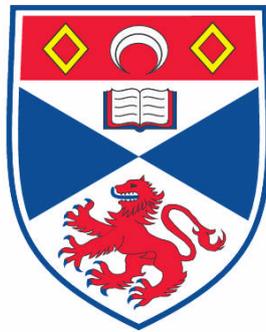


**PRIMARY HEALTH CARE DELIVERY IN RURAL INDIA :
EXAMINING THE EFFICACY OF A POLICY FOR RECRUITING
JUNIOR DOCTORS IN KARNATAKA**

Swarthick E. Salins

**A Thesis Submitted for the Degree of PhD
at the
University of St. Andrews**



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Primary health care delivery in rural India: examining the efficacy of a policy for recruiting junior doctors in Karnataka.

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Ph.D. Thesis

July 2008.

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Abstract.

This thesis examines the role of primary health care delivery in rural India but specifically focuses on aspects from Karnataka state. It broadly reflects on the differences that exist between urban and rural populations' access to healthcare. The concept of primary health care appears to have lost its lustre at present, it was once enthusiastically promoted in the late 1970s and 1980s but as chronic problems appeared to affect the smooth delivery of healthcare and nowadays major global bodies like the WHO and IMF have relegated primary health concept to a lower level. However in countries like India, which adopted this concept although its implementation has been riddled with complex ongoing problems, there are not sufficient grounds to abandon it completely. These problems are mainly due to the slow implementation, which has left a vast rural population with little or no access to healthcare. Primary health care strongly promotes equity of access hence is vital in many developing nations.

Recruiting highly skilled personnel to work in rural health centres has been an ongoing problem, which hinders the effective delivery of healthcare. A policy followed by Karnataka state tries to rectify this problem by offering postgraduate positions to junior doctors who are willing to work in rural areas. The efficacy of this policy is closely examined from two perspectives. Those who consume healthcare in rural areas are given an opportunity to voice their concerns and also the doctors who work there represent the views of the providers of healthcare. This study was conducted in Bidar district, which lies in the north of Karnataka. Bidar is identified comparatively as a less developed district that has many problems associated with poverty and poor health status. In the process of conducting research a variety of interesting aspects have been highlighted. My hope is that relevant authorities identify with the problems and take measures that could benefit many people's lives.

Interestingly it transpires from the views expressed by the rural respondents that they have a good grasp of what they think they will need to access a better form of healthcare from the existing system. However it appears that there is almost a universal fatalistic acceptance of them being helpless and voiceless about making any to change by their suggestions nor did most of them have a hope of influencing future prospects. The studies also indicated that where there is a better level of provision there the people tend to access healthcare from authentic sources as opposed to unregistered and unqualified personnel.

The doctors suggested that the policy is very useful provided certain intrinsic changes are made. On the one hand they did accept that their cost benefit and academic value of this policy is great. On the other hand they suggested the hurdles put in the course of achieving the postgraduate position are arduous and often vague sets of guidelines are imposed, making it very hard to make a straightforward transition from working in rural areas to getting a postgraduate position of choice. The doctors working on temporary contracts appeared to suffer genuine discrimination especially due to number of years they spent trying to get permanent position, years which were not counted towards their ambition of further education. Where it appears there is very little difference in the roles and responsibility between permanent and temporary contract doctors the question of why it does not occur to the authorities to redress this issue is discussed.

Declaration

1. I, Swarthick Ebenezer Salins, hereby certify that this thesis, which is approximately 94,000 words in length, has been written by me, that it is the record of work carried out by me and that it has not been submitted in any previous application for a higher degree.

Date: Signature of Candidate:.....

2. I was admitted as a research student in 200 and as a candidate for the degree of Ph.D. in September 2002; the higher study for which this is a record was carried out in the University of St Andrews between 2001 and 2008.

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3. I hereby certify that the candidate has fulfilled the condition of the Resolution and Regulations appropriate for the degree of Ph.D. in the University of St Andrews and that the candidate is qualified to submit this thesis in application for that degree.

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Acknowledgements.

My stay in Scotland has been so eventful over the past 8 years that I have to thank so many people without their support I would not be in the position of writing this thesis and rewriting it again. This list does not represent the order of importance but I would like to show sincere gratitude for receiving all the help. Thank you, Balcraig Foundation and Ann H Gloag for personally taking an interest and sponsoring my studies at St Andrews. I would also like to thank 'Capability Scotland' for employing me and the continuous support sustained my stay in the UK but also for giving me a better insight for the needs of people with disabilities.

The department of Management especially the role of late professor Mo Malek who encouraged me to enrol for a PhD and I am sure he would have appreciated me completing my studies. My parents who have passed away during my studies have actually inspired me to carry on. My mother always wanted me to get into further education whilst my father instilled that we all have the potential of doing good especially in the light of a his Christian influence. My hope is that I fulfil their desires. I want to thank the department of Geography for taking me onboard and in addition my supervisors Prof Robin Flowerdew and Dr Mike Kesby. Robin played a vital role in identifying my potential of writing this thesis but it must be noted it was like a geologist seeing a glint of kimberlite on the surface. However getting to the gemstone would make the scale of mining at Ekati appear like having a scoop of ice cream. I say this because before I arrived in Scotland I never knew how to switch a computer on let alone writing a thesis.

I would like to thank those who participated in this research and allowed me access to vital information. My thanks to numerous supporters in India and Scotland who encouraged me to study and not give up this of course, this includes my family, friends and many associates. A special thank you to the Peterkin family for their vital support during bleak times. The NHS has also played a vital part of my life here and I would like to thank the UK government for having such a system. My three children were born here and without the NHS I would have had to struggle.

Finally what would I do without my wife? Through all the struggles she has put up with me and endured right up to the end. Especially in the light of last year's disappointment of me unsuccessfully defending my PhD it gives me great strength to see my family still stand by. Thank you all for your support and consideration.

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I.

The relevance of primary health care in India: in the light of health sector reform and the epidemiological transition.

1. Introduction.

In countries like India primary health care has a long history. If one takes into account the various practices of traditional medicine and home grown remedies there are strong historic precedents of people accessing these services within a small geographic area. Usually that means accessing healthcare close to where they live or in and about the towns / villages that surround them. The traditional form of healthcare has quite a significant role in certain aspects of most people's lives in South Asia and it is still used quite widely, for instance the traditional usage of turmeric when one has burns or going to local bonesetters to correct fractures and sprains. Traditional practitioners of Ayurvedic¹ medicine, Unani², Siddha³ and homeopathy are quite well established throughout the country and there are concerted efforts being made by the government to standardize, promote and effectively use the benefits of these systems under the department of Indian Systems of Medicine and Homeopathy (ISM&H).

However the major form of healthcare delivery that has been adopted by the government is based on allopathic western medicine, which is strongly rooted in well researched, tried and tested scientific methods. When India gained independence it inherited the colonial health infrastructure and technologies, which were highly centralised in hospital-based

¹ The Ayurvedic system is based on the traditional Hindu system of medicine written in the Vedas. It is based on the idea of balance in bodily systems and uses diet, herbal treatment, and yogic breathing.

² Unani is a system of medicine practiced in parts of India, thought to be derived via medieval Muslim physicians from Byzantine Greece.

³ Siddha is an ascetic who has achieved enlightenment. Therefore this system tries to use spiritual aspects of religion to overcome medical problems.

healthcare delivery systems, mostly in urban areas or garrison towns. In India there has always been a plural form of healthcare where both government and private sources have existed side by side. There is a major distinction in that private sources are polarised and concentrated mainly in urban areas working mainly on a commercial basis. This predictably leaves the majority of the rural population little or no healthcare to access directly in terms of western allopathic services. It has been an ongoing goal for the health planners of the country to try and achieve some form of balance and redress this issue by providing allopathic healthcare facilities and services in rural areas. The role of public provision of healthcare has been taken quite seriously in the case of India as its policy makers envisaged the benefits of providing health care to the people. As early as 1951 bearing in mind that India had recently gained independence in 1947 and was a fledgling democracy, strategies were developed in the 1st plan⁴ to ensure that public provision of health care was made available (Green 1999). The Indian constitution formed in 1950 adopted some of these directive principles⁵ of state policy, which are rights that would be given to the citizens in the future.

“The State shall strive to promote the welfare of the people by securing and protecting as effectively as possible a social order in which justice-social, economic, and political- shall inform all institutions of the national life. It further enjoins that the State shall ensure that the health of workers, men and women, and the tender age of children are not abused”. (Sharma and Chaturvedt 1978 p. 87)

These principles show that there was a strong desire by the state to pursue and provide a range of social welfare schemes including healthcare. The pre-independence report and recommendations of the Health Survey and Development Committee headed by Joseph Bhore in 1946 was taken on board in 1952 under the community development programme (Sharma and Chaturvedt1978). This committee recommended that the

⁴ The government of India followed a soviet model of 5 year plans where strategies were put forward for that period. Generally it was a good tool to measure progress.

⁵ Directive principles are those tenets that the government aspires to give the people when conditions are suitable in the future.

government should establish well-organised systems of Primary Health Centres (PHCs) to provide basic health care. There has been a significant steady growth of such centres over the decades (refer to table 5). The leaders of the nation at that time thought of a national health system where the country would play a leading role in determining priorities and financing, and provide services to the population (WHO-India 2007). The public health system in India was based on the British National Health Service (NHS) concept where healthcare is provided free of cost at the point of access. However at present in India public healthcare provision is mostly free for the poorest sections in society but for others it is subsidised so that it only cost a fraction of the market prices to the consumer.

There have been numerous landmark events that have contributed to and advanced the concept of primary health care in India according to the report by WHO- India (2008) p.40

- *Health Survey and Planning Committee (Mudaliar Committee 1962) was limited to the development of the health services infrastructure and the health cadre at the primary level. They suggested that the growth of infrastructure needed radical transformation and further investment.*
- *In the Third Plan (1961-66) when family planning received priority for the first time. Increase in the population became a major worry and was seen as a hurdle to the development process.*
- *During the Fourth Plan (1969-74), efforts were made to provide an effective base for health services in rural areas by strengthening the PHCs.*
- *Fifth Plan (1974-79), policy-makers increasingly emphasised that health had to be addressed alongside other development programmes. The Minimum Needs Programme (MNP) promised to address all this but became an instrument through which only health infrastructure in the rural areas was to be expanded and further strengthened.*
- *When emergency was declared (1975-77) most of the basic health workers got conscripted into the family planning programme.*

- *The Chaddha Committee Report (1963), the Kartar Singh Committee Report on Multipurpose Workers (1974) and the Srivastava Committee Report on Medical Education and Support Manpower (1975) remained focused on giving recommendations on how the health cadres at the primary level should be distributed (this was based on the size of population and to a lesser extent geographic considerations were taken into account).*

All of these events had an impact on the way in which primary health care was perceived and managed until the next major thrust which put in motion the ideas of a comprehensive health strategy for rural areas. It must be stressed that the concept of providing health care especially in terms of the levels seen at present in developed and underdeveloped nations is not to be taken for granted as an integral part of the system. This concept has gradually been incorporated into each country's plan according to the need, ability and perhaps, good will to provide basic facilities. Moreover the development of primary health care can be perceived as a movement where different stages can be assessed and studied.

Basic Health Services.

The levels of healthcare available in urban areas in most cases could meet the secondary, tertiary and in some places highly specialised needs of the people. Providing a similar level of healthcare in rural areas was unthinkable mainly as the estimated cost would have been astronomical and neither the infrastructure nor the personnel were equipped to take on this challenge. The vast differences in almost all aspects of accessing and availability of healthcare between rural and urban areas led to a slow and phased approach being adopted where it was envisaged that at least a basic level of healthcare should be provided in the rural areas.

Post-second World War the emphasis of development theories mainly stressed the importance of building infrastructure like roads, dams, industry and similar structures, and concepts like health and other social services such as education were considered as non-productive expenditure sectors (Walt 1990). In the decades following it appears that

a paradigm shift in the ideology of development took place where access to concepts like universal education and health were considered as an intrinsic part of improvement of mankind. According to WHO (1973) it was during the mid-sixties that the idea of basic health services was developed promoting the further extension of the peripheral health centres and dispensaries in order to take services to where people lived, as opposed to them having to access urban centres. The idea mainly promoted was that there is an alternative to centralised hospital services, which would lead to the eventual provision of services where people need them the most. The concept of basic health services had a good influence in India but it still had lots of ground to cover in term of making services accessible to the rural masses.

On the grounds of basic health services the basis for the next level of the evolution of the primary health care was formulated. In 1978 in the conference organised by UNICEF and WHO, the 134 heads of health ministries from all over the world jointly made a declaration now most commonly known as the Alma Ata declaration. Here there was an enthusiastic uptake of primary health care as a strategy for many developing countries to ensure that they can adopt according to the need perceived. Broadly the following can define this declaration.

“The Alma Ata Declaration, Primary Health Care, at that period produced a lot of optimism about working towards ‘Health for all by the Year 2000’. Health was upheld as a basic human right. Primary Health Care was to have a far-reaching, even liberating potential. It embraced the World Health Organization’s broad definition of health as ‘complete physical, mental and social well-being’. It mandated universal availability of basic health services, with special concern for those in greatest need. To overcome the underlying human-made causes of ill health, it called for working toward a new economic order based on equity”. (Werner 2001 p. 353)

India wholeheartedly signed and accepted the Alma Ata declaration in 1979 and this gave healthcare a new impetus to make access and availability a virtual right for all the citizens. Furthermore it gave a lot of credence to the slogan “Health For All” (by 2000). With hindsight it does not take much to realise that a number of the stated policies still remain rhetorical and are yet to be fulfilled. It did not take a long period of time before this declaration and its goals were picked apart. They were seen to be too ambitious in terms of comprehensive primary health care with a limited budget, being too all encompassing. A more targeted approach needs to be adopted in order to meet the health needs of people at risk and the most vulnerable people. Concepts such as selective primary health care were devised and other programmes were introduced in view of the criticisms of a comprehensive approach.

Furthermore the advent of Health Sector Reform mainly attributed to organisations like the World Bank and the International Monetary Fund (IMF), which recommended that governments should reduce spending on their agencies by allowing open market policies, privatisation and liberalisation as ways to develop. The implications of the enforcement of conditions stipulated by such bodies did have an effect on primary health care. Overall in amongst the numerous moves and strategies over the years these ideas have had a great impact on primary health care. Indeed in the view of some reports primary health care is close to becoming a pejorative concept, something perhaps not worth promoting in view of the many failings (Roemer 1986) (WHO 2000). This chapter however will examine primary health care as a movement and its current relevance in an Indian context.

2. Defining the concept of primary health care.

There has been ongoing change to the perceptions and understanding of primary health care. For instance in 1920 Lord Dawson’s report in England implied that ‘primary care’ was mainly concerned with the first contact of medical care (Hetzl 1978). This type of concept was simple to understand and quite universal as it included only one aspect about people’s access to medical care when they require it. With the concept of health being included in theories of development, primary health care has taken aboard a wide range

of aspects that are intended to integrate a holistic approach of complete wellbeing of mankind. For instance the view expressed by the Director General of the WHO in 1975.

“Primary health care is taken to mean a health approach which integrates at the community level all the elements necessary to make an impact upon the health status of the people. Such an approach should be an integral part of the national healthcare system. It is an expression or response to the fundamental human needs of how can a person know of, and be assisted in the actions required to live healthy life, and where can a person go if he/she needs relief from pain or suffering. A response to such needs must be a series of simple and effective measures in terms of cost, technique and organisation, which are easily accessible to the people in need and which assist in improving the living conditions of individuals, families and communities. These include preventative, promotive, curative and rehabilitative health measures and community development activities”. WHO 1975. (p.3 in Hetzel 1978).

It is very obvious that the concept of primary health care has progressed enormously from being perceived as a primary contact for accessing medical care for individuals, to where it accommodates a wider purpose of a holistic community development agenda at the grassroots level. How much of this agenda has been taken up by each country differs, as there are major differences in the perception of primary health care between developed and developing countries. In most of the developed world primary health care involves a range of services that would be seen by the underdeveloped world as a luxury or a distant concept that could be aspired for at best. Not intending to interpret this concept from the viewpoint of the developed world I will discuss its importance in an Indian context.

Primary health care as a rural alternative.

Interestingly primary health care in India has largely, by default, taken the role of providing healthcare mainly for rural areas as opposed to all its citizens. This is because

of the great imbalances and inequalities that exist between urban and rural areas in terms of health and healthcare facilities. I do acknowledge that there are populations within urban areas like those who live in shanties and slums, who could have far worse health status and may be susceptible to getting repeated bouts of endemic diseases caused by poor environmental conditions as opposed to those who live in rural areas. However in terms of accessing health facilities the urbanites have a bias disproportionately favouring them.

It was estimated by the WHO in 1975 that only a fifth of the rural population in developing countries receives any basic form of healthcare on a regular basis. The multiple deprivations suffered by families unable to access healthcare were identified and their stunning effects on the potential for growth and development were described (Ebrhim and Ranken 1988). At the beginning of the millennium statistics indicate that out of the projected 1.3 billion population of the world living under the poverty line (World Bank, 2000), Indians comprise nearly a third of this estimated number, of which 75% live in rural areas (IFAD 1992). Although the levels of poverty have been contested since it is undisputed that poverty has an adverse effect on millions of people in India. For a country with such adversities in its path of development, it does not take much persuasion to be convinced that there will be serious health-related issues that need to be tackled. Poverty compounded by other complementary attributes has an adverse effect on health, especially on the rural populace. A few of the complementary attributes of poverty having an adverse effect on rural population are best described in the words of Mullen

“There have been powerful vectors of rural differentiation, erosion of livelihood systems, marginalization, and disempowerment of men and women. Worsening socio-economic profiles between rural and urban areas, particularly in terms of public goods, such as healthcare and education, and income-earning opportunities are in evidence”. (Mullen, 2002 p.147)

The concept of primary health care was not necessarily designed only for rural population but the plights of many developing nations that have a similar population distribution

where most of the people reside in rural areas, and uneven development on many fronts that mostly favoured urban areas. It was considered that this concept appeared to be well suited to be adopted. In the case of India over two thirds of the population live in rural areas. Providing healthcare at the levels seen in the towns and cities was not possible on many accounts, primarily due to the inability to meet the financial cost. Even if the funds were hypothetically available there would still be problems that might occur, some of which have been aptly described by Phillips (1990)

“In most third world developing nations most persistent problems in improving health and welfare do not necessarily stem solely from the complexity or expense of medical technology and the scarcity of financial sources. Rather, problems tend to derive from design deficiencies or from practical difficulties of policy implementation and management”. p. 25

There were other known obstacles such as shortage of trained technical and administrative staff, poor infrastructure and distribution systems that would invariably hamper the implementation of programmes for people's access to healthcare. In India these problems have been persisting and it has been an ongoing struggle to resolve them. Therefore what India considers as primary health care has aspects that have applications that most developing countries would adhere to and there is a distinction where the country also tries to engage certain indigenous practices. India has based its primary health care concepts mostly in and around the general ideas generated by international bodies like the World Health Organisation. The bodies generally try to adopt a comprehensive approach to providing health care to the rural population.

‘Primary Health care is essential healthcare based on practical, scientifically sound and socially acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation and at cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.’ WHO, 1978. p.1

This definition has quite a large remit and can be interpreted ambiguously as each country will determine according to their need and ability to provide healthcare. There are certain universal aspects, which define principles and components of primary healthcare.

Table 1. Principles and components of primary health care.

Principles of PHC	Components of PHC
<ol style="list-style-type: none"> 1. Equity 2. Self reliance 3. Prevention 	<ol style="list-style-type: none"> 1. Education concerning health problems and methods. 2. Promotion of food supply and proper nutrition 3. An adequate supply of safe water and sanitation. 4. Maternal and child health care including family planning. 5. Immunisation against the major infectious diseases. 6. Prevention and control of local endemic diseases. 7. Appropriate treatment of common diseases and injuries. 8. Provision of essential drugs.

Source WHO 1978. (p.16 in LaFond1995)

During the development and progress of primary health care through the years, a lot has been added to this list of components, and it is still evolving and not yet exhaustive e.g. interactive community participation and co-ordination of various government departments and sectors involved. India has accepted most of the concept of primary health care at least on the policy level but there appears an uneven implementation of this concept in its entirety. Certain aspects seem to be well covered or stringently observed like family planning however on the other hand many unnecessary, preventable deaths

such as infant mortality, though very high in the Indian states that have poor health indicators, are not fought with the same enthusiasm nor have similar proportions of finance allocated. However these activities that define primary health care are mostly of intrinsic beneficial value to mankind especially to those who are usually vulnerable and whose healthcare needs are compelling.

Primary health care after the Alma Ata declaration.

The enthusiasm for uptake of primary health care soon appeared to lose the impetus at which it was accepted. The comprehensive approach was thought to be too hard to accomplish especially for most developing nations with weak economies. Some exceptions like China, Cuba, Sri Lanka and the state of Kerala have been cited for achieving against this trend but the majority of the developing nations have shown wide gaps in terms of universal coverage of healthcare. Although comprehensive health care coverage would be seen as 'ideal' the scope and range is often too wide to be achieved due to the bottlenecks and shortages of finances, personnel and technologies. This gave way to concepts such as Selective Primary Health Care (SPHC). If the comprehensive approach can be viewed as a horizontal coverage SPHC was perceived as a vertical approach specifically designed to combat a disease or other problem faced delivering healthcare. Questioning the feasibility of comprehensive primary health care a group of global health experts conceptualised and became proponents of SPHC and as a movement they introduced it as an interim strategy for disease control in developing nations (Walsh and Warren 1979). Only a year after the Alma Ata declaration where comprehensive primary health care was acknowledged and widely accepted by many developing nations as a sound strategy to deliver healthcare, Walsh and Warren (1978) proposed as an alternative strategy, which formed the basic guidelines for SPHC. They emphasised these four points for prevention and treatment of diseases that can be adopted by developing nations to target certain specific aspects of ill health in the most effective way. Magnussen et al (2004) has aptly described these factors and the distinct position SPHC held as opposed to the comprehensive approach.

“Developing countries should base SPHC on the prevalence, morbidity, mortality, and feasibility of control (including efficacy and cost) of diseases. Thus, rather than the envisioned emphasis on development and sustainability of health systems and infrastructures to improve population health, primary health care implementation in developing countries became focused on four vertical programs: growth monitoring, oral rehydration therapy, breastfeeding, and immunization (GOBI). Family planning, female education, and food supplementation (FFF) were added later. These interventions targeted only women of childbearing age (15–45) and children through age five. This narrow selection of specific conditions for these population groups was designed to improve health statistics, but it abandoned Alma Ata’s focus on social equity and health systems development”. (Magnussen et al 2004 p.169)

SPHC was designed on the basis of priority of disease control where each condition was banded into high, medium and low category. Most of the diseases that went under the high priority banner would have been in this category irrespective of the type of system adopted to deliver health care. Nevertheless SPHC promoted those interventions that would most likely have positive effects in developing countries with limited budgets. As cost effectiveness was taken into account this approach was quite keenly promoted by many donor agencies as it had measurable outcomes that were usually proportional or even a higher rate of benefit to the investment. Broadly two categories of people have benefited from this approach children and childbearing women. Programmes such as Expanded Programme on Immunisation (EPI) and appropriate medical care for maternal illnesses are still widely accredited to SPHC. The rate of immunisation, which was about 20% acceptance in the 1980s, grew to 80% in the 1990s (Sanders 2003). During this period infant mortality dropped by 25%. On other communicable and infectious diseases SPHC was targeted and could deliver positive outcomes i.e. where immediate medical intervention can treat the symptoms for instance antibiotics when a person suffers from pneumonia. It is also attributed that SPHC can relieve physicians to do other work due to

their roles under this system being mostly of a non medical nature e.g. personnel management and maintenance of medical supply (Phillips 1990).

There have been a number of shortfalls noted in the SPHC system, as it was perceived to exclude certain important factors. Sometimes due to the fact that irrespective of the medical intervention if the economic, social and environmental conditions of people are stagnant, diseases may just appear in a permanent cycle with no end in sight (especially for people living in poverty and poor hygienic conditions like slums). SPHC has been criticised broadly along these lines according to Hirschhorn et al (1989) p. 343.

- 1. It is argued that SPHC diverts resources and does little to build sustainable primary health care at the community level; moreover SPHC is classically 'top-down', creating dependence on outside organization and supply, uncontrolled by families themselves. The 'military paradigm of EPI', for instance, may preclude a respectful approach to health education and community diagnosis - replaced, instead, by 'manipulative social marketing'.*
- 2. Others allege that SPHC focuses too narrowly on infectious disease control, ignoring (and thus, perhaps, abetting) powerful social, economic and nutritional antecedents to illness.*
- 3. Finally, SPHC has not yet been shown to have a lasting impact on mortality; a child saved from one infection may only live long enough to succumb to another not dealt with by SPHC, the so-called 'replacement mortality'.*

It must be noted despite the criticisms of this approach SPHC is part and parcel of the health system as it was one of the strategies adopted in the evolution of primary health care. In India SPHC has been adopted in certain aspects with the distinction of not fully abandoning the comprehensive primary health care approach. It has been done on a piecemeal and ongoing basis specifically to target certain diseases or conditions with the view to reducing the burden of disease faced by the country. Some programmes can be attributed to SPHC that have been adopted by India are aspects such as family planning,

Maternal Child Health (MCH) and Child Survival and Safe Motherhood (CSSM) which resonate with this approach. Vector borne disease control programmes in India also largely relied on SPHC to be implemented e.g. malaria, tuberculosis, preventable blindness and recently AIDS. GOBI in India functioned by supplying oral rehydration solution packets and immunisation. With regards to family planning aspects, emphasis was also put on antenatal care by registering pregnancies and providing nutritional complements by distributing iodised salt, iron and Vitamin-A supplements (JSS 2000). The efficacy of using SPHC in India has been debated widely with a range of positive and strongly negative points.

The criticisms of this approach were broadly around the following notion, on the one hand, there have been positive outcomes like the decrease in infant mortality and increase in immunisation rate in many countries; on the other hand those gains came at the same time as growing social inequalities, poor quality of care, and worsening living conditions (Walt and Gilson 1984). Although India still uses SPHC as an approach, the desire to provide comprehensive health care is a part of the health policy that has not been abandoned. This can be seen in the Indian National Health Policy (NHP) 1983 and 2002, which has reiterated a sincere desire to ensure that the rural population should be able to access a wide range of healthcare facilities. However these policies have not yet been fulfilled to the extent envisaged, leaving wide gaps that need to be addressed.

It must be noted that according to the various aspects of the evolution of the primary health care movement, India has not been a distant observer but has accommodated almost all suggestions made by leading health bodies but as a stretched and drawn-out strategy with a pace of its own. Primary health care so far in this chapter has been discussed mainly in terms of how this concept has gradually developed with interfaces that have a significant role in defining its framework. However even as this concept developed and strategic changes were adopted, other aspects appeared that eventually led primary health care to take a different approach that was based on alleviating the poor economic conditions faced by most developing countries. Under the instrumental guidelines and concepts that were generated and recommended by international bodies

like the World Bank and the International Monetary Fund that introduced Stabilisation Programmes (SPs) and Structural Adjustments Programmes (SAPs) were introduced, leading to Health Sector Reform (HSR). The introduction of these schemes in many countries had severe adverse repercussions but in India perhaps not with the severity of some African or Latin American nations.

3. Health Sector Reform

A brief history of the events that created the grounds for the economic crisis has been described below.

“While the 1950s and 1960s were a period of steady economic growth in most Third World countries, the modernization strategies adopted by newly independent governments locked their economies into the unequal trading relationships that lie at the root of the current economic crisis. Despite efforts to industrialize and diversify, many less developed countries (LDCs), remained dependent on the export of primary commodities to developed countries for foreign exchange earnings. Because of adverse terms of trade, primary exports generated insufficient wealth to import manufactured goods, industrial supplies and agricultural technology. Third World governments were therefore forced to rely on foreign investment and foreign loans to finance economic development. In what was to become a vicious cycle, such borrowing increased the need to earn foreign exchange to repay loans and hence the need for primary produce”. (Asthana S 1994) p.51

In the 1970s the Organisation of the Petroleum Exporting Countries (OPEC) increased the prices of crude oil and also tried to impose an export ban on countries they deemed to be supporters of Israel. This caused a worldwide economic crisis which affected developing countries much more disproportionately as they had to borrow extensively to make ends meet. Commercial banks also had to invest the income of the OPEC countries coined as petrodollars which they lent liberally to many developing countries that further exacerbated the burden of debt. A report by the WHO on the introduction of HSR in India has given the following account.

“The genesis of Health Sector Reforms can be traced to the early 1980s. Prior to the 1980s, health care provision was mainly publicly funded and organized through public health care services with the aim of improving equity in access to care. However, the 1980s saw a smaller role emerge for the State and a shift to a neo-classical paradigm. In the face of world recession, the oil shock of the late 1970s, the socio-political changes that occurred globally especially after the collapse of the Soviet Union, a fiscal crunch was felt by both developed and developing countries. As a consequence of the economic crisis of the early 1980s, there was a change in the economic policies of several developing countries. This situation was coupled with governments struggling to develop financing mechanisms in the context of severe income inequalities, low access and utilization of health services by the poor and overburdening of existing services due to increasing disease burden on account of communicable diseases especially AIDS. During this period, social sectors like education and health were increasingly squeezed financially and cutbacks were made in the state intervention in the health sector. The fiscal constraints coupled with pressure on health systems due to rising health needs led to many countries availing of loans from the ‘Bretton Woods’ institutions namely the World Bank and the International Monetary Fund, under the Structural Adjustment Programme”. (WHO-India 2007) p. iv.

In India there were other internal factors that also contributed towards the economic crisis in the health sector. According to Purohit (2001) prior to liberalisation, from 1974 to 1982 grants from the central government to the states were about 20% of the State’s health expenditure. Once liberalisation was introduced the central governments’ subsidy to states health budgets decreased to 6% in 1982-89 and then a mere 3.3% in 1992-93. This of course put severe strain on the states to find resources to match this shortfall. Quite often meeting this shortfall was not a high priority this resulted in health schemes being withdrawn or scantily implemented. Obviously the impact of such actions would invariably affect the poor and vulnerable in more adverse ways than others. The

economic crisis faced by India was not to the extent faced by some African and Latin American countries, for example the foreign debt of Zambia in 1996 was 161% of their Gross National Product (GNP) whereas in India it was 22% (World Bank 1999). Therefore there was not the same amount of pressure or influence that international bodies could put on India.

Structural adjustment programmes were basically refinancing, rescheduling and new loan agreements given by the leading financial institutions but with an added clause of ensuring numerous changes. In many cases loans were only sanctioned if the country agreed to implement the suggested changes. The way in which they were able to influence countries is described as follows.

“The World Bank and IMF, became impatient with what were perceived to be authoritarian developing country governments. Given their central role in debt rescheduling and new loan agreements, these agencies were able to introduce significant conditions in the form of structural adjustment programmes which demanded political reforms (e.g. retraction of the civil service, introduction of multi-party elections) as well as economic reforms (e.g. trade liberalization, removal of subsidies). Economic adjustment programmes affected the health sector through cuts in budgets, promotion of the private sector, and the introduction of user charges for health services”.
Walt and Gilson (1994) p.355.

Most of the grounds described above for applying conditions appear not to have a direct impact on India. As it is a democracy (apart from a brief period in 1975 to 1977 when it was under Emergency Rule) most of the politics reflected the will of the people. There has always been a political goal in India, having strong historic roots in Gandhi's freedom struggle (under the banner Swadeshi movement) to become fully self reliant and self sufficient, by producing goods within the country and depending less on foreign goods. Phrases such as 'be Indian buy Indian' was once a very common slogan but now it still has some weight especially in some of the extreme national rightwing religious

ideologists. However in the late 1980s and early 1990s there was quite a lot of political instability. The Indian National Congress lost the election in 1989 and a fragmented alliance of opposition groups formed the government. In a 2-year period the opposition further split and a faction supported by the Congress party formed the government, which lasted less than a year, before the alliance broke and general elections had to be called. The political instability also went hand in hand with poor economic prospects due to lack of confidence by the market forces. During this period the advent of the first gulf war only exacerbated these conditions where it was even seen that the Government of India (GOI) had to bail the country out by pledging gold reserves to increase credit worthiness at international level (MOF 1992-93). During this period it was common to see fuel being rationed (in many states fuel could not be purchased in the night) and strict enforcement of limits to accessing foreign exchange. These poor economic conditions made the country alter its traditional course as there was a growing willingness to consent to loans and programmes from the World Bank and the IMF. Once these financial institutions started their structural adjustment programmes it was mainly the 1993 World Development Report and its emphasis on investing in health that gave the background to introduce HSR.

According to the WHO in India the following aspects were to be reformed.

- ***User charges;***
 - *Community financing schemes;*
 - *Insurance;*
 - *Stimulating private sector growth; and*
 - *Increased resources to health sector.*
- ***Changes in health system organization and management***
 - *Decentralization*
 - *Contracting out of services; and*
 - *Reviewing the public-private mix.*
- ***Public Sector Reform***
 - *Downsizing the public sector;*
 - *Productivity improvement;*

- *Introduction of competition;*
- *Improving geographic coverage;*
- *Increasing role of local government; and*
- *Targeting role of public sector through packages of essential services.*

Source: WHO-India 2007. p. iv.

This list of proposed HSR in India was generated about two decades ago but in terms of implementation it is on a piecemeal and incremental basis. However some aspects are still ongoing at the proposal level. In the Indian context HSR was perceived as a response to bolster the existing health care strategy by giving it a new direction and focusing on fiscal management. In part HSR acknowledges that there are instances of success and major gains in terms of health indicators attributed to the existing health system, despite some highlights there are large gaps, and this system did not deliver as expected. Hence by implementing HSR, it was envisaged that there would be rapid economic development and improvement in people's living standards by ensuring their development. Furthermore it had a wider goal of eventually eliminating poverty, protecting human rights and giving scope for community participation and even representations of groups normally excluded. HSR aimed to close the gap between India's potential and actual performance WHO-India (2007).

Alternatively there is a strong view that HSR was introduced because of fiscal constraints rather than health priorities as it is seen countries like India generally invest only a bare minimum on health (John and White 2003). It was suggested by John and White that managerial efficiency is needed in public health but HSR fundamentally ignores the low level of public funding on health hence it will be very difficult to expect any significant outcome especially when most budgets are spent on curative services. It is estimated that India spends 70% of its health budgets on hospitals (Griffin 1992). Investing in health does not appear to have much political appeal in India as opposed to other government initiatives like loan distribution/ waiver to farmers or subsidies on food rations. Investing in health may have long-term political gains whereas other investments with populist tones can be perceived as potential vote winners.

There are conflicting views expressed with regards to HSR throughout the developing world, and it has raised substantial debate much of which is still relevant as the impact is ongoing. I will try and focus mainly on the impact HRS is having in India rather than its broader role globally with the exception of using some examples whenever necessary. The reforms suggested by the international financial bodies (refer to page18) can be explored in detail and the impact assessed in terms of the positive and negative effects they have had on the nation. In this section I will be discussing the main initiatives of the HSR in India i.e. User Charges, Changes in health system organization and management, and Public Sector Reform, with only brief appraisals on the subsections under each of these headings.

The impact of User Fees.

India based its health policy mainly on the British NHS model where healthcare can be accessed freely at the point of access irrespective of financial status of the individual as the government funds the system. GOI did not initiate user charges for over 4 decades after independence although it did not provide for as wide a range of services as the NHS. Resistance to the introduction of user fees was not that vociferous, nevertheless policy makers in the past did not give much credence by looking at it as a venue for resource collection. Whatever resistance was there to user charges did not appear to challenge persistently or alternatively was not consulted by the government when HSR was introduced. Perhaps people's apathy and gradual acceptance appeared to ease the imposition of user fees. Moreover it is almost a universal practice to pay for accessing private healthcare in India. Hence the concept of paying for services was not alien to the public.

With low investments in the health sector and growing deficits in health budgets perhaps GOI thought that user fees would reduce the financial burden and generate new sources of revenue. The Bamako Initiative introduced by UNICEF 1987 in Mali West Africa initiated the concept of user charges. Women's and Children's Health through the Funding

and Management of Essential Drugs at Community Level was the main aim (Kanji 1989). This was supposed to happen by charging a levy on drugs enough to cover operational cost and replenishment of stocks to conduct Mother and Child Health (MCH) under the primary health programme. Therefore the process was a cycle to replenish stock by investing proceeds of the previous year and hence help to finance the system. The Bamako Initiative was financed by UNICEF on the assumption that if people perceive monetary values in the quality of services provided they would be willing to pay to access such facilities, hence generating income to sustain the system right down to the grass-roots level.

In India there has been a phased introduction of user charges with the distinction that it is not levied against those deemed to be below the poverty level. Initially all individuals possessing a green coloured ration card fell in the category of Below the Poverty Line (BPL); later the identification process changed and those who have a yellow ration card were given BPL status. Changes were made in the 8th five year plan (1992-1997) where free healthcare access was revoked to accommodate charging for services for those who are above the poverty line. The initial stages of introducing private initiatives were also envisaged in this plan. In the 9th plan (1997-2002) private, voluntary and self-help groups were promoted to provide healthcare at affordable rates. The 10th plan (2002-2007) made provisions so that those who live below the poverty line can be covered under health insurance schemes to ensure a wider range of services can be accessed by them. It must be noted that although HSR has implications for the whole country it was mainly implemented in 7 States of India (Andhra Pradesh, Karnataka, Maharashtra, Punjab, Uttar Pradesh, West Bengal and Orissa) eventually other States came under the World Bank programme. As I am conducting research on certain health policies of Karnataka State therefore I will try and elicit some direct effects of HSR.

Part of the advocacy of user charges was also to manage people who would tend to repeatedly use facilities unnecessarily. Overcrowding and high volumes of patients seeking treatment is still an ongoing problem especially in urban centres. What effect user charges have had in reducing the number of patients unnecessarily accessing

healthcare can only be determined by anecdotal evidence as there is not much written in the Indian context. However in terms of user fees acting as a deterrent to access health facilities there are substantive studies that have indicated detrimental effects in many developing countries and there are no exceptional circumstances in the Indian context to stop similar effects taking place. In Bangladesh a part of the strategy of HSR was to add a charge for those using some forms of contraceptives in order to sustain the programme. The results in that study indicated that the rates of people accessing that programme fell (Levin et al 1999). Similarly in China, where some of the rural health models were once considered ideal strategy to replicate in other countries, in 1980s when the country adopted 'a socialist market economy' as opposed to stringent communist based economies, disparities seemed to be growing between rural and urban areas and even between richer and poorer regions of the country. Rural health in poorer areas has disproportionately suffered where user fees have only increased the burden of out of pocket expenses borne by the public (Bloom and Xingyuan 1997).

In India out of pocket expenses are very high and unfortunately have a more detrimental effect on poorer people as the proportion of income spent accessing healthcare is far higher (refer to chapter 3). Initially when Karnataka introduced user charges and the income generated appear to make very little impact of either improving or regenerating resources. This was partially blamed on the system that required hospitals to remit all incomes collected with the treasury and from there funds would be allocated. By adopting such practices it could be described in terms of United Kingdom as all funds collected throughout the UK being remitted to London and from there the reallocations of resources would take place. The process itself entailed a lot of bureaucratic huddles as the treasury hardly could envisage the actual needs at source neither could it give timely assistance. Hence there were changes introduced where it was repackaged and greater powers were divested to the local level under the District Development Fund (DDF). The income generated from user charges could be held with them. It is up to the (DDF) to reuse the funds for maintenance, repair and minor and immediate needs of the hospital.

The main criticisms on user charges in India are that it can have the potential to alienate large segments of the population. Although those (BPL) do not get charged those marginally above this measure will feel that it is an unwarranted practice. Even among those (BPL) the question of how aware they are regarding the system of charging and the eligibility criteria would still be open to examination. Moreover in order to attract high levels of income from user charges it will need the affluent and those well above the poverty line to use the facilities. With the current level of competition from the private sector it will be quite farfetched to expect droves of affluent people accessing the public health system. Therefore user charges are mainly being collected from those who are marginally above the poverty line and those categorised as the middleclass in Indian society.

A unique observation was made on the Indian rural population, as a large segment of the population avoid or disassociate themselves from most forms of public healthcare. Sizeable landowners quintessentially represent this segment, as well as those who have a high caste status in society, those represented by trade and business holdings, and generally anyone deemed to be well to do. Jeffery R (1991) coined a phrase to describe this component as the rural proprietary class and in his observation of this class of people said:

*“Quite different interests activate the rural proprietary classes. For their own medical care they share the demands for private medical facilities in towns. None of the proprietary classes would use government hospitals except in emergency or in cases (as with some urban teaching hospitals) where facilities are unavailable elsewhere.”*p.109

This observation is still valid to describe the better off sections in society as they continue carrying out this practice even to the present day. However there are exceptions to this description and this group does not represent a homogeneous body of people, for example a certain caste of people may act in a particular way but in a different geographical area or circumstance may not act in tandem with the group described above. Although caste still plays a significant part of defining a person’s status and place in society, it is slowly

being replaced by monetary success and income status of individuals. Generally speaking it would be fair to say that those considered as better off would usually avoid public health care provisions unless essential or unavoidable.

The advantage of user charges only appears to bring slight benefit to the government as it can provide additional and instant funding if required but unless it attracts enough customers with paying capacity to reflect the true cost, it will only be an insignificant part of the income source. The current system may just create a few more jobs without making great progress in the people's health.

The introduction of health insurance.

In western societies the concept of insurance is part and parcel of life and it is a well established financial body. In countries like the USA health insurance is an essential to access healthcare. In India although certain aspects of insurance has been well established e.g. life, general and motor insurance, the concept of health insurance has taken a while to be accommodated into the conventional line of insurance. Traditionally insurance has been a forte of those who have a regular source of income, trade and when it is an instrument of necessity e.g. motor insurance. Health cover was slowly introduced in the private sector for individuals or employees of large companies and for government employees under the Employees State Insurance (ESI). However for poor people especially those (BPL) there was no initiative nor was there the financial incentive to attract such people. Moreover people with low incomes could hardly afford any additional financial burdens being added on and it would be a difficult task to convince people with a historic background of a fatalistic attitude, to the benefits of insurance.

The World Bank schemes to introduce health insurance in Karnataka have worked on the following basis. Under the Karuna Trust which has had a long term partnership with the United Nation Development Programme (UNDP) that introduced various micro-credit schemes to the population. Here health cover was provided to those who could afford Rupees (Rs) 30 (35p) per annum to cover health cost of Rs 2500 (£30). In the event of hospitalization an additional Rs50 would be given for drugs and Rs 50 towards the loss of

wages suffered by that individual. The scheme was fully subsidised for those (BPL) and individuals who were tribal or have low caste status. Those individuals classed above the poverty line had to pay the whole amount without getting any subsidy from the government. This scheme has mainly been criticised because of the limited amount of cover it provided as very little healthcare can be purchased with Rs 2500. Supporters of this scheme suggested as opposed to having nothing this was at least something to reassure people in times of ill health.

In 2003 another health insurance scheme was introduced with the partnership of the Government of Karnataka (GOK) and the Yeshasvini Cooperative Farmers Health Care Trust that proposed the Yeshasvini Health Insurance Scheme (YHIS). This scheme was different as the range of services including various surgeries like heart, kidneys and other vital organs were done for free for those who subscribed to this insurance policy. Here individuals had to pay Rs 60 or Rs5 a month of which GOK would subsidise Rs2.50 per person. Another distinction was that (YHIS) covers policy holders throughout the state and not one region. Therefore (YHIS) has much better monetary value for individuals, than the other scheme. The uptake of (YHIS) is slowly becoming much more relevant but it has still a long way to progress if the desire to provide universal healthcare is to be fulfilled. The concept of health insurance is most likely to be taken up by those who have a better educational and financial background, in remote and inaccessible place it will be an uphill struggle convincing people of the benefits of such programmes. Until most people are fully aware and have taken aboard all the benefits of where, how and when they can access healthcare by using such policies this concept of health insurance will still be spatially specific with ongoing teething problems.

Stimulating private sector growth.

India has always had a strong private sector providing healthcare therefore it could be argued that HSR did not have much of an impact and whatever did happen was invariably due to happen as this sector was expanding rapidly. The impact of HSR on this sector is mainly focussed on the public private partnerships and the rise of highly sophisticated secondary and tertiary level of hospitals.

It is often the case that the government cannot meet the needs of people's healthcare and there are private providers catering in the same region. In order that the goals of the government and the private bodies meet it would be more plausible if a partnership is agreed upon where the government has a monitorial role (WHO-India 2007). In Karnataka 31 Primary Health Centres (PHCs) were handed over to medical colleges and other non-governmental organisations. These centres were spread through the state and have been running quite efficiently. However such public private partnerships are not prevalent in all the districts of the state hence not all the public have benefited from such endeavours.

During this same period the country promoted the investment by private sources in health as a part of HSR. Mostly non-resident Indians from USA, UK and the Gulf States invested great amounts to set up modernised hospitals with up-to-date medical machines and technologies. Later on large Indian companies made similar investments in the health sector as they took the benefit of tax incentives. It was recommended by the World Bank to encourage such ventures so that the country can have healthcare facilities at par with anywhere in the world (Purohit 2001). The government allowed such facilities to import costly equipment without adding punitive taxes (normally to discourage people from importing high taxes are added) on the basis that these facilities will provide a portion of their care for the poorer sections of society. Unsurprisingly most of these hospitals were based in Delhi and other state capital cities with only a few exceptions. Intrinsically these facilities are capitalist profit making conglomerates with their eye to cater to the needs of the rich and growing middle class in India. In extreme cases it is alleged that some of these hospitals do not release the dead bodies of patients unless their bills are paid up. Of course these hospitals do have charitable wings and occasionally great works have been done for instance the Sparsh Hospital in Bangalore performed the surgery on Laximi to separate a headless parasitic twin attached to her pelvis at birth, for free which would have normally cost £30000 (Telegraph 2007). However at present it is quite the norm for poor people to avoid such hospitals unless provisions are there and neither does it appear that these hospitals are attempting to attract and cater to their needs. The one positive

effect of such hospitals existing is that a high level of healthcare compatible to most western standard is accessible to those who can afford it.

Contracting out of services; and reviewing the public-private mix.

Initially this process of public private partnerships wanted to contract only non-clinical services like the management of biomedical waste and the supply of diet to the hospitals mainly with the view to reduce the cost government incurred whilst attempting to do everything with its own resources. Eventually even the outsourcing of clinical services began for instance when there was a shortage of anaesthetists in government hospitals private doctors were contracted to work. Similarly other aspects of health care were contracted to NGOs who had expertise in certain diseases like leprosy, and they were encouraged to carry on working to meet government goals. In terms of eye surgery for a fixed price certain authorised private hospitals with the required infrastructure could conduct operations and claim the money back from the government. This was mainly done to bring down the huge backlog of repairable blindness in the country.

The contracting of services to private sources is still an ongoing practice by the government as cost cutting measures are viewed favourably especially from the perspective of the treasury. In an ideal free market best quality goods would be brought at the lowest price, therefore producers would have to produce goods in the most efficient way and then market competition would spur efficiency and innovations. India has also drawn some strands of this ideology and has taken the cost advantage of using cheaper workforce. However a lot of caution needs to be applied before adopting such measures liberally. Although there is not much evidence of the detrimental effects in India but studies have shown elsewhere the reasons for a cautious approach (Haiso 1995, Murray 1995). HSR initially mainly proposed that lower grade of staff can be taken on contract basis but at present even doctors are hired on this premise. Some of the effects of contracting doctors on temporary basis are discussed in (chapter 5).

With regards to reforms suggested in the public sector this is still widely acknowledged as an urgent need where lots of changes have to be made. However the government works at its own pace and only in part has taken measure to expedite the process. As aspects such as downsizing the public sector and productivity improvement have only marginally been addressed. It is quite evident that introduction of competition and the expansion of geographic coverage have been implemented. In terms of competition, the vast growth of the private sector stands out and has posed a viable alternative for the rich and growing middleclass. There does not seem to be any competition within the government departments. It has been an ongoing policy to increase geographic coverage and the numbers of health centres have been increasing since the 1990s.

HSR in India has not had devastating impacts like in African or Latin American countries but neither has it brought the majority of poor people a better level of accessing healthcare. However on the contrary in India one could say HSR has brought about highly sophisticated modernised hospitals, which are mainly for the rich, middle class and now they are competing to target the international health market.

Until now I have been discussing how the primary health systems have been evolving and the major developments that have affected and have dictated the course through which it has developed. There is another aspect of health care that has played a vital role in determining why certain strategies are being followed in order to cure and eradicate diseases. The advent of new medicines and technology to cure diseases promoted the concept of medical interventions as an instrumental part of reducing the burden of diseases. Here medical strategies were developed based on the epidemiological conditions of each country and regions. Once epidemiological data is collected in a region one could 1. determine the health problems, 2.monitor progress over time in relation to environmental change and 3.evaluate new measures (Lowe and Kostrzewski 1973). As greater understanding of epidemiology has developed over the years, strategies are now being based according to the way in which the pattern of diseases is prevalent. Since then the study of the epidemiological transition and the shifting burden

of diseases in countries has been given a greater importance in developing strategies of tackling health problems.

4. Epidemiological transition

The traditional role of epidemiologists was concerned with disease infection moving through a population. However nowadays populations are not only faced by the risk of infections but other diseases caused by life style changes. On the one hand in many developing countries preventable communicable diseases are prevalent and endemic but medical intervention has the potential of curing such diseases. On the other hand rapidly growing incomes and economies in these nations also dietary and lifestyle changes lead to the spread of non-communicable diseases. In many developing countries the type of communicable diseases that once appeared to have widespread detrimental effects, eventually lose their grip once brought under control and conducive factors change. Often non-communicable diseases appear to replace that role and equally increase the burden of diseases faced by the country. Dov Chernichovsky (1995) has aptly described this shifting pattern of disease burden.

“Once certain nutritional thresholds are passed, diets and life styles associated with higher income levels and modern life-styles may have adverse health consequences, leading to the spread of non-communicable diseases and the advent of mortality and morbidity from trauma, while communicable diseases remain common and endemic. This particular situation is also associated with increased life expectancy. That is, developing nations need to anticipate and expect to deal with an epidemiological transition”. p.84

Epidemiological transition has to be given great importance in India as the country shows the ideal symptoms with rapid economic growth in certain sectors and therefore the associated life style changes are bound to have serious health implications. Therefore I will give a brief historical background to the kind of health challenges faced by the country. Epidemiological transition has highlighted the complexity of the burden of diseases faced by the nation.

Even though the public health network has been severely restricted by the amount of resources made available to it, remarkably there have been improvements in certain health indicators. Since gaining independence in 1947, great strides of improvement have been made in terms of health indicators (see Table 2). For instance in the 1950's life expectancy was a mere 36.7 years, compared to the present 63 years. Similarly there has been a significant reduction in the ill effects of certain diseases by the epidemiological shift where diseases that once afflicted many are affecting far fewer people than in the past and also certain health problems are alleviated by the eradication of some diseases. For instance the incidence of malaria has reduced from 75 million in the 1950's to about 2.2 million in 2000, and certain diseases like guinea worm and small pox have been eradicated (NHP 2002). Malaria used to affect almost 25% of the population in the 1950's. However at present it only affects less than 0.1% of the population. Even though a couple of million are still affected by this disease now the fact is that there has been a significant reduction in the percentage of people being affected and effective measures have been taken to tackle the disease to reduce the burden of ill health caused by malaria. The country can deservedly be commended for achieving such a great feat by controlling and understanding the methods for tackling this epidemic.

Table 2 Changes in health indicators, India, 1951-2000.

Indicator	1951	1981	2000
Demographic Changes			
Life Expectancy	36.7	54	64.6
Crude Birth Rate per 1000	40.8	33.9	26.1
Crude Death Rate per 1000	25	12.5	8.7
Infant Mortality Rate per 1000	146	110	70
Population in millions (* 2001)	361	683	1028*
Epidemiological Shifts			
Malaria (cases in a million)	75	2.7	2.2
Leprosy cases per 10,000 population	38.1	57.3	3.74
Small Pox (no of cases)	>44,887	Eradicated	
Guinea worm (no of cases)		>39,792	Eradicated
Polio (no of cases)		29709	265

Source NHP2002.

Synopsis of the prevalence of diseases, epidemics and illnesses faced.

Another positive event in the provision of healthcare interestingly is the decline of leprosy. It appears that the battle against leprosy is going to conclude in the near future (possibly 2010) with the complete eradication of leprosy. Current statistics indicate that the prevalence of leprosy has further reduced from 3.74 per 1000 in 2000 to less than 3 heading towards about 1 in every 10000 population by December 2005 (Madur 2005). Leprosy has always had a widespread stigma in Indian society. Therefore sufferers from this disease were either hidden⁶ from society or ostracized, whereas others are forced to beg for alms in order to live. Historically a single antibacterial drug was used on a therapeutic basis to cure this disease. However due to the strains of drug resistant bacilli there appeared to be very little progress in constraining leprosy; in fact the incidence of leprosy increased from 38.1 per 10,000 population in the 1950s to the 57.3 in the 1980s. A plausible explanation for this phenomenon to have occurred is based on a combination of various factors but I would highlight the following. On one side of the spectrum was the ineffectiveness of the drugs used to combat leprosy and the rise of drug resistant bacilli making it very hard for health systems to restrain the spread of leprosy. The other side of the spectrum was that traditionally people often refused to register or hid their disease due to the adverse social implications that are associated with the disease but this aspect duly changed with the advent of Multi Drug Therapy (MDT) as people understood its positive effects. There was a surge of people wanting to get cured especially in the 1980s; hence more people got registered to do so therefore as indicated there was a significant rise in the apparent prevalence of leprosy for the 1980s.

With the introduction of MDT in the 1980s the incidence of leprosy has impressively come down to the present levels. MDT is still being widely used to fight and hopefully to eradicate leprosy, although there are ongoing reports of MDT-resistant bacilli emerging and this might prove to be a hard problem to solve. However the advantage of MDT is clear. Accordingly if people are detected within the early stages of leprosy (i.e. with only a patch on the skin) they can be assured that with the use of MDT they can get rid of

⁶ Hidden in the same sense as occurred in western societies in the past where unwed mothers were sent to distant relatives or secluded places to deliver in order to avoid being shamed and discriminated against by society.

leprosy. Therefore if the public are made fully aware that leprosy is curable and are urged to voluntarily seek assistance when they discover the first signs of the disease it would significantly help in seeing the end of leprosy. The gravity of leprosy in India is still very significant even if the incidence is 1 per 10000 people, as it would mean 100,000 new cases every year throughout India.

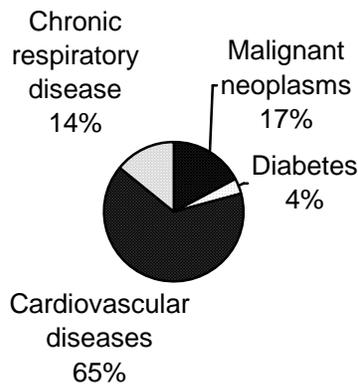
Moreover there has been a rapid growth in other diseases that appear to have replaced the traditional diseases and pose a great threat to the present population. Communicable diseases like AIDS are on the rise and it is estimated about 5.2 million people are suffering from it in India making India the second most populous nation with AIDS victims in the world after South Africa (WHO 2005a). Strains of drug resistant Tuberculosis (TB) appear to be hard to contain. Presently TB is estimated to affect 344 persons in every 100,000 population, thus making it a serious disease that threatens to engulf a large segment of the population. It is estimated that about 40% of the population live in the areas where filariasis is endemically present. Though malaria is on the decline other menacing diseases caused by mosquitoes like dengue appear to be prevalent in almost all urban centres. Kala-azar or leishmaniasis is mainly present in the states of Bihar and a few districts of West Bengal and Jharkand State. Periodically epidemics occur on a regular basis i.e. some diseases are expected during the monsoon period or even specifically during the summer months. Even diseases thought to be eradicated like bubonic plague have been surfacing thus increasing the burden on the health system. One must be always aware that in countries like India the burden of diseases appears to be hanging precariously over the people virtually at all times and it would just take a few factors to trigger an epidemic or a series of epidemics which would cause a lot of deaths and put severe constraints on the health system. This makes the country susceptible to emerging and re-emerging epidemics, which most often attack the most vulnerable in society.

Non-communicable diseases

On another front non-communicable diseases are also causing concern to a growing amount of people. It is estimated that now almost half of adult mortality, morbidity and

disability in South Asia is attributed to non-communicable diseases (Ghaffar et al 2004). Cardiovascular diseases, diabetes, cancer, consequences of substance abuse and mental health problems are affecting large segments of the population hence a greater amount of effort is needed to tackle the onslaughts of such diseases. Predominantly the cause of deaths due to non-communicable diseases in South Asia is assigned to a sedentary lifestyle, extreme poverty and inadequate health systems (Ghaffar *et al* 2004). A recent survey conducted in 2002 by the WHO on deaths caused by non-communicable diseases in India showed the levels of death according to the percentage each disease makes up.

Mortality -Both Sexes
Group II - Noncommunicable Diseases India



Source: WHO 2005b.

Table 3 Non-communicable diseases in selected regions.

Deaths from non-communicable diseases in 2000 (as percentage of all deaths)				
	India	Sri Lanka [†]	Sub-Saharan Africa	China
Cardiovascular disease	31.7	20.1	11.2	32.1
Diabetes mellitus	1.1	1.5	0.3	0.6
Cancer	7.4	5.6	6.2	20.5
Chronic obstructive pulmonary disease and asthma	2.5	1.6	1.9	17.8

[†]For 1998. Source Ghaffar *et al* 2004 pg 809.

In certain aspects India and China have similar indicators with regards to cardiovascular diseases whereas Sri Lanka appears to be better off in most ways. The burden of non-communicable diseases appears not to have a similar effect in Sub-Saharan Africa as it does in Asia but this may be because the burden of communicable diseases poses a much higher threat in Africa as opposed to other regions of the world e.g. malaria and AIDS. In Sri Lanka, although it has better health indicators in most aspects when compared with India and China, deaths caused by diabetes are much higher. Interestingly China surpasses quite significantly when one compares the deaths caused by cancer and chronic obstructive pulmonary disease and asthma. There is a single factor to indicate the exact reason for such a phenomenon to occur but also congruence of various factors specific to China that causes such high rates. China is the world's largest producer and consumer of tobacco and its products. About 60% of men and 3% of women smoke and it was estimated in the mid 1990's about 1.2 million deaths are caused by smoking related diseases (WHO 2005 c). It is projected in the world from the present 1.3 billion smokers will increase to 1.7 billion by 2025; currently about 350 million smokers live in China. With such high usage of tobacco in China it is not surprising that China has such a high death rate caused by cancer whereas chronic obstructive pulmonary disease and asthma are further complicated when one smokes, as the ill effects of tobacco usage just strengthen the adverse effects of such diseases.

A large portion of the deaths due to cardiovascular diseases and cancers are also attributed to the widespread use of tobacco. In India tobacco is not only smoked but also chewed⁷ in various forms and it is also snuffed. It was estimated that the proportion of smokers among males 15 years and over in the 1980s was between 32-74% (rural) and 46-63% (urban), and females 20-50% (rural) and 2-16% (urban) (WHO 2005d). Although there is a higher rate of smoking among men this trend may not be similar in terms of consumption of tobacco in other forms. Chewing of tobacco is quite common among women and it is readily accepted by society as opposed to them smoking which is

⁷ Tobacco is either chewed directly or made into blends of paan masala, Gutka (betel nut or areca nut mixed with tobacco) and placed in one's mouth to gradually discharge its effect.

seen as immoral by certain segments of society. In India a lot of people who use tobacco are non-smokers. It is estimated that up to 40% of tobacco users consume tobacco by other means rather than smoking it. However it is estimated that 10 in every 100,000 are affected by oral cancer regardless of the form of tobacco they use. Therefore its adverse influence on disease and mortality among individuals and populations is clear (Subramaniam et al 2004).

Presently there are a growing number of deaths caused by motor accidents and to a lesser extent by poor working conditions. According to (WHO 1999) India has 20 times higher fatality rates than any developed country. It was estimated that over a million people died annually due to motor accidents. Although India does not possess the most number of vehicles it has one of the highest death rates (Aparajita and Ramanakumar 2005). The main reason stated was the high levels of two wheelers usage as they are more susceptible to injury and death due to lack of protection. Similarly due to a lack of health and safety measures, agricultural workers are exposing themselves to hazardous chemicals, poor working conditions and are susceptible to injuries. Lynch (2005) gave an example of farmers using sewage water to grow vegetables in Hubli district Karnataka where they often trod on used syringes disposed from a hospital nearby and they also mixed hazardous chemicals without protective clothes. Here the farmers are at a high risk of being contaminated by chemical toxins and in danger of other health hazards that might occur. Therefore such categories of deaths and diseases are also adding to the existing health problems faced by the country.

The burden of non-communicable diseases in India is compelling and a lot of resources and a proper agenda should be set in order to tackle the problems posed by it. Many developing countries are undergoing demographic and epidemiological transition that will have the potential of increasing the burden of chronic diseases as opposed to communicable diseases (Islam and Tahir 2002). Nevertheless public provision of healthcare in India faces a variety of challenges both from communicable and non-communicable diseases at present. India, being a very large country and having the second biggest population in the world, has a diverse geography, culture, society, levels

of income and also health status. Due to wide variations within the country the issue of the provision of healthcare will be complex and usually riddled with problems. Therefore in order to get an optimal level of health care provided policy makers would need a focused and targeted approach where they can carefully alleviate problems according to the perceived need at the local level. Presently there is a wide range of services made available to the public ranging from specialty hospitals / research institutes and district hospitals in urban areas and a minimum basic level provided in the rural areas.

In this chapter I have discussed the major historical and ongoing concepts of primary health care and the epidemiological transition in India. Given that the country has a major task of delivering healthcare especially to the rural areas I will discuss the model that has been adopted.

5. Primary health care model in India

Currently the pattern that is followed to implement the national model for primary health care in rural areas is as follows; there is a Community Health Centre (CHC) for a population of 120,000 (or 80000 in hilly and tribal areas). CHCs are based mostly at the Taluk⁸ level or in a village with a large population, which is also widely accessible, from a cluster of surrounding villages. A PHC is for 30000 people (or a PHC for every 20000 people living in hilly and tribal areas). For each PHC there are 6 Sub-centres (SC) which cater for a population of 5000 people (and in hilly and tribal areas for a population of 3000 people). A medical doctor along with a team of Auxiliary Nurse Midwife (ANM) and Male health worker (also known as a Multi-Purpose Health Worker MPH) run each sub-centre. These SCs are the most peripheral contact point between primary healthcare systems and the community. PHCs and SCs have a wide range of functions that are mainly promotional and educational relating to maternal and child health, family welfare, nutrition, immunisation, diarrhoea control and control of communicable diseases (MOHFW 2001).

⁸ Taluk is a major subdivision of a district.

The physical access to such centres is generally based on the policy that PHCs and SCs should be accessible within two hours using local modes of transportation. In urban India this is possible, unfortunately in rural India there are lots of loopholes in the policy on access to PHCs, therefore in many areas in India this two-hour policy may not be applied (Indrayan 2000). Sometimes this is due to the geographic location, e.g. the state of Jammu and Kashmir where the average area covered by each PHC is 662 sq km (hilly terrain) whereas the Indian average is 145 sq km/PHC. It could also vary due to the sparse spread of population in certain states of India e.g. Madhya Pradesh.

Table 4. Staffing norms.

Central government Guidelines	CHC	PHC	SC
Number of doctors	4	2	1
Number of paramedical workers	21	14	3
Number of inpatient beds	30	4-6	0

Source MOHFW 2001.

The table above shows the guidelines from the planning authorities according to what would be the 'ideal' number of personnel required to maintain the health system according to the Central Government of India. However in reality one can find quite a number of variations in the implementation of these guidelines as each state of India differs in the way in which it staffs its CHCs, PHCs and SCs. Primarily this is due to the financial constraints each state is under and also the diverse geography, demography, perceived need and adverse circumstances each state faces. For instance in Karnataka State just over 80% of the PHC system is maintained under the Minimum Needs/ Basic Minimum Services (BMS) Programme as opposed to the Government of India (GOI) pattern (Reddy 1994). The BMS is used by many states that set their standards slightly below the GOI pattern to avoid contradicting GOI rules. The present norms to fulfil the minimum requirement in staffing PHCs are at least 1 medical officer (doctor) supported by 14 paramedical workers and other staff. These centres broadly base their activities on curative and preventive medicine, promoting good health and family welfare services. As most PHCs are based on the minimum needs programme, whether it is adequate or not

would depend on whose perspective one would like to consider: either the Government's or the consumer's. The answer to this is revealed in later chapters where I have analysed the data from my field trips to India. The intention of setting the standards lower than that of the GOI is that many states agree in principle that the GOI pattern is desirable and will eventually comply with it. However the various existing constraints and the unavailability of certain resources make it very hard to comply with the GOI pattern; hence the option of BMS is used. For example according to the GOI it would be ideal to have a male and female doctor to work in a PHC in order to share the work load and also to help to cut across socio-cultural barriers that exist in India e.g. where women prefer to be seen by women for their healthcare needs in certain segments of society. However in Karnataka State very few PHCs adopt this model because not many women are willing to work in remote and inaccessible villages. Hence the state is forced to run the PHC with one doctor or two male doctors. Similarly other staffing requirements are also compromised under the BMS where it appears that certain vacancies are not filled on time or appear to be completely ignored due to the financial burden involved.

Table 5 Number of health centres established by the government and of medical colleges (private or public), 1971-2001.

	1971	1981	1991	2001
Total No of Hospitals (pub & pvt)	3862	6804	11571	18218
No of Community Health Centre		214	2070	3043
No of Primary Health Centre	5112	5740	20139	22842
No of Sub Centre	28489	51405	130984	137311
No of Medical Colleges (241 in 2005)	95	109	128	189

Source: National Institute of Health and Family Welfare. (National documentation centre).

In table 5 it can be clearly seen that India has increased the number of health centres therefore making steady progress towards providing a wider accessibility of healthcare. The rapid increases from the 1980s indicate that the government is keen in promoting primary health care. Although the model of primary health care has been well established throughout India, it is not without persistent problems, which have created hurdles, and the public has not benefited fully from its implementation. Most of the problems appear

to stem from the lack of managerial and financial resources, which often affects the neediest regions more. In the next section I will discuss some of the major problems facing health authorities in delivering services.

6. The Problem

In India the problems faced by the health sector has been out in the open and it is relatively easy to comprehend the complexities due to the numerous levels of its shortcomings. The government is not oblivious to this fact and is searching for solutions to sort out these problems.

1. *Persistent gaps in manpower and infrastructure especially at the primary health care level.*
2. *Sub optimal functioning of the infrastructure; poor referral services.*
3. *Plethora of hospitals not having appropriate manpower, diagnostic and therapeutic services and drugs, in Govt., voluntary and private sector;*
4. *Massive interstate/ inter-district differences in performance as assessed by health and demographic indices; availability and utilisation of services are poorest in the neediest states/districts.*
5. *Sub optimal inter-sectoral coordination.*
6. *Increasing dual disease burden of communicable and non-communicable diseases because of ongoing demographic, lifestyle and environmental transitions,*
7. *Technological advances which widen the spectrum of possible interventions.*
8. *Increasing awareness and expectations of the population regarding health care services.*
9. *Escalating costs of health care, ever widening gaps between what is possible and what the individual or the country can afford.*

Source: Dr. Prema Ramachandran, health adviser, (Planning Commission India) p.1.

The list shows some of the persistent problems acknowledged by the government. Interestingly shortage of manpower has been given a high priority but it should be noted that these problems are not universally applicable throughout India, except in poorly performing states. It is quite obvious that there is not a single strategy that can be either envisaged or implemented to resolve all the problems. The logical option would be to pursue specifically targeted programmes that attempt to resolve a problem or a few at a time. However this is easier said than done, as there are problems solely to be dealt by the central government, the respective state governments and even different districts with

in the state. There are even cases where problems need to be resolved at all levels by a joint effort of all the major players, especially during outbreaks of epidemics and natural disasters. This list is not solely depicting the problems faced in delivering healthcare in rural areas but it highlights issues facing all of India. In table 5 a clearer picture of the persisting problems in rural areas is presented.

Table 6 Major constraints in rural health services and their probable causes.

	Major Constraints	Probable Causes
1	Non-availability of staff.	Rural postings not attractive. Lack of women doctors. Diverse tasks and absenteeism. Lack of posts. Systemic inefficiencies.
2	Weak referral system.	Lack of organizational support. Poor transport and communication. Lack of awareness in the community. Systemic inefficiencies.
3	Recurrent funding shortfalls.	Financial constraints. Lack of autonomy. Negligible income from patient care. Bureaucratic delays.
4	Lack of accountability for quality care.	Obsession with targets for family planning. No system of clinical audit or quality control. Inadequate understanding of rural health services. Lack of interest.

Source Mavalankar et al 2003 p.7.

Table 6 encapsulates quite a wide range of problems and their probable causes, which constrain and are usually blamed for the dysfunctional nature of the rural health network. I do not intend to explore every aspect in detail but will try and present those relevant to the thesis. Some of the problems mentioned in table 6 I explore and elaborate in detail in chapter (4) where I write about the perceived problems faced by the people in accessing healthcare and the reasons they give for the suboptimal or poor service provided by the government. Certain aspects that have not been mentioned in table will include the effect of corruption in public healthcare provision and the vulnerability of entire population groups because of their economic status, gender, social group, age and location. Other the problems mentioned in table 6 is highlighted in chapter (5) where I analyse the outcome

of the interviews conducted with the doctors serving in rural areas of Bidar district. This is primarily because doctors have an overbearing influence and responsibility in the management of Primary Health Centres (PHCs). Therefore the functioning or non-functioning of the PHCs would overwhelmingly reflect on how well the doctor actually manages to deliver healthcare from the PHC he or she is entrusted with.

The problem of recruiting doctors to work in rural areas.

Although the government has been able to build PHCs and other centres, there have always been problems recruiting highly qualified staff, especially doctors, to work in these centres. The severity of the above problem can be observed in The Government of India health report (1999 GOI). Aggregated for India that has approximately 22000 PHCs, more than 4000 positions for PHC doctors lay vacant, above 1300 PHC run without any doctors, about 5000-laboratory technicians post for PHC are still to be filled and nearly 24000 positions for health workers are vacant. Several initiatives and incentives were adopted in order to find a solution to this problem; however as mentioned above there seem to be a lot of problems that need to be tackled in order to get the right people with knowledge and competence to run PHC smoothly. Services provided by doctors were meant to improve on the previous quality of service and also to provide a broader range of healthcare to the population. Prior to the interventions of doctors, poorly qualified staff, mainly Auxiliary Nurse Midwives (ANMs) and Male Health workers were often left to manage PHCs. There are different ongoing policies adopted in India and its states that aim to bring a balance in the availability of doctors between urban and rural areas.

The problem of recruiting highly skilled personnel to work in rural areas has been ongoing ever since health policy planners envisaged the concept of primary health care delivery in rural areas of India. This meant that although there was in many instances the infrastructure for a PHC there was not the manpower available to manage the facilities. It appeared especially that doctors resisted or were not interested in working in rural areas of the country. Historically similar problems are faced by many developing nations and there does not appear to be a cohesive policy that works for every nation. Some nations

depended on giving out financial incentives to doctors to work in rural areas. In Turkey doctors were given four times the normal salary to work in rural areas (Cheyne and Lloyd1975). This Turkish scheme however lucrative it may have seemed was not as productive as intended, because the doctors involved weighed other factors against it such as their own safety, the education of their children, lack of amenities and development of basic infrastructure. Providing financial incentives appeared to be the norm followed by many of the Indian states but the professionals mostly disregard them, as these initiatives were deemed inadequate (Indrayan 2000). It might be suggested that the financial incentives offered by the government in the Indian context never appeared to satisfy the levels expected by the doctors. The financial incentives at present only tend to meet about 10% of what is expected by doctors hence it does not appear to be appealing enough to attract them to work in rural areas.

In order to attract doctors to work in rural areas it was envisaged in the 9th plan (1997-2002) of the country, to allow states to offer postgraduate seats (places) to doctors who completed working for a period of time in rural areas (PCI). Karnataka readily adopted this policy and made certain alterations to suit the situation within the state. The GOK has a policy to attract junior doctors to work in rural areas for six years with the incentive that after completing this duration they will be eligible to get postgraduate seats (KGMOA 2001). It must be noted that placement in postgraduate positions is in itself a financial incentive, because one can bypass the normal procedure of either having to pay vast sums financially or enter into highly competitive exams to get such placements.

My thesis will examine the effects of this policy on the delivery of healthcare to rural areas from the perspective of both the provider and consumer of healthcare. I intend to concentrate on one district of Karnataka state, which is known to be an area that is deprived and lags behind in development. The effects of the GOK policy will be closely studied in the Bidar district of Karnataka.

7. Conclusion.

In this chapter I have attempted to give a brief historic perspective of the way in which primary health care has been developed and how it has been implemented in India. Undoubtedly health planners in India have shown a keen interest in providing universal access to healthcare. Turning ideas into actions has been an uphill task almost riddled with problems at every stage, which challenge the country even to this very day. Although India inherited an unevenly balanced system favouring an urban setting there have been serious attempts to try and rectify this imbalance. The concept of primary health care has been adopted as a model to ensure at least a basic level of healthcare can be accessed by the people. Certainly not everything has gone according to plan as health indicators show that there are vast differences within the country. Yet at the same time some southern states in India like Kerala and Tamil Nadu have shown remarkably good health indicators thus emphasising if primary health care is properly implemented it can achieve far better results.

It is quite obvious that there are significant shortfalls within India that can be solely blamed for the primary health system to be working on a suboptimal level. Primarily the blame is based on country's low investment on health, indications of a poorly managed system and the sluggish pace of development. However there are certain external factors that have equally reduced the relevance of primary health care. The external factors are sometimes from the ideologies being adopted by the country e.g. concepts such as SPHC only concentrated on one segment of a population or diseases leaving other relevant sections untouched. Elsewhere conditions applied by lending institutions under the guise of HSR, appear to spearhead private sector growth much more than revamping the public health network. This could be seen as a good development for those individuals who have the economic means to access a high quality of services. On the contrary it restricts the access to primary health care for the poorer sections of society and alternatively one could perceive it as a cheap and ineffective form of health care for the poor.

The burden of diseases poses a growing threat to the nation on two fronts. At one level some communicable diseases are on the decline whilst others are on the rise e.g. AIDS. A growing middleclass and brighter economic prospects for the nation have also changed the epidemiological conditions, so that non-communicable diseases are posing an equal challenge on the health sector. Undoubtedly a status quo cannot be maintained and the health system should be more proactive with the ability to assess and provide for the needs of the people especially for those who cannot afford it. Given that there are wide differences and imbalances between rural and urban areas in India, the step that Karnataka is taking by attracting doctors to work in rural areas should in theory be able to reduce this gap. Perhaps this is the sort of policy the government should promote where both the doctors and public ought to benefit. However, only after proper scrutiny and analysis should such policies be promoted. Philips (1990) suggested that modern health care is certainly not universally available but there is a trend towards serving all the population, if starting perhaps with the majority living in the more accessible areas. Certainly in India this suggestion is valid but it appears what began in urban areas remain there and only marginal levels of impact in the rural areas.

II.

Methodology and strategies adapted for collecting the relevant data.

1. Introduction.

In the previous chapter I have written about the significance of primary health care in India and how this concept forms the basis for delivering healthcare in rural areas. Although the concept has been eagerly promoted, there have been numerous problems that have prevented its progress to the extent, where it is perceived to be working on a suboptimal level especially in poorly performing states. The gravity of ill health faced by developing nations is severe and cannot be ignored. The low levels of investment on health have not been helpful either. Therefore the measures taken to rectify problems in the primary health system should be promoted, however it has to be examined to see whether such actions are efficacious. Conducting research often follows a standard pattern, where it begins with the research design, then sampling, data collecting, data analysis, the results and finally the conclusions. In my case I had a clear idea of the topic my thesis would concentrate on, but choosing which method was most appropriate to elicit responses from the respondents and to present the research in a suitable format will need to be discussed and the reasons for the choice highlighted.

My thesis will assess the effectiveness of the ongoing policy of the Government of Karnataka (GOK) to recruit doctors to work in PHCs and how this fits in the wider concept of primary health care delivery in India. In theory this policy should have a dual effect of enhancing the doctors' prospects and also the rural population's chances of accessing a higher level of healthcare. The question of how I have chosen which method is most appropriate to assess this policy will be discussed according to the perspectives I got from the rural population and the doctors. Because of the fact that the doctors' and the rural population form different aspects of my research, in terms of one being a provider and the other potential consumers of healthcare; methods had to be adopted to suit the relevant groups with the exception of some

techniques which have common characteristics. Moreover the doctors were asked specific questions regarding the policy along with other aspects of primary health care. In contrast it transpired that most of the questions posed to the rural population were based on their experiences with the health system. Matters such as ethics and potential biases will also be discussed to ensure that the research is within the boundaries stipulated under the code of professional ethics.

Establishing the framework of primary data.

In my field trips to India I had to explore the features of primary health care in relationship to the ongoing policy of recruiting doctors by the government of Karnataka, with the view of presenting perspectives of providers and consumers of health care. Certainly I do not believe that I am an expert on ascertaining perceptions, nor do I know all about the underlying problems faced in the study area, but I have a strong inclination and hope of becoming a change agent. There is not a single method through which primary data can be collected; primary data is mainly collected by the following four methods, questionnaires, interviews and participant observation and focus groups. Though each of these methods has their own advantages and disadvantages it is appropriate to choose the most effective and appropriate method according to the merits. Perhaps even a mixture of all four techniques could prove helpful in measuring the outcomes.

Questionnaires in the context of human geography are a very important tool in collecting primary data, according to Parfitt (1997)

“The questionnaire survey is an indispensable tool when primary data are required about people, their behaviour, attitudes and opinions and their awareness of specific issues”. p.76.

Questionnaires are good as the response can be easily measured and encoded for further statistical analysis. Closed and open-ended questions both have their positive and negative aspects but both assume that those being interviewed are literate. However in the context of rural India, as literacy levels are low and it could prove an ineffective tool. Generally the measure used to check literacy levels in India is the ability of individuals to sign their name as opposed to giving a thumb impression. Hence a certain percentage of individuals classed

as literate could still find it difficult to read and answer a questionnaire. Similarly questionnaires would seem to necessitate the arduous task of interviewing each and every respondent personally, as the option of using post and telephone services would be unreliable in rural India (De Vaus 2002).

Interviews were the method, which I was inclined to use, despite problems in measuring the outcomes of unstructured interviews. To avoid this situation I originally intended to interview using semi-structured tape-recorded interviews. Interviews can express all the complexities and contradictions and can be seen as a dialogue rather than an interrogation (Valentine 1997).

With the doctors a blend of interviews, questionnaires, overt and covert observation and group discussion helped in gleaning relevant information. It is usual protocol for doctors to be regularly called to the district health office for meetings, debriefing and updates on policy and practices. Taking the opportunity of using such meetings would enable me to access many doctors at one time in the same venue. It would be very useful for making contact with the potential of further meetings, provided the authorities agreed to allow me to attend such meetings. In case the authorities are not co-operative one could tackle such a situation by at least knowing the day when all the doctors together meet with the district health officer. Personal invitations could be given for them to meet in a neutral venue, say a tea shop/restaurant, therefore enabling an informal discussion to be conducted from which valuable data can be acquired. Through these group discussions with doctors, a proper and friendly liaison can be created in order that future in-depth interviews can take place. Doctors can arrange a time for my visit to their PHCs where such interviews and observations can be made. Such arrangement and organisation will be time saving as one would know where to go and on what day. An unannounced visit could prove frustrating if there is nobody to conduct the interview with or a hostile situation is created where the researcher is seen in light of an inquisitor therefore very little co-operation can be expected. However a balance needs to be struck between arranged and spontaneous interviews because if all the interviews take place at the expected time the researcher can be shown a completely different picture from reality. Therefore to avoid such snares one could observe the PHC 2 days before or after the interview and spend time in the villages conducting interviews with the consumers of healthcare and of course observing the PHCs simultaneously. This could prove very useful in

getting a proper insight into the actual situation prevailing. Covert observation will be needed for doctors as they might express in a certain way the problems that exist without necessarily taking the responsibility on themselves. For example they might blame the system for its poor functioning but in reality they might be blamed as they rarely or irregularly visit PHCs. In order to observe corrupt practices of those doctors who adopt such practices covert observation will be the most appropriate technique.

Having only a limited time to conduct the interviews it would have been an impossible task for me to interview all the key players. Therefore I had to sample the PHCs where I would be conducting the interviews, in order to get a broad range of data in my field trip and not just data on the most inaccessible places. The idea was to carry out my work in 6 PHCs, sampling 2 similar PHCs each depending on the access to the PHCs. These PHCs vary from being 1. easy to access i.e. on the main road (tarred), 2. A little less accessible e.g. off the main road, 3. Difficult to access i.e. only access by foot or 4 wheel drive vehicles if available. Consequently after making my judgement on which PHCs to conduct the studies in, the choice should help me to get a broad range of the working of PHCs and their effectiveness.

Because a considerable proportion of ordinary people is illiterate and many classified as literate could also be deemed as illiterate depending on the measure used to classify their status, I hoped to use group discussion forums as a way to gauge the opinion of health consumers. Using group discussion it must be noted that all precautions should be taken in order that the people can express themselves freely and in no way feel biased or intimidated by the interviewer. Therefore before the actual interview pilot studies should be conducted so that the right questions are asked and understood hence getting a proper response. To conduct my pilot studies I was able to use the unique position that I hold, being associated with a non-government organisation (NGO) started by my parents. The Velemegna Society has been active throughout Bidar district carrying out various activities that are related to health and socio-economic development of people in rural areas. Presently this NGO is busy conducting a government programme of eradicating preventable blindness; hence a lot of patients come from different villages to get their eyes operated on. These patients and their relatives who come along with them could be interviewed, from which I was able to gauge the type of questions to be asked. The value of such interviews could be priceless as the interviewees could be used as initial contacts in the village, thus making it easier for me to gain the trust of inquisitive and suspicious rural folk. This NGO is currently conducting programmes in

concurrence with the government, so a lot of government officials especially from The Department of Health visit the NGO. I could take the opportunity to capitalise on this partnership to gain access to people whose work is relevant to me without compromising my status or intention of study.

I had to recruit and train a female research assistant to conduct interviews with women so that I do not miss a wide sector of rural people, whilst I conducted interviews and work with men. Taking a female assistant was an important aspect of my research to get across the cultural barrier that could cause certain limitations for exploring women's perceptions of PHCs. Women in rural India can be very reclusive and seemingly hard to contact, hence the help of a female research assistant is essential. However there are ways to ensure proper access, this could be as simple as the choice of words a man uses to address women; generally depending on her age she can be addressed as sister or mother. Prefixing such words, whilst addressing women, could prove very handy in making inroads into the gender barrier. The women in context will not feel threatened if addressed in such a manner as it implies that the researcher has noble intentions especially if they come to know I am a married man with a child. Similarly eye-to-eye contact should be avoided if possible as it could lead to various interpretations culturally, of which some could be harmful to my own security. Therefore it would be in my interest that the trust gained in society should not be violated in any manner. Another suitable option is to interview focus groups consisting of married women and their husbands as this type of interview was very fruitful when other researchers conducted similar studies as Reddy (1994) did in rural south Karnataka and was able to cross certain cultural divides by using such a process. Here again I needed to adopt what appeared to be fitting for the situation especially as I had to keep in mind the time frame in which I needed to complete the data collection.

2. Criteria needed to sample the rural population.

My intention to ascertain the views expressed by the rural population did not mean that I randomly conducted research with anyone who came from rural areas. About 70% of the population live in rural areas in Bidar. Current statistics indicate that the present population of Bidar district is just over 1.5 million, which would give me a potential sample of 1 million people to choose from. To get a representative sample from such a large sample would not

only be difficult but impossible with the time and resources that I had whilst conducting the research. I needed to focus on a small but relevant reflection of the rural population to carry out my research. I broadly adopted the following criteria to guide me to the kind of people to target. This was also done to include those who can be perceived to be in greater need of accessing healthcare as opposed to those who can easily access healthcare.

- a) A person living in a rural area from which it takes over half an hour to reach urban centres (mainly Bidar district hospital). Mere distances from the town were not necessarily considered, as I had to look into various geographical positions and factors that influenced my decision. For example some villages were within a 20km radius of Bidar but because there are only a few bridges across the River Manjra a roundabout route is needed to reach the town. Hence I conducted interviews in such villages although they were relatively close to the town. On the other hand some villages over 30km away from town had well-maintained motorable roads or a relatively continuous and frequent traffic flow. My understanding was that people in such villages find it very easy to reach urban centres. Therefore I avoided such villages too. What I took into consideration regarding the approximate time taken was how long it would take to reach urban centres from the villages using locally available modes of transportation. Therefore any village that is easily accessible within half an hour was not taken into consideration. Locally available transportation in my case was a combination of walking, bullock carts, buses, lorries and other private transporters like jeeps that ferry passengers to and fro from villages to towns. My assumption was that people that lived relatively close to the towns with relative easy access to motorable roads tend to bypass the rural PHCs and access urban centres.
- b) Persons who are representative of the opinions of their households. This of course can be very subjective as healthcare is free to be accessed by all and everyone has an opinion. However I did not just want to get the opinion of those who rarely took decisions about using the PHCs e.g. children, frail and elderly, but intended to contact those who generally can make independent decisions. My intentions were also to get the opinion of those people who influenced the decision making process of the family most. There is no set format for finding out such individuals as various factors influence the choice of person who holds this responsibility. Traditionally India is still a male dominated society but women play a vital role especially regarding the health of women and children within the family. Sometimes this role is played by the mother

of the house or by the dominant daughter-in-law. For instance if there is going to be a delivery in the household depending on the seriousness the decision is generally left to the women of the house whether it can be managed in the home or needs to be seen at the PHC and lastly whether they need to go to the urban centres. The only way in which I was able to gauge this was by my personal knowledge of the existing culture.

- c) Persons who are part of general rural society. I had no intention of conducting interviews with people who live on the fringes of society like the nomadic population, people not able to share opinions due to learning disabilities, ostracised segments of society e.g. lepers and generally anyone who did not have a fixed abode e.g. Sadhus (Sage or Ascetic) who lead an anchoritic life. My perception was that such people live reclusively and seldom influence the ways of society on a day-to-day basis. However I accept that anchorite persons have an immense power in Indian society as many revere them but they tend to concentrate on the spiritual side of society and matters regarding healthcare have a low priority. Of course some sages do mix the roles of traditional healer along with the spiritual role they have in society.

There are many social inequalities that exist in Indian society that favour the upper caste therefore it becomes quite hard for the views of lower castes to influence society. They tend to struggle to enforce certain safeguards the law has already provided them. It is even harder for those who live on the fringes of society to be accepted as a part of society. For instance a group of lower caste could possibly get a bore well drilled in their locality but the same task would be virtually impossible for a nomadic group of ironsmiths. Therefore I ruled out seeking the views of people living on the fringes of society.

With these 3 broad factors in mind I intended to approach the prospective respondents and start the process of data collection.

Pilot Studies.

The rural population in Bidar district represents a large number of people; the question that was provoking me was with whom do I begin? Do I just go to a village and work through the existing traditional geographic positions of individual households that tend to be in concentric circles where the lower castes live in the peripheries and as you get into the centre of the village you tend to find the elites represented by the higher castes? This of course is easier said than done, as perhaps it would raise a lot of suspicion, hence creating a lot of hindrance

to my work. This problem could easily be solved if I can make contact with the elites of the village who traditionally hold the strings of power, and therefore could easily persuade the rest of the village to offer their cooperation.

Here again my close association with the NGO helped me to make such contacts easily. Currently this NGO is mainly involved in the eradication of repairable blindness i.e. cataracts, glaucoma and other preventable blindness. Some of these programmes are affiliated with the government's healthcare agenda therefore a close and congenial relationship is maintained with the government health department. The government currently pays a subsidy for each patient that has an eye operation in this hospital whenever there is a free eye camp conducted. These programmes appear to be very successful, as many people especially rural people tend to queue in lines to take advantage of such programmes. It is common practice for patients to come along with a member of their family who take care of them if they are operated on. As these patients were accompanied it helped me get a wider view or perception of society or else I would have mainly a geriatric point of view of society. However this does not mean that I discounted the views and opinion of elderly people as many of them were the Kartha¹ or were in matriarchal families where elderly women's views are well respected, and it is also known that elderly people tend to require more health care and perhaps may be using the PHCs more often. However in most cases the person who accompanied the patients was the main earner for the family and hence had a greater influence over decisions and opinions.

I had a preconceived assumption that the people who usually accept free treatment would tend to be from the poorer segments of society but I was astonished to see that people with higher caste and higher economic status were also availing themselves of such services. Perhaps the richer segments of society were following a human characteristic of "why pay for something when you can get it for free". Hence I was able to make vital contacts with the powerful elites of rural areas who were very helpful later on as they had the desired effect in helping me to make close contact with the rest of the villagers.

These initial contacts made a big difference mainly in the following ways. Numerous interactions with patients in the hospital helped me understand them and their logical

¹ A kartha is the most senior male member of a joint Hindu family who manages all the affairs of the family and is given supreme authority over all matters that might affect the family.

thoughts over many issues. That made me sort out an appropriate way in which I should carry out my research, because I was able to make decisions based on the kind of feedback they gave me and accordingly made amendments. It became evidently clear that almost all the people questioned did not have clear ideas about the government's recruiting and retaining policies for rural doctors. They expressed the view that most government programmes being implemented are directly or indirectly caused by a combination of government officials and politicians who set about strategies that will be executed, with very little involvement of the general public unless they are closely associated with either of these lobbies. This kind of disassociation was surprisingly expressed even among the elites of society that I encountered. Unsurprisingly the lower the level of society each person represented this gap appeared to widen even further. Perhaps it could be blamed on the widely held fatalistic attitude most people in the subcontinent have, who blame virtually everything on their fate and feel it is not worth trying to change things that are out of one's control. This type of disassociation and virtual unawareness of government policies by the people made me rethink my own approach to how I conduct research and see what would be the most appropriate questions that I need to ask them to get relevant answers. However on problems faced when generally accessing public healthcare and its provisions there was a remarkable response; every individual had something to say or offered suggestions and made their points willingly with virtually no coaxing or prompting needed. Therefore I decided to make vital changes in my method of data collection and instead of asking them about government policies I framed questions with regard to their general view of healthcare provisions and their experience with the providers. During the pilot study sessions there was ample time to try out different methodologies and then narrow it down to the most suitable option.

Choosing the method in the light of the pilot studies.

I was aware that there is a high rate of illiteracy in Bidar especially with the type of people and villages that I intended to target to conduct data collection sessions. The intended choice of methodology seemingly apt for use under such circumstances was to use semi-structured tape-recorded interviews to get an in-depth analysis, because this method tends to be a dialogue rather than an interrogation where the complexities of situations could be expressed (Valentine 1997). Another advantage was that it should be relatively easy to recollect all the answers and analyse them at a later stage. However the difficulty that I faced whilst using this

method was to try and get the attention of the interviewees away from the tape recorder. No matter how discreetly I tried to place the tape recorder their attention kept going towards it. Perhaps I should have taken the advice of Blaxter et al (2001)

“Tape-recording may, however, make respondents anxious and less likely to reveal confidential information”. p.154

Some people even had suspicions that I may use the recording as some form of evidence, which might be used against them. Though I realise the ethical issues that might arise whilst conducting interviews I did make it clear to the interviewees who I was and what my intentions were and also ensured that they clearly understood that their names would not be revealed or be linked with any further investigations (Kitchin 2000). Though I revealed my intentions the tape recorder tended to be more of a hindrance than an asset. Therefore I had to take a decision to alter my methodology and use a structured questionnaire having both open and closed questions.

Keeping in mind the broad guidelines by which I was going to conduct my field session I still had to contend with many problems. Even after narrowing down my focus on the type and kind of village and person I intended to target, in some villages the population of adults was in excess of 4000 people. In smaller villages too the average population would be about 500 plus people. This still left me with a very large source of population to sample from in order to get a true reflection of their views hence I had to conduct some form of sampling that could give a qualitative reflection of the population. For these interviews I intended to make a judgemental sample (Kitchin and Tate 2000) of a small number of the population. However I intended to represent major segments of the strata in society from the powerful high caste landowners to the coolie agricultural labourers who represent the bottom segment of society. To make judgemental samples usually requires the interviewer to have ample experience to make such judgements, which of course I did not have but my judgements were based on the cultural context of each individual as I have acquired a substantial amount of personal experience into how society works in India.

I had envisaged using focus groups, and I did experiment with them during my pilot study sessions. With most of the questions in the questionnaire they did respond well as a group

and lots of useful insight was gathered. However I began to notice that people with the strongest opinion usually voiced their opinion and the voices of the quieter ones were hardly ever heard. Even when I insisted on asking the quieter ones for their opinion they tended to look at those people who were answering most of the time just as if to say “are we doing the right thing?” To avoid such situations I altered my approach once again by concentrating more on one-to-one interviews than groups. However I must reiterate that the interviews I conducted were in a family setting that resembled a small focus group and it was very helpful to take into account certain comments other family members or other villagers made.

Background information about accessing doctors working in rural areas.

The primary intention of this field session was to conduct interviews with doctors who serve in rural areas and assess their opinion of the ongoing policy of GOK to attract doctors to work in rural areas with the option of getting Postgraduate (PG) seats after completing 6 years of service (KGMOA 2001). During the months of May through July 2004 my intention was to try and interview as many doctors as possible that are working at the forefront of delivering healthcare in rural areas. I had in mind to also interview certain health authorities that are in charge of the administration of healthcare in the district. These interviews would enable me to get a substantial representation of the views of the doctors and also to get a broader perspective from the authorities, on the policy and various other ongoing issues with regards to the problems and prospects of effectively delivering healthcare in rural areas.

Selecting the study area and the interviewees.

This section will concentrate on evaluating the policy of attracting doctors to work and simultaneously the effectiveness of doctors serving in rural areas. Interestingly an observation I made whilst conducting this field session was to see that most of the positions for doctors in rural areas were filled. This fact can also be substantiated by the information provided by the official information website of the GOK (Kar.nic). According to the official website of GOK out of the 90 positions for doctors in all of Bidar district 87 positions are filled (Kar.nic). However there is no clarity with regards to how these doctors were recruited i.e. on the basis of this policy to encourage doctors in lieu of getting PG seats, on the basis of awarding temporary contracts or directly appointing them through various other schemes. The statistics I am quoting are for the entire network of doctors serving in the government set up which includes those that serve in the district hospital in Bidar and in Community Health Centres

(CHCs i.e. centres meant for a population of 100,000 which are at the Taluk level). Historically it has not been difficult to fill positions in such centres. At present there are 64 positions for doctors to work in rural areas of Bidar district and most of these positions have been taken. Although it might be apparent that these positions are filled it would be rather naïve to think that the problem of recruiting doctors has been solved and there is no need for the policy offering PG seats. There is an ongoing debate that all graduating doctors should compulsorily have some periods of time spent serving rural areas and also for all aspiring PG students irrespective of the type of study they want to pursue, to work in villages but it is yet to be legislated by the government of Karnataka. There appears to be quite strong resistance from doctor groups that do not want the government to introduce such legislation due to various reasons but mainly that such legislation will increase the time taken for doctors to progress in their education (Madur 2007). My intentions in this chapter are only to examine the role of the existing policy to attract doctors along with the vital role doctors have in healthcare delivery.

It may appear that over 70% of the positions for doctors in Bidar are based in PHCs. This could be a temporary phenomenon, which was observed at the time these interviews were conducted and which was geographically specific to Bidar. As doctors are apparently working in their positions in rural areas this should at least in theory improve the prospects of healthcare delivery and access. I will assess the outcomes of the policy attracting doctors to work in rural areas by gathering inputs from two sources, mostly from the views of doctors and partly from health authorities.

Table 1 shows the number of doctors working in (PHCs &SCs) in rural areas of Bidar district.

Taluks of Bidar district.	Number of PHC.	Number of SC.	Number of doctors working.		Number of doctors interviewed.
			PHC	SC	
Aurad	8	3	10	3	7
Bhalki	9	3	11	3	11
Basavakalyan	10	3	12	3	1
Humnabad	9	2	12	2	2
Bidar	6	0	08	0	0
Total	42	11	53	11	21

Source: District Health Office Bidar.

Note: Taluk is a subdivision of a district in India and Bidar district has 5 Taluks including Bidar Taluk.

As a part of the study of the policy offering postgraduate places to the doctors serving in rural areas, such doctors were to provide the main inputs to this research session. According to table 1 there was a possibility of interviewing 64 doctors who serve in rural areas. Given the time frame that I was working under, it would have been extremely difficult to get the views expressed by all the doctors working in the rural areas. Although it would have been ideal to get a complete representation of their views it would have been impractical due to the limited timeframe and also other factors that I needed to consider. These factors include the effects of growing urbanisation; where PHCs are located close to the town (within 25km) it appears that there is very low use of such facilities. According to common observations it appears that there is an unwritten formula for the amount of infrastructure like roads and transportation that is available in rural areas. It appears that the closer to the town a village is the better chance for it to have good infrastructure and transport facilities. This makes it much easier for those villages closer to the town to access facilities in the district hospital rather than the PHCs. This is not applicable to those areas that are relatively far, remote and inaccessible. At present I have observed that if one takes into account the availability of both public and private transportation on certain rural routes during the day (7am to 8pm) there are facilities for being transported to Bidar town every 10 minutes and sometimes such transport facilities are available from distances of about 30-40kms. This makes it much easier for such villagers to access urban facilities. I could substantiate this view of villagers who took advantage of better transportation facilities to access urban facilities as opposed to going to the nearest PHC. For example when I asked certain rural respondents whilst interviewing them why they don't use the PHC that is 6km away from their village in comparison to travelling 20km to the town they replied "*that there is direct transport links to the town and to go to the PHC entailed changing 2 buses if they are on time or walking the entire route*". Easy accessibility is not applicable to other remote and inaccessible areas where it is accepted that there is usually one bus in the morning and another in the evening to take them to and fro from the town. In extremely inaccessible areas the villagers have to walk a considerable distance to get to the nearest motorable road to access transportation. Therefore these were the basic ideas and assumptions I had and hence proceeded to ensure that I conducted interviews with doctors who work in remote and inaccessible villages where it could be presumed that the need for primary health care is greater.

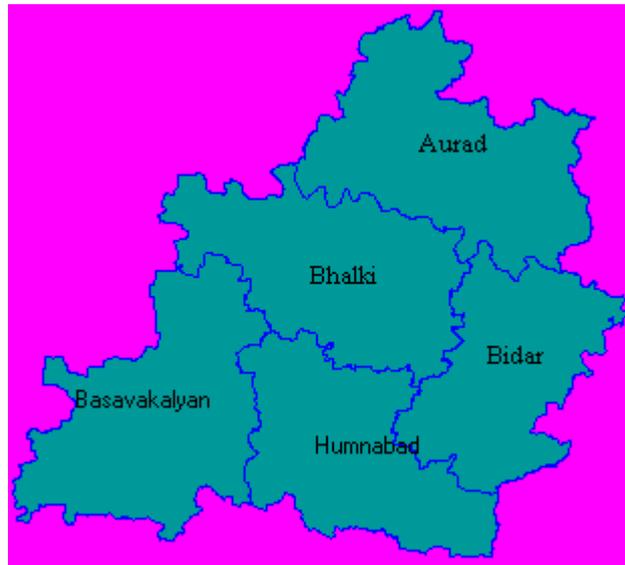
The ideal form of sampling that I was inclined to take into consideration was to take a stratified sample of the doctors who I needed to interview (Parfitt 1997, Toyne et.al 1971). However this would have meant to stratify the doctors according to the Taluks they represent and then take representations from all the strata to analyse comprehensively. I stratified the doctors according to the Taluk they represented but I intended to concentrate mainly on two Taluks that are perceived to be in the most need of primary health care, because of them being least developed. Therefore cluster sampling was the choice I had to take in order to focus my samples from specific strata. However I was aware of the down side of using this form of sampling. As Nichols (1991) p.63 argued:

‘Always use cluster sampling with caution. Because you concentrate you sample in small areas within the target population it is easy to miss out some important sub-groups completely.’

However on the positive side of using cluster sampling it helps save time by allowing the researcher to concentrate on smaller geographic areas. The reason I chose this form of sampling over other forms of sampling e.g. simple random sample, systematic sample, stratified samples was that I wanted to highlight the plight of those that are most in need of primary healthcare, rather than those people who have the chance of bypassing the primary healthcare system because they can easily access urban centres.

The criterion that I took into consideration was to make contact with those doctors working in remote and inaccessible areas rather than those who worked close to the town. The people living in such areas have less opportunity to bypass the primary health network therefore making PHCs much more significant in their lives.

The grounds for focusing on Bhalki and Aurad Taluks to conduct interviews with doctors.



Taluk map of Bidar. Source as accessed on Kar-nic.

The Taluks of Bhalki and Aurad are currently the least developed areas of Bidar district and fitted the criteria for this series of interviews. Notwithstanding the fact that all the other Taluks of Bidar also have remote and inaccessible areas, when compared to those living in Bhalki and Aurad they have a significant advantage of having better infrastructure whereas in Bhalki and Aurad development is lethargically slow. Historically regions of Bhalki were never developed as the neighbouring state of Maharashtra laid territorial claims; also Aurad being the northernmost frontier of Karnataka State tended to be bypassed during any programme of development. Unsubstantiated claims blame the problems of low development of Aurad on the nexus of corrupt government officials and politicians. A lot of this blame has been fuelled by the fact that (during the nineties) when the income tax department announced an amnesty² to declare unaccounted wealth it is alleged that the Aurad Taluk's Member of Legislature declared an enormous sum of 800 crores rupees (8 billion rupees). Earning this kind of money honestly is very hard and a logical conclusion is that it was earned by dubious methods especially when the area represented has a majority of people living in such abject poverty and there is no known source of earning such substantial amounts in this region.

² “Voluntary Disclosure of Income Scheme, 1997 (VDIS'97) The provisions of Voluntary Disclosure of Income Scheme, 1997 introduced by Finance Act, 1997 are contained in Sections 62 to 78 of the Act. The object of the Scheme was to mobilise resources and channelize funds into priority sectors of the economy and to offer an opportunity to persons who have evaded tax in the past to declare their undisclosed income, pay a reasonable tax and in future adopt the path of rectitude and civil responsibility. The scheme commenced on 1.7.97 and ended on 31.12.97”. Source Income Tax department Government of India

Hence it is quite obvious why people lay the blame on politicians and corrupt government officials for siphoning funds and as a consequence the slow progress of development.

I decided not to conduct interviews with all those doctors working in areas that have good infrastructure and easy accessibility to urban centres. Due to the fact of growing urbanization, such PHCs with good access to urban centres have only a symbolic importance. It can be observed that these PHCs are accessed mainly by the residents of the village the PHC is located in and those who live close by but only a few people living further away use its services because they tend to access healthcare in urban centres. The intended area of research was to examine the effectiveness of healthcare delivery by doctors so I did not want to concentrate on those centres that are known to be ineffective due to the villagers having an option of accessing urban centres. Rather, I concentrate on those populations that are most in need of primary health care and have less chance to access urban facilities. In this field session I concentrated on targeting doctors mostly from two Taluks Aurad and Bhalki, which are known to be the least developed in Bidar district. The slow pace of development in these Taluks has ensured that a significant portion of the population live in abject poverty and due to the correlation between poverty and ill health I decided that it would be appropriate to conduct my studies in these Taluks where the population is in most need of healthcare. From these Taluks I was able to interview 7 doctors in Aurad and 11 doctors in Bhalki, getting a representation of 54% in Aurad Taluk and 79% in Bhalki Taluk of all the doctors working in rural areas. This representation could have been up to 100% in both of these Taluks but certain interviews did not materialise due to the unavailability of doctors in PHCs and SCs or because it was virtually impossible to track the doctors and their whereabouts. Overall out of a possibility of interviewing 64 doctors working in PHC and SCs in Bidar district I was able to conduct interviews with 21 doctors. These 21 doctors represent 32% of all the doctors in Bidar district.

Methods used for gaining access to doctors to conduct interviews.

The interviews were conducted over a period of ten weeks using a semi-structured questionnaire having both closed and open-ended questions. However there were various methods used to get into contact with each of these doctors. Initially I made contact with the District Health Officer (DHO). Although the DHO did not know me personally he was aware

of my personal links with the NGO established by my parents and he appreciated the health related activities of the NGO. To establish a good relationship with the DHO was essential as he acted as a gatekeeper holding the reins of authority over the administration of the health system in the district. Any adverse reaction or restriction placed by the DHO towards my field session would have been devastating, for example if he had advised the doctors not to entertain or cooperate with me. Knowing that it would be quite a difficult task to ensure the gatekeeper's full cooperation is attained (quoting Valentine (1997) "*although these gatekeepers can be more obstructive than helpful*"), it was essential that I avoided any situation which leads to any adverse confrontation, even though I may have certain opposing views to the gatekeeper. However the DHO was helpful in understanding the nature of my field session and offered his cooperation to a great extent. He introduced me to many doctors when he allowed me to accompany him for a monthly meeting of doctors and other healthcare staff in Bhalki Taluk. During this meeting vital links with doctors serving in different PHCs were made. Doctors gave me a schedule on which time would be most appropriate to meet them. Conducting research in my hometown had its advantages like the fact that some doctors I wanted to interview knew me. This made it much easier for me to establish a cordial relationship with other doctors they introduced me to.

The other method that I used to get in touch with doctors working in PHCs was by meeting nurses and Auxiliary Nurse Midwives (ANMs) who lived in Bidar town but worked in PHCs. These nurses and ANMs were able to talk to their doctors and make it possible for me to get in touch with them. Through the efforts of the nurses and ANMs I was able to contact doctors and arrange a meeting according to their convenience. Using this method was very useful for me as it saved a lot of time, as I was able to meet the doctor when I visited the PHC, rather than going to the PHC on an unscheduled visit to find no one working there.

Finally the opportunity of interviewing doctors increased due to the process of snowballing, where the interviewee identifies other potential interviewees and through which contacts were made and further interviews were conducted (Hoggart et.al 2002; Valentine 1997). This process was very helpful in making contacts with doctors and also allowing them to have an open discussion with me. They also did not view me with suspicion. Most of the doctors were quite open whilst being interviewed, especially after knowing that their colleagues had participated in similar interviews conducted by me. I ensured that they never felt intimidated by me and I prevented any concern to arise about repercussions from the health authorities, as

my study was being done on an independent level with no affiliation with any government agency. After genuinely explaining about the purpose of my study and the independent nature of it, I was able to get a congenial atmosphere to conduct the interviews. After realising that I was not conducting an inquisition of some sort the doctors generally felt quite relaxed and started to answer my questions frankly. Although I did benefit from the process of snowballing however it did not guarantee me easy access to the doctors as each of them had different levels of suspicion and inhibitions about talking with me. Hence it took a varying amount of time to convince each doctor that I posed no threat. Some doctors were happy to talk once I had introduced myself properly and explained my intended reasons for conducting these interviews. However certain doctors required a bit more coaxing and assurance from other colleagues that it was all right to participate in the interview, for example one doctor only began to talk frankly after his colleague accompanied me to the interview and assured him about the confidentiality and independent nature of the study being conducted.

3. Confidentiality and Ethics of conducting research.

The importance of ethics has been reiterated over the years and has been gaining momentum (Mitchell and Draper 1982). It is now an intrinsic topic to consider before conducting research in almost any field, as guidelines and strict laws have been incorporated to ensure that the study lies within well defined boundaries (Smith1997). In the past research conducted by the Nazis in the name of science is now deemed as atrocious, unacceptable, and certainly criminal. Similarly the Tuskegee experiment where African Americans were deliberately denied effective treatment for syphilis (Brody, 1998) are just a few examples of why there is an outrage against such research and why we need to consider ethics before conducting any study. Nowadays unless bodies like the University Teaching and Research Ethics Committee (UTREC) grant approval it is exceedingly difficult to conduct research. The guidelines issued by such bodies and by research councils can be broadly categorised under two theoretical traditions, the deontological and utilitarian approaches (Banks 1995; Johnson 2001). Here the deontological approach mainly emphasises the individual rights and freedoms of the participants despite the consequences of conducting research. It is suggested that this approach could involve curtailing or withdrawing ethical approval for a project if it contravenes the rights of the participant. The utilitarian approach in contrast takes the view

that research can be conducted provided the potential benefits outweigh the harm to the subjects' (Melville 2005).

Most research in human geography will be governed by the precepts of the deontological approach where the participants' rights are safeguarded. In contrast some medical sciences like human fertility and embryology may be granted permission under the utilitarian approach. My research is based on the deontological approach, in which all aspects of ethics will need to be given utmost importance. Aspects such as making participants aware about what will happen to information elicited, consequences of participation, confidentiality and finally publishing reports will need to be stated very clearly and mutually accepted with free will. My research has two sets of participants and both of them can be viewed as vulnerable especially if their views are critical and not tolerated by those opposing them. Some respondents from the villages mentioned that they can face retribution and reprisals (discussed in chapter 4) if they ever complained. Thus they felt very vulnerable. Therefore it was essential for me to ensure consent and reassure them of confidentiality. A way of ensuring ethical consideration is taken on board whilst conducting research with vulnerable people is to get an informed consent which can be drawn from the following method.

“The voluntary agreement of a person or group, based on adequate knowledge and understanding of relevant material, to participate in research. Informed consent is one possible result of the informed consent process; the other possible result is refusal”. (NHMRC 1999)

In no way should research be coerced or obtained without getting proper consent from the participants. They should always have an unconditional option of withdrawing from the study if they wish. I do accept that things such as consent forms and participant information sheets can be used as an accepted method to practice. In my research I did go to great lengths to ensure that all the participants had given voluntary consent without the use of such forms, as I had to take into consideration that most of the respondents were illiterate. However I went down the track of the culturally acceptable position of giving my word and reassuring the participants that my research is of an independent nature and all attempts will be made to conceal their identities and strictly to observe the confidentiality of information.

“The goal of geographically masking a geocoded health data set is to reduce the potential for identification of affected individuals to acceptably low levels, while at the same time retaining sufficient geographic detail to permit accurate spatial analyses of the data”. (Zimmerman and Pavlik 2008) p.53.

Zimmerman and Pavlik show how and why masked and geocoded data helps conceal the identities of the participants yet with the ability not to lose the relevance of the data elicited. In my thesis I broadly differentiate the types of villages with or without PHCs but have taken steps never to identify the interviewees neither specifically giving away their precise location, gender, caste and religion. With regards to the doctors and health authorities similar steps have been taken to ensure confidentiality. However it must be noted, although guidelines can show a researcher what the boundaries are, that a lot depends on the researcher’s personal moral reflexivity and integrity (Molyneux and Geissler 2008). Aspects such as enhanced disclosure followed in western countries are not yet in practice in India hence I did not go through this process but I am aware of its benefits especially accessing vulnerable people.

Another key aspect taken into consideration before conducting research is the risk and safety factors. An evaluation needs to be done about the risks involved with regards to the researcher and those participating in it. In my research sometimes I needed to take precautions in ensuring the right place was chosen to conduct the study usually this meant within the confines of the respondents home. This was done to avoid outsiders overhearing or misinterpreting matters that could have devastating effects. In my case unless I blatantly infringed upon certain cultural settings there was relatively a very low percentage of risk. Regarding safety there are obvious measures that need to be taken relating to one’s own health and personal safety but also ensuring that in no way should the participants be exposed to any significant risk.

Exposing personal biases conducting research.

Mark Tully the veteran BBC Indian correspondent once described the Indian bureaucracy as “Abominable *no men*” (Tully 2003) suggesting they try and object to anything if they can. My personal view does not differ substantially from this viewpoint as encounters with government officials usually are frustrating and time consuming and rarely are procedures

shown in a straightforward manner. It must be noted that my experience is not unique as similar or even more explicit description can be given. However keeping my biases aside regarding government officials I do acknowledge provided a right attitude and relevant reforms are introduced, they are in one of the best positions to deliver services widely.

Similarly I do acknowledge that I do not belong to the elite caste or predominant religion in India thus making me an outcaste with the disadvantage of not easily being able to access groups of elite individuals. Although I do not have any personal grudges against such people but manmade barriers sometimes prohibits a straightforward way for them to come in contact. However I draw from the comparison where most developed countries restrict the travel of individuals from underdeveloped countries unless they have a visa. This does not mean that those from the underdeveloped world need to bear a grudge against such nations. Similarly high caste and elites do put up barriers but keeping this in mind and respecting their beliefs for instance a low caste person may not be allowed into a high caste home for the fear of defiling the place, but this does not mean that common venues can be used as an alternative. I was also aware that most of the high caste and elites may have taken into consideration my religion Christianity, perhaps with all the negative connotations and status in India (refer to chapter 3 page 87). However I did not take this fact as a disadvantage, because of other positive aspects of my status. This can be explained by understanding the way in which Indian society accepts the caste hierarchy on the one hand and on the other hand at similar level concepts such as honour / respect and status are given equal importance.

The caste status of an individual cannot be changed as it is specified at birth in many cases even though a person's religion may have changed it still lingers on in different forms. For instance Muslims although they do not confer caste status on individuals practices such as "Biradari" (Brotherhood of individuals of a clan) are widespread; this can also be said of the Sikhs because the dominance of the Jatt caste over other sections, even some Christians especially in South India can be accused of carrying on the caste system in some forms. Therefore in my case trying to wrestle with the caste issue would be futile but my strengths come from the other aspects. In Indian society it is common to see respect for elders, the well educated, those with a privileged employment status, good financial status and often certain universally respected occupations such as judges, doctors and senior ranking defence personnel are given an equal importance as caste. Certainly in some of these aspects my

status will be seen in good light. The fact that my parents were and sisters are doctors and all of my family being well educated gives me a leverage to match the hierarchy in many ways. My family profile fitted into the educated elite of the country hence my caste or religion status did not raise many problems accessing elites and high castes. On a similar level the fact that my parents were doctors in a way helped me to get more credibility and respect among doctors who took part in the study. This connection appeared to give me a level platform due to my acquired knowledge of the existing practices and the networks within the medical profession.

Crudely one could apply a thumb rule that reflects the caste and respect system of the country under this analogy “*kiss up and kick down*” a term once used by a colleague to illustrate the drawbacks of Robert J Bolton the former American ambassador to the United Nations (USA-Today 2005). I do accept that this kind of depiction is very negative and not necessarily applicable to the entire nation or people but generally it would not be wide of the mark to see similar symptoms in the culture. To understand the constructs about the cultural practices that exist is paramount for a researcher, in order to reflect genuine interpretations of the responses elicited. Here is where I felt that I have a good grasp of the existing culture. For instance my fluency in most of the languages spoken in Bidar district, I speak Kannada which is the predominant language of the state, Hindi (national language), Urdu (mainly spoken by Muslims) and a little bit of Telugu (spoken mainly in Andhra Pradesh). This was very helpful as I had to often switch languages to communicate with the respondents. My handicap was that I cannot speak Marathi (state language of Maharashtra) but I can read it (similar script to Hindi) and have a basic understanding of this language. Marathi is fairly widely spoken in the district but often Marathi speakers can also speak in Hindi. Hence I used Hindi as a common language to communicate with the exception of a few words in Marathi. Similarly when the respondents were Muslims my grasp of Urdu really helped me to get to the nuances and intricacies as the conversations elicited a rich concentration of information. I believe as a researcher I was able to access the doctors and the people mainly due to the perception that I was local and knew the region well. For most purposes I was considered a part of the society in Bidar however in certain aspects was seen as an outsider

Much of the work written on the process of conducting research on elites and others has tended to assume that there exists a simple and clearly discernible dichotomy concerning the researcher's positionality – either the researcher is an “outsider” or she/he is an “insider” – whilst, furthermore, it assumes (sometimes implicitly, sometimes explicitly) that being an “insider” or, at least, being perceived as an “insider”, is the most advantageous position in which to be since this gives the researcher a privileged position from which to understand processes, histories, and events as they unfold. As I reflect upon my experiences interviewing foreign elites I have come to think, however, that the issue of validity and one's positionality – that is to say whether one is (perceived as) an “outsider” or an “insider” – is more complex than this dualism would initially suggest. (Herod 1999) p.320.

I do agree with Herod as positionality can be perceived in complex ways and not just in two broad categories. Although I was considered an “insider” in terms of being local but when accessing high castes a contrasting view could have been taken. At the same time the poorer sections of society especially the Dalits (untouchables) and religious minorities I was likely to be perceived as a champion to highlight their problems with an empathetic understanding of their conditions. Correspondingly the doctors I interviewed would have perceived that my knowledge of the medical profession gave me adequate grounds to understand their views but as an independent researcher not affiliated to the government I would have been seen as an “outsider”. Therefore every researcher's positionality is subjective and can be perceived contrastingly depending on numerous factors. However whilst acknowledging certain drawbacks if the researcher rather than directly confronting problems finds alternatives and manages in such a way that the richness of data collected is not lost or made inaccessible.

Certainly I could not radically change some aspects of my life in terms of the perceptions held due to my parents, my religion, position held in society and gender. In situations where it was disadvantageous I had to look at alternative methods like using snowballing techniques to gain access to elites. Similarly when factors were favourable I had to use certain restraints in order not to give a skewed perception for instance not to only concentrate on the views of the poorer sections of society but to ensure representations were made from all sections.

In terms of gender of course there could be lots of problems for me to access female respondents as there are numerous cultural and religious barriers that can make them very elusive and hard to elicit a meaningful discourse relevant to the research. Perhaps in my case I faced the reversal of what some feminist researchers like McDowell, (1992), England 1994 and Mullings (1999) who presented their perspectives despite the problems caused by the power structures of a male dominated positions. In the Indian subcontinent it is still a male dominated society in many ways and although great signs of progress can be seen, this distinction can be noticed and very much felt even at present times. Where society dictates that men hold sway over matters outside the home and most issues within the home are dealt by women. It would appear that each gender operates in distinct spheres with very little interactions. However this is not true in all circumstances as society has more subtle ways of interactions as what would appear from a distance. There are numerous ways to intermingle provided one follows the cultural guidelines that govern these processes. The fact that I grew up in India and inherently know about such guidelines helped me to cross the gender barrier. Of course factors such as recruiting a female assistant, conducting interviews in the homes along with their husband and other family members were vital to access females.

4. Conclusion

I had quite a clear concept of my research topic and whom and where to conduct the study but how to adopt the right methodology and give meaningfulness to the data collected were the questions that needed to be answered. There is not a single and stringent format to conduct research in as each method has its advantages and disadvantages. It becomes evident for the reasons I chose one method over the other. For the doctors I had to use a format and the people it was a mixture of different methods. I did contrive not to give a skewed perspective but went to lengths to get a wider representation. Conducting research in my home town had its advantage but I had to take into account potential biases and avoid any predetermined prejudices in order to give a free and fair assessment of the research. However I did feel that my position to conduct the research was quite positive as I had many aspects that made it more conducive to explore and elicit relevant data from the sources.

III.

Major health problems faced by the rural population in Bidar district.

1. Introduction.

In the first chapter the evolution of primary health care and how it has been adopted to provide healthcare in rural areas of India were discussed on a broad basis, further highlighting its role in Karnataka State and in a specific case study of Bidar district. In the second chapter the methods adopted to conduct this study were discussed. My thesis will be based on my research in this district. By analysing how certain policies of the Government Of Karnataka (GOK) have been implemented and their effectiveness, I will attempt to explore and understand the perspectives of both the providers and consumers of healthcare in order to give a holistic view. Rurality within India will portray contrasting conditions, depending on various factors such as geography, income, caste status and levels of infrastructure. For example in the state of Punjab the rural population, especially those owning agricultural lands may be viewed as prosperous and well to do, when compared with the rest of India. This is mainly due to the high levels of irrigation facilities that were made available to them through developmental programmes instigated by the government. Many programmes such as construction of dams, canals and widespread improvement in vital infrastructure in rural areas appeared to have a positive effect on living conditions of the population. Also the availability of, and easy access to, fertilizers / pesticides and high yielding varieties of seeds and other vital improvements are attributed to the Green Revolution (Corbridge 1995). Other states like Kerala have much better prospects for their rural population, although agrarian reforms need not take the credit fully for this achievement. Other vital social reforms that were introduced in the state like the high levels of education and the unionisation and enlightenment of the labour force along with the empowerment of women can take precedence for enabling the people to achieve better health status.

However the opposite can be said about rurality in tribal dominated districts of states like Orissa and Chhattisgarh (part of Madhya Pradesh State until 2000) that suffer widespread poverty and as a result have poor health indicators. Accordingly India has some states that perform well, others that perform at a mediocre level and some that can be considered as poorly performing states. There is no uniformity in the levels of progress or performance between all the states of India. Similarly Karnataka like India as a whole is large with different regions of this state depicting diversity in culture and different geographical regions showing variations in the levels of development. Therefore some regions of the state have better prospects and are often complemented with health indicators that reflect their progress.

Bringing about some level of parity and assisting those regions that are lagging behind will need to take a higher priority for planners and health policy makers in order to help those who live in these regions gain better health status. This paper intends to highlight the plight of those living in Bidar district, which is one of the least developed and backward districts of Karnataka. It focuses on the problems and prospects of those who live in the rural areas, mainly on those who live in abject poverty, the marginalized sections of society and those people and villages that appear to be neglected by the relative progress of development. This district is one of the neediest regions of the state where the proper implementation of health policies and programmes could prove very beneficial to the population. Because two thirds of the population live in rural areas it is appropriate to voice their concerns and also measure the outcomes of primary health care provision, which are a vital necessity for their development.

2. A brief description of Karnataka State.

Karnataka is the state where I have conducted most of my research and based my thesis on certain policies followed by the government. Therefore I thought it is appropriate to broadly describe this state especially to those with a limited awareness of it. The State of Karnataka is situated in the southern part of India. Karnataka lies between latitudes 11.31 and 18.45 degrees north and longitudes 74.12 and 78.40 degrees east, on the western part of the Deccan plateau. The state is the eighth largest in the country in both area and

population. Karnataka's plains, plateau and coastline cover 191,791 sq. kms. It was formed in 1956 by joining the old state of Mysore and its bordering areas where Kannada was spoken. Each of these territories had been under a different administrative system in the erstwhile states of Madras, Hyderabad, Bombay and Coorg so each had different levels of development. This is one of the significant reasons for the variation in development and infrastructure across the state. However after 1956 the state was brought under one administration and there has been an effort to improve services in the less developed areas. Today, Karnataka has a population of around 53 million people (Census 2001).

The state has four natural regions extending over 700 kms from the north to the south and 400 kms from the east to the west, with each having its distinctive characteristics. First the coastal area covering Dakshina Kannada (Mangalore district) and Uttara Kannada districts (Karwar District) is a narrow strip between the Western Ghats and the Arabian Sea. The region is characterised by heavy rainfall - 2500 mms to 3000 mms. Second, the coast is hemmed in on the east by the Western Ghats; the Ghat or malnad region covers the districts of Chikkamagalur, Hassan, Kodagu (Madkeri district) and Shimoga and the uplands of Uttara Kannada district. 43% of the forests of the state fall within this area. Plantations of coffee, pepper, cardamom and rubber are interspersed with dense forests. The maidan (plains or open spaces) region falls into two broad sections. The third natural region, the south maidan has rolling hills and is drained by the Kaveri and its tributaries- the Harangi and the Hemavathy-as well as by the Tungabhadra. Rice, ragi, coconut, sugarcane and mulberry are the principal crops. Fourthly the northern maidan is less developed, receives low rainfall and supports jowar (sorghum), cotton, oilseeds and pulses. The Krishna and its tributaries- the Malaprabha, Ghataprabha, Tungabhadra and Bheema -are the principal rivers of the northern plateau. Karnataka is India's second most arid state. Statewide figures mask significant disparities: parts of Karnataka are quite developed; others, especially in the north, are backward. Administratively, the state is divided into 27 districts. Today, the state is best known for its software industry. Biotechnology is gradually emerging as a new area. Its capital, Bangalore, also called the Electronics city, is one of the fastest growing cities in Asia and is home to industries like

aircraft-building, international call-centres, telecommunications, aeronautics and machine manufacture (WHO 2005c).

Physical map of Karnataka.

District Map of Karnataka.



The potential of medical education in Karnataka.

The numbers of medical colleges are much higher in Southern India when compared with the rest of India for the year 2000, if one considers dividing India into north and south regions. The states of Andhra Pradesh, Tamil Nadu, Karnataka and Maharashtra account for 81 of the 181 medical schools throughout India (PCI 2005). Karnataka has one of the highest numbers of medical colleges in India, having 29 recognised institutions at present and there is a further proposal to allow another 5 colleges subject to getting approved by various bodies and crossing other legislative hurdles. Maharashtra state has the highest number of medical colleges in India at present having 31 recognised institutions and a few more which will be recognised in the course of time. However the population of Maharashtra is 97 million nearly twice as much as Karnataka State. Therefore the proportion of medical colleges to the population is much higher in Karnataka than Maharashtra even though the latter has more medical colleges than Karnataka. Apart from having a high number of medical colleges Karnataka has 39 Dental colleges also a number of Pharmacy and Nursing Colleges. According to the Rajiv Gandhi University of Health Sciences (RGUHS¹) Karnataka, a university created in effect to act as a conglomerate body with regards to health sciences.

“There are 242 colleges conducting undergraduate courses, 68 institutions conducting post graduation courses and 6 institutions offering super speciality courses in the field of health sciences such as medical, dental, nursing, pharmacy, physiotherapy, Ayurvedic, homeopathy, Unani, and paramedical under the jurisdiction of RGUHS. About 13,000 under graduate, 2000 post graduate students and 30 Super Speciality students are admitted in different faculties of health sciences from this university every year. About 10,000 teachers are engaged in different faculties of health sciences in this university”. As accessed on web.

Karnataka State takes pride in being one of the leading states in India for providing medical education where it benefits not only the population of Karnataka but also many students from

¹ RGUHS is a university created to over see and guides all educational institutions that are relevant to health sciences and research e.g. medical colleges, dental colleges, nursing and pharmacy colleges. It directs them with regards to setting the curriculum, setting standards, examinations etc.

all parts of India who come to access various courses. The fact that many students come from many states in India to Karnataka is mainly triggered by the fact that many states do not have enough medical institutions to cater for the apparent demand for medical education within each state e.g. Andhra Pradesh until recently had only 16 medical colleges for a population of 75 million, thus a lot of students from Andhra come to Karnataka to study medicine. Similarly Tamil Nadu has 17 medical colleges but has a population of 62 million. However in states like Andhra Pradesh there appear to be ongoing plans in the near future to recognise more institutions so that they can cater for their students within their state. The fact that the introduction of new medical institutions is not taking place at the rate of population growth in India is primarily due to the Medical Council of India and other relevant authorities. On the one hand they do not want to dilute the standards of medical education by allowing an unmanageable number of institutions. On the other hand the government's failure to start new medical colleges is usually under the pretext of severe financial burden hence it has the option of asking private bodies to take up the opportunity. However allowing private bodies to start new medical colleges usually raises a lot of complex problems as there are vicious political wrangles involved with regards to whom the state allows to run medical colleges. This is because many medical colleges are run on a profit² basis making it very lucrative. Hence a lot of people are keen to get permission to run such colleges. Quite often very powerful lobbies try very hard to find the favour of the government to fulfil their pursuit of managing medical colleges. Therefore it becomes quite hard for the government to choose a particular lobby; hence they prefer the status quo rather than siding with any particular group or institution.

Currently medical students are recruited under the government scheme into colleges after fulfilling the following conditions: after scoring 50% and above in their pre university exams and also after excelling (80% and above) in the Common Entrance Test (CET). There are some exceptions to these rules e.g. students who belong to scheduled castes or scheduled tribes can get in with 40% marks in their pre university exams and a lower score in the CET yet are allowed to apply for medical college. The Government of Karnataka (GOK) has a mechanism to ensure that private medical colleges take a significant number of medical

² Profits of running medical schools are gained by offering medical seats for a premium fee usually in the guise of fees, donations, contributions etc. Currently it is in between £15000-£25000 for Indians and £25000- £40000 for non-resident Indians and foreigners. Private medical colleges usually offer medical seats under their own management i.e. the seats remaining after taking the required number of seats under government obligations. Those who are taken under government quota only pay about £5000 for their education.

students from the pool of students who have fulfilled the government criteria. There are three types of seats made available in various colleges within the State of Karnataka. 1) Free seats or merit seats 2) payment seats 3) management quota (5% Non Resident Indians NRI quota). Currently 50-80% of all those students studying in private medical colleges are recruited from those who fulfil the criteria set by the government. GOK has done this in order that the private medical institutions do not put medical education out of reach of the general public by charging enormous fees and donations, which most Indians cannot afford; therefore GOK has introduced a very structured fee norm and caps the amounts a college can charge depending on the category of seat each individual falls under. There are certain exceptions to the rules stipulating the number of seats private medical colleges should take from those who fulfil the government criteria under various clauses and reservations, for example institutions managed by minorities i.e. Christians and Muslims have been given much more flexibility, as they are given a leverage where they need not take in the stipulated number of students under the government list in order to cater for students of their faith.

However the present system of recruiting new students into medical colleges involves a practice where it is engineered so that a majority of seats are also reserved for those who have at least 7 years or above of academic studies in Karnataka. Only after filling all the seats available for students of Karnataka are other candidates given a preference. Karnataka has such a high number of medical colleges and all of them combined produce an estimated 2400 undergraduate medical doctors every year. However this apparent high number of medical institutions and high output of medical personnel does not appear to have any significant impact on the population in terms of improving health indicators compared to other Indian states.

Karnataka's health indicators are only marginally better than the national average in certain aspects (see Table 1) and it is lagging behind some of its neighbouring states with respect to certain demographic indicators. Of course the high output of medical students in Karnataka will not necessarily mean that all of these graduates will stay in Karnataka after graduating, as many out-of-state graduates tend to migrate back to their own state after completing their studies. Another factor is that there is not an equal spread of medical colleges within the state and almost all these colleges are concentrated in urban areas and more affluent regions of the state, therefore mainly benefiting the urban population. In certain places many medical colleges are concentrated in a few cities whereas some towns are not represented. For

example in Bangalore there are 7 medical colleges and Mangalore 5 medical colleges whereas in many districts like Bidar there is no medical college (in 2007 a medical college was established in Bidar). The GOK is attempting to address the problem by issuing permission to start medical colleges in un-represented areas in the near future.

Karnataka has got the advantage over many states in India of being a centre for medical education and has the facilities and infrastructure to cater to postgraduate and other higher studies. However it is in its interest that it makes moves to ensure that the population benefits from this apparent advantage of having so many institutions of excellence.

Table 1 Certain demographic indicators of India comparing Karnataka with the neighbouring states.

States/Union Territory	According to Census 2001				Crude Birth Rate (2000) SRS ▼	Crude Death Rate (2000) SRS	Natural Increase (CBR-CDR) SRS	Infant Mortality Rate (2000) SRS	Total Fertility Rate (1999) SRS
	Population (In million)	Annual Exp. Growth Rate (%)	Female Literacy (%) 7 yrs. & above	Sex Ratio (Females Per 1000 Males)					
India	1,027,015	1.93	54.20	933	25.8	8.5	17.3	68	3.2
Karnataka	52,734	1.59	57.45	964	22.0	7.8	14.2	57	2.5
Andhra Pr	75,728	1.30	32.70	978	21.3	8.2	13.1	65	2.4
Maharashtra	96,752	2.04	67.51	922	20.9	7.5	13.4	48	2.5
Tamil Nadu	62,111	1.06	64.55	986	19.2	7.9	11.3	51	2.0
Goa	1,344	1.39	75.51	960	14.3	7.4	6.9	23	1.0
Kerala	31,839	0.90	87.86	1058	17.9	6.4	11.5	14	1.8
Certain Poorly Performing States									
Uttar Pr	166,198	2.30	42.98	898	31.6	9.7	21.9	80	4.7
Jharkhand	26,946	2.09	39.38	941	26.4	7.9	18.5	51	N/a
Rajasthan	56,507	2.49	44.34	921	30.6	7.7	22.9	78	4.1
Madhya Pr.	60,348	2.18	50.28	919	30.4	9.8	20.6	85	3.0
Orissa	36,805	1.48	50.97	972	23.2	9.8	13.4	87	2.8

Source: Department of Family Welfare GOI. ▼ Sample Registrations Scheme (SRS)

Comprehending certain gender differences observed in Karnataka.

According to Table 1 a key statistical figure stands out amongst the various indicators. That is, the number of females is far less than males in India and most of its states. In this section I would like to discuss some aspects of the disadvantageous position the female population has in Indian society and aspects seen in Karnataka state. Before I examine aspects of gender differentiations I would like to state my position and views on this topic. I broadly agree with the view that unless there is a substantial improvement in the lives of the female population through far-reaching socio-economic, cultural and political change, it will be highly unlikely

to see women benefiting in Indian society (Asthana 1996). Declining female population is an ongoing problem and it is a serious issue that will need to be tackled in order to solve this imbalance. Interestingly unlike developed countries and even some of India's neighbours India has more males than females, which in itself is quite alarming due to the adverse consequences that will occur if this trend continues. If one takes into account updated world estimates of the gender balance the male population is around one male to one female (UN2004). India portrays an unhealthy picture of showing such a high proportion of the male population over the female population; this is applicable to most states in India apart from Kerala and Pondicherry, which defy the norm and have a greater female population than male. The reason I say this is an unhealthy situation is because this occurrence has not happened due to natural causes or an isolated event. There appear to be many factors that have caused this feature to exist. There is a strong desire from families to promote males over females in the family as they are traditionally seen as the main breadwinners, protectors and custodians of the family line. At the same time women in Indian society are traditionally known as Praya-Dhan³ and seen as weak, vulnerable, an economic burden with regards to the expenses on dowry which is demanded by their husbands when they are married. In the existing culture most women in India are given a lower status than men and they have well defined roles that they are meant to fit into naturally for example aspects such as marriage, motherhood, catering to family needs which tends to include serving their in-laws and basically being subservient to their husbands in a broad sense. Of course there are exceptions to this assumption such as the Khasi people who predominantly live in the north-eastern state of Meghalaya have a matriarchal society where the women have greater power and sway in that society and men are married on a matrilineal basis without having the traditional rights e.g. to property or family name.

However the example of the Khasi people is an exception to the norm followed by the rest of India. The strong desire to promote males consciously or subconsciously caused quite widespread gender biases to exist. Although there has been quite a lot of reform in India, it is still a predominantly male dominated society where there is a lot of discrimination on the basis of gender. A study conducted by Borooah (2004) highlighted gender biases on the uptake of vaccination and food intake. According to the studies done by Borooah

³ Praya-Dhan means wealth that belongs to someone else. In the sense that although her parents will bring up a 'girl', eventually she will belong to her husband and his family and to them her loyalties will lie. Therefore a girl child may be born in a family, but she is seen to be there on a temporary basis, hence an asset that eventually belongs to someone else.

“In respect of vaccinations, the likelihood of girls being fully vaccinated, after controlling for other variables, was 5 percentage points lower than that for boys. In respect of receiving a nutritious diet, the treatment of girls depended very much on whether or not their mothers were literate: there was no gender discrimination between children of literate mothers; on the other hand, when the mother was illiterate, girls were 5 percentage points less likely to be well-fed relative to their brothers and the presence of a literate father did little to dent this gender gap. But the analysis also pointed to a broader conclusion which was that all children in India suffered from sharper, but less publicised forms of disadvantage than that engendered solely by gender. These were the consequences which stemmed from children being born to illiterate mothers and being brought up in the more impoverished parts of India”. p.1719.

The conclusion that Borooah has arrived at stands out quite clearly as the states of Kerala and Pondicherry have high literacy levels amongst their female population 87.86% and 74.13% respectively and these states have 1058 and 1001 females to a 1000 males. On the other hand there is another factor that could take some of the blame for the present lower levels of female population in India. This is the current widespread availability of technology to determine the sex of the unborn child, which could lead to the medical termination of female foetuses. The factors responsible for female foeticide are mainly influenced by the negative images that are associated with females in Indian society, combined with a strong preference for a son along with socio-economic adversities associated with females e.g. the evil of dowry. All of these factors are expedited with the easily accessible and affordable procedure for sex determination during pregnancy and unethical medical practices which are practiced with virtual impunity as only on rare occasions does one find anybody being prosecuted for such practices. To avoid this misuse of modern technology laws have now been passed that do not allow doctors to disclose the sex of children before they are born. However it is yet to be seen how well such laws are enforced.

States like Punjab and Haryana have a very bad record of having 876 and 861 females to 1000 males. Hypothetically it is projected that in 25 years the ratio will be 500, 250 in 40 years and 100 in 50 years (DH 2005b). Karnataka does not fall into a category depicting such dire situations as some other states in India. Therefore I will not be comparing certain indicators with known poorly performing states. However neither can Karnataka highlight

any significant distinctions that can show how well the state has progressed in comparison to other states in India. States like Maharashtra and Tamil Nadu (TN) that have a large population and large and diverse geographic areas have some demographic indicators that are better than those of Karnataka. For instance if one takes into account the percentage female literacy levels, they are 67.5 and 64.55 for Maharashtra and TN respectively whereas in Karnataka it is 57.45 which is barely above the national average of 54.20. Similarly Maharashtra and TN have rates of infant mortality, 48 and 51 (per 1000) respectively, which is less than that of Karnataka (57).

Perhaps Karnataka could take some comfort from the fact that one southern state that has a large population and diverse geography and in certain aspects fares worse than Karnataka is the state of Andhra Pradesh (AP). However AP has better indicators with regards to the proportion females to males 978/1000 and crude birth rate of 21.3, in contrast to Karnataka's 964/1000 and 22.0. The reason I am comparing similar larger states with Karnataka rather than smaller states like Kerala and Goa is so that the comparisons are compatible in terms of size, geographical area and diverse populations. Though Karnataka has much better demographic indicators than the poorly performing states like Uttar Pradesh it would be misleading to compare indicators with such states as it would show Karnataka appearing to excel in various aspects, whereas a comparison made with other states that have similar status to Karnataka will provide a better perspective. Health indicators indicate that Karnataka still lags behind or is marginally better than some of its neighbouring states. The big question that concerns me is how neighbouring large states can achieve better health indicators than Karnataka State. Why is Karnataka not performing as well as some of its neighbouring states?

A part of the answer to this question is that development in Karnataka is not evenly spread hence there appears to be quite a wide range of variations in terms of the stages of development that can be seen in the state. There are obvious outstanding features like the recent establishment of industries like information technology that have created zones for great financial enhancement and development. Similarly certain people who live in coastal areas of Karnataka are renowned for their entrepreneurship, as they own, manage and play a dominant role in the banking sector of the country. Therefore in many parts of Karnataka some people have far better health status than many of those who live elsewhere in the state. However due to the uneven progress of development vast regions and segments of the

population have been left behind and have poorer health status and they require a lot of assistance in order to catch up or attain the levels of health and prosperity some people in the state already have. The GOK has promoted various schemes to achieve this apparent goal of evenly developing the state and assisting districts to improve their status both in rural and urban areas. In relation to health GOK has promoted the primary health model extensively to benefit mainly the population living in rural areas. Karnataka had established 124 CHCs, 18537 PHCs and 124 SCs throughout the state by the year 2002(GOK2005).

3. Brief description of Bidar

The population of Bidar district is 1.5 million. It has 62% literacy, 73% of males being literate and 50% of females (Census 2001). Bidar is situated on the northern border of Karnataka State and has 5 subdivisions known as Taluks. People are primarily engaged in agrarian based activities where most of the land is arid, with no permanent source of irrigation. Cultivation is mainly on a seasonal basis depending heavily on the monsoon. However a substantial amount of land is irrigated throughout the year because of the tapping of ground water resources by the use of bore wells and open wells. Developments such as 100% electrification in rural areas and developments of canals and dams have significantly improved the prospects of agriculture. As Bidar is my hometown, and I was born and have lived there for most of my life, and I am well versed with the culture, language and customs of the region.

Historically Bidar was a part of the Bahamani Kingdom (descendants of Persians). About 500 years ago, they ruled over districts like Gulbarga, Bijapur and Golconda led by the dynasty of Barid Shah. In later years about the 1700s, the Nizams of Hyderabad took control of the district and it was under their reign, until the last Nizam gave up his power in 1948. The proximity and close ties to Hyderabad have a legacy that continues to this day as the districts of Bidar, Gulbarga, Bellary, Raichur and Koppal are known and referred to as the Hyderabad Karnataka region. Due to the arid region that Bidar is located in, Bidar has been prone to droughts that often create a lot of adverse conditions. In extreme cases it leads to famine. Although famines have not struck this region over the past decades, in the early 70s the monsoon failed for 4 consecutive years. This led to many people suffering the worst famine in recent memory. To survive many people migrated to towns and cities where they could find employment and sources of food. Others were forced to sell their lands and possessions

for a very little amount of money or in extreme cases had to abandon all they possessed and look for solutions in order to survive. Some analysts in Bidar speculate that the major reason for such devastating effects of the famine in the district, where the government was unable to do much, was the fact that India was at war with Pakistan busy pursuing the liberation of Bangladesh. Hence this famine was given a lower priority.

However at present such dire conditions of famine do not occur at least on a regular basis, as adequate measures such as tapping of deep underground water sources by using bore wells and other improvements in relevant infrastructures that have been upgraded. For instance almost all villages in the district can be accessed throughout the year by motor vehicles at present. Other ongoing projects such as rainwater harvesting and also construction of dams, reservoir and canals have helped and have the potential to alleviate the problems caused by being prone to drought. Most farmers are subsistence farmers with only a few exceptions where a few individuals hold large farms on a joint family basis⁴. Growing of lentils and cereals is mainly carried out by those farmers who depend on the monsoons for their crops having non-irrigated lands. Sugarcane, wheat and rice are cash crops grown on irrigated lands.

Bidar does not have much of an industrial base although sincere efforts are being pursued to attract industries by the government. Schemes such as tax breaks for new industries, loan subsidies and new industrial zones have been created. However most of these attempts appear not to have achieved any significant change, as many industries lie closed or barely functioning. Bidar is a small but unique producer of artefacts known as Bidri; these products are renowned throughout India and the rest of the world. Otherwise the industries that are doing well are mainly those based on agricultural produce, sugar factories and related by-products like alcohol appear to thrive, similarly lentil-processing units perform exceedingly well. The only other major source of industrial employment in the district is the jobs that are created by the air force training school of the Indian Air Force, as Bidar is an important centre for the defence forces.

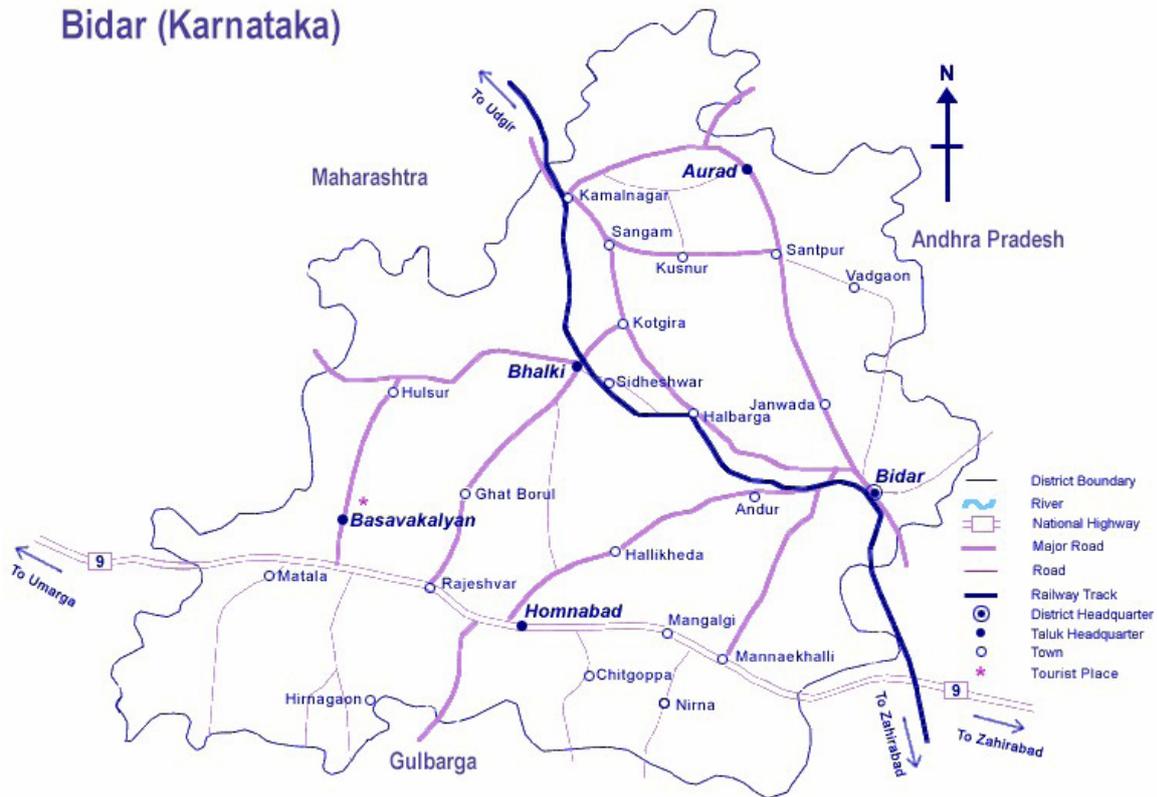
⁴ Due to the land reforms introduced by the erstwhile Indira Gandhi led Congress government those individuals who have above a certain amount of land were forced to redistribute it to those who do not have land. Tenants of landlords were also given rights to the land they possess. However certain individuals with large land holdings managed to get around the reforms by dividing their land into smaller sections by nominating the land in various family members' names.

In contrast, Bidar's adjacent district of Gulbarga has a large mining industry of limestone used mainly in the production of cement, building material and flooring. Therefore Gulbarga has a lot of cement industries and other related industries processing limestone. Bidar is not considered as a district with opportunities for mining. However the mining of Laterite stones is quite widespread in the district but on a small scale as the stones are used primarily as building blocks in the construction of houses.

In terms of education Bidar has a number of engineering, dental and agriculture colleges; various undergraduate colleges are also quite well established. Though it does not have a medical college other aspects of health sciences are quite well established like nursing and pharmacy colleges. A notable fact that the government can be commended for is promoting education, in that in almost all villages at present there is at least a primary school established. Balwadis⁵ and primary schools have been instrumental in reducing the illiteracy levels throughout the district. Schemes such as the midday meals offered by schools and balwadis have encouraged economically poor students to stay in school as their parents see the offer of the school providing meals as a means to lighten their burden of feeding their children. The most notable fact of the government provision of primary education and also to a greater extent higher education is that it is free of any charge. To assist scheduled castes and scheduled tribes education is virtually free of any cost at all levels and the government also provides scholarships to help. The only villages with no primary school are those villages that have a nomadic population or some villages with a low population whose people are given the opportunity to study in neighbouring villages. In extreme cases there are no primary schools in certain villages that represent a population of scheduled tribes that are hostile to any government intervention. However this may not be true for long as the peoples of such villages are rapidly realising the benefits of education. Primary education is also helping close the gender gap that exists between the levels of literate males and females. The GOK encourages all to benefit from education rather than any one sex, caste or religion.

⁵ Balwadi is like a nursery or play school where young children are encouraged to get into the habit of going to school as opposed to them working in the fields or tending cattle.

Bidar (Karnataka)



Influence of the Highway.

The national highway 9 of India which connects Hyderabad and Mumbai cuts through the Taluks of Humnabad and Basavakalyan; these national highways are vital road links to connect key cities and towns in India therefore they are well maintained. The positive outcome of the highway going through these Taluks is that the people benefit by having easy access to both Mumbai and Hyderabad and other towns that are along the highway. Quite a number of people migrate from these Taluks to find work or other opportunities in these metropolitan cities. Some people only migrate on a seasonal basis because during the post monsoon period, usually after harvesting their crops there is very little opportunity to find work in the agriculture sector. Hence during the summer months it is quite common to see a lot of people seeking work in cities. On a similar front quite a lot of businesses thrive due to the large amount of traffic that flows through these Taluks. Businesses include roadside restaurants and retail outlets that provide goods from the cities; vice versa local farmers benefit by being able to sell their produce directly to the cities for a better price as opposed to them selling it in Bidar. According to my observations, as a result of the highway passing through Basavakalyan Taluk it has attracted a vast network of indigenous haulers /transporters who have their bases here. Most of the transporters can be categorized as owners

of small companies of one to five lorries with the exception of a few successful proprietors who have fleets of over 100 lorries. It is speculated that the concentration of truck owners in Basavakalyan is one of the highest in India. A subsidiary growth of economic activities related to the transport industry has also mushroomed in this Taluk as opportunities for mechanics, automobile spare parts shops, truck bodybuilding, vehicle financiers and the insurance sector have a significant stronghold here. Hence a large segment of the population is either directly or indirectly involved with this industry and it is a vital resource for the Taluk. Therefore in my perspective I would consider the Taluks of Basavakalyan and to a lesser extent Humnabad Taluk slightly better developed than the other Taluks of Bidar District.

The railway line that goes through Bidar does not appear to have a similar effect on the population of Bidar as opposed to the effect of the national highway, as the railway line is mainly used to transport coal to a thermal electric generating plant in Maharashtra state. Over the past ten years passenger trains have been introduced to enable people to get to Bangalore (Karnataka State capital) and various other places in India. There are also proposals to shorten rail journeys connecting other South Indian cities with New Delhi by rerouting lines to go through Bidar district by upgrading the existing lines. However at present the full potential of the railways in Bidar has not yet been realized.

Religion and caste structure of Bidar district.

The population of Bidar district comprises 72.6% Hindu, 23.3% Muslim and 4.1% other (mainly Christian), out of the total Hindu population they can be further classified as 19.1% scheduled caste⁶, 5.6% scheduled tribes, 58% other backward castes and 17.3% high castes (RCH). These population indicators are slightly different from those of the country according to the census figures for 1991 Hindus are 82%, Muslims 12.12%, Christians 2.34% Sikhs 1.94%, Jains, Buddhist and others consist of 1.6% of the population. Among the Hindu population of the country scheduled castes form 16.48% and scheduled tribes 8.08% of the population (Census 2001). Though the population of Muslims comprises about 23.3% in the

⁶ The Caste system of Hindus basically works in the following order. Imagine a ladder with 4 boxes; in the top box are the priests or Brahmins who have the most power, in the second are soldiers and merchants, the third are farmers and shepherds and finally all those who do menial jobs e.g. gravediggers. This final segment of people was also known as the untouchables, they usually comprise the economically poorest in the country. There are numerous sections and sub-sections of castes that exist in each of the boxes.

district the town of Bidar has about 40% of its population consisting of Muslims. There is also a small minority of Sikhs in Bidar as they have a temple, which was visited by one of the founding masters of their faith. Similarly in Basavakalyan Taluk the founder of the Lingayat community (high caste) Basaveshwar lived there hence the place holds a significant position among those who adhere to his principles. Christians in Bidar mainly consist of converts from those who previously belonged to the schedule castes under Hinduism.

Understanding the caste system of India and to what level it is involved or how much it impacts each individual, is important and must be taken into account as the caste system has some sort of significance on every segment of Indian society. Even in terms of health indicators studies have shown that the lower castes and the economically poor usually have far worse health indicators than other segments of India society (see table 2). In this table it can be clearly seen that lower sections of the caste matrix have poorer indicators.

Table 2 Indicators of health status among various socio-economic groups.

Indicator	IMR/1000	Under 5 MR/1000	% Of children Under weight.
India	70	94.9	47
Scheduled castes	83	119.3	53.5
Scheduled tribes	84.2	126.6	55.9
Other disadvantaged	76	103.1	47.3
Others	61.8	82.6	41.1

Source NHP2002. Abbreviations: Infant Mortality Rate IMR, Mortality Rate MR

Traditionally the upper castes have many advantages over the lower castes in Indian society usually by having the best made always available to them before any other section of society can access it. This is in the context of power, land, economy and positions of religious importance. This situation has occurred primarily due to the way in which society has been structured over the millennia where it has always been a lopsided affair with almost all good aspects of society favouring the elites and a selected few. However the GOI has been implementing various programmes and schemes to empower and enlighten lower castes in the hope of bringing about a proper balance in society. Positive discrimination is one of the policies that GOI has vigorously promoted, by offering reservations and protections to scheduled castes, tribes and other disadvantaged castes in order to allow them to make

progress. The outcome of such policies has created quite a lot of social change over the past decades. In the past where the slightest irreverence or deviations from some of the draconian dictates of upper castes by anyone who dared to defy their edicts were met with serious repercussions. For example it was expected that lower castes were to take off their footwear and place it above their head when they passed by upper castes, as this action would mean a mark of respect. There were instances of lower castes being punished for twirling their moustaches in an upright fashion as it was regarded as the fashion of the higher castes. However at present such extreme measures are rarely seen as the laws of the land act as a deterrent and as people who once were disempowered now have powers granted to them that have empowered them not to tolerate atrocities that perhaps their parents' generation thought were the norm. Therefore the balance of power that was once absolutely in the hands of the upper castes is gradually shifting its balance.

In districts like Bidar caste hierarchies still exist but not necessarily on the same scale of power or enforcement as it used to be in a historical context. Although those who belong to the group of high castes still have a dominant role especially in rural areas, where the best land, income status and power are associated familiarly with them, there has been a radical change in social aspects such as participation of lower castes in education, local governing bodies (Panchayat⁷) and in almost all of the government run institutions. The effects of this induced change can be seen in varied stages as the vice-like grip of the higher castes has only been reluctantly released at differing levels and it also depends on specific areas i.e. in certain villages there will appear to be very little change but the contrary might be true in a different village.

Concepts such as untouchability of lower castes are gradually becoming an uncommon phenomenon at least in their most blatant forms. In the towns it is rapidly losing its significance but in the rural areas it does have quite serious implications. However most villages in this district have stopped practicing what can be termed as blatant untouchability but of course there is still a long road to progress until it is completely eradicated in all of its forms. The government can take full credit for not practicing untouchability in any form within all of its institutions nor are any officials allowed to do so, as stringent measures are in

⁷ Panchayat system is a traditional form of governance in rural India (South Asia) where 5 selected elders form a council and preside over local matters and provide justice and lay down rules. Their jurisdiction is generally over the village they reside in. The government has promoted this system of local self government by introducing reforms by ensuring representations are made by scheduled castes and women in these councils.

place, in order to avoid such practices. However the general public may have different perceptions or sets of beliefs at a personal level. Therefore it is quite hard for the authorities to enforce and avoid all the forms of untouchability apart from certain obvious forms, which can be avoided. The government however appears to be trying hard on an ongoing basis to encourage people to stop all forms of untouchability. Some obvious forms of untouchability like not sharing a seat on the bus with a lower caste is not practiced or tolerated any more. Other obvious forms of untouchability that still exist in almost all the villages would be in the cases where lower castes will not be allowed to access wells that belong to upper castes or enter their homes and in certain cases places of religious gathering for the apparent fear of any contamination that might occur. Such forms of untouchability are primarily enforced under an unwritten law or the guise of segregation i.e. it is normal for castes to live in clusters where most of the basic amenities they need are made available within that specific area. Hence people from one area in theory do not need to venture into another area to access basic amenities.

Whereas other forms of untouchability are gradually losing their significance, for instance it was quite common historically to see lower castes not being served cups of tea in teashops or they were given different cups to drink from and had to clean it up after using it as lower castes were seen as dirty and unfit to be served by the upper castes. At present most of the villages have stopped this practice sometimes after some of the lower castes took a stand and protested against such practices.

The majority Hindu population on the other hand views minorities with a different perspective from other castes as they are deemed to be outside the caste system. Similarly each group of minorities is viewed differently in terms of their faith. Traditionally Hindus and Muslims have lived alongside each other but there has always been an apparent mistrust and antagonism towards each other, which has led to a split along sectarian lines. At present one can still get a perception that Hindus and Muslims lead quite independent lives with hardly any interaction with each other. Although Bidar district was historically under Muslim kings until the last Nizam⁸ gave up his power the Hindu majority took the realms of power in

⁸ On September 17 1948 the last ruling Nizam Mir Osman Ali Khan of Hyderabad relinquished his power and allowed Indian authorities to rule his provinces. Though India gained independence on August 15 1947 the Nizam did not want to join either India nor Pakistan and formed his own independent country but this was a futile attempt as the Indian army crushed the resistance led by the Nizams army of Razakars. The operation led by the Indian army was popularly known as 'police action'.

1948 (Frontline 1998). During this transition a lot of upheavals took place like communal riots that led to a lot of bloodshed and what could be termed genocide and ethnic cleansing. The Muslims that lived during this period of time bore the brunt of the atrocities that led most of them to migrate into safer places. This mass migration led to Muslims concentrating in cities, towns and villages where they deemed it to be safer and a few even took their journey right through to Pakistan. One can see the results of this migration as in towns like Bidar there is a concentration of Muslims in certain areas whilst villages that once had some Muslims have none of them residing in these villages. At present in some villages one can see a variation of a high density of Muslims consisting of 80-100% or villages with a strong presence of Muslims where their population is in between 25-50%. It might be observed that although Muslims are basically concentrated in certain areas, other areas do not have any Muslims. These concentrations of Muslims may be found quite well spread throughout the district.

Armed resistance by the Muslims may be a thing of the past; over the past 5 decades there has been relative peace where communal forces have been kept away. Many Muslims still feel quite alienated and feel that they are second-class citizens. Issues such as gaining an equal status with the majority population are yet to be realised although the status they once enjoyed prior to independence will most likely not be attained. Muslims now face other problems such as finding appropriate representation in the government and accessing schemes implemented to uplift some of the economically poor Muslims. Muslims do not follow the caste system but do have certain hierarchies within their community. Although some Muslims will fall into the category of the very affluent, most Muslims in Bidar can be classed as poor with only a small section forming a middle class. Due to the immense levels of poverty that are apparent in this community there are a lot of health related problems that affect it.

Christians form a small minority in Bidar although the national average of Christians in India is about 3% Christians in Bidar comprise 4-5% of the total population (RCH). Most Christians in this district consist of converts from people who belonged to scheduled castes of the Hindus. Therefore quite often they are still referred to broadly as scheduled castes by the upper castes but the local connotations to the word describing them are quite derogatory names such as *wholair* (dirty people) or *mahador* (people to be kept far away) are used. Officially it is an offence to call anyone such names but the use of offensive language is still

in common practice although it is rarely used to directly confront individuals of a lower caste status. Words such as *harijan* (people dedicated to God) *girijan* (people who live in hills) and *dalit* (scheduled caste) have been introduced to describe scheduled castes and scheduled tribes and they have much better connotations as opposed to traditional words. It could be suggested that the measures introduced by the government are similar to steps taken by developed nations to eradicate the 'N' word from use that had very derogatory connotations describing a race of people.

The educated amongst Christians have made significant progress as many of them have managed to get government jobs in all the departments especially in the education and the health-department⁹. Some of the educated members have ventured into running business but this could be seen as a small proportion of the Christian population. A few Christians have managed to break into traditional caste based jobs such as carpentry and tailoring, which historically could only be done by members belonging to specific castes. However the uneducated or poorly educated Christians have to earn a living doing menial jobs basically eking out a hand-to-mouth existence. In the rural areas most Christians can be termed as landless agricultural labourers.

⁹ In the health department one can observe a high proportion of Christians work in this department as opposed to the minority status that they hold. Quite a lot of the nurses, auxiliary nurse midwives, male health workers come from the Christian community. Hindus and Muslims previously had an aversion to sending their women out to work especially in rural areas whereas Christians did not have a similar aversion as they looked on this as an opportunity to get out of their poor economic conditions.

Table 3 Indicators of Bidar among other districts of Karnataka State.

Index	Districts	Female literacy %	Male literacy %	Girls married below 18years %	Current users of FP Method %	Birth order 3 & above %	Safe delivery %	Complete Immunization %	% Decadal population growth rate	Composite index %	Region of the state
I	DISTRICTS WITH GOOD PERFORMANCE										
1	Hassan	59.32	78.29	15.20	75.10	19.70	69.70	92.80	9.66	81.55	O-M
2	Shimoga	67.24	82.32	16.50	69.30	22.80	83.00	92.90	12.90	80.37	O-M
3	Kodagu	72.53	83.80	22.00	70.60	18.80	79.40	94.80	11.64	80.06	O-M
4	Dakshina Kannada	77.39	89.74	4.50	63.70	32.00	91.50	86.00	14.51	78.77	O-M
5	Uttar Kannada	68.48	84.48	15.00	66.00	27.20	86.10	89.90	10.90	76.11	B-K
6	Udupi	74.02	86.59	4.50	63.70	32.00	91.50	86.00	6.88	75.97	O-M
II	DISTRICTS WITH AVERAGE PERFORMANCE										
7	Mandya	51.62	70.71	37.00	71.70	26.10	61.90	88.00	7.14	75.86	O-M
8	Mysore	55.81	71.30	47.90	65.40	23.90	69.70	92.70	15.04	75.70	O-M
9	Bangalore Rural	78.98	74.43	21.05	63.00	16.40	79.10	83.70	34.80	75.34	O-M
10	Bangalore Urban	78.98	88.36	37.00	60.10	26.10	90.60	77.00	34.80	75.19	O-M
11	Chitradurga	54.62	74.69	30.05	59.90	34.40	53.80	88.40	15.05	73.98	O-M
12	Tumkur	57.18	76.88	27.10	61.30	27.30	63.50	88.00	11.87	73.97	O-M
13	Dharwad	62.20	81.04	36.50	61.20	37.40	65.30	74.80	16.65	73.03	B-K
14	Chamraj Nagar	43.02	59.25	47.90	65.40	23.90	69.70	92.70	9.16	72.18	O-M
15	Chikkamagalur	64.47	80.68	37.00	71.40	26.10	78.00	83.50	11.98	72.13	O-M
16	Kolar	52.81	73.14	33.50	57.10	29.70	59.20	90.60	13.83	71.92	O-M
17	Gadag	52.58	79.55	36.50	61.20	37.40	65.30	74.80	13.14	69.72	B-K
18	Belgaum	52.53	75.89	55.80	61.80	36.70	68.60	64.80	17.40	68.75	B-K
19	Haveri	57.60	77.94	36.50	61.20	37.40	65.30	74.80	13.29	65.66	B-K
III	DISTRICTS WITH POOR PERFORMANCE										
20	Bellary	46.16	69.59	44.20	50.40	48.60	54.00	52.60	22.30	65.54	H-K
21	Davangere	58.45	76.44	35.50	59.90	34.40	53.80	53.80	14.78	65.43	O-M
22	Bijapur	46.19	68.10	64.80	47.10	43.00	50.10	53.20	17.63	62.86	B-K
23	Bidar	50.01	73.29	67.60	50.60	52.90	52.50	50.30	19.56	60.55	H-K
24	Raichur	36.84	62.02	57.10	45.40	52.80	48.00	37.20	21.93	58.34	H-K
25	Gulbarga	38.40	62.52	47.70	39.20	53.70	47.70	25.30	21.02	58.31	H-K
26	Bagalkot	44.10	71.31	64.80	47.10	43.00	50.10	53.20	18.84	54.71	B-K
27	Koppal	40.76	69.15	57.10	45.40	52.80	48.00	37.20	24.57	53.09	H-K

Source: GOK2003, 2005.

Notes: Abbreviations B- K for Bombay Karnataka, H- K for Hyderabad Karnataka and O-M for Old Mysore. FP for Family planning.

According to Table 3 it can be quite obvious to notice the region represented by the Hyderabad Karnataka fares far worse than other regions of the state. All the districts represented by the Hyderabad Karnataka region fall in the category of poorly performing districts as opposed to other regions that have either one or two districts in this predicament. Perhaps it is just a reflection of the neglect and slow pace of development that has persisted in these districts over the years. However other aspects like the relative aridity of the northeastern region of Karnataka should be taken into account. Areas represented by the poorly performing district fall under the category of arid regions of Karnataka, which would imply that farmers would not benefit as much economically from their activities in this region as opposed to other well irrigated regions of the state. This factor may answer the question of why some districts perform poorly. Another interesting fact about the poorly performing districts is that all of them are located in the northern areas of Karnataka. There is a virtual north south divide in the state, where south and western coastal areas have far better indicators than any of their northern counterparts. These facts should make planners and authorities realise that vital measures need to be taken in order that these poorly performing districts get to some sort of parity.

The district of Bijapur was divided recently (not more than 10 years ago) into Bijapur and Bagalkot and Raichur was divided into Raichur and Koppal. Therefore certain figures quoted in table 6 appear to be the same when comparing Bijapur with Bagalkot and Raichur and Koppal. For example the percentage of girls married below the age of 18, family planning methods used, birth order 3 and above, safe delivery and immunization figures. However other indicators like male and female literacy rates and decadal growth are different. Similarly Mysore district was also divided into Mysore and Chamraj Nagar. Here one can see that a lot of figures are similar. The similarity in the figures quoted may be due to the fact that these districts are using the same source prior to their division to compute their figures. Perhaps in the course of time when these newly formed districts work completely independently one may see different sets of figures appearing.

The composite index in Table 8 places Bidar district among the lowest sections of Karnataka just 5 positions above the lowest level. The composite index is compiled according to a similar basis to the United Nations Development Programme that publishes its reports on the Human Development Index (HDI) of various countries. The HDI takes into the following 3 elements to rate every country (UNDP).

- A long and healthy life, as measured by life expectancy at birth.
- Knowledge, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight).
- A decent standard of living, as measured by GDP per capita (PPP US\$).

The composite index in this table has followed most of these guidelines but instead of weighing the index against American dollars obviously has used Indian Rupees. The composite index reiterates and highlights that the districts of the Hyderabad Karnataka region face an uphill task of improving their performances at least to the levels that have been achieved by better performing regions of the state.

The potential of poor regions to improve health.

However this raises a big question of whether it is possible for a developing country to achieve better health status for its people with the resources it has available. The simple answer to this question is “yes it is possible” and examples of this can be found where countries and states, although having adverse economic conditions (when compared with developed nations) have some health indicators closely compatible with developed nations. According to Roberts

“The outliers show that it is by no means inevitable that countries with low per capita incomes will have low standards of health. There are some well known and extensively documented cases of low income countries or areas – for instance Vietnam, Sri Lanka and the state of Kerala in India –enjoying a health status typical of upper middle income countries as a result of a combination of cultural norms and high educational attainments and accessible, effective, public health services”.

Why health outcomes have been good in Sri Lanka and Kerala

Non-health sector factors which have not been influenced by health sector policies have had a major impact on health outcomes in Sri Lanka and Kerala:

- The relatively high status and autonomy of women encourages attention to maternal health
- Relatively good access for poor people to subsidised food
- High levels of cash incomes from workers' remittances.
- High level and quality of education, leading *inter alia* to high health awareness and demand for health services.
- High population density, with dense transport infrastructure, making access to health facilities easy.

In the health sector there have been:

- High levels of expenditure on health relative to GDP
- High utilisation of public facilities, and sense of affinity in the population for public health services.
- High levels of technical efficiency (patient throughput) in the management of public facilities
- Fruitful complementarity between public and private health providers, with traditional providers channelling poor patients promptly to the modern, public, sector when necessary and the modern private sector treating better off patients, so that
- Public subsidies go mainly to the poor.

Source Roberts 2003 p.116.

The box above highlights certain main reasons that have brought about successful health outcomes for Kerala and Sri Lanka. It is also quite clear that if other countries and states could follow the examples perhaps they might be able to achieve similar results to Sri Lanka and Kerala.

Although these examples of countries and states that have indicated that better health can be achieved with limited resources but it often involves the public having to pay substantially to access healthcare. Interestingly this key aspect of having to pay for healthcare needs to be examined as it often has a detrimental affect on poor people.

Impact of out of pocket expenses on health.

The criticism levelled at the out-of-pocket¹⁰ expenses borne by individuals in terms of accessing private health care is not in isolation as many developing countries of this region face similar problems. Statistics for 2002 by the World Health Organisation (WHO) indicated that out-of-pocket expenses range from 100% of all health expenditure in countries like Maldives and Myanmar to 75.80% in Thailand and in India it is 98.50% (WHO2002). India has a plural form of healthcare provision where healthcare is provided by private and public sources. It is estimated that approximately 80% of the population approach private sources to access healthcare in cases of ambulatory or outpatient care, but this figure is also matched by public healthcare in terms of preventative medicine such as immunisation where the government appears to be dominant (Mahal et al 2001). Although public provisions play a significant role providing mostly a service free of charge at the point of access, private provision of health in contrast involves a fee and charges patients for its services. As individuals are seeking healthcare from private sources at such high levels the consequence is that they will need to find the resources to pay for the services. Perhaps the rich are not necessarily impacted as much, as they can find the means, but it could have a devastating effect on the poorer and weaker segments of Indian society who basically struggle for survival in a day-to-day existence. It is also argued that the population actually pays much more out-of-pocket than the state actually invests on each individual (Berman 1998)

An estimated “sources and uses” matrix for India’s total health expenditure, three quarters of this spending comes from households’ out-of-pocket disbursements. Almost 60% of total expenditure goes to primary care services, of which 85% (almost 50% of total spending) pays for primary curative care services, which were defined as ambulatory (not as an inpatient) treatment of illness. Household spending comprises an even larger proportion of primary curative care, at 92%. In contrast, government sources account for 73% of spending on preventive and public health services. Despite the fact that most hospital beds are in government-owned institutions, government expenditures only account for 24% of inpatient treatment expenditures. Although fees in government hospitals are low, households still report sizable out-of-

¹⁰ **Definition:** “Out-of-pocket spending on health is the direct outlay of households including gratuities and payments in-kind made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or to the enhancement of the health status of individuals or population groups. Includes household payments to public services, non-profit institutions or non-governmental organisations, excludes payments made by enterprises which deliver medical and paramedical benefits, mandated by law or not, to their employees”. Source WHO2002.

pocket expenditures, perhaps on necessary drugs and supplies for hospitalized patients. p.1465.

According to a report by the GOI there are certain ill effects of out of pocket spending. The report quotes quite alarming statistics but it gives an insight into the severity of the problem faced.

- Only 10% of all Indians have any form of health insurance, mostly inadequate
- Hospitalised Indians spend on hospital expenses an average 58% of their total annual expenditure.
- Over 40% of hospitalised Indians borrow heavily or sell assets to cover expenses.
- Over 25% of hospitalised Indians fall below the poverty line because of hospital expenses.

Source GOI 2005.

At present out-of-pocket expenses are quite inevitable as there is an untrammelled growth in the private sector, which also dominates in the provision of healthcare especially in the urban areas. In order to reduce the expenses paid out of pocket by the public the government will need to increase adequately the amounts of services it can make available, especially as it intends to help those who are in most need of healthcare and also alleviate conditions for those who live in poverty suffering from ill health (Roy and Howard 2006). Although I am aware of the high use of private health care providers and their effect on Indian society I do not intend to explore all the advantages and disadvantages of private healthcare providers. However I have explained in detail certain reasons in chapter (4) about why certain people are forced to use private healthcare providers as opposed to using their local government facilities. Primarily this is due to the suboptimal and dysfunctional levels at which the public provision of healthcare is being administered.

In Bidar district there appears to be a thriving group of individual private providers of healthcare mostly concentrating in the urban areas with the exception of a few who venture into some easily accessible rural areas i.e. with motorable roads or villages where rural markets are held. However most of the rural population have to depend on the public provision of healthcare to alleviate their health problems. Therefore public provision of healthcare is more important in rural areas and ensuring that the public health network functions at an optimum level should be high on the list of the government's priorities.

Currently the population of Bidar district is 1.5 million people of which 22.94% live in urban areas and 77.06% live in rural areas. The rural population in this district is higher than the state's average of 66% living in rural areas (RCH). Karnataka state is one of the most urbanised states of India but within this state, districts like Bidar have a higher density of rural population. Thus the need for accessing healthcare by the rural population should be a higher priority. Although the rural population forms the majority of the population in this district, like the rest of India the provision of healthcare is lopsidedly in favour of the urban population while the rural population have little or dysfunctional levels of provision of healthcare.

The importance of rural healthcare.

Interestingly one could argue hypothetically that perhaps if the government strengthens only the urban health network and makes adequate provisions for the rural population to access healthcare there perhaps this may change for the better the prospects of health of the rural population. This is from the perspective that the urban centres are much better equipped and staffed and can provide a wider range of services. However these services are usually overwhelmed to the breaking point with a huge demand to access all the available provisions. Some of this demand comes from the rural population accessing their healthcare needs, but a part of these needs consist of services which could have been provided by the PHCs. However due to the dysfunctional nature of the provision of healthcare in rural areas they are forced to use urban centres. The towns and cities have far better infrastructure and amenities than the rural areas, which in itself is a great advantage. At present urban centres can provide a wide range of services, even sophisticated equipment and technologies when required, whereas in the rural areas even the basic level of healthcare provision faces an uphill task to run on a regular and sustainable level. Therefore a lot of the services provided in the urban centres are much sought after by the rural population

However this strategy of only improving urban centres will have serious drawbacks if one takes into consideration the existing difference in infrastructure, communications, economy and other conditions between urban and rural areas. Although vital improvements and increased investments need to be made constantly in urban areas, this should not be done at the expense of the rural population. At present in rural areas the levels of infrastructure, communications and stages of development i.e. banks, post offices, industries etc are either

very poor or just at the basic levels whereas in the urban areas the basic levels of development have been attained and now it would appear that the goal is to surpass the secondary levels and reach the tertiary levels of development. The uneven progress of development has created wide gaps between urban and rural areas. Unless measures are taken to bridge the existent gaps it would be futile to concentrate only on urban areas. Neglecting the provision of healthcare in rural areas would eventually lead to far worse outcomes for the rural population than what has been achieved at present. Even with the current levels of investments one can see how neglected rural areas of India are and to what levels they need to catch up. For example in urban areas about 73% of the population have improved access to proper sanitation whereas in rural areas it is only 14% (PHNIP 2002). i.e. in terms of accessing drinking water 92% of the Indian urban population have adequate sources compared to 86% of the rural population (PHNIP 2002). Sometimes the gaps may not be as blatant but it still leaves rural areas a lot of room for improvement

Karnataka while being in line with the general characteristics of India does reveal certain wide gaps that exist in between rural and urban areas. According to the 1991 Census figures for amenities, 76.3% of the urban households utilize electricity whereas only 41.8% of rural households use it and for safe drinking / potable water, 81.4% of the urban and 67.3% of the rural households have access. Differences in the types of houses people live in shows that 69.4% of the urban population have pucca (permanent structured) houses whereas 30.4% of the rural population have the same, 22.2% of the urban population live in kachcha (semi permanent or makeshift) houses while 49.3% of the rural population live in such houses. The status of housing may not indicate great significance or relevance. However when studies were conducted by Deshpande (1998) on morbidity in rural Karnataka, he came to the conclusion that those living in poor quality housing tend to have less hygienic living conditions and a greater chance of getting ill. This was substantiated by the morbidity rate in his paper for those who live in kachcha houses, which was 13.1% of the population whereas it was only 9.5% for those who live in pucca houses. Therefore in order not to alienate or neglect the rural areas, more emphasis will be needed on rural development schemes that help the rural areas. However another perspective of looking at rural development would be the consideration of whether it is worthwhile persisting with rural development schemes when some, perhaps being over sceptical, may consider them a waste of resources.

Perhaps this question is best answered by Desai and Potter (2002)

“Should poor countries be concerned about the implications for human welfare when they cannot afford to provide health and educational needs and when their economic resources are heavily constrained? There are three reasons for concern. Firstly, the basic health, nutritional and educational needs of the most vulnerable groups – the under-5s, pregnant women and nursing mothers –are urgent and compelling. If these are neglected, they can set back the health and welfare of the whole future generation of a country, in addition to adding to present human and economic miseries. Second, there is considerable evidence that there are positive economic returns to interventions supporting basic nutrition, health and education; and third, human welfare and progress is the ultimate end of all development policy”. p.381.

Desai very well highlights the importance of implementing human welfare programmes and the logical conclusion would be for countries like India to persist and improve programmes that alleviate the problems faced by the disadvantaged populations. In terms of ill health faced by the rural population in Bidar district I would broadly base it on the following 3 categories.

- Ill health faced by the most vulnerable in society (women and children)
- Diseases and illnesses caused by epidemics and endemic to the region.
- Diseases caused by social evils like poverty, alcoholism.

3. Existing health problems.

Primarily I want to concentrate on these 3 categories rather than writing on the broad issue of access of healthcare for all the people that live in rural areas, because the elites and other who have better status appear to have much better health and tend to bypass rural healthcare providers for better provision in the towns. Likewise some villages that have better access due to the provision of good roads and transportation may not feel the same urge or desire for accessing healthcare locally as opposed to those who live in remote or inaccessible villages. The latter part of this chapter will generally discuss India and Karnataka state mainly based on anecdotal evidence on Bidar district. This is because there are few readily available updated statistics or verifiable data accessible to the public and also because the collection and compilation of statistics at the district level is generally poor in India. Though the

description of these 3 categories I am writing on will emphasise India and Karnataka, I will try and project its relevance to Bidar district

I. Ill health and its effects on the most vulnerable people in society.

Ill health can affect all, but largely women and children form the most vulnerable groups in India closely followed by the other segments of society that are deemed to be lower down in the caste scale of Indian society. To access healthcare they usually have to access the public health network. A number of studies conducted in the assessment of different aspects of primary health care provided by PHCs in different parts of India have shown the vital role that doctors and PHCs have in rural areas (Bloom et al 1999, Khan et al 1999 and Ramarao et al 2001). These studies concentrate on maternal and childcare matters, along with family planning. They indicate that through relatively simple techniques e.g. regular antenatal checkups, immunisation and assisted deliveries, medical personnel and institutions could save lives. Mostly the poorer and vulnerable segment of the population in India suffers unnecessary, preventable deaths, illness and disabilities. Current statistics indicate that above 100,000 women die each year from pregnancy and child birth related causes, average maternal mortality is 540 per 100000 live births, only 42.3% of all deliveries are assisted by medical professionals (PHNIP 2002). According to UNICEF 67 of every 1,000 infants born in India die in the very first year (33 die in the first week) against an average of 5 for the industrialised world. One in every 15 children born in India dies before they reach their first birthday while the infant mortality is one in 200 across the industrialised world. In India, 2,335,000 children below five years of age die annually. India records 4.4 deaths per minute of children in the age group 0-5 years. One in four infants in India are born with a low birth weight, less than 2.5 Kilograms. Unfortunately the burden of most of the above-indicated statistics is borne by the rural population who have not yet been able to access health care through the channels that the Government has set up (Retherford et al 2001).

To tackle these problems the gist of the priorities set in the National Health Policy (NHP 2002) for basic healthcare provision which public health attempts to meet are along the following fronts. 1. Maternal and child care including family planning, 2. Immunisation against major diseases, 3. Prevention and control of locally endemic diseases and 4. Appropriate treatment for common diseases and injuries. Though this list appears to be exhaustive, other priorities have been introduced according to the needs that have arisen. Schemes such as Child Survival and Safe Motherhood (CSSM) in 1991-92 and Reproductive

and Child Health (RCH) in 1997-2002 have been introduced to reduce maternal mortality by promoting institutional deliveries and to closely monitor the health of the mother and child. The GOI's strategies envisaged under the CSSM were to achieve a target of 2 maternal deaths per 1000 population by 2010 as opposed to the level of 4.07 per 1000 in 1998 on the following lines a) Early registration of pregnancies, b) Universal coverage with Tetanus Toxoid (TT) and Iron Folic Acid (IFA), c) Timely identification and treatment of maternal complications, d) Promotion of clean deliveries and deliveries by trained personnel, e) Promotion of institutional deliveries, f) Management of obstetric emergencies, g) Birth spacing, h) Improvement of infant survival rate by establishing essential newborn care including exclusive breast feeding, so as to promote birth spacing and reduce fertility (MOHFW). RCH on the other hand was introduced in 1997, which incorporates many of the principles of the CSSM but includes aspects of maternal child health services that involve interventions for reproductive tract infections and sexually transmitted diseases. *"The idea behind the RCH programme is to provide need based, client centred, demand driven, high quality integrated services to beneficiaries"* Pallikadavath S et al 2004.

Table 4 Key indicators for women and children in India.

Immunization 2004: pregnant women with tetanus toxoid in %	80
Total fertility rate (1970)	5.6
Total fertility rate (1990)	4
Total fertility rate (2004)	3
Antenatal care coverage (%), 1996-2004*	60
Skilled attendant at delivery (%), 1996-2004*	43
Maternal mortality ratio†, 1990 - 2004*, reported per 100,000 live births	540
Data on Children.	
Infant mortality rate (under 1) (2004) per1000 live births	62
Under-5 mortality rate (1970) per1000	202
Under-5 mortality rate (1990) per1000	123
Under-5 mortality rate (2004) per1000	85
% Of infants with low birth weight (1998-2004)	30
% Of under-fives (1996-2004*) suffering from: underweight (moderate)	47
% Of under-fives (1996-2004*) suffering from: wasting (moderate & severe)	16
% Of under-fives (1996-2004*) suffering from: stunting (moderate & severe)	46
%Child marriage 1986-2004*, total	46
%Child marriage 1986-2004*, urban	26
%Child marriage 1986-2004*, rural	55
Immunization 2004: 1-year-old children immunized against: Tuberculosis (TB) (BCG) in %	73
Immunization 2004: 1-year-old children immunized against: Diphtheria, pertussis and tetanus (DPT1) in %	71
Immunization 2004: 1-year-old children immunized against: Diphtheria, pertussis and tetanus (DPT3) in %	64
Immunization 2004: 1-year-old children immunized against: Polio (polio3) in %	70

Source: UNICEF 2004.

Note; † The maternal mortality data in the row headed 'reported' are those reported by national authorities. Periodically, UNICEF, WHO and UNFPA evaluate these data and make adjustments to account for the well-documented problems of underreporting and misclassification of maternal deaths and to develop estimates for countries with no data.

*Data refer to the most recent year available during the period specified in the column heading.

The ideas and schemes under CSSM and RCH are praiseworthy; however in less developed districts like Bidar attaining the goals envisaged in these plans appears to be elusive and distant. Studies conducted by Bhatia and Cleland (1995) in Karnataka indicate that higher levels of maternal education increased the uptake of antenatal care and other medical

services. However in districts like Bidar that have poor indicators for women with only 50.01% female literacy, 67.60% of women married before they are 18 years old and 50.30% immunisation (refer to table 3) the ramifications of which would most likely be that women will have poor health status.

Another aspect that further complicates or makes the problems worse for women and children is the prevailing culture and attitude that society has towards them. Gaining social equity or some sort of parity with their male counterparts may be distant at present but it is attainable, and states like Kerala have proved that such status can be achieved. There has been relative progress of development over the decades in districts like Bidar where more women are being educated and also a substantial portion of them are in employment both in public and private sectors. It might be suggested that the majority of women still live in a male dominated society where they are given the role of maintaining the domestic household, childbearing and upbringing of children whilst men are considered as the main breadwinners hence they play a dominant role in society.

Successive governments at the central and state level have promoted a policy of positive discrimination by giving reservations and also stipulating a fixed quota for women that must be represented in all of the departments. This impetus has resulted in women working in virtually all government departments even in those jobs once considered to be taboo or beyond their boundaries e.g. the police department. Therefore this has created much better opportunities for women and in many instances the role of the breadwinners has also reversed from men to the women, where they are the main source of income for a family as opposed to men being the main earners. However it might be suggested in less developed districts women have a lower status in society even though some women have a strong economic status. What I intend to say is although some women in this district may have better economic status because of being employed, society will still expect them to adhere to the traditional role of housekeeping and the upbringing of children along with their role of being employed. For instance it is quite a common occurrence to see in Bidar district women having full time employment who are married to unemployed men. These men perhaps may help by dropping and picking up children from school but it will be very rare to see them cooking food or washing clothes as these jobs are traditionally seen as fit for women. Therefore in such cases even though the woman may be the main income source society will expect her to cope with all the traditional female roles in a family irrespective of their

economic contributions. In a family where both spouses are employed it is possible for the women to pursue a career and also enjoy certain economic freedoms. The position of both spouses being employed may not have any significant difference for women in terms of their status in society, as society has quite rigid dictums for women and has quite well defined boundaries within which the female population are supposed to be. For example in the late evening time it will be very odd to see women venturing out on their own to shop or travel as society basically says that they should be confined in their homes. The logic used here to ensure unaccompanied women do not venture out in the evenings is due to the presumption that there are prevailing dangers that could engulf them in the dark, as they are vulnerable, therefore this measure is imposed on them in terms of safety. However there are many other domains where females still lack parity or an equal footing with men in Indian society which often puts them in a lower position and usually is to their disadvantage.

These situations that I have been illustrating may depict the plight of most women in urban areas but in the rural areas a similar situation prevails where women have a far lower status than men do. However there is a definite distinction in terms of economic status for women between urban and rural women. There are many opportunities for women to find employment in the cities or towns because most government departments and private industries and enterprises are located in urban areas. In rural areas there is only a limited amount of opportunities for women to find employment; mostly they work in the agricultural sector. It is the norm that men earn¹¹ more than women and men are considered the main breadwinners. However women also share the burden of having to manage the family and also contribute economically by working in the agricultural sector. It might be suggested that only women from privileged elites or from economically sound backgrounds could manage to be at home and cater to the needs of the family. Some women are also confined to the home due to certain religious restrictions imposed on them and they tend not to seek employment. For example Muslim women normally stay at home or only work in their own fields as opposed to working in others' fields for a wage. However this example may not be valid in the future as many educated Muslim women are coming forward to seek employment in various government departments and other in house opportunities to earn are being taken up

¹¹ In Bidar district (quite common phenomenon for many regions in India) for agricultural or physical work especially in rural areas most women get approximately half the wages of a man even though they may have done the same amount of work in terms of hours worked and sometimes even when they have done the same amount of physical work. Usually in an agrarian set up women are given less physical work like weeding whereas men will be given harder tasks like tilling the land. However in the government institutions there is no such discrimination.

such as tailoring and popodum¹² making. However the majority of women living in rural villages would come under the category of having a poor economic status hence would need to seek some form of paid employment in order to widen the sources of income to maintain a family. Therefore in rural Bidar it will be quite common to see that both men and women work to earn money but it will be expected that all the household responsibilities and the traditional role of motherhood will be the sole responsibility of the women. Of course as children grow up in the family it is almost customary to see them helping their mothers with some of the responsibility like looking after younger siblings or fetching drinking water. This slightly reduces the burden on women but may have serious consequences for children especially in cases where girls are stopped from taking further education in order to help the family by catering to younger siblings or routine duties.

In terms of health the cultural context can have a deep impact on the behaviour or perception of health of women and children. In Karnataka there are quite a lot of early marriages and consanguineous marriages where first cousins get married or uncles get married to nieces (Matthews et al 2001). Early marriages for girls married between the ages of 15-19 have the potential of doubling the risk of death due to pregnancy related causes and studies have indicated that teenage mothers have a higher incidence of foetal loss and abnormal deliveries (Adhikari 2000). Bidar has the highest number of married women who were married when they were 18 years old or younger in the state of Karnataka. In Bidar 67.6% women are married by the time they are 18 years old which is substantially far higher than other districts that have good health indicators e.g. in Udupi district (in the southwest coastal region of Karnataka) only 4.5% of women are married at this age (refer to table 3). Therefore it will imply that women in Bidar district are at a high risk of ill health caused by complications at delivery and associated problems of childbearing. The potential risk of genetic defects being passed on to children will always loom as long as the practices of consanguineous marriages are an accepted norm in society. The cultural context is further complicated when there is an attitude of virtual fatalistic acceptance by many people that most problems associated with childbearing or sickness suffered by children are routine and normal and do not require a higher priority. Hence even when women die and children die people just accept it as a matter

¹² Popodum making at home usually involves the process of a supplier (usually NGO or a small scale industry) supplying the raw material consisting of mainly Urid dhal (lentil) powder to individual homes, which is processed by kneading the dough and then rolling it into thin sheets to be dried. The supplier collects these sheets and pays according to the amount of sheets each individual produces.

of fate, which there is not much they can do about. Quoting Retherford et al (2001) who conducted a study on promoting institutional deliveries in rural India has, quite adeptly grasped such attitudes of people.

“Another factor affecting women’s health-seeking behaviour, especially as related to pregnancy and childbirth, is that traditionally in rural India pregnancy is considered a natural state of being for a woman rather than a condition requiring medical attention and care. Such perceptions and beliefs constitute a “lay-health culture” that is an intervening factor between the presence of a morbidity condition and its corresponding treatment. Postnatal care and infant and child health care are similarly affected by this culture, with the result that women often do not avail themselves of preventive and curative medical services intended to safeguard their own and their children’s health and well-being. The lay-health culture presumably has substantial effects on utilization of maternal health services in regions of the country where poverty and illiteracy are widespread”. p.6.

Therefore it is quite often that women and children have to endure morbidity and ill health without much support from society. They are told to accept their condition with the hope things will improve eventually. However this means that a lot of women and children who are the most vulnerable in society unnecessarily suffer bouts of ill health and diseases, making it hard at times for health authorities to detect, cure or prevent such sufferings. It might be suggested that there is an unwritten sentiment among some men that see women and young children as replaceable i.e. “if a wife dies we can get another or if young children die we can produce more”. Considering all the major problems the female population face it should be more compelling for the authorities to ensure that at least a basic level of healthcare is provided. Careful thought should be given whilst implementing programmes so that women can easily access health centres and health personnel and can understand programmes that create awareness of ill health or where possible of solutions that are available and can be accessed for certain conditions. Until corrective measures are taken in society and in the existing health care system it will be most likely that one will find that women and children will be the most vulnerable in society.

Table 5 key indicators for women in Bidar district.

Characteristics of women		Fertility	
% Below age 30	55.9	Crude birth rate (CBR) per 1000	23.9
% Age at first cohabitation below age 18	70.8	Total fertility rate (TFR) per 1000	2.74
Non-literate	56.8	% Birth order 3 and above	45.5
% Having 10+ years of schooling	17.0	Maternal healthcare	
% With Non-literate husband	33.8	% No Antenatal check-up	12.7
% With husband having 10+ years of schooling	38.5	% Any Antenatal check-up	87.3
Marriages		% Three or more Antenatal check-up	71.8
Mean age at marriage for boys	24.8	% Antenatal at home	8.5
Mean age at marriage for girls	18.2	% Tetanus Toxoid (TT) injection during pregnancy	
% Boys married at age below 21	12.3	% Who had none	18.4
% Girls married at age below 18	44.9	% Who had one TT injection	3.2
Utilization of Government Health Services by women.		% Who had two or more TT injection	74.1
% Antenatal care	26.9	Iron Folic Acid (IFA) tablets during pregnancy	
% Treatment of complications during pregnancy	38.7	% Consumed 2 or more IFA tablets regularly	17.7
% Treatment of post-delivery complications	35.7	% Received 100 or more IFA tablets	21.6
% Treatment for RTI/STI (vaginal discharge)	22.3	% Received full <i>Antenatal check-up</i> (ANC)	18.5
% Treatment of complications due to Female sterilization	46.5	Child Care	
% Treatment of complications due to IUD	27.6	% Of children who received BCG	87.7
% Treatment of complications due to Pills	0.0	% DPT (Three injections)	76.3
Mortality		% Polio (Three doses)	78.8
		% Measles	69.0
Crude death rate (CDR) per 1000	6.3	% Full immunizations	60.7
Infant mortality rate (IMR) per 1000	37.7		

Source RCH 2001.

Table 5 shows key health indicators for women in Bidar, according to the survey conducted by the International Institute for Population Sciences Mumbai in November 2001 and they used the 2001 Census to verify the population data. It might be suggested that this data may not be up to date, as 6 years have passed since this report was published. However in terms of the availability of specific data relevant to this district the RCH report has a broad range of data that encompasses all major indicators for women and children's health. Table 5 does highlight certain indicators for women that could have a major impact on their health in the

future e.g. the number of women married by the age of 18 or below. Similarly some indicators for women and children show the gravity of their condition they are in e.g. maternal mortality in this district is higher than the national average (refer to table 3) therefore there is a need for improvement. In terms of IMR the children in this district have better indicators than the national average. Hence if one has a glance at the health indicators of Bidar they will see a mix of both good and bad indicators as well as noticing an uneven consumption of healthcare.

II. Diseases and illnesses caused by epidemics and endemic to the region.

This is another important reason for the health care network to ensure that healthcare is delivered to all those who need it and especially for those who live in rural areas. The burden of ill health can often be predictable according to the different seasons of a year. Quite often waterborne diseases increase during the monsoon period as the source of drinking water tend to be contaminated with sewage or pools of stagnant water become breeding grounds for mosquitoes that in turn spread diseases like malaria, dengue and filariasis. Similarly during the summer months, the lack of drinking water or the multipurpose¹³ use of stagnant water has resulted in the spread of diseases like cholera, gastroenteritis and jaundice. The Taluk of Balkhi in Bidar has been reported to have the highest number of elephantiasis sufferers as a result of enduring filariasis in Karnataka state. However it was only in June 2004 that the state had its first programme conducted to eradicate filarial diseases by immunising the population. For epidemics that occur on a regular basis the state needs to be alert and prepared to challenge and arrest the spread of such diseases.

However on another front communicable diseases that have become endemic such as TB, HIV /AIDS and leprosy are evidently quite widespread in this district and to a lesser extent malaria. Focus is needed on controlling and eventually eradicating these diseases. Concerted efforts on leprosy eradication appear to have paid off as the incidence of leprosy is decreasing. However the battle against TB and the evolving disease AIDS (and the symptoms associated with AIDS) appears not to have a similar effect. The threat that these diseases pose is very severe hence serious strategies and action are needed in order that none suffer

¹³ The multipurpose uses of untreated water open to the environment e.g. lakes and ponds and some wells in this context is when the same source of water can be used for washing, bathing, drinking (both by man and animals) and also for toileting purposes, thus making it very prone to spreading diseases.

unnecessarily. It is approximated that TB in India accounts for nearly a quarter of the world cases which amounts to 2 million cases a year. TB causes 421,000 deaths annually in India, which is far more than the 258,000 annual deaths, caused by malaria, hepatitis, meningitis, nutritional deficiencies, sexually transmitted diseases, leprosy and tropical diseases cumulatively put together (WHO 1999). Quoting Bajpai et al 2004.

“TB is a 100 percent curable disease and requires relatively simple and inexpensive interventions. Yet, it is a major killer in India due to a combination of factors, not only medical and public health, but also societal and economic”. p.11.

The government set up the National Tuberculosis Programme (NTP) in 1962 and it mainly involved a programme that relied mainly on X-rays to diagnose TB however there was not a standard regime followed on the treatment of the disease. This led to low rates of treatment completion; moreover NTP was not implemented properly due to lack of funds. However in 1993 the Revised National Tuberculosis Control Programme (RNTCP) was established. In this programme emphasis was put on curing patients by standardising treatment and detection methods. Unlike the previous NTP that used X-rays to detect TB under the RNTCP microscopic sputum test were done. The process of checking sputum results in a laboratory is relatively faster as several more peoples results could be obtained as opposed to patients physically accessing x-ray machines that would tend to be in urban centres which of course would imply the cost of transportation will be absorbed by the patients and the further one lived the greater one had to pay out of pocket to access such facilities. The costs involved in accessing and operating x-ray machines were not only high for individuals but also on the government as the routine maintenance and repair of x-ray machines consumed large amounts of financial resources. RNTCP implemented the administration of drugs to TB patients according to the WHO recommendations of the Directly Observed Treatment, Short course (DOTS). The introduction of DOTS¹⁴ has played a vital role in ensuring that patients

¹⁴ What is DOTS? *“Tuberculosis is curable and DOTS (directly observed treatment, short-course) is proven to be the most successful and cost-effective treatment strategy. The objectives of the DOTS strategy are to decrease the risk of infection, reduce morbidity and the transmission of infection, and prevent TB deaths. Achieving these objectives through the DOTS strategy is simple: Identify TB cases in communities around the world, particularly those in developing countries. Treat TB cases by directly observing their medication intake for six to eight months. This is to ensure that medication is taken in the right combination and appropriate dosage in an effort to prevent the development of multi-drug resistant TB”*. Source WHO 2006.

take their medicine regularly as opposed to them stopping taking it regularly after a brief period of time, or in inadequate amounts. It has also helped health workers to monitor whether patients are taking the right dosage. Administering DOTS is one of the main duties of health workers in the rural areas resulting in certain positive effects credited to them for bringing down the prevalence of TB. The success of RNTCP can be measured by the fact that prior to 1993 only 3 out of 10 TB patients were cured of TB but now it has risen to 8 out of 10. However growing multi-drug resistant TB is posing a greater threat now. Therefore it is essential that the health policy planners update strategies to tackle the evolving problems caused by TB and not lose the battle against this disease by allowing the multi-drug resistant TB to reach catastrophic proportions. Perhaps schemes like the DOTS-plus, which targets mainly those who are suffering from multi-drug resistant TB, need to be implemented. Furthermore there are other complications associated with TB for example people with HIV AIDS in India developing TB is estimated at 7% of those who get tested (Narayan et al, 2003). The combination of these diseases in most cases makes it virtually very hard for health authorities to control TB as AIDS affects the patient's immune system and they become non responsive to routine treatment procedures. A combination of antiretroviral drugs needs to be taken in addition to the present regimen to have any effect. However this comes at a far greater cost, which very few developing countries can afford.

The threat that AIDS poses in India is very severe as it is estimated that India has the second largest population afflicted by HIV AIDS in the world. However unlike certain Sub Saharan African countries where ranges of 2% to 25% of their population are affected, it has not yet reached such epidemic proportions in India. Though it is estimated that 5 million Indians suffer AIDS it consist of less than 0.5% of the entire population. However it is a growing epidemic and neglecting it will only have dire consequences. It might be suggested that AIDS needs to be tackled in 2 fronts. On the one hand attempts should be made to find cures and use up-to-date antiretroviral drugs and treatments that are available. On the other hand awareness programmes should be promoted that are designed to abate the spread of this disease and prevent people from contracting it. A part of this awareness should also create awareness in the minds of the population that there are ways to cope¹⁵ living with HIV and it

¹⁵ Suffering with HIV AIDS in India is mainly associated in many Indians minds with those who live sexually immoral lives, and being infected by this disease would imply that one is involved with such practices. Hence it is quite common to see entire families preferring to commit suicide rather than attempting to get cured of AIDS

does not necessarily mean inevitable death. In Karnataka State it was estimated that there were 52 598 HIV positive cases in 2005 which means that slightly over 1% of the population are affected by this disease which is higher than the national average and Karnataka State has the fourth highest rate of AIDS victims (DH 2005). The states of Tamil Nadu, Andhra Pradesh and Maharashtra hold the first, second and third position respectively. However it might be suggested that although these states show a high prevalence of AIDS compared with the rest of India. Perhaps it might just reflect that in these states there is a higher rate of routine medical examinations and investigation and also public awareness resulting in a higher rate of detection. As opposed to other states where there is a limited level of access to medical facilities or a lack of thorough medical investigations therefore allowing HIV/AIDS sufferers to go undetected. Hence HIV/AIDS victims in such states may not be diagnosed by not being properly investigated and the faulty prognosis of their morbidity / illness or death may be attributed to other reasons i.e. TB, chronic dysentery and various diseases that occur due to dysfunctional immune system. A report on the pregnant women, who had blood test, indicated that within Karnataka State some districts have a very high incidence of HIV positive women. For example Belgaum 4.3%, Koppal 3% and Dharwad 2.9% whereas some districts like Shimoga have just 0.5% the overall rate for Karnataka state was 1.5% (DH 2004). Perhaps if all eligible men and women of a sexually active age were tested, the incidence of AIDS will give a more reflective picture and the gravity of this disease will be better understood. At present there appears to be a lackadaisical and unorganised approach in tackling this disease in the state as political parties, leaders and government officials appear to hide behind social taboos as opposed to putting serious efforts in stopping the spread of this disease. According to WHO estimates only about 10% of HIV/AIDS sufferers receive antiretroviral drugs for treatment in India (WHO 2005b).

Historically public attitudes to diseases such as leprosy went down the lines that it was due to a curse from the gods or a suffering brought on oneself due to a sin committed in the past. Similarly there is a widely held perception that AIDS sufferers are rightfully suffering because of their immoral sexual practices. However at present society appears to be refusing to see the actual facts that most of the AIDS victims are innocent. Yes, society may be persuaded that children or infected blood transfusion victims are innocent but other facts will be conveniently unnoticed such as a recent report that stated 90% of women infected in

because those living with the disease will normally be condemned by society and a loss of any honor or good reputation they had in the present culture.

Karnataka reported that they had only a monogamous relationship. It might be suggested that the spread of AIDS in India is mainly blamed on migrating labour, drug addicts sharing needles, polygamy, unprotected sex with commercial sex workers and also partly a paradigm shift within the culture where there is a veiled acknowledgement that there is a growing trend of promiscuous sexual behaviour and of a lesser extent an acceptance some people have alternate sexual preferences, in all levels of society. The reason I mention a veiled acknowledgement is because the prevailing culture tries to portray that Indians have high morals and they live strictly within permissible cultural boundaries of sexual intercourse. Promiscuous behaviour or alternate sexual preferences are a western influence or associated with people that have loose morals. Therefore rejecting such practices is justifiable as it is not something closely resembling the Indian culture. There have been very few studies done in India to show the levels of licentious behaviour or alternate sexual preferences of individuals and the health problems that arise from such practices, at best only anecdotal evidences may be found. However viewing the present culture with a pair of high moral spectacles will not only be a dangerous and sometimes a suicidal perspective to consider a taboo subject, because failing to recognise problems caused by those who do not fit the high morals of the predominant culture and also those who are able to disguise their cultural preferences will most probably lead society to be foolhardy where imminent disasters are waiting to happen in the near future.

Certain cultural practices that exist in Karnataka do create a number of problems in stopping the spread of HIV/AIDS. Because the people involved in such cultural practices not only risk contracting of this disease but also assist in its spread. For instance the traditional practice of the Devadasi¹⁶ women is a common tradition in many districts especially in Bellary and Bijapur (O'Neil et al 2004). Perhaps one would wonder why does this practice still exist when similar religious practices which can be viewed as disadvantageous to women such as Sati (widow being burned on the husband's funeral pyre) have been banned. There appear to be two sets of answers by the authorities (both government and religious) they accept this practice is basically followed by a very small segment of the society and banning such practices will be hard to enforce and impracticable hence ignoring such practices and turning

¹⁶Devadasi. Literally means a woman who serves God. These women were traditionally accepted as temple dancers or helpers to the priest. They were married to a god so they did not have a husband but were generally sexually abused by the temple authorities and elites in society. Nowadays although they do play the traditional role of dancers they are virtually considered as temple prostitutes. Some of them do have a nominal husband i.e. when they are initiated into this practice ceremonially; it is common for the highest bidder will sleep with her to be allowed to be called her husband but she will later have the freedom to have as many partners as she wishes.

a blind eye appear to be the best option. Those who follow the devadasi system or prepare their daughters to become devadasis believe that by participating and continuing this tradition it will bring prosperity along with numerous other alleged benefits. Therefore a lot of poor people are lured into maintaining this tradition.

On another front HIV/AIDS is being spread into virtually all regions of India by long distance truck drivers. Most drivers belong to the poor and illiterate section of society. To their peril on most major highways in India there appears to be a thriving commercial sex industry sometimes run by professional sex workers or else by those who are mainly driven by poverty into this trade. In most urban brothels or red-light areas there has been a galvanised effort by NGOs and government officials to promote and make freely available prophylactic measures to make safe sex possible, but this type of provision is not widely available on the highways. However it can also be stated that even where provisions are available some people still appear not to want to take any prophylactic measure as a matter of preference and in turn take the risk and suffer the consequences. On the highways Commercial Sex Workers (CSWs¹⁷) are mainly mixtures of independent, transient and temporary workers (as opposed to those who regularly are involved some women may use the profession to earn a bit of money and stop when they have enough) making it hard for the authorities to monitor. Therefore it will be most probable that such CSWs will be infected with various sexually transmittable diseases, as they tend not to use any form of protection because they are not in a good position to readily access available sources. This perceived dangerous liaison between drivers and the CSWs has become a combination, which has intensified the spreading of HIV/AIDS in almost all of India. Because of the relative affluent status lorry drivers have in India, they tend to get into a lot of vices and most of them are not educated enough to know that unprotected sex can be harmful. Moreover there is always the risk of drivers leading a sexually risky lifestyle as there is a common unwritten rule that puts a lot of peer pressure and expects them to follow male chauvinistic line which perceives and promotes the concept of having multiple sexual partners as a great achievement and something to be proud of. Therefore the drivers are inadvertently spreading reproductive track infections, numerous sexually transmitted diseases and in extreme cases AIDS, rapidly. Hence the threat that HIV/AIDS poses is severe and health authorities should take some more proactive roles in arresting and eventually eradicating this disease. For example by

¹⁷ CSWs. Commercial Sex Workers are mainly women but there are also a few men in this trade. Eunuchs and hermaphrodites also actively participate in the flesh trade, as it is one of their main sources of income.

embarking upon initiatives, which break down misconceptions held by the general public about this disease. It should also be made one of the top priorities for health officials to ensure measures are in place to suppress a HIV/ AIDS pandemic.

Other endemic diseases that affect certain segments of the population also need much higher levels of healthcare delivery than what is available at present. Morbidity levels in Bidar district will be high when one looks at the number of people who suffer unnecessarily even though their illness could be easily cured. For instance among the geriatric population, a lot of them suffer from blindness that could be easily repaired. Similarly men suffering from hydrocele may be found in almost all the villages of the district. Simple surgical procedure that is done in the PHCs can actually rectify the problems associated with hydrocele. However the voluntary uptake of such operations by men is not in desired numbers as a lot of misguided beliefs, superstitions and perceptions still hold them back from accessing healthcare. Therefore it is vital for health care providers not only to provide their services but to accommodate policies which help create awareness in people that the benefit from healthcare provisions can alleviate their ill health conditions. However if one looks at the challenges posed by the numerous diseases and sources of ill health faced by the district and perhaps if serious attempts were made by the authorities to treat all the curable diseases in the district; clearing the backlog of patients with various diseases built up over the years would by itself prove to be a phenomenal problem to resolve. Therefore health authorities will need to ensure that the population can easily access or be referred to the right centre to get treated. Another key factor that health authorities will need to take into consideration will be that the centres that provide healthcare are managed on a sustainable, regular, reliable, organised and closely monitored level and not on an ad hoc knee-jerk reaction to certain outbreaks of epidemics, immunization drives or when high level authorities visits such centres.

III. Diseases caused by social evils like poverty, alcoholism.

“Poverty is the world biggest killer of people” (WHO 1995). Perhaps this is an uncompromising statement however it is still valid in many developing nations as it is one of the main underlying problems that they face. Quite a lot of the problems faced by the developing nations could either be directly or indirectly linked with the levels of poverty each country has. Therefore it is critical that countries take measures to reduce the levels of poverty and develop strategies to ensure that conditions are not created where poverty

reaches unmanageable levels, which could then overwhelm major efforts to reduce disease. The statement below quite well depicts how interwoven poverty and health are but it may appear a bit far-fetched. However to an individual in extreme poverty it has great relevance.

“Poverty is the main reason why babies are not vaccinated, why clean water and sanitation are not provided, why curative drugs and other treatments are unavailable and why mothers die in childbirth. It is the underlying cause of reduced life expectancy, handicap, disability and starvation. Poverty is a major contributor to mental illness, stress, suicide, family disintegration and substance abuse. Every year in the developing world 12.2 million children under 5 years die, most of them from causes, which could be prevented for just a few US cents per child. They die largely because of world indifference, but most of all they die because they are poor”. WHO 1995.

Historically around the time of independence it was estimated that over 50% of the population lived in extreme poverty but over the years India has been successful in reducing the percentage of people living in poverty (World Bank 2004). The estimated levels of poverty in India at present (2000 to 2010) vary according to the various agencies as a result of the different variables they use to measure the levels of poverty. Conservative estimates indicate that about 26% (Mehta et al 2003) of the population live below the poverty line which is defined by those who earn less than a USA dollar a day. However estimates by the Department For International Development UK (DFID 2004) show it to be about 35% whilst other estimates by GOI (NHP 2002) put the figure around 44% of the population. Although there is quite a large variation in these estimates there should be no doubt that poverty and its ill effects have widespread ramifications on the public particularly in terms of health. The seriousness of poverty in India can be better understood if a different variable was considered to categorise those who are poor. This can be done if one took into account the number of people who earn 2 US dollars or less a day the statistics indicate about 80% of the population fit into this category (Earth Trends 2001). Those considered marginally above the poverty line i.e. who earn more than \$1 but less than or equal to \$2 a day, also represent such a large segment of the population and their struggle for survival is equally arduous but perhaps slightly better off than those who live in extreme poverty. Numerous studies have been conducted on the relationship of poverty and health and have shown that those having a low socioeconomic status have far worse health indicators and their chances of living healthily is

less likely than those with better socioeconomic prospects (Heuveline et al 2002, Mehta et al 2003, WRI 2001). A report by the International Fund for Agricultural Development (IFAD) in 2001 show that about 1.2 billion people around the world live below the poverty line. Taking this fact on board one should realise that in between 20% and 35% of these people living below the poverty line actually live in India. Notwithstanding the fact that at present India is making great progress in virtually all levels of trade and development, and it is perceived by many developed nations that it is in line to become one of the two great economic hubs of that region, the other nation being China. However this surge in economic development appears to be enjoyed exclusively by a few whilst large segments of the population are not associated with this phenomenon and find they are unable to rid themselves from the shackles of poverty, hence benefiting fully from this apparent prosperity seems to be elusive.

The elites and an emerging but large middle class are mainly enjoying these apparent levels of successes, whereas those living below the poverty line or those who are just marginally above this measure find daily survival and existence an uphill task to fulfil. Unless successful measures are introduced as opposed to egalitarian rhetoric and programmes that do very little to alleviate problems caused by poverty, the perceived levels of economic success that India claims and also the high levels of progress it is accredited with will always be marred by the fact that substantial portions of its population still live in grinding poverty and suffer all the ill effects associated with poverty.

Quite often poverty poses some very obvious problems for which relatively easy solutions can be found. For example those suffering from malnutrition, the obvious answer is to take adequate amounts of food however if one cannot afford the price of food because of poverty, it will be a perplexing problem to solve. Of course it would be incorrect to say that GOI and the state governments are not doing anything to tackle the problem of poverty and in fact there are numerous ongoing schemes that have been adopted to reduce the affect of poverty. Schemes such as the Public Distribution System (PDS) of subsidised food grains and domestic fuel have a direct impact on the majority of people living below the poverty line. The PDS has achieved its network virtually throughout India as almost all the villages have a distribution centre. One of the positive effects of the PDS network is that India does not suffer famines to the extent it did historically as this network is able to deliver food grains quite effectively throughout India. The PDS initially offered all the citizens of the country

some amounts of products on this system but those who were classified to be very poor were given a higher quota of products and they also got a higher level of subsidy. Gradually the concession to all the citizens was removed and the PDS concentrated mainly on those who live marginally above the poverty line and those that live below this level. A higher subsidy is paid on those living below the poverty line so that they can access food grains and domestic fuel at affordable price. However the desired effect of the PDS has not yet reduced poverty to manageable levels in most of the country. This is because PDS has been plagued by malfunction caused usually by systemic deficiencies like poor storage facilities and transport, pilferage by distribution agents and endemic corruption that virtually bedevils the entire scheme.

In this section I do not intend to explore in detail why there is poverty or the extreme effects it has on people but to accept that significant portions of the population in Bidar live more or less under or just above the poverty line. Typically the section of population represented to be poor and marginalised in India are the schedule castes, schedule tribes, other lower castes and some who belong to minority religious groups. These people are the ones who tend to need healthcare much more than others (refer to table 2) and their case is much more compelling as episodes of ill health usually have a detrimental effect on them because they do not have the option of mobilizing enough financial resource to access better or higher levels of healthcare. Neither do they have the opportunity to earn substantially to use the excess income as leverage when episodes of ill health come along. The affluent on the other hand have a choice and can access both public and private healthcare providers according to their status and the levels of income they have. However most of the poor people mainly depend on their physical wellbeing to earn a living and any major episodes of ill health could put them out of work and have a devastating effect on their income insidiously leading them downward on a spiral of debt and poverty. My thesis intends to highlight how these wide gaps between those who have and do not have the means, could be bridged by an effective provision of healthcare, which would lead to levelling out the health inequalities that exist in between various social groups.

The states of Bihar, Uttar Pradesh, Madhya Pradesh, Orissa, and Rajasthan are considered to have the lowest levels of income in India. Poverty within these States ranges from an estimated 50% to 66% of the population living below the poverty line and over half of India's poor people live in these states (Mehta et al 2003). Karnataka State is not normally

considered a state where there are high levels of poverty existing. However the northern districts of Karnataka have the peculiarity of being backward and less developed thus sharing some similar indicators (particularly those relating to poverty) with states that have high levels of poverty. Bidar being one of the least developed districts in Karnataka State has some conditions that are rife with the potential to cause serious health problems. Therefore the need for a proper provision of healthcare is urgent and the authorities should focus on all the programmes that alleviate the problems of ill health faced by the public. The challenges faced by the health authorities resolving problems inherently caused by high levels of poverty in the population appear to lead to a vicious cycle, which eventually increases, and over burdens the existing healthcare provisions.

“Pockets of poverty and deprivation, therefore, persist giving rise to three simultaneous burdens for South Asia and much of the rest of the developing world: continuing communicable diseases, increasing burden of chronic diseases, and increasing demand for both primary and tertiary levels of health care services”. (Anwar and Tahir 2002) p.151.

Anwar highlights that poverty can cause perplexing problems for those who experience it and also for those with the responsibility of dealing with reducing the problems of poverty. The only way to get out of this situation for healthcare providers is by ensuring that the positive effects of interventions by various government agencies and their initiatives, and also non-government bodies that intend to reduce the levels of poverty in the country are not forfeited by allowing episodes of ill health to have a debilitating effect on people, consequentially allowing them to slide back into poverty.

Alcoholism.

Historically India tried to adopt a Gandhian ideology of teetotal dry state. However the substantial revenue from the sale of alcohol as opposed to the high cost of enforcing complete prohibition made it virtually irresistible for states not to allow the sale of alcohol. Apart from Gujarat State (the state in which Gandhi was born) every other state in India has allowed alcohol sales although there were instances in history where States did experiment with total prohibition but it never seemed to persist for long periods of time. As excise revenue from the sale of alcohol is based on a percentage basis hence it was aggressively promoted by the

liquor industry, which in turn benefited the states coffers tremendously. The growth in this industry and also high levels of consumption has helped this industry to appear very lucrative and has created vast sums of income for those who own this industry and they have gained the status of liquor barons. These barons have tended to wield great influence over governments because of the wealth and power they have gained. It is alleged in Karnataka that these barons, more commonly known as the liquor lobby, virtually bankroll political parties and politicians to ensure that nothing adverse to their interest ever takes place. The significance of the liquor lobby can be clearly seen by the amounts of revenue they generate in Karnataka. Karnataka can be described as one of the states with superfluous amounts of alcohol where 25% of the states revenue comes from the sale of alcohol (DH 2006). Therefore Karnataka is heavily dependent on the revenues from this industry. It might be suggested that one of the consequences of having a large alcohol industry is that it is becoming a state where there is a growing population of alcoholic addiction and high consumption of alcohol. According to the second National Family Health Survey 1998-99 (NFHS-II) it shows that about 18.2% of urban males and 22.5% of rural males regularly drink alcohol. It must be noted that men mainly consume alcohol in India, as the same NFHS-II survey showed that only 0.1% of urban and 0.2% of rural women drink. Other more recent studies have indicated that in between 10% to 60% of the male population consume alcohol of which about 1.2% becomes dependant on alcohol (Gururaj et al 2005). Although there is not an up-to-date database to confirm the exact number of people who regularly use alcohol or are addicted to it, it would not be farfetched to suggest that in Karnataka it would be an inherent factor that within this state alcohol related problems affect large portions of the population

Legal retail sales of alcohol in India are mainly sold in 3 forms 1. Indian Made Liquor (IML) i.e. whisky, brandy, rum etc, 2. Arrack (rectified spirit fit for consumption usually having a high % of alcohol), and 3. Alcoholic spirits extracted from palm trees. IML is made mainly made and priced to cater for those who can afford such drinks but there is quite a wide range of quality hence prices also vary and some brands of poor quality IML are relatively cheap and some poor people and those who are marginally above the poverty line can afford to drink such products. However most poor people are left with the choice of either drinking arrack or palm sap based alcohol. Palm sap is only sold in areas where these palms grow hence most of the poor people left to drink arrack.

The significance of drinking arrack and the ill effects it has on the public may be perceived along the following lines. Historically poor people used to be able to drink home brewed or locally brewed alcoholic drinks, which tended to cost Rupees (Rs) 1 or 2 for a bottle consisting of 650ml to 750ml. It did not have a significant economic impact on the individual as only a small portion of his or her income was spent indulging in this habit. However it used to be quite common to see occasional tragedies where unscrupulous brewers mixed methyl alcohol (industrial alcohol) instead of ethyl alcohol, which caused blindness and death in the extreme case. Therefore the government took a stringent and a highhanded approach to stop all individuals / local factories who brewed alcohol and introduced arrack produced by the state presently priced about Rs10 for a sachet containing 180ml. Therefore those who regularly drink often find themselves drinking 4 or 5 sachets of arrack a day. The government mainly justifies the high price of arrack to use it as a deterrent. However in India a person earning about Rs 45 a day (average exchange rate for one US dollar) or even Rs 90 who consumes arrack in large quantities regularly will find that the economic impact will be very severe. As men are the main breadwinners hence it is inevitably their families suffer because there is very little income spared for the family to survive on and to meet the rest of their needs. The scale of arrack consumption can be put into perspective whilst considering that over half of the excise revenue in Karnataka State comes from the sale of arrack (DH 2006). Presently there is a policy to have an arrack shop to cater for a population of 3000 people but there is evidence that the liquor lobby / arrack contractors want to enhance their sales by putting pressure on the government to permit arrack shops for a population of 1500 people (DH2006). Perhaps it should not be surprising to see this happen in the near future as the government has a tendency to succumb to the liquor lobby and rake-off the revenues created by the efficient supply¹⁸ of arrack throughout the state. It might be suggested that the high levels of consumption of arrack and its unhindered aggressive sales is one of the key factors that can be linked irrefutably to the cause of people's suffering from poverty, deprivation and ill health.

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Arrack contractors do the supplying of arrack throughout the state. They are extremely efficient in the sense that they are able to supply and collect the revenues from arrack sales. They are able to cater for the demand even in remote and inaccessible areas. For example if stocks of arrack run out at 10pm by 6am the stocks are replenished. The deterrent of inaccessibility does not appear to have much effect on them.

4. Concluding discussion.

In this chapter I intended to highlight why there is a need for an efficient delivery of healthcare in Bidar district. Bidar, having the status of a less developed district with a large rural population mainly living under the grip of abject poverty, cannot be helped by a poorly functioning healthcare system. The threat of prevailing epidemics, endemic diseases and numerous health problems suffered by the people is serious. Of course the government will need to prioritise and ensure that the most vulnerable in society can access and benefit from an optimal provision of healthcare. At present the public healthcare network appears to function at optimal levels only on an ad-hoc basis especially when there is a drive to immunise or when diseases reach epidemic proportions. However whilst attempting to deliver healthcare on a sustainable, routine and regular level it appears not to be fully in control and is just superficially trying to resolve major health problems. Is this because at present they do not have the financial, technical and human resources or is it that there is a lot of apathy and the people do not have the powers or know-how to resolve the problems they face? The answer is a mix of all these factors. However at present countries like India and states like Karnataka cannot deny that they face major challenges enabling adequate financial adjustments to be made available to invest more into the provision of healthcare. The reason I say this is because the current economic growth in a variety of businesses has enabled GOI to access vast amounts of revenue but the spending on health appears to be stagnant at 5-6% of the GDP. Perhaps if the GOK thought of reinvesting all the income it gets from the sale of arrack back into the rural areas it would ensure that the healthcare network is given all the resources it needs. Such financial reallocation will surely benefit the people much more than the current levels achieved. However radical shifts in the financing of the healthcare system may take a while to accomplish. Perhaps at present the GOK should take some lessons from the arrack contractors and learn how to deliver healthcare throughout Karnataka efficiently.

IV.

The Analysis of the rural population's views on health care provision.

1. Introduction.

In the previous chapters I have outlined the provision of healthcare in India and also I have described the existing and potential health problems that affect the population of Bidar. In this chapter I analyse the views put forward by the rural population after open-ended questionnaire interviews were conducted. Initially I intended to ask them about the ongoing government policy that ensures junior doctors are posted to rural areas, in the hope of getting an understanding of their perceptions of possible benefits, indifference, drawbacks and also an overall grasp of the efficacy of such policies for the rural population. However when I conducted the initial pilot studies and even during the course of conducting the research I found out that almost all the respondents knew nothing of this specific government policy and were virtually unconnected and uninformed about the recruiting policies of government authorities. Nor did they believe that they had any say in the functioning of the government. Therefore I amended my questionnaire and asked them their views about accessing current healthcare provisions and about their encounters and interactions with health authorities. The questions were organised in a manner that would enable the respondents to state their views on current healthcare provision, future expectations and also their suggestions for possible changes that are needed to ensure effective delivery of healthcare.

The villages where these interviews were conducted were divided into two categories: the villages that have PHCs and those that do not have PHCs. This was done in order to get a wide range of views from both types of villages and also to assess the differences, disparities and similarities that exist between these groups. This chapter will highlight to what extent people are aware of, or are empowered to access, public healthcare provisions but it will also give a good insight into how helpless / voiceless people are to initiate any change or to benefit from the existing system, even if it happened to run at an optimum level.

The interviews were conducted over a period of 2 field sessions in November to December 2003 and May to July 2004. In all 226 complete interviews were successfully conducted. If I took into account the number of people represented by each family it was over 1500 people who participated in this study as each family averaged about 7 people. Women represented a third of these interviews resulting in 76 women and 150 men participating. Most of the people interviewed came from villages that did not have PHCs representing 85% of the interviewees. These interviews were mainly conducted in 5 villages however an additional 3 non-PHC villages were represented as I took some of the interviews conducted during pilot studies. Similarly the interviews conducted in villages with PHCs consisted of 34 interviewees representing 15% of interviews conducted. Most of these interviews were concentrated in 3 PHC villages but an additional 4 PHC villages were represented as some interviews conducted during pilot studies were taken into account. I did this intentionally in order to get an apt reflection of those who do not have direct access to healthcare provisions as opposed to those who have PHCs in their villages. This was also done on the premise that those living in areas without healthcare provision will have a higher desire to access such provisions as opposed to those who have it readily available. In fact on analysing the data I can validate this premise as villagers who do not have PHCs in their village have a greater desire for provisions of healthcare, which I will substantiate later on in this chapter. There was also a wide range of ages represented ranging from the youngest being 18 years old to the oldest 80 years old but the majority of interviews were conducted with people from 30 to 50 years old. I included the major religions represented in Bidar by interviewing 196 Hindus, 14 Muslims and 16 Christians. Among the Hindus I was able to interview a cross section of the society by getting representatives from high castes, middle castes, scheduled castes and scheduled tribes. 157 of the representations made among the Hindus came from scheduled castes and middle castes, 19 interviews from high castes and 20 from scheduled tribes.

Another key factor, which influenced the interviewees I targeted, was the economic status of every individual. In the Indian context it would be the norm to assume better economic circumstances for individuals to be intrinsically a part of their high caste status in society. This presumption may not be relevant over a phase of time possibly if the present state of economic growth and prosperity enjoyed by a few spreads its

beneficial effects over the entire population. Historically chronic poverty is disproportionately higher in marginalized groups such as scheduled castes, scheduled tribes and casual agricultural labourers who suffer from multiple deprivations over long periods of time (Mehta et al 2003). Therefore I relied on the certitude that the richer sections of the population tend to have better health indicators and may not feel the urgency of accessing public healthcare. This is not only because they have an obvious advantage of economic factors favouring them such as higher income, ownership of the most suitable agricultural lands and better nutrition. The overwhelming advantage in terms of accessing healthcare is the fact that the rich have an option of accessing private healthcare provision for a fee whenever they need it, which only a tiny minority of the poorer sections of society can afford. They have an uphill struggle to generate enough money to pay when they need healthcare from private sources. During my research I did not measure each individual's health condition irrespective of their income status to enable me to definitely say that the poorer sections of society need more attention and provision of healthcare. This was based on empirical evidence and observed experience of working in rural areas when I used to live in India. Hence the respondents targeted were the marginalized poorer sections of society. This is illustrated well in the type of people who provided the data in the research. Out of the 226 interviewees only 20 respondents were from the economically better off sections in society, while 121 (53.5%) and 85 (37.4%) came from those characterised as below the poverty line and marginally above the poverty line respectively.

Interpreting income status.

Income status was determined in this study by the type of ration card¹ (refer to table 1) the individual holds but a consideration of their occupation there is a slightly alters our outlook on the respondents' economic status. It comes to my notice that some people for example who work in business have managed to get a Below the Poverty Line (BPL) ration card. This may be due to the number of people within the household i.e. a

¹ Ration cards are a part of the colonial legacy still in use in India. Here each family is allotted a card according to their income status and number of people in the household, which entitles them to access subsidised food grains, cooking fuel and cooking gas from fair price shops. The poorer the family the higher the subsidy they get. It is also used as an identification document. However at present the GOK is gradually withdrawing this system for the economically better off and only granting ration cards to people who live below the poverty line and marginally above this line. Traditionally a yellow ration card is given to a person living below the poverty line, a green card for marginally above this level and a pink / white card for richer sections of society.

businessman with a large family who is the sole breadwinner; the income from business may not be enough to lift the entire household to live above the poverty line. Presently people who earn less than Rupees 12000 (£150 p.a.) in rural areas and Rupees 17000 (£200 p.a.) in cities are eligible to get a below the poverty line ration card (Kar-NIC-PDS 2006). Most rural business is very small and run on a subsistence level hence this occupation might be overlooked by the authorities who issue BPL ration cards. Of course from a critical stance such lapses justify allegations that government officials are either negligent or collude (mostly after taking bribes) with such individuals and grant them favours. Similarly a few landowners and civil servants have managed to come under the economically poorer sections of society. Being landowners does not automatically mean being in the richer sections of society as land could be arid or only used seasonally i.e. dependant on the monsoon. Most landowners in India could also be labelled as subsistence farmers on smallholdings where only a few have permanent sources of irrigation. The introduction of ongoing land reforms has also ensured land has been redistributed to tenants, landless labourers and poorer sections of society. Therefore it is quite plausible to find landowners in poorer sections of society due to such reforms as the benefits are yet to be capitalised by all the members of the landed class. Perhaps this may explain why some although appearing affluent can find themselves classed as poor. However as a researcher I must admit that I cannot be qualified to judge every respondent's wealth, as I was not going to inspect their fields to verify or to intrusively persist in finding out their exact sources of income.

Although using ration cards as a measure of income has flaws I continued using it as a measure on the following grounds. In the case of people having BPL cards I accept that there were exceptions where it was possible for people earning more than the stipulated qualifying earnings to get such cards either by bending the rules or by authorities being negligent. However if we were to identify poor people by the ration card they hold it would be most likely that the poorest people will have a BPL card, as it would give them the most benefit. It will be absurd or most unfortunate if they are identified for a higher-level card i.e. almost all the poorest sections of society will possess a BPL card and it will be a rarity to see such people having higher category cards unless complex problems are involved in defining their status. The probability of identifying the various categories of income based on the ration cards is high enough for it to be quite an

appropriate measure to use in my research. Hence I felt the need to overlook the exceptions and classify people's income based on the type of card they hold.

Table 1 showing occupation and income.

		Occupation and Income Crosstabulation			Total
		Income category			
Occupation		Yellow	Green	Pink	
		Agriculture	Count	87	
Labourer	% within Occupation	73.10%	24.36%	2.52%	
	Count	5	17	8	30
Land owner	% within Occupation	16.66%	56.66%	26.66%	
	Count	8	15	6	29
Business	% within Occupation	27.58%	51.72%	20.68%	
	Count	8	13	0	21
Labourer	% within Occupation	38.09%	61.90%	0	
	Count	5	6	3	14
House wife	% within Occupation	35.71%	42.85%	21.42%	
	Count	8	5	0	13
Unemployed	% within Occupation	61.53%	38.46%	0	
	Count	121	85	20	226
Total	Count				
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	61.334(a)	10	0.000		
N of Valid Cases		226			
a 6 cells (33.3%) have expected count less than 5. The minimum expected count is 1.15.					

Note: *Nonparametric tests do not require assumptions about the shape of the underlying distribution. The data are assumed to be random sample. The expected frequencies for each category should be at least 1. No more than 20% of the categories should have expected frequencies of less than 5.* Source: SPSS help.

In view of the above note a level of caution needs to be taken into account whilst interpreting the results. Even though some results may show that there is a strong statistical significance but when there are more than 20% of the categories where the

expected values are less than 5 in such cases the results are capable to be interpreted with a level of scepticism. However as I have used SPSS as a tool to explain the results of my research I do acknowledge the shortcomings of some of the results even though they are statistically significant.

Table 1 indicates that, for this sample of people, the relationship of income and occupation was highly significant. However it must be noted that 33.3% of cells have a count less than 5. Similarly when interviewees' income was analysed with the number of people in each home, education, and age the p value was 0.002, 0.010 and 0.031 respectively. These results indicate that the sample of individuals, who participated in the research, while consisting of mainly poorer sections of society, included enough participants representing the economically better off to produce statistically significant results. However it must be noted when some variables were crosstabulated with income, namely the position of the interviewee in the household and the type of village the results were not statistically significant as p values are 0.925 and 0.778 respectively. Therefore in the sample of individuals who participated in this study their income status and occupation status relationship was not always significant as it varied according to the criteria of variable used to measure.

2. Analysing responses to the questionnaire.

The questionnaire was designed in such a manner that the respondents gradually explained their interactions with health personnel; their perceived need, future expectations and the strong and weak points of the existing health service network. After I made the initial contact with the villagers I took their general details down before beginning the questionnaire. I often had to repeatedly assure the respondents that my research in no way will pose a threat to them and that I would ensure that their names and home address would remain confidential. This put many at ease as they accepted my word² for it partly due to my assurances and also to the social status in society I personally have. The first question I asked them was asking them to explain where they first go to if they have a health problem and why. The respondents

² Word in this cultural context is a good form of honour i.e. if one does not keep his word in society it will automatically put them in a disreputable position. If one is known to keep his word for instance in business it would be normal to even borrow money without any paperwork.

answered according to the availability of healthcare within their local area. Their choices were subjective according to their perceived level of ill health i.e. when they have a minor illness they wanted to go to a lower level health provider and obviously the higher the severity of ill health the higher level of healthcare provider they sought after.

Table 2 first line of accessing health

Type of healthcare accessed by villagers * Village Crosstabulation					
Type of healthcare Accessed by Villagers		Count	Type of Village		Total
			Village with PHC	Non PHC	
ANM (Auxiliary nurse Midwife)		2	33		35
	% within Type	5.71%	94.28%		1
PHC (Primary Health Centres)		29	31		60
	% within Type	48.33%	51.66%		
RMP (Un/Registered Medical Practitioners)		2	83		85
	% within Type	2.35%	97.64%		
Traditional Doctors		1	19		20
	% within Type	5%	95%		
Household Remedies		0	3		3
	% within Type	0	100%		
Urban Centres		0	22		22
	% within Type	0	100		
Other		0	1		1
	% within Type	0	100%		
Total		34	192		226
	Chi-Square Tests				
	Value	Df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	71.30115	6	0.000		
N of Valid Cases		226			
	6 cells (42.9%) have expected count less than 5.				

Table 2 shows a variety of choices the villagers have made whenever they have a perceived health problem. Auxiliary Nurse Midwives (ANMs) play a key role in healthcare delivery in rural areas of India. They are usually first in line of contact for

the rural population as they are fairly evenly posted in the villages throughout the district. Rao Sastry 2003 has quite appropriately defined their role and responsibilities.

“Each PHC has a group of female health assistants called ANM (Auxiliary Nurse Midwife) associated to cover a population of 5000 by each of them. These ANMs are in direct contact with rural people in delivering health care. The basic health needs of the rural villages typically are safe water, hygiene, and protection from communicable diseases, healthcare for mother and child, among others”. p.2

ANMs have quite a wide remit and tend to have a wide mission to accomplish. They are often attributed to be working on a suboptimal level due to various problems they face in Indian society. However they are fundamental in directly delivering healthcare to the rural population and they are one of the most recognisable aspects of public healthcare delivery. Their significance appears to be somewhat diminished after analysing the data that I have gathered. In villages where PHCs are present, approximately 6% of the population indicated that they use the services of the ANMs as a first point of contact. This low level of access of ANMs' services could be attributed partially to the fact that those living in villages that have PHCs can access higher levels of healthcare for instance by using the services of doctors. Consequently it might be suggested that the role of ANMs diminishes where there are higher levels of healthcare available. However a different picture emerged when I asked them in a subsequent question of their perception of the various public healthcare personnel who they consider the easiest to approach or most readily available in villages. Overwhelmingly 60% of the respondents indicated that the ANMs are generally the most reliable source of getting healthcare and the easiest to access. Separating this result correspondingly to the villages that have PHCs and do not have PHC approximately 65% and 59% respectively showed that ANMs are the easiest to access (refer to table 3).

These results should give a good indication that the services of ANMs are not being utilized to their full potential. This mismatch between the actual usage and the perceived easier access to ANMs may be due to two broad reasons. Perhaps on the one hand it may be justified by the fact that the levels of healthcare provided by ANMs are not up to the levels of care needed by the villagers or they do not cater to the needs of the entire population. For instance ANMs are perceived to care for women and

children's health problems only; hence men tend to avoid asking for their assistance if needed. On the other hand due to the overwhelming workload that is supposed to be done by the ANMs i.e. catering to a population of 5000 is virtually unrealistic, hence they are not effective and have many problems working in rural areas. According to Nagdeve 2002 p.1 who has identified 8 major problems in amongst many problems faced by ANMs whilst delivering healthcare these are as follows.

Work Conditions of Auxiliary Nurse Midwife (ANM)

(1) *“Work load: The delivery of health care through house to house visits sounds easier than it really is. What it disguises are the hours of travel that go along, often under adverse conditions. It is difficult for ANM to cover the villages under their area”.*

(2) *“The village level ANMs are exposed to community politics and it is at this juncture that their gender, age, marital status, social image, caste and political affiliations (if any) are crucial”.*

(3) *“ANM in view of their work speak openly about sexual and reproductive health and contraceptives, interact with men and women, are viewed as women with loose characters and ANM becomes easy prey to wide ranging harassment, including sexual harassment”.*

(4) *“Another kind of harassment emanates from appointed (and self-appointed) village leaders who demand special services at home like immunization”.*

(5) *“A third pretext for maltreatment emanates from caste affiliations. Lower caste ANMs are looked down upon and ANMs belonging to the higher castes are visibly uncomfortable dealing with deliveries of women from lower castes”.*

(6) *“Inadequate support systems at sub-centres. The sub-centres ideally are posted with ANMs, one for handling work within the precincts of the health centre and other for outreach activities in the community. However disguised vacancies exist to the large extent”.*

(7) *“Most of the primary health centres and sub-centres are also inadequately fortified with equipment and supplies. This affects the capacity of a system to respond to community's health needs and ANM, being part of that system, fare no differently”.*

(8) *“In contrast to primary health centres, sub-centres are set in isolation at varying distances from primary health centres. The ANMs posted in these centres work in an unassisted fashion with only transient professional guidance from the Medical Officer or Lady health visitor”.*

Primarily I would agree with most of the above problems however with some reservation as certain conditions may not be relevant in states that are progressive like the southern states of Kerala and Tamil Nadu. Bidar district is considered as less developed hence most of these conditions are very relevant and play a vital part in deterring the proper functioning of ANMs. From a wider perspective related to the services provided by ANMs, which I will discuss later on in this chapter, the levels of irregularity and absenteeism that almost all levels of staffing can be stained with and consequently the bad effects on healthcare delivery appear very significant. Therefore people are not truly benefiting from the role those ANMs are supposed to play.

Table 3 showing the most easily accessible government personnel as rated by the villagers

Easiest source to access healthcare from * Village Crosstabulation					
				Type of Village	Total
				Village with PHC	Non PHC
Readily accessible Personnel	ANM	Count	22	114	136
		% within Accessible	16.17%	83.82%	
	MPHW	Count	0	11	11
		% within Accessible	0	100%	
	Doctor	Count	12	57	69
		% within Accessible	17.39%	82.60%	
	Other	Count	0	10	10
		% within Accessible	0	100%	
Total	Count	34	192	226	
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	4.152552	3	0.245		
N of Valid Cases	226				
a	2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.50				

The results in table 3 indicate that PHC status of the village is not related to education, age, gender and position in household but when variables like income or occupation were taken the outcome was strongly significant with p values being 0.000 and 0.010. I wanted to show the differences between PHC and non-PHC villages hence I

highlighted this result. In villages where PHCs are established 64% of the respondents use the services of ANMs and this is slightly higher than non PHC villages 59% indicated they access services from this source; perhaps this is due to their options being limited. I must accept that my observations may be a bit skewed, as I did not ask many women of childbearing age or children their opinion on accessing ANMs as I felt it was not in my intended area of specific research. Perhaps if I had done so, it may have portrayed a different picture altogether. However on the broad lines of healthcare provision I do feel that my data sets give a proper reflection of the differences that do exist between villages that have and do not have PHCs.

It was quite obvious that the majority of people living in villages that have PHCs access it for their healthcare needs. 84% of the respondents said that they access the PHC in their village whereas only a meagre 16% of the respondents in villages without PHCs access a nearby PHC. I have looked at this data in two ways. Firstly it shows that the PHCs are very significant in the villages that have them. Secondly it highlights that the PHCs are not having the desired effect on the villages that do not have PHCs. The majority of the population in the villages that do not have PHCs can be said to be bypassing such centres, failing to find them relevant in their process of accessing healthcare. The big question that arises now is ‘why does this appear to occur?’ During the numerous interactions with different respondents a number of reasons were suggested by them to indicate what they thought are the main reasons for such a wide difference in perceptions in between villages that have and do not have PHCs. Among the many suggestions and perceptions that were revealed I would like to highlight the predominant view of the respondents.

Reliability

The respondents from villages that have PHCs appeared to rely much more on these centres even though many of them accepted that they were not 100% reliable. Where for instance they can expect to find that medical staff may not be found on duty hours, they accepted that staff timings and attendance can be sporadic and not up to a standard practice (refer to table 19). However these villagers have accommodated their behaviour towards accessing healthcare according to observations that they have regularly made or are widely held by the village. For example when they see the first

bus arrive in their village they expect to see certain PHC staff who use it to commute hence they tend to access the PHC shortly after the bus has arrived so that they are quite sure of getting a service they need. Similarly the villagers said that they would ask a shopkeeper or someone who was on the road to check whether they have seen the PHC doctor pass by on his motorbike. When they got an affirmative response they then accessed the facilities in the PHC and tentatively avoided what could have been a disappointing situation and a waste of time if they had gone without consulting relevant sources. Obviously objects like the doctor's vehicle parked in the PHC or activity of patients being served gave them good indication that the PHC was in use and they could use it if they needed it. These kinds of communications do not appear to exist in between villages especially in terms of the awareness of readily available healthcare provisions. On the peripheries of PHC and remote villages such communications in between villages appear to diminish. Respondents from non-PHC villages said that it was very risky to access PHCs, as it was very likely that they would not find the staff to deliver healthcare or in the worst possible situation find the PHC shut. Considering the cost involved for each individual to access PHCs without taking into account the amount of money needed for corrupt malpractices that might occur it would be a relatively high sum for the villagers. Cost such as for transportation, prescription drugs, loss of wages due to their own ill health and perhaps even for the person who may take them along to the PHC will have a high relevance to the individual. However the idea of wasting money on an unfruitful trip to a sub optimally functioning PHC would be considered scandalous for the villagers and to reduce such risks the villagers without PHCs considered avoiding them due to their perceived poor reliability.

Inadequate support.

Another point the non-PHC villagers stressed was that there is a widespread perception that PHCs generally provide only a very low level of services. For example they said that PHCs were only good if they had a mild fever or cough and not when they are seriously ill. They did accept that PHCs are not geared to provide secondary and tertiary care but even on a primary level it is perceived as providing a poor quality of service. For instance if blood tests are needed they were almost certain that the PHC's laboratory will not be functioning properly, sometimes due to staff absence/ vacancy or unavailability of required chemicals and facilities to produce results. Many respondents

indicated that they felt that the drugs given at the PHC were ineffective and substandard when required for treating higher levels of disease. The doctors I interviewed also did acknowledge in part the responsibility for this perception among villagers, but put the onus on the government for a limited supply of effective drugs which get used rapidly and the supplies of which are rarely replenished as quickly. As a consequence the doctors have to prescribe such drugs to the patients who have to acquire it from other sources. Usually effective prescriptions drugs have to be purchased from pharmacies that are located either in the town or large villages that have good access roads and commutability. Sole proprietor or private partnerships run pharmacies in India as a business hence they operate in viable areas such as towns and heavily populated villages where weekly markets are organised and consequently attract people from surrounding villages. A large number of PHCs and SCs do not have pharmacies in the village they are located in especially in the more remote and inaccessible villages. This perception of substandard drugs or the unavailability of pharmacies heavily influences the villagers in avoiding accessing healthcare from PHCs.

Incomplete provision.

Furthermore there appeared to be a perception that the PHC could only give an incomplete form of treatment i.e. when patients access PHCs quite often part of the process of treatment may involve using facilities in the town or factors beyond the remit of the PHC. The uncertainty of getting complete healthcare from PHC acts as a deterrent because of the kind of reasoning that arises in individuals intending to use this facility. It was suggested to me as a common line of thinking that *“why should we spend money accessing PHCs that can not cater to all our needs where we may have to go elsewhere to get the rest of the levels of care needed? Instead we might as well go to a centre which can give us what we need”*. For instance in cases of complications arising during childbirth where there may be conditions for a caesarean section the PHC may not be adequately ready for the procedure as it is mainly prepared for a normal delivery. Hence patients who have a high risk of problems such as first time expectant mothers or mothers who have potential life threatening symptoms (like swelling of hands and face, hypertension and prolonged labour over 18 hours, excessive bleeding and loss of consciousness) tend to bypass the PHC and access

facilities where all the risks involved can be managed when needed (Bhatia et al 1995). Even at a basic level of care it was suggested by the villagers that they felt the PHC network was lacking and was not able to provide properly. For example they said that they might find the personnel to give them an injection but are not able to get the drug in the village. Hence they face the dilemma of having to go to another place to get the drug and then be treated at the PHC or just going to a centre where they can get the entire treatment.

It might be suggested that some PHCs that run on an optimum level and do not face these criticisms levelled against them. During my research sessions I observed that some PHCs are performing caesarean sections, family planning operations, hydrocele operations and other surgical procedures. These PHCs can be commended for their achievements in rural areas, thereby giving a positive outlook to PHCs and perhaps a goal for other PHCs to attain.

Referring to table 2 I intend to discuss the choice of accessing healthcare from RMPs³. People accessing healthcare from RMPs is rather a worrying factor to acknowledge but in the present situation prevailing in rural India it is an unavoidable reality that they fill in the vacuum created by poor delivery of healthcare by the primary health care system. Interpreting the data I have gathered the villages with PHCs do not tend to access RMPs as much as those who do not have PHCs. About 6% of the respondents from villages with PHCs appear to be accessing RMPs. On the other hand in villages where there are no PHCs RMPs appear to be significant providers of healthcare as 43% of the respondents indicated that they access RMPs as a first choice of healthcare provider.

Another way of interpreting table 2 would be to consider the fact the respondents from non-PHC villages are accessing healthcare mostly from unqualified personnel. This fact can be seen after clustering all the respondents who access healthcare from qualified persons and institutions. On the one hand it indicates that 33 access ANMs, 31 PHCs and 22 urban centres (assuming they are hospitals) totalling 86. On the other hand one can collectively combine 83 respondents that access RMPs and 19 traditional

³ RMPs are known as registered medical practitioners. The Medical Council of India used to register such practitioners until 1954 but has stopped since. For practical purposes they could be termed as mostly rural medical practitioners who practice without any formal medical qualifications

healers giving a total of 102. This results in 53% of all respondents in village that do not have PHCs seeking healthcare from personnel who have very little or no formal training. In stark contrast only 9% of the respondents in villages with PHCs appear to access healthcare from unqualified personnel. The worrying factor is that most RMPs do not have any formal training in medicine. They acquire their skills by a trial and error experimental method or by working under trained doctors as apprentices or as general helpers just to learn / observe enough to practice on their own. In effect RMPs practice quackery by using allopathic medicine (prescription drugs can be procured easily from pharmacies as they are loosely monitored) and sometimes perform minor surgeries. They work amongst villages and appear to be very accessible as they routinely visit villages, village-markets and sometimes have permanent shops from which they operate virtually unhindered by the authorities. They usually charge a nominal fee and are either paid in cash or kind. They have a relatively good grasp of the kind of health problems the villagers have. Ill health is undesirable for anyone especially the working class poor in villages, not only for the bad effects associated with ill health but also to a greater extent the economic drawbacks from falling ill. Economic drawbacks such as inability to work / earn, the possibility of reducing the income of those caring for the sick (at home and in hospitals) and opportunities that may be lost due to sickness e.g. seasonal harvesting impact greatly on the poorer sections of society as opposed to those who have some sort of income or network to fall back on. Therefore among the villagers there appears to be a great desire to maintain good health or regain it rapidly whenever they fall ill.

It could be suggested that RMPs have an intimate understanding of the villagers having a great desire to get well and often they capitalise on this fact. Villagers have a strong desire to be injected with drugs as opposed to other forms of administering drugs. A similarly an observation have been made in Pakistan (Ahmad 2004) where consumers believe that injections are the most powerful, the best and most effective form of treatment and practitioners (includes public, private and unqualified practitioners) are strong proponents of injections for the lucrative economic benefits i.e. they can get as much as 5 times the cost of the drug by itself. Ahmad's description is quite apt even in an Indian context but I would like to add another local factor to his analysis. In Bidar there is a common belief that there exists a semi-mythical treatment known as the Ram-

Ban⁴ injection a supposedly rejuvenating revitalising factor and a cure for all ailments. RMPs often claim they have such cures and can be seen giving colourful or heat releasing injections in Ram Ban's place. These aspects may be viewed as light-hearted quackery where gimmickry is used as a placebo in order to extract money from patients. However on a serious note it is alleged that RMPs in their haste or greed to treat patients rapidly for their ill health sometimes indiscriminately use drugs like steroids and other harmful drugs that could have serious side effects, if misused. Such misuses and other malpractices employed by RMPs have a detrimental effect and also belittle good medical practice. It is also known in extreme cases RMPs have even caused death but in most cases mistreatment often complicates illnesses further. When patients mistreated by RMPs seek a proper treatment from qualified sources it is often very expensive, which only a few can afford, or it is too late to rectify, for instance when patients have been exposed to long term steroid dependency and its bad effects. Although there are obvious dangers in accessing healthcare from RMPs most villagers who do not have any readily available alternative tend to use their services in significant proportions. Unless there is going to be a drastic change in the primary health care system it is quite inevitable that they will be major healthcare deliverers for the foreseeable future.

In table 2 those seeking care from traditional doctors or using household remedies (for all practical purposes traditional doctors and household remedies in my data set was based on respondents indicating they access Ayurvedic and Unani systems of medicine and their practitioners as opposed to using Siddha and Yoga systems) appear to be very few in villages with PHCs. In villages without PHCs the number of respondents indicating that they accessed such sources for healthcare is relatively low. Roughly 11% of the respondents from non-PHC villages showed they access traditional doctors and use household remedies. Perhaps this may give a clear indication that most villagers have a strong preference to access western allopathic medicine and treatment. Kakar (1988) in his study of traditional practitioners of India said that up to 75% of the rural population are being served by such practitioners. However his studies were based on the northern States of Punjab and Haryana in the 1980s as opposed to my data

⁴ The concept of Ram-Ban is taken for the Hindu Deity Lord Ram and his Ban (bow and arrow) through which he could perform miraculous signs. Other ayurvedic practitioners blend a mixture of honey and cinnamon whilst making Ram-Ban portions.

collected twenty years later in Karnataka, a state of southern India. Perhaps with the progress of primary health care and other medical practices the villagers' dependence has been altered at present times. Of course the GOI is strongly promoting Indian Systems of Medicine and Homeopathy (ISM&H) but it still has to implement a lot of reform to uniformly provide and to promote those aspects that have great benefit to mankind. At present these alternate systems are significant in some places or mainly held in certain family based networks that do not intend to share their knowledge because of the fear of losing their source of income and status. Household remedies are based on common knowledge spread down the generations and are used prevalently by virtually all people for treating minor ailments and sicknesses.

Finally the villagers that access urban centres according to table 2 can be perceived in two ways in my analysis. Firstly the villages that have PHCs have shown an absolute indication that they can afford to bypass the urban centres, as they can access healthcare within the village itself. They did indicate in a subsequent question, which I will highlight later on in this chapter, that they also access urban centres especially during the night or when they feel their need is greater than the provisions provided by the PHC. Therefore in the villages that have PHCs the likelihood of individuals bypassing the PHC is quite unlikely unless it is essential. Secondly the villages that do not have PHCs showed that 11% of the respondents use urban centres and bypass the primary health care network. The interesting aspect that I would like to highlight would be that most of my respondents came from villages that are remote and inaccessible. Perhaps the cost involved in transportation may have acted as a deterrent. However it would not be inaccurate to speculate that if I had conducted my research in very accessible and highly commutable villages the percentage of respondents indicating their use of the urban centre will be largely inflated, possibly giving a good reason for seeing the urban centre being overwhelmed by villagers seeking primary healthcare.

Awareness of Doctor.

A major part of my thesis concerns the provision of health care by junior doctors in PHCs. Therefore it was important that I found out whether people are aware of the presence of qualified doctors in PHCs. Evidently the villagers bypass the primary health network not because they are not aware that the primary level of services are

available in rural areas and the services of trained doctors can be accessed but due to the perceptions discussed earlier i.e. unreliability, inadequate provision and incomplete provision. When the interviewees were asked whether they are aware that doctors are posted in PHCs. 100% of the respondents from villages with PHCs said they are aware similarly 90% of respondents for non-PHC villages indicated their awareness of this fact. However this apparent high rate of awareness cannot be interpreted as a high rate of people accessing primary health care. On analysing the data it can be revealed that there is a strong association (statistically significant) with the number of times the respondents actually access PHCs and it appears to correspond with the awareness of doctors (according to the villages with or without PHCs) (refer to table 4). Villages with PHCs show that it does not make a difference whether they access healthcare from such centres as all the respondents indicated that they were aware of the provisions of doctors. Compared to villagers without PHCs where two thirds of the respondents who were not aware of a doctor's presence appear never to access the service of PHCs and the remainder did use it sparingly. Therefore it could be suggested that those who rarely access PHCs or never use the facilities are more likely to be unaware of accessing doctors in rural areas especially in the villages that do not have PHCs.

Amongst the two third respondents from non-PHC villages that are aware of the presence of doctors there appears to be a wide gap in terms of the number of them actually accessing the PHCs (refer to table 2) only 16% of respondents indicated that they accessed PHCs as the first point of reference when they needed healthcare. Within this group there are a high number of respondents (23%) that indicated that they never access the PHCs and a majority if one included all the respondents who scarcely use the system i.e. those who indicated less than 5 to 15 times a year would show that 65% fell into this category, leaving only a small 11% of respondents who said that they access the PHCs regularly.

Table 4 showing the awareness of doctors and the number of visits to PHC.

Awareness of doctors working in villages * Village * Number of visits annually to PHCs Crosstabulation					
		Awareness of doctors			Total
		Yes	No		
The number of Visits to the PHC	Never	Count	40	14	54
		% within Visits	74.07%	25.92%	
	<5	Count	61	6	67
		% within Visits	91.04%	8.95%	
	5><10	Count	49	1	50
		% within Visits	98%	2%	
	>10<15	Count	12	0	12
		% within Visits	100%	0	
	Regularly	Count	43	0	43
		% within Visits	100%	0	
	Total	Count	205	21	226
	Chi-Square Tests				
		Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square		26.52411	4	0.000	
N of Valid Cases		226			
a	3 cells (30.0%) have expected count less than 5. The minimum expected count 1.12				
Type of village * the number of visits to the PHCs Crosstabulation.					
		Village		Total	
		Village with PHC	Non PHC		
The number of Visits to the PHC	Never	Count	1	53	54
		% within Visits	1.85%	98.14%	
	<5	Count	4	63	67
		% within Visits	5.97%	94.02%	
	5><10	Count	2	48	50
		% within Visits	4%	96%	
	>10<15	Count	4	8	12
		% within Visits	33.33	66.66%	
	Regularly	Count	23	20	43
		% within Visits	53.48%	46.51%	
	Total	Count	34	192	226
	Chi-Square Tests				
		Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square		69.30578	4	0.000	
N of Valid Cases		226			

Perhaps this apparent low access rate by the majority of respondents from non-PHC villages should give a clear indication that the relevancy of the primary health care network is rather undermined and diminished as the intended benefits do not seem to permeate throughout the rural areas. It can be suggested that there is a weak demand for primary healthcare in some villages, which subsequently can cause major obstacles in delivering healthcare (Paul 2004). There appears to be a poor progress of proper provision of healthcare in non-PHC villages, which is usually replaced by unqualified providers or results in a pattern where villagers seek healthcare from sources that have adequate provision. Firstly poor demand for primary health care can lead to the bypassing of the rural system that exacerbates the overburdening of urban centres to levels incapable of managing the drawbacks, which results mainly in ineffective, substandard, malpractice ridden and poor quality provisions. Often it is quite a common sight to see urban centres overcrowded by villagers seeking primary care, which could have been managed in the rural network. Secondly, villagers are not using PHCs because they have other alternate sources readily available or end up suffering high rates of morbidity only seeking help perhaps at a chronic or unbearable stage.

Clearly from my data it can be interpreted that there is a low uptake of healthcare from PHCs especially in non-PHC villages. Does this automatically mean that there is a low demand for healthcare from such villages? I would take a contradictory position from this view, as my interpretation would not be inclined only to acknowledge that there is a low access rate but also to consider the causes for such an effect. The question to analyse would be 'Is there not a higher demand because there is not a great need?' i.e. people have good health in such villages and the need for PHCs is diminished. Certainly the contrary is true. Due to the perception that PHCs are not adequately equipped and are difficult to access villagers tend to bypass them for a better deal or available alternatives. It might be suggested that if the services of the PHCs were very good there would have been a higher rate of non-PHC villagers accessing healthcare from these centres. For this type of utopia to exist the financial cost of accessing PHCs must be bearable by the villagers as many of them live in abject poverty and any additional cost in their lives acts as a deterrent. Seriously one would have to consider the implications of financial cost to each individual accessing PHC, as those in dire poverty will feel a heavier burden as opposed to those with better financial status.

Analysing whether income of individuals had a significant effect on the number of times the respondents indicated that they visited PHCs. Surprisingly I found that there was not a strong statistical significance. I had a preconceived assumption that the poorer sections of society mainly use PHCs and the rural elite avoids it if they can (Jeffery 1991).

Table 5 showing income and number of visits.

Income * Number of visits annually to PHCs Crosstabulation						
		Income			Total	
		Yellow	Green	Pink		
Q3. Number of visits to PHC.	Never	Count	31	22	1	54
		% within Q3	57.4%	40.74%	1.85	
	<5	Count	36	24	7	67
		% within Q3	53.73%	35.82%	10.44	
	5><10	Count	26	19	5	50
		% within Q3	52%	38%	10	
	>10<15	Count	7	5	0	12
		% within Q3	58.33%	41.66%	0	
	Regularly	Count	21	15	7	43
		% within Q3	48.83%	34.88%	16.27	
	Total	Count	121	85	20	226
	Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	7.740017	8	0.459269			
N of Valid Cases	226					
a	5 cells (33.3%) have expected count less than 5. The minimum expected count is 1.06.					

According to table 5 the proportion of people with better income status appear to use the PHCs far more than those who are marginally above or below the poverty line. Here only 1 of the 20 respondents who have a good income status indicated that they never access PHC i.e. 5%. In the same context 25% of the respondents from poorer sections of society said they never access PHCs. Just over a third of respondents with strong financial status said that they regularly access PHCs as opposed to an even smaller proportion of 12% represented by the poorer sections of society. The differences in between the groups who access PHCs a few times appears to be marginal as 60% and 56% of respondents from richer and poorer sections respectively indicated

that they infrequently access PHCs. Although the data is not statistically significant I would like to highlight certain important aspects of my findings. It must be noted that when the variable is changed to the type of village the p value is 0.000, which is highly significant. To see that a large segment of respondents who live in poverty are avoiding the primary health care network either completely or are only using it a few times will imply and indicate that there must be serious reasons for this to occur. This fact should be a worrying aspect to consider for health authorities as it clearly shows that the most vulnerable members of society are either not interacting or only partially benefiting from the provisions primarily intended to serve those who are in most need. Questions that arise in my mind is what needs to be done to level out this imbalance between villages with or without PHCs, how much more does the government need to do and what are the main deterrents that acts as impediments for non PHC villagers gaining access? The initial two questions can only be partially answered, as it will heavily depend on the government to act and implement programmes or make changes. Only thought provoking suggestions can be made for instance what if the government rethinks its strategy and takes measures to actually go to the villages and deliver adequate healthcare as opposed to expecting people to access such centres. Apart from the ANMs and MPHWS who regularly interact with villagers, and some of whom even reside in the village, it is very rare to see doctors delivering healthcare directly in all villages. Of course in times of emergency or when epidemics are on the raise and when specific goal oriented projects are being implemented e.g. Pulse polio drive one can see a flurry of activities where almost all ranks of providers can be observed delivering healthcare even in the remotest villages. The scenario quite aptly described by Das Gupta et al 2003

“We conclude that India’s public health system is configured to be highly effective at top-down reactive work, such as bringing disease outbreaks under control, but not for the more routine collaborations required for proactive disease prevention.”p.2.

Certainly India is trying hard to decentralise and allow plans to be executed on a local level but there is room for much improvement to happen. Until then it will be an ongoing problem that will need to be resolved. Perhaps getting rid of the centralised and heavily bureaucratic image by ensuring the devolving of powers of decision and

action taken to a localised level should be given a high priority for health authorities and planners to resolve problems. The deterrents perceived by the respondents on accessing PHCs will be explained as this chapter progresses interpreted according to my examination of different results and outcomes from the data sets.

Perceived sufficiency of existing provisions.

I asked the respondents a question on their opinion whether current healthcare provision is adequate or if they find it lacking in any manner. This was also done to check levels of imbalance perceived by the villagers and also the different types of villages.

Table 6 showing the satisfaction levels.

Are villagers satisfied with healthcare provisions * Village Crosstabulation					
		Satisfaction mark		Total	
		Yes	No		
Village	With PHC	Count	6	28	34
		% within Village	17.6%	82.4%	
	Non PHC	Count	12	180	192
		% within Village	6.3%	93.8%	100.0%
Total		Count	18	208	226

Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	5.118(b)	1	.024	

a Computed only for a 2x2 table
b 1 cells (25.0%) have expected count less than 5.
The minimum expected count is 2.71.

The views indicated by the villagers were significantly different at the 0.05 level between PHC and non-PHC villages. However, both groups show overwhelming dissatisfaction with the current level of provision. Only 18% and 6% of the respondents from villages with and without PHCs said that they were currently satisfied with the levels of provision. Understandably villagers without PHCs can show high levels of dissatisfaction as they can have many obstacles accessing healthcare. They want good healthcare delivered but appear unable to get it at present. Therefore in this segment I intend to concentrate on the opinion of those who live in PHC villages. In villages with PHCs almost four in every five respondents indicated that they did not think they were

being adequately provided for. This fact should be a worrying factor for authorities because even in villages where the government has an obvious presence the service provided is not considered to be of a satisfactory level by the villagers. There was a general perception among these villages that much more needs to be done and currently the provisions are just basic and when the need for higher levels of care arises quite often they are disappointed, as the PHCs cannot provide the service they need. Respondents broadly based the complaints on two points, firstly the effects of mismanagement i.e. absenteeism of staff and improper time keeping, inadequate supply of drugs and equipment, ongoing malpractices and even inconsistency in the level of services provided between PHCs. Many of the respondents could clearly identify PHCs (according to their own perception) that worked on an optimal level. Comments such as “in that PHC we can get operation done whereas over here we only get injections and tablets” or in another PHC there are two doctors, one of whom is a woman therefore the women will be at ease accessing care”. Similarly greater importance was given to PHCs where the staffs actually reside in the village as opposed to those who commuted from the town or other villages.

Secondly some complaints were more personal in nature where allegations were made that healthcare providers (the entire set up i.e. doctors, nurses, ANMs, MPHWS etc) are poor at diagnosing and treating illnesses and it is common to be referred elsewhere as the PHCs do not have the capacity to deal with their ill health. However it was quite hard to discern whether the respondents actually meant that the providers did not have the knowledge and therefore the ability or the capacity and intent to provide. Regarding the knowledge aspects I did not feel qualified enough to ascertain by cross questioning the doctors and knowing for sure but I have interacted with doctors and asked their opinion on similar problems which I will mention in the next chapter. However with regards to the aspect of intent there are certain subtle issues, which I would like to discuss. Primarily with the phenomenal growth of private healthcare where services are provided for a fee it is almost certain that all villagers will understand economic aspects of healthcare delivery. A simple economic truth is that when there is a short supply of a product people will be willing to pay more for it. Hence it is quite a common allegation that providers could withhold treatment and perhaps even propose to refer them to another place in order to extract money from the patients i.e. the economic option is put forward to the patient where the doctor says if you want to be

treated here it will cost you a certain fee or else go to the town. The price charged will obviously be enticing enough to avoid the whole process of going elsewhere. I did try to ascertain whether the perception of intent to provide when only along economic lines or did it have any other facets like caste, religion or status. It was evidently quite clear to confirm that it was mainly economic aspects (refer to table 24) and other aspects did not matter. Generally paying to get well did not matter as long as they got well however certain respondents did mention that they resentfully conceded to such practices as their options are limited.

I asked the respondents to give an appraisal about the levels of care they access from the primary care network. Unsurprisingly similar results were obtained to that shown in table 6 as a clearer insight can be seen about the differences of perception between the types of villages. The results of table 6 showed a lopsided view where the overwhelming majority indicated that they were dissatisfied with current provisions but in table 7 a fairly levelled view is presented.

Table 7 showing the opinion on current provision.

Opinion of current provision * Village Crosstabulation					
Q7. Villagers Opinion			Village		Total
			Village with PHC	Village with Non PHC	
Q7. Villagers Opinion	Perfectly adequate	Count	1	1	2
		% within Q7	50%	50	
	Fairly adequate	Count	5	15	20
		% within Q7	25	75	
	Moderate	Count	23	97	120
		% within Q7	19.16%	80.83%	
	Fairly inadequate	Count	5	56	61
		% within Q7	8.19%	91.80%	
	Very inadequate	Count	0	23	23
		% within Q7	0	100%	
Total	Count	34	192	226	
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	11.36946	4	0.022		
N of Valid Cases	226				
a	4 cells (40.0%) have expected count less than 5. The minimum expected count is .30.				

There are marginal differences between table 6 and 7 where the percentage of respondents who indicated that they were satisfied stood at 8% and 11% if we cumulatively take into account those who said the system is perfectly adequate and fairly adequate. However if we only looked at table 6 it would not be wrong to come to a damning conclusion that the primary health network is defunct and people have very little consideration for the system. Opinions shown in table 7 indicate that a combined 53% majority of respondents considered the levels of healthcare provided to them to be moderate. Individually the percentage stood at 68% and 51% from PHC and non-PHC villages. The respondents that indicated that they considered the levels of healthcare provision to be fairly inadequate are a significant minority of 15% and 29% in PHC and non-PHC villages. Understandably those who indicated that they felt the current levels of provision are very inadequate came from non-PHC villages where 12% of the respondents fell into this category. No respondents from PHC villages indicated that the current provisions are very inadequate because most of them perceived that having a PHC as opposed to none is a greater advantage.

As table 7 shows most respondents recognized that healthcare provisions appear to be moderate and fairly adequate but there is a significant minority of views that perceive the levels of provision accessed to be fairly inadequate or very inadequate. Perhaps this should give a clear indication to the health planners and government authorities that people are not very happy with the current provisions and they consider it to be on a mediocre level. Statistics from my datasets indicate that even in villages with PHCs there is not a very high proportion of respondents who are very satisfied with the levels of care accessed. Most respondents claimed that there is a need to make vital changes in the levels of services provided in order to benefit properly from the system. Ideally it should be a top priority for the authority to deliver services at an effective level where the beneficiaries' perception of services should be at the perfectly adequate level. In reality achieving such egalitarian goals may be far fetched in developing nations especially when they know that even in developed nations with sound financial status, it is a constant struggle attaining such a status. However it might be suggested in the case of India, public health care provisions in rural areas appear to be pursued more on an obligatory level rather than intending to serve the actual needs of the population. By this I intend to say that PHCs and SCs are established according to norms fixed by the government but the question of whether they can effectively deliver services or are able

to serve the population appears not to be thoroughly thought through. A respondent likened the current provision to a bore well fitted with a hand pump, which appears to be functioning, but when one attempts to use it, it is either dry or very little water drips down. Perhaps this example states the truth of the problem in India where there is a great imbalance in between the planning and actual implementation of development programmes. Quoting Singh 1999.

“It is a common complaint that whatever good ideas one has are highlighted in India’s files of planning programmes, but the most crucial problem we face is non-implementation”. p.60.

A part of the analyses of my datasets can be interpreted to highlight this problem. However my intentions of highlighting existing problems are not to just expose them but to give constructive criticism and to give thoughtful suggestions to planners with the hope of alleviating the hardships faced by the population. Other respondents emphasized that they do not doubt that the government has good intentions by providing the infrastructure, finance and staff to provide healthcare. However they were very sceptical and severely critical of those who are in charge of delivering healthcare and they had very little hope of seeing any improvement. Broadly quantifying the critical perception of healthcare deliverers by the villagers is to put it into two boxes 1 being mismanagement i.e. siphoning / squandering of resource and mainly corruption 2 a sense of great apathy and lethargy in delivering services. This is why many respondents indicated that current provisions are moderate however they also did not completely reject the system as they valued having some levels of provisions as opposed to none.

The villagers have given their opinion about their satisfaction and perceptions on the current provision and statistically significant results were obtained. To probe a bit further along similar lines I asked them to assess and give their opinions about the services they access. The results are statistically significant (refer to table 8) between villages with or without PHCs. Once again the results indicate that the majority of the villagers indicated a negative image of the services they access. Only 18% of respondents from PHC villages indicated that the services were good but 44% consider them to be poor or very poor. The percentage varies quite drastically in villages without PHCs where only 7% of the respondents thought the services are good but 70% indicated that the services are poor or very poor. I do not intend to elaborate much on

the results from villages that do not have PHCs (table 8), for the simple reason that they have a great disadvantage of having either scanty or an inconsistent provision of healthcare. Of course I acknowledge some PHCs are of a dysfunctional nature and the villager from such villages could also be put into the same disadvantage group of non-PHC villages. However in my analysis I have assumed that the villages with PHCs have a better chance of accessing healthcare than those that do not have such centres.

Table 8 showing the assessment of services.

Assessment of the quality of healthcare provided * Village Crosstabulation				
Q8 Villagers Assessment of services		Village		Total
		with PHC	Non PHC	
Good	Count	6	13	19
	% within Q8	31.57%	68.42%	
No Opinion	Count	13	44	57
	% within Q8	22.80%	77.19%	
Poor	Count	14	94	108
	% within Q8	12.96%	87.03%	
Very poor	Count	1	41	42
	% within Q8	2.38%	97.61%	
Total	Count	34	192	226
Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	12.38741	3	0.006	
N of Valid Cases	226			
a	1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.86.			

The results in table 6, 7 and 8 have similar outcomes that indicate the people's perception of PHCs is notable for the fact that there is a high rate of disapproval, dissatisfaction and inadequacy especially among non-PHC villages. What I would like to reiterate is the fact that even where the government appears to be providing services the perception of villagers is not overwhelmingly positive about the services they access. Therefore this should give a clear indication to the authority that much more needs to be done, initially to rectify provisions in PHC villages before attempting the wider objective of serving the entire population. Perhaps if the authorities put more emphasis on effective delivery and management of PHCs the population will have good health indicators. Part of the positive outcome of such action will predictably

lead to a higher usage among villages that have PHCs and may act as a catalyst to attract more people from surrounding villages to access services.

Future expectations.

To find out more about this topic I thought it would be appropriate to ask the respondents what they want in terms of healthcare provision. After taking into consideration that many villages bypass PHCs or consider current healthcare provisions inadequate I wanted to ascertain whether there is a great desire to access healthcare in their village or are they quite happy to carry on with their current methods of access.

Table 9 showing future desires.

Village * type of healthcare to expect in the future Crosstabulation					
Q6 future Expectations			Village		Total
			Village with PHC	Non PHC	
Basic	Count		15	50	65
	% within Q6		23.07%	76.92%	
	Count		16	45	61
	% within Q6		26.22%	73.77%	
Hospital	Count		3	97	100
	% within Q6		3%	97%	
Total	Count		34	192	226
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	20.60265	2	0.000		
N of Valid Cases	226				
a	0 cells (.0%) have expected count less than 5. The minimum expected count is 9.18.				

The results in table 9 show that there is a statistically significant relationship between the options the respondents have chosen and the types of villages they represent. Before interpreting these outcomes I would like to explain what I mean by basic, moderate and hospital shown in table 9. The villagers have perceived basic services as accessing doctors and other health workers to get treatment by being prescribed medication for illnesses or where routine health checkups. Widely held perception of basic care meant a place where they can access tablets and injections whenever they fall ill. Moderate in this case meant in addition to a basic level the villagers perceived

PHCs equipped to provide minor operations, proper inpatient facilities and pharmacy. They also took into account staff quarters where the personnel stayed in the village as opposed to commuting from the town. The understanding of hospital in this case was when the villagers wanted the levels of provisions they can get in the district hospital i.e. a fully fledged working hospital with different departments where a wide range of illnesses can be catered for.

The main differences seen between villages that have and do not have PHCs are as follows. 29% of the respondents indicated that they were satisfied if they could at least access a basic level of services. Surprisingly the percentage of respondents from PHC villages was quite high as 44% of the respondents perceived accessing basic healthcare from PHCs as opposed to just 26% from non-PHC villages. This high percentage of respondents from villages with PHC indicating they want basic care did not complicate matters further, as I had to alter my views on this result after gaining some insight into the perception the villagers held. Through the numerous interactions I had with the respondents from PHC villages the impression I was given when they indicated that a consistent basic level of service would be on a satisfactory level as opposed to having a dysfunctional level of services. The difference being that in non-PHC villages the respondents had a desire to get basic services when they need them as opposed to none. Keeping this fact in mind it would be appropriate to say that in PHC villages the people want a consistent and reliable basic level of care from PHCs.

The respondents that indicated that they prefer a moderate level of care include 47% of villages with a PHC and 23% villages without a PHC. Nearly half of the respondents from PHC villages desired the PHCs to function in a moderate manner where a higher level of care can be provided. Many respondents said that if they could access most of their healthcare in the village they would never envisage going elsewhere to access it. Some of them had a good sense of which PHC in their district functioned at a moderate level and that their village was lacking such facilities. This is another aspect that government authorities should take into consideration. Even in PHC villages there is a high percentage of people who would like to see an upgrade in services provided to them. It appears that the percentage of respondents from non-PHC villages fell between the choices of basic and moderate as 27% for basic and 23% for moderate. This result defies logic because why would more people choose an inferior option over a better

one. This type of behaviour may be baffling however the reasons behind this were rather simple. Most respondents from non-PHC villages did not have great experience in the different levels of care from PHCs. With high rates of them avoiding PHCs by bypassing the system and going to towns or using alternatives (refer to table 2) it should not be surprising that an unpredictable outcome has resulted. I could safely say that if the respondents were regularly using PHCs the results would certainly be different.

The respondents who indicated that they desire to see services provided at a hospital level could be assessed as being over optimistic however they have certain vital points that are relevant. Only 9% respondents from villages with PHC desired to have services at hospital level but this figure is 5 times higher in non-PHC village. I have taken the liberty to interpret these results in a slightly different way as a majority of non-PHC villagers have indicated they desire to have a hospital or the levels of services they can access in towns. This by itself is very unlikely and impractical as no government or country in the world can provide a hospital in every village. With the majority indicating ideally hospitals should provide healthcare it could imply that there is a great desire and demand to access good healthcare in such villages. Sometimes critics of primary health care say that there is a low demand for such provisions. However according to my datasets and outcomes I would take a contradictory stance and say that there is a high demand but it is unmet because the current provisions and delivery systems are not functioning at an optimal level.

Ideal changes.

The next question that I asked the respondents was what kind of changes do you think would be ideal to improve the delivery of healthcare in the villages. The respondents had a good grasp of what they thought was wrong with the current system. Therefore I made a few suggestions and asked them what kind of changes they thought would ideally benefit them. In this case the analysis was not done on the basis of the type of village the respondents live in, as the results were not statistically significant. However when I analysed according to the income status of each individual there appears to be a strong significance between these variables. In table 10 most of the respondents strongly agreed with all the indicators for vital changes that are needed to improve the

services they access. Other respondents preferred to highlight and emphasise what they thought was the most crucial area, which needs to be enhanced or improved.

Table 10 showing the intended changes.

What Changes can improve the health system * Income Crosstabulation						
Intended changes			Income			Total
			Yellow	Green	Pink	
More ANMs	Count		3	7	2	12
	% within Intended changes		25%	58.33%	16.66%	
More Doctors	Count		13	17	4	34
	% within Intended changes		38.23%	50%	11.76%	
Free Medicines	Count		5	8	2	15
	% within Intended changes		33.33%	53.33%	13.33%	
Corruption Free System	Count		11	12	5	28
	% within Intended changes		39.28%	42.82%	17.87%	
Easy Access	Count		5	3	0	8
	% within Intended changes		62.50%	38%	0	
All of The above	Count		82	38	4	124
	% within Intended changes		66.12%	30.64%	3.22%	
Total	Count		119	85	17	221
Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	24.8394	10	0.006			
N of Valid Cases	221					
a	8 cells (44.4%) have expected count less than 5. The minimum expected count is .62.					

There were only 2 respondents who indicated their disagreement with these intended changes and another 2 of them did not have an opinion. Hence their views were not taken when the analysis was done for table 10. Here we can see that 56% of the respondents indicated that all the proposed changes are necessary. Individually the bulk (182) of the respondents in this category came from below the poverty line 45% from those marginally above the poverty line and 24% from the richer sections of society.

Perhaps this strong desire from the majority of the respondents indicating that there need to be major changes to improve healthcare delivery can be understood to answer how they think current provisions are lacking.

Other respondents indicated what they thought most vital for a better delivery of healthcare along the following lines. 18% of respondents thought that if the numbers of ANMs serving in villages were increased it should make a great impact on the levels of services accessed. These respondents consisted of 2.5% from below the poverty line, 8% of those marginally above the poverty line and 12% from those who have better financial status. Interestingly when I subsequently asked the respondents if they think that enhancing the skills of ANMs or MPHWs and increasing the number of them serving will help villagers access basic healthcare more readily available. On analysing the data I found that there is a strong statistical significance when their answers are crosstabulated with age and income resulting in Pearson Chi-Square indicating .001 for age and .047 for income. However when the same question was crosstabulated with other variables like gender, village, education and position held in household the results were not statistically significant.

Therefore it might be suggested that these results, subject to certain conditions or requirements by the villagers, give an importance to the services provided by the ANMs and they would appreciate it if more of these providers were present to deliver healthcare. However they also acknowledged and had preconceived notions of the limits and disadvantages of relying on ANMs for healthcare as opposed to getting it from higher levels of providers. Collecting all the major opinions the respondents gave and to condensing them gives a brief summary with regard to accessing a higher level of healthcare from ANMs or MPHWs, along the following lines. The villagers thought that ANMs were good at administering medication or making initial diagnosis. However these personnel cannot be fully depended on to give a complete treatment of illnesses. For this reason they thought it is better that the villagers access healthcare from higher levels of providers like doctors where they are likely to get a wider range of treatments and possibly a quicker cure. However for all minor ailments and diseases they thought it was ideal to have more ANMs and MPHWs providing healthcare.

In table 10 the second choice the respondents indicated which would improve the current level of healthcare provisions is having more doctors serving in the villages. Interestingly this desire to have more doctors serving in the villages stands clearly as the most important change the villagers would like to see. Though most respondents thought that there need to be major changes in all the suggested options in table 10 but among those who wished to indicate one aspect they considered was crucial was the choice of having more doctors. Independently 14% of respondents indicated that the provision of more doctors could have a good impact. If I include the number of respondents that indicated that improvement is needed in all the available options, along with those who thought that more doctors are needed, it would represent 71% of all the interviewees. According to the economic group each respondent represents, 80% of those below the poverty line, 65% of those who live marginally above the poverty line and 47% from richer sections of society indicated that there need to be more doctors serving in villages along with other major transformations. Seeing that such a large majority of the respondents have a desire to see more doctors work in rural areas, it gives my thesis a lot of relevance and a great impetus to analyse the provisions of doctors and policies associated with their rural posting. Primarily to see whether doctors are making any impact on the population and if not what possible solutions or suggestions could be given to improve access and consequentially benefit the entire society. Of course most matters relating to doctors will be discussed in the next chapter.

In table 10 the respondents that indicated that people should have free medication provided stood at 63% when those who consider all options are added along. Independently only 7% of respondents formed this group who solely indicated that free medication would make a big impact on the delivery of healthcare. According to the economic status of individuals there was only a nominal difference among the groups they represented as the percentage of respondents indicating this choice was 4% for those living below the poverty line, 9% for marginally above the poverty line and 11% for the richer sections in society. This may appear to be very small representation but it should not be interpreted as a sign of lesser relevance for the role that free medication can play. The reason I say this is because of the perception most of the respondents had. During the numerous interactions I had with the interviewees I could perceive a strong sense of scepticism among them, as they did not believe that it could be possible

for drugs to be freely available. Although they have experienced drugs being administered freely for instance when there is an immunisation drive and when they were being treated for not so serious illnesses at PHCs. However for procuring effective drugs it was a common practice that they will have to get it from other source by spending money. The respondents did say that they would not mind and in fact would be very happy if they could receive free medication that was effective, as it would lower their economic burden. Therefore if there was a likely change introduced where villagers can access free medication it would be readily accepted but until then people will think of it as a far-fetched dream.

The next option in table 10 was the idea of a corruption free system. This option on an independent basis was the second most popular option just after the suggestion of having more doctors. When combined with those who thought that at all levels ideal changes are needed it showed that 69% of all the respondents indicated that a corruption free system was essential. Interestingly in each economic group the percentage of respondents who think corruption is a major problem along with all the other options in table 10 appears to increase according to the lower financial position each individual holds. 53% of those having good financial status indicated corruption free system and all the other options need to be introduced in order for the villagers to benefit, 59% from those marginally above the poverty line and 78% from below the poverty line had the same conclusions. Perhaps this should be a clear indication that those who suffer more severely from the ill effects of corruption have voiced their views most appropriately. Obviously the poorer sections of society will feel the economic impact much harder as they generally have to struggle to gather financial resources as opposed to those who can manage it relatively easily. However corruption in the Indian context has certain complexities, which I deal with in subsequent questions based around this malpractice.

Finally in table 10 the last option the interviewees could choose was the concept of easy access. Surprisingly the results here showed that there were only a small percentage of respondents who indicated that easy access can be beneficial for the villagers. Of course when I combine the results along with those who thought that major changes are needed at all levels 60% of the respondents fall into this category. The reason for this kind of behaviour was slightly complex as most respondents

strongly indicated their preferences of having healthcare delivered in their villages (refer to table 9) but here the perception is slightly altered. From my interactions with the interviewees I can conclude that almost all the villagers have not truly experienced very good healthcare delivery especially those from non-PHC villages and poorer sections of society. Most of the villagers fatalistically accepted the fact that to have easy access to healthcare one must either go to private sources or to towns where better facilities can be found. This combination of inexperience and fatalistic acceptance is probably one of the main reasons why the villagers gave such a low indication to easy access of healthcare.

The gender of the doctor.

The next question I asked the respondents was whether the gender of the provider mattered when they sought to access healthcare. There were two broad reasons I asked this question, firstly to see whether the stereotype of the culture still exists where women would avoid seeking healthcare from a male doctor as opposed to readily accepting care from a female doctor. Secondly if this cultural phenomenon still exists and if the government is doing something that is fundamentally opposed to the existing culture by using mainly male doctors to serve in rural areas, this may be one of the main reasons for the dysfunctional nature of public healthcare provision. Historically in conservative societies within the South Asian context it can be presumed that they favour a general separation of the provision of services along the lines of gender. This rule is not stringently imposed at least on the males as they can access healthcare from both male and female providers. However with regard to women it is more likely that they would prefer to be seen by a female doctor or it is widely promoted and thought to be most appropriate by cultural and religious practices followed in this region. It may be suggested that to avoid any embarrassing and intimate contact with male doctors, religious principles and cultural practices have developed to ensure women are kept apart or avoid associating with male providers if possible. In the Islamic worldview it is obligatory for women to avoid male doctors if possible (Tsianakas et al 2002). In a Hindu context there is no obvious compulsion but certain cultural practices may be similar to this Islamic tradition i.e. in certain Hindu communities, women never communicate or mingle with unrelated males hence have a strong preference to access female doctors. Certainly some times it might be suggested that a young Hindu woman

may allow an elderly father figure like a doctor to examine her without any inhibitions but in the case of a younger doctor she may like her family to accompany her through the procedure. There are many other cultural and religious practices that I am aware of and also have an in depth knowledge of the local traditions which are predominant due to my personal experience and also being seen as a part of the society. Therefore I did not have much difficulty understanding the situation even when the respondents were not explicit about their perceptions and choices.

Table 11 showing the choice of doctor and whether gender matters.

Does the gender of doctor matter * Choice of doctor Crosstabulation						
Gender of Doctor Matter			Type of doctor preferred			Total
			Female Doctor	Male Doctor	Any Doctor	
Yes	Count		38	4	2	44
	% within Gender of Doctor Matter		86.36%	9.09%	4.54%	
No	Count		3	2	177	182
	% within Gender of Doctor Matter		1.64%	1.09%	97.25%	
Total	Count		41	6	179	226
Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	187.1478	2	0.000			
N of Valid Cases	226					
a	2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.17.					

Analysing the results in table 11 shows that there is a strong significance when data is cross tabulated between whether the respondents think the gender of the doctor matters and their preference of doctor if they were given a choice. Notwithstanding what I have previously described as a conservative society in India where there are restrictions imposed more stringently on women and where society would like to see a separation of services provided to them based on the gender of the provider, in my data sets it can be seen that there appears to be a paradigm shift in terms of who they are willing to

access services, from a stereotypical conservative position to a more accommodating and adjusting society. It can be clearly seen that a majority (80% of the respondents) indicated that the gender of the doctor did not matter when accessing services. When I examined the choices according to gender it showed that out of the 76 women respondents 56 (73% of women respondents) said that they did not mind what the gender of the doctor was as long as they could access healthcare from them. 82% of the male respondents also shared a similar view with their female counterparts. Seeing that such an overwhelming majority of the respondents do not consider the gender of the doctor whilst accessing healthcare it might be suggested that the conservative position held by the villagers is rather on the decline and most people would like to access healthcare irrespective of the gender of the provider. In extreme examples women used to be allowed to die as opposed to them accessing care from male doctors. Thankfully this extreme measure is no longer the norm and generally society has progressed and seen the benefit of accessing healthcare of doctors irrespective of their gender. Of course there are elements that still hold on to the rigid view and would like a greater separation however when I questioned the respondents if they would adhere to a strict position even in a life and death situation unsurprisingly no one responded saying that they would not access healthcare from doctors when such compelling measures are needed. It could be suggested that those who still preferred a separation of service provisions based on gender did not support their views because of a religious compulsion as I found that even Muslims that I interviewed had divided opinions. However it was done on a general perception of maintaining decency and where women would appear to feel much more at ease to discuss personal matters with a female doctor. Previously it could be said there was an unwritten rule, which was imposed to ensure women do not freely contact men who are unrelated as it could lead to a threat where they could be taken advantage of, as they are vulnerable. This type of fear tactics is still quite widely employed in other aspects of life but in terms of accessing healthcare from doctors it appears to be diminishing in its effectiveness, as most people do not see male doctors as a threat to women patients.

Nearly 15% of the male respondents indicated that they would prefer if they could access female doctors, which can appear to be a bit surprising. The intention of their aspiration has to be analysed on the following basis. The main reason they indicated that they prefer to access female doctors was that they thought this was the most

appropriate for their wives and children rather than themselves. My interviews were mostly (56%) held with people who represented the head of the household hence the male respondents who indicated that they would prefer female doctors was taken as the view of the entire household. When I analysed this data on the basis of position held in the house I found it to be statistically significant and a chi square test showed a p value of 0.007. These respondents clearly mentioned that for the women in the household their preferred option would be to see a female doctor and concerning the males it did not matter who they accessed. There appeared to be a widely held view that it would be most desirable to see every PHC having a male and a female doctor to serve their needs.

I analysed table 11 using other variables but the results were not statistically significant. My conclusions with regard to table 11 go along the following lines. The initial suggestion that there appears to be a cultural and religious background for a desire to separate the access of healthcare on the basis of gender is not widely held. At present a minority of respondents still hold on to such views but are willing to amend it when there are limits on the options available or in compelling circumstances. In another perspective the question whether the government is embarking on a strategy with the potential to have great drawbacks, the simple answer is no, the rigid perception that people will avoid accessing services at all cost due to the gender of the provider will eventually become insignificant over a period of time. However if the government wants to ensure the services provided are run on an optimal level it would be desirable to ensure both genders of doctors are represented to enable better access and perhaps eventually get an effective system of healthcare delivery.

Can an enhanced provision of ANMs help?

The next question that I asked the interviewees was ‘do you think an enhanced or a better-equipped staff and a higher level of medical care by ANMs and MPHWs could solve your need for basic healthcare?’ There appeared to be a strong consensus where over 95% of the respondents agreed that if the above were implemented in their villages it would make a substantial improvement in the levels of care accessed. However it must be noted that most of the respondents knew that this was a hypothetical question and very few believed that this could ever be achieved. When I

analysed the data sets the results were not statistically significant with most of the variables but when I used income as a variable the results was significant at the 0.05 level (refer to table 12). According to the group each respondent belonged to there appeared not to be wide differences in the opinion they indicated. 98% of the respondents below the poverty line indicated that it would make a significant difference similarly 94% of those living just about the poverty line said it would make a big difference. This figure was slightly lower in the case of those from the affluent sections of society as it indicated that 85% of the respondents thought that it would have a positive effect. Perhaps this variation in between each of the economic groups also reflects the dependency each has on the levels of care provided by ANMs and MPHWs. It may be assumed that the more affluent a person is in India the better choice one has in terms of accessing the public healthcare system or alternatives that are available. It is more likely that the poorer people are, the more they will depend on the public health system.

Table 12 showing the enhanced provision of ANMs & MPHWs with income.

Income * Enhanced provision of ANMs & MPHWs Crosstabulation						
				ANMs & MPHWs		Total
				Yes	No	
Income Category	Yellow	Count	118	3	121	
		% within Income	97.52%	2.47%		
	Green	Count	80	5	85	
		% within Income	94.11%	5.88%		
	Pink	Count	17	3	20	
		% within Income	85%	15%		
Total		Count	215	11	226	
Chi-Square Tests						
		Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square		6.113993	2	0.047		
N of Valid Cases		226				
a		2 cells (33.3%) have expected count less than 5. The minimum expected count is .97.				

However as table 12 is based on a hypothetical question I do not intend to elaborate much on the results but it can give a clear indication to authorities that if they do think about enhancing the skills and the levels of care provided by ANMs and MPHWs there

will be wide public acceptance. Acceptance is not only by one section of society but it can be seen that all sections feel such programmes will make a big impact in resolving problems of healthcare in rural areas.

Opening times of the PHC.

The interviewees were asked about their opinion on the working hours of the PHCs where it is generally open during the daytime (9am to 5pm) basis. In addition with only a few PHCs having staff or doctors residing in the villages, how did this affect their choice of whether they access the PHC or not? For instance if it was 3 o'clock in the afternoon would a person from a non-PHC village risk accessing the PHC as it will be most likely that it will not be staffed adequately. The analysis for this question was done according to the type of village each respondent lived in.

Table 13 showing the working times with the type of village.

Village * Impact of the working Times of PHCs Crosstabulation					
Village	Village with PHC	Count	Working timings of the PHCs		Total
			Yes	No	
			15	19	34
		% within Village	44.11%	55.88%	
	Non PHC	Count	178	13	191
		% within Village	93.19%	6.80%	
Total		Count	193	32	225
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	56.98061	1	0.000		
N of Valid Cases	225				
a	Computed only for a 2x2 table				
b	1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.84.				

Interestingly the proportion of people from PHC villages who said it did not make a difference is much higher. As 48% from PHC villages indicated that the working timings never made a difference whereas only 7% from non-PHC villages indicated that it does not make a difference. The obvious answer for this kind of a large variation

is due to the simple fact that I have mentioned earlier on in the chapter (refer to page 16) with regard to reliability where those with PHCs have managed to understand the operation of the PHCs through constant observation whereas the non-PHC villagers find it unreliable. It might be suggested that table 13 supports this perception of differences I have portrayed between the PHC and non-PHC villages. Hence there can be room for such large variations between the types of village the respondent lives in. The respondents from PHC villages who indicated that timing does matter mainly arrived at such conclusions due to the irregularity of staff working in the PHCs. Another fact, which had a negative influence on the working timings of the PHCs, was that most staff commuted between the town and the PHC and during the night or out-of-working-hours villagers could not access PHC personnel. These respondents placed a higher value on the services provided by PHCs staff who live in the village and indicated that the PHCs with a doctor residing in the village are better than those with a non-resident doctor. Therefore it becomes quite clear in table 13 that timings do hold a vital significance on the perception of whether the PHCs are running on an optimal or suboptimal level. Perhaps this should give an indication to public health planners and authorities that reliable working schedules should be an intrinsic part of the healthcare delivery system.

I partly support the ongoing process of the government providing staff quarters and other vital amenities in order to enable health personnel to stay in the villages and consequently villagers can access their services throughout the day. However I see this goal as ambitious and not thoroughly thought through as many problems remain unresolved i.e. basic amenities like electricity, piped water and necessary maintenance are yet to be secured in many PHCs. Hence it might be suggested to ensure a reliable healthcare delivery system the government should initially strictly ensure the normal working times i.e. 9am to 5 pm become reliable before persisting on providing a 24 hour service. Although it would be idealistic and equally important to provide access to care throughout the day and it should be a goal that needs to be attained, the logistics are not as simple as they appear i.e. staff quarters can be provided but they may not be occupied if the village they are located in does not have a good educational system. This in turn acts as a deterrent to the healthcare personnel as they would prefer it if their children got a better opportunity in the town. There are other complex aspects that affect the timing, which I will discuss in the next chapter where doctors voiced their

concern that the government expects them to work on a 24-hour basis but pays on an 8 hourly working day rate.

Problems accessing PHCs at night.

It became quite clear from conducting the interviews that not all PHCs are working on a 24-hour basis I asked the interviewees what they would do if they had an illness during the night or out of the normal working hours of the PHCs. The intention of asking this question was also to get a clearer understanding of the predicament most of the rural population face. During the process of interviews I had to be very sensitive, as some respondents had given very emotional accounts and some related harrowing experiences that sometimes ended in tragic consequences of having illnesses during the night⁵. The most extreme example, which I can quote, was when a mother explained how she lost her child when he suffered severe symptoms of dehydration and according to her statement by the time they mustered together the money to go to the town it was too late. Relatively simple solutions such as using oral re-hydration sachets (that are normally stocked with ANMs or MPHWs) could have helped this child but there was an apparent lack of awareness from the respondent that led to such a tragic end.

It is quite a common practice for children to be branded on their stomachs when they suffer from dehydration. There does not appear to be any logical reason why people practice such bizarre customs. Although the uptake of such practices may be reducing as healthcare provisions are becoming more accessible, a significant proportion of the population still sustain this form of treatment. Perhaps the continuation of this practice could be explained in some kind of a warped way that due to the extreme discomfort the children are put in they may eventually drink more and in the process survive. Such practices along with many other traditional approaches have very little scientific analysis or backing hence the outcomes are very unpredictable. Observing such

⁵ From the late evening throughout the night it is normal not to have public transport available especially in remote and off the major road villages. However in the recent years there has been a significant increase in the number of individuals who run private jeeps, tractors, trucks and auto-rickshaws as taxis that are available in most villages. It is relatively easy to hire such vehicles even in remote areas. Obviously the burden of paying for such services is much higher for poorer people than the richer sections of society. This is because it is expected by these taxis to be paid upfront before they proceed with the journey. It could be possible for poor people not being able to manage the fee charged and hence suffer the consequences of not being able to access services.

practices as a researcher it just reiterates the importance and urgency of an effective primary health care system in order to give people a viable alternative and to root out improper treatment. Thus the emphasis of ensuring proper healthcare delivery systems should be given a higher precedence by the authorities especially in regions where there is a low awareness of healthcare. Other respondents also had similar problems that occurred when the PHCs were not in operation but most of them said that they would prefer to do nothing about it unless it is compelling in nature or they can find alternative sources to access healthcare.

The interviewees responded to this question according to the following categories of answers

- 1 do nothing
- 2 access traditional remedies
- 3 access traditional healers
- 4 access RMPs
- 5 access PHC staff
- 6 access urban centres
- 7 access other alternatives.

Although this question was not intended to be a multiple response question but to engage with the interviewees and get an in depth understanding I needed to ask this question repeatedly and when I emphasised the severity of the illness they had different responses. For example when I asked them what they would do if they needed to access healthcare in the night the immediate answer was to do nothing but when I asked if they would do the same in compelling circumstances they responded differently.

respondents indicated that they would prefer to wait for the opinion of the PHC staff when they open the centre the next day as opposed to taking any serious action. There appeared to be an overbearing emphasis on extra cost that would be involved if they accessed healthcare during the night or when the PHCs were not functioning. It was the prime factor most people took into consideration before they opted for any other alternatives. It might be suggested that relatively high levels of morbidity are quite acceptable in rural societies as people are instilled with the idea to bear with their illness and seek care only when it reaches a critical stage. Therefore it should not be so surprising to find a majority of respondents especially from non-PHC villages indicating that they would prefer to do nothing if they had health problems during the night or when the PHCs were not functioning.

I carried out some more analysis on the “do nothing” option and found that the results were statistically significant when the variable was changed from village to education. The results were statistically significant and the p value was 0.003. Interestingly it became quite relevant to see that the higher the educational status each individual had the more likely it was that they would seek to access care as opposed to doing nothing. When the variables were further changed to gender, age, income, occupation and position held in the household the results were not statistically significant.

The second and third options of accessing traditional remedies and traditional healers where 70% and 95% of the respondents indicated that they do not opt for such customs when they are in need of accessing healthcare in the night. The results were not statistically significant when the variable type of village was used. Similarly results show that the use of traditional healers was not statistically significantly related to other variables. However when other variables were used to analyse the use of traditional remedies some results indicated that it was statistically significant. The p values were 0.020 (gender), 0.041 (occupation), 0.034 (education), 0.038 (position in household) and 0.011(income) when analysed with the variables indicated in the brackets. Therefore from my data sets it would be right to say that traditional remedies have a significant role in villages although the number of users may be a minority (only 67 respondents out of 226). Most of these remedies have been passed down the generations or are common knowledge among the population. There appears to be no uniform code of practice regarding the composition of traditional remedies as

variations depend on the combination of ingredients, geographic regions and belief systems of the population. Perhaps if these remedies were scrutinised and the good ones promoted it may help alleviate the health problems of many people, as a traditional remedy is usually a simple and affordable form of treatment.

Table 15 showing those accessing RMPs and the type of village.

Villagers accessing RMPs to cater to their needs and type of Village Crosstabulation.					
			Village		Total
			Village With PHC	Non PHC	
Option of RMP	No	Count	28	64	92
		% Within RMP	30.43%	69.57%	
	Yes	Count	6	128	134
		% Within RMP	4.47%	95.52%	
Total	Count	34	192	226	
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	28.75647	1	0.000		
a	Computed only for a 2x2 table				
b	0 cells (.0%) have expected count less than 5. The minimum expected count is 13.84.				

Those who indicated that they would access the services of RMPs were analysed and in table 15 we can see that the results are strongly statistically significant. Here two thirds of respondents from non-PHC villages indicated that they would access RMPs during the night or when the PHC is not functioning which should be a worrying factor. I have discussed problems associated with accessing RMPs (refer to page 134 to 136) therefore to see such high proportions of people accessing services from them should be alarming and health authorities should give importance to reduce the influence RMPs have in rural areas. In PHC villages only about a fifth of the respondents indicated that they would access RMPs. This is a vast reduction compared with non-PHC villages. This is mainly due to the fact that villagers in PHC villages have better chances of accessing proper healthcare. Even those who access RMPs from PHC villages said they did it because they could not access staff out of working hours, on holidays and in the night. It might be suggested if health authorities wanted to reduce the influence of RMPs in villages it is quite apparent that where the presence of the public health care system is prominent like where there are PHCs the percentage of

people accessing RMPs is far less than where the presence is limited. Perhaps if the government maintains a fully effective healthcare delivery system it may result in curtailing RMPs from practicing altogether.

Table 16 showing access to staff residing in PHCs and the type of village.

Option of accessing PHC staff residing in the village and the type of village Crosstabulation.				
		Village		Total
		Village With PHC	Non PHC	
Accessing PHC-staff-in-village	No	Count	1	121
		% within PHC-staff-in-village	0.81%	99.18%
	Yes	Count	33	71
		% within PHC-staff-in-village	31.73%	68.26%
Total		Count	34	192
Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	41.9711	1	0.000	
N of Valid Cases	226			
a	Computed only for a 2x2 table			
b	0 cells (.0%) have expected count less than 5.			

Table 16 shows that there is a highly statistically significant relationship between the type of village and the respondents accessing PHC staff who reside in the village. Nearly all the respondents from PHC villages indicated that they would access the health personnel who reside in the village if they need to; whereas only 37% from non-PHC villages declared that they would seek the assistance of these staff. Primarily this kind of a wide variation between those who live in PHC or non-PHC villages is the factor that the PHC villages have got used to the work timings of staff and know whether or when they reside in the village. This knowledge does not appear to be widespread as it mainly influences villages in the periphery of the PHC and rarely does it spread into remote and inaccessible villages. Interestingly the number of respondents from non-PHC villages who indicated that they would access staff in the village during the night was actually higher than the number who chose PHC as the first line of access for healthcare (refer to page12 table 2). In table 2 only 31 respondents indicated that PHC would be the first choice of accessing healthcare and here (in table 16) 71 interviewees declared that they will access PHC staffs that reside in the village. It

might be suggested that this kind of variation is primarily due to the limited availability of options during the night. However it reinstates the importance of the government's goal to ensure that healthcare personnel reside in villages as they play a significant role in delivering healthcare during off duty times and the night.

Table 17 showing those who access urban centres and income.

The option of accessing Urban Centres * Income Crosstabulation						
		Income			Total	
		Yellow	Green	Pink		
Access Urban Centres	No	Count 39	35	3	77	
		% within Urban Centres 50.64%	45.45%	3.89%		
	Yes	Count 82	50	17	149	
		% within Urban Centres 55.03%	33.55%	11.40%		
Total		Count 121	85	20	226	
Chi-Square Tests						
	Value	Df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	5.33108	2	0.069			
N of Valid Cases		226				
a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.81.						

When the analysis was done for those who access urban centres with the type of village the results were not statistically significant as the p value was 0.072. The majority of villagers irrespective of the type of village they stayed in indicated that they will access urban centres if the nature of illness was compelling and urgent. Similarly in table 17 we can see that the results are not statistically significant but I would like to highlight certain points that arise in this table. Here we can see that 65% of the respondents said that they will access urban centres when the nature of the illness needs urgent and compelling treatments especially in the night or when the PHC's services are not available. This type of choice by the majority may appear to be logical as opposed to relying on an unreliable primary health care system. However the question that arises is what about the 35% of the respondents who indicated that they would not go to urban centres even if the nature of illness is serious. In table 17 it becomes quite evident that 32% of the respondents from below the poverty line and 41% from marginally above the poverty line indicated that they would not go to urban centres. It might be suggested that the fear of crippling cost acts as a major deterrent and they would be likely to accept in a fatalistic way the consequences of their inaction. Only a small

number of respondents from the financially affluent indicated they would not go to urban centres but this was due to the facts that there were other alternatives available and if pressed they could afford to go. The difference for the poorer sections of society is that even if they wanted to go the cost involved would prohibit it.

Table 18 showing other options and type of village.

Other options chosen by villagers * Village Crosstabulation					
		Village			Total
			Village With PHC	Non PHC	
Other options	No	Count	26	175	201
		% within Other options	12.93%	87.06%	
	Yes	Count	8	17	25
		% within Other options	32%	68%	
Total		Count	34	192	226
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	6.323001	1	0.012		
N of Valid Cases	226				
a	Computed only for a 2x2 table				
b	1 cells (25.0%) have expected count less than 5.				

The analysis in table 18 shows that there is a strong relationship between the type of village and accessing other types of healthcare. Only 9% of the total respondents indicated this choice and in terms of percentages 23% and 9% of interviewees from PHC and non-PHC villages opted for this option. There appeared to be a difference between the conceptions of other alternatives between the types of village. In PHC villages most respondents said that they would access pharmacies or shops that stocked medicines as opposed to non-PHC villages where it was a matter of faith. This does not mean that non-PHC villagers never accessed pharmacies but many of them felt helpless and put their faith in God to help them. Even in PHC villages irrespective of religion all respondents had a strong inclination to faith, as religion and caste is intrinsically a part of their identity but the options of accessing pharmacies were mostly available to them. It might be suggested that although faith and belief systems have a significant role in everybody's lives it would be more likely to act as a source of healthcare for those who have very few alternatives. Sometimes faith and belief systems of individuals could

lead to poor health indicators as people may refuse the offer of assistance by the government (DH 2005). For example, a person may not want his child to be immunised against polio because of his personal faith.

The problem of absenteeism

Table 19 showing staff attendance and type of village.

Regularity of staff in PHC as observed by villagers * Village Crosstabulation					
				Village	Total
				Village With PHC	Non PHC
Regularity observed By villagers	Regular	Count	25	2	27
		% within Regularity	92.59%	7.40%	
	Irregular	Count	9	187	196
		% within Regularity	4.59%	95.41%	
Total	Count	34	189	223	
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	142.2187	1	0.000		
N of Valid Cases	223				
a	Computed only for a 2x2 table				
b	1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.12.				

The next question I asked the interviewees was about whether healthcare personnel attend to their duties regularly or not and if the respondents can find them when they are needed. Primarily this question was asked to see whether absenteeism has any effect on the rural population. It is common knowledge that absenteeism is quite widespread but I thought it would be appropriate to analyse the perception the rural population held. The analysis in table 19 was done after excluding the opinion of 3 respondents, as they did not have anything to say about staff attendance. The results indicate that there is a statistically significant relationship between the type of village and their opinion of staff attendance. It must be noted that these results were based on people's perceptions and were not measured against actual government records i.e. attendance registers maintained by the individual PHC. Neither was this question

targeted at a particular health worker but the entire primary health care network. Therefore these results may be subjective but the interviewees had a clear understanding of absenteeism and they voiced their opinion earnestly. According to table 19 the overwhelming majority of respondents indicated that the healthcare personnel are irregular and cannot be relied on to be there when needed. There was a vast difference between the types of villages as the PHC respondents indicated in a majority that the staff were regular but the non-PHC villages represented an entirely opposite view. This just reiterates the dichotomy that I have been portraying between those who have good access to PHCs as opposed to those that do not.

Involvement of corruption

The role and practice of corruption is virtually intertwined with almost all government departments in India and it should not come as a surprise to see that the health department is affected too. To get an in depth analysis of the views people hold and the effects it has on them accessing healthcare I asked the respondents about this practice. It was quite evident that all the respondents did realise that healthcare provided in rural areas by the government was mostly free at the point of access. However there were different interpretations of what people thought was corruption and what they thought was routine e.g. when doctors charged them a premium for prescription drugs that they stocked as little effort was placed to find out whether the doctor buys the drugs or is supplied by the government. Other obvious and certain subtle forms were well understood by the interviewees e.g. when patients are referred to other centres unless they can pay for the services in the PHC or a common ploy was when the patients were asked to see the doctor in his/ her residence to be treated properly but one would need to pay for such services. The subtleness in the later example is done primarily to cover doctors from prosecution i.e. if one is caught taking a bribe in the PHCs it will definitely end with a suspension or disqualification but when money is taken at home it is seen as a private matter and rarely dealt with the same severity.

Table 20 showing the perception of corruption and type of village

Corruption practiced in the health system * Village Crosstabulation					
		Village		Total	
		Village With PHC	Non PHC		
Corruption practiced.	Yes	Count	23	185	208
		% within Corruption	11.05%	88.94%	
	No	Count	11	7	18
		% within Corruption	61.11%	38.88%	
Total		Count	34	192	226
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	32.47369	1	0.000		
a	Computed only for a 2x2 table				
b	1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.71.				

According to the results in table 20 it shows that there is a statistically significant relationship between the perception and the type of village. The overwhelming majority of the respondents indicated that corruption is rampant in the healthcare set up but there appears to be a slight variation in the perception between the types of village. About a third of the respondents from PHC villages indicated that they did not think that the services provided required any form of corruption. Perhaps this was due to the fact that they use the services on a regular basis and also some may hold an influential position in society i.e. many respondents who had good political influence managed to use it in their favour. On the other side some of the respondents from non-PHC villages were so poor that survival was the greatest struggle in life and they could never afford to practice corruption even if they wanted. Hence they indicated that the system is not corrupt. Of course this does not mean that all the health personnel are corrupt hence some people can experience accessing the public health network without experiencing any form of corruption.

Therefore I decided to ask them in detail when they faced corruption most frequently. I had described different situations and asked them their opinion about such

circumstances. The results, which were statistically significant, and the p values were as follows,

- When accessing PHCs for minor treatments 0.001
- Antenatal care 0.003
- During childbirth 0.007
- When accessed in most major illnesses 0.036
- For accident and emergencies 0.054

The results which were not significant and the p values was, when they accessed PHCs

- For family planning operations 0.177
- Prescription drugs 0.070
- Blood transfusion 0.509
- Referral to other centres 0.226
- For eye operation 0.147

These results indicate that the type of corruption and how and when they experience differs according to the perception and understanding each respondent had. It certainly would not be wrong to say that one could experience accessing PHCs without any form of corruption; however others have found corruption by an inherent part of the healthcare system. Surprisingly most respondents were not perturbed by the idea of rampant corruption that they may face in the healthcare system but accepted it as a fact of life although a bitter aspect but wanted to be treated well and recover from their illnesses as soon as possible.

Impact of doctors

Undoubtedly the respondents perceive primary healthcare delivery in rural areas of Bidar negatively but I was surprised to see the results of the next question I asked the interviewees. The respondents were asked to give their opinion on the impact the doctors serving in rural areas has on them. This question was asked with a historical point of view i.e. it has been only in the past 2 decades that it is a norm to see qualified doctors posted in rural areas whereas in the past the villagers had to go to urban areas or prominent villages to access care from doctors. Nowadays it is relatively common to

see that doctors are posted virtually in all the regions of the district and accessing care from them must have an impact. Of course there are numerous problems associated with doctors effectively delivering healthcare but I thought it was appropriate to ask the interviewees their opinion on the presence of doctors in rural areas.

Table 21 showing impact of doctors and the type of village

		Village		Total	
		Village With PHC	Non PHC		
Impact of doctors Working in Villages	Big Impact	Count	12	28	40
		% within Doctors Impact	30%	70%	
	Moderate Impact	Count	18	108	126
		% within Doctors Impact	14.28%	85.72%	
	No Opinion	Count	3	40	43
		% within Doctors Impact	6.97%	93.02%	
	Minor Impact	Count	1	13	14
		% within Doctors Impact	7.14%	92.85%	
	No Impact	Count	0	3	3
		% within Doctors Impact	0	100%	
Total	Count	34	192	226	
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	10.46178	4	0.03332756		
N of Valid Cases	226				
a	3 cells (30.0%) have expected count less than 5.. The minimum expected count is .45				

The results in table 21 show that they are statistically significant to the 0.05 level. The majority of the respondents thought that the doctors' influence in the village was either moderate impact or a big impact. About a fifth of the respondents did not have either positive or negative opinions on the impact of doctors. The number of respondents who thought the impact of doctors in rural areas was very little was in a small minority and

no one from PHC villages indicated that doctors had no impact. Therefore it might be suggested that even though there are numerous problems associated with the effective delivery of healthcare by doctors, their services are much sought after and are very highly valued by the villagers. It could also be said that the respondents who were most disaffected by the services provided by the doctors, actually had very little interaction with the primary health network hence had a very negative view of the impact of doctors serving in villages.

Table 22 showing income status and opinion of staffing

Staffing at PHCs * Income Crosstabulation						
		Income			Total	
		Yellow	Green	Pink		
Staffing Levels And Quality of Service	Very Poor	Count	32	8	1	41
		% within Staffing	78.04%	19.51%	2.43%	
	Poor	Count	54	29	6	89
		% within Staffing	60.67%	32.58%	6.74%	
	No Opinion	Count	19	28	4	51
		% within Staffing	37.25%	54.90%	7.84%	
	Good	Count	15	18	7	40
		% within Staffing	37.5%	45%	17.5%	
Total	Count	120	83	18	221	
Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	24.70665	6	0.000			
N of Valid Cases	221					
a	3 cells (25.0%) have expected count less than 5. The minimum expected count is 3.26.					

The next question I asked the interviewees was to give their opinion about the adequacy of existing provisions and infrastructure they accessed in PHCs. The idea behind this question was to see whether respondents thought that current provisions in PHCs in terms of staffing, medication, hospital beds and other amenities were adequate or not. And if they thought these provisions were poor, did it act as a deterrent to their

use of PHCs? Basically I wanted to test if there is a perception that the current provisions are very poor and for this reason not worth giving it a try. The results were statistically significant when income and occupation were used as the variable. However when the results measured against any other variables was not significant. The p values were.

- 0.022 for staff,
- 0.012 medications,
- 0.014 for beds
- 0.020 for amenities

When occupation was used as a variable.

Table 22 indicates p value at 0.000, which is very significant. Similarly when income status was crosstabulated against other provisions p values for medications was 0.029, beds were 0.048 and for amenities it was 0.002. Interestingly when we look closely into the opinions of the respondents a varied view is represented as opposed to a lopsided view. It becomes quite clear that there is a majority who view staffing in a negative form and say that the levels are inadequate. About two fifths of the respondents indicated that they view staffing to be adequate if we take into account those who did not have any opinion. Only about a fifth of respondents indicated that staffing levels were very poor and it would act as a deterrent for them to access the PHCs. It might be suggested that not all respondents view the provisions of services in a very negative light but they would like to see vast improvements. Perhaps if the government increased the number of staff, made room for better provision of medication, improved inpatient bed facilities and ensured basic amenities like proper toileting facilities and drinking water provision in every PHC. Accordingly if this action took place, the majority of respondents who had negative opinions about the primary health care system will probably be turned into a minority and in the process increase the number of those who access the PHCs.

Table 23 showing perceived discrimination and gender

Discrimination felt * Gender Crosstabulation					
		Gender		Total	
		male	female		
Discrimination Felt accessing Services	Yes	Count	92	59	151
		% within Discrimination	60.92%	39.07%	
	No	Count	58	17	75
		% within Discrimination	77.33%	22.66%	
Total	Count	150	76	226	
Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	6.043058	1	0.013		
N of Valid Cases	226				
a	Computed only for a 2x2 table				
b	0 cells (.0%) have expected count less than 5. The minimum expected count is 25.22.				

Table 23 shows that there is a strong relationship between gender and apparent discrimination felt by respondents whilst accessing PHCs. Before I explain the results in table 23 I would like to state what it meant to be discriminated against by the PHC. Discrimination in this case did not go along traditional biases such as caste, religion and gender but mainly on an economic level. What I mean by this is that it appeared that respondents clearly felt that nowadays the most important thing was the income status of the individual and not other factors. Here it appeared that the better off financially a person was the better one got cared for. This was stated even though the element of corruption was taken out of reference but the respondents still thought the way in which they were perceived to be financially positioned was essential in order to enjoy the benefit of getting proper provisions. Instances given by the respondents for example when they waited in a queue they said those with better financial status were taken care of first and the poor are usually brushed aside. Quoting another respondent *“unless we show the capacity that we can pay for the services we will not be cared for and if we want to be seen properly we need to pay”*. Surprisingly many of the respondents from good financial positions and high caste status agreed with the perception that there is an apparent discrimination in the services provided and said

poor people will face difficulties accessing all the provisions. Sometimes it was difficult to perceive whether the discrimination was primarily done on the income status, as some poor people put the onus on their caste. However it is quite normal for certain poorer segments of society to be found in specific castes or the type of work they do. For instance agricultural labourers irrespective of their caste status will usually be poor or the community who practice jobs like skinning dead animals will inevitably be in poverty as their job is one of the most disliked in society. Therefore the intertwined nature of poverty and caste status makes it quite hard to differentiate. Hence when somebody feels he is being discriminated against because of his caste it could also be due to his income status or vice versa the exact opposite could be true. It must be noted that according to government laws it is an offence to discriminate against any individual according to religion, caste and gender and there are numerous measures introduced to stop these practices. However it is quite evident from table 23 that there is a widespread view that people still feel discriminated against depending on economic status. The results were also significant when occupation was used as a variable and the p values are 0.000 but this was not constant when income was used as an alternative. Of course the government has to be commended for banning obvious discrimination such as on religious or caste basis but it still needs to do a lot where the discrimination is subtle. In terms of poor people the perception that they will not be cared for properly when they access PHCs is quite widespread and needs to be sorted out. Perhaps if there was not this kind of perception of discrimination in the population it would be plausible to see more people access PHCs and consequently bring down the levels of morbidity suffered by individuals. However until discrimination is rooted out in all its forms it will be very hard to see the population benefiting fully from the provisions of primary healthcare in rural areas.

Table 24 showing ability of taking action and the type of village

				Village		Total
				Village With PHC	No PHC	
Intended Action To complain	Do Nothing	Count	19	148	167	
		% within Action	11.37%	88.62%		
	Complain	Count	2	14	16	
		% within Action	12.50%	87.50%		
Unaware of The procedure	Count	7	9	16		
	% within Action	43.75	56.25			
Fear Reprisals	Count	6	21	27		
	% within Action	22.22%	77.77%			
Total	Count	34	192	226		
Chi-Square Tests						
		Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square		13.24209	3	0.004		
N of Valid Cases		226				
a	3 cells (37.5%) have expected count less than 5. The minimum expected count is 2.41.					

The final question I asked the interviewees was ‘will they take any action to make any changes by complaining to authorities about the levels and type of provision offered by the PHCs’? The results in table 24 shows that there is a strong significance between the type of village and the options indicated where the p value is 0.004. There appear not to be vast changes between the types of villages as 55% and 77% of respondents from PHC and non-PHC villages indicated that they will do nothing about the problems they faced. Less than 10% of the respondents indicated that they will proceed and take measures to complain to authorities. Perhaps it is due to this kind of a majority view of doing nothing that one can see that health officials can get away without thinking much about public opinions. However I would also like to mention that most of the complaint procedures are based in the town and it will take considerable skill to get the right appointments with the individuals in charge to proceed further. This of course is time consuming and will be a strain financially. Moreover complaint procedures are not explicitly explained or made easy for individuals to grasp, especially illiterate people.

The system is not made easy where a person can pick up the phone and complain anonymously but it usually requires a written complaint format before any action is taken.

In table 24 we can see that 7% of the respondents indicated that they are completely unaware of the procedures. Therefore this category of individuals is also virtually assured of not complaining to the authorities. The data in table 24 should give a clear indication of the fatalistic attitude that the interviewees had where they virtually accepted helplessly that they were in no position to make any changes. Many respondents did mention that if they were given a chance to complain within their villages and with full confidentiality they might take more bold steps to sort out their problems. About 12% of the respondents indicated that they feared reprisals if they considered complaining against any individual. Sometimes the reprisals they feared appeared to be violence but in another sense they also feared that they might be boycotted by the PHC staff and unable to access services when they wanted. Hence the fear of reprisals was threatening in many ways and they felt that they will be the losers irrespective of the outcomes. The concept of confidentiality is not yet taken seriously to the levels we can see in developed countries hence it is probable for the individual against whom the complaint was made to take action in opposition to those who made it. Unless stricter measures are taken the fear of reprisals is a valid reason for people not wanting to officially complain.

It might be suggested that there is another way of perceiving table 24 where it can be interpreted as the voiceless aspect of rural society as it appears that very few could voice their concern and the majority would prefer to keep silent. Almost all the respondents valued the services of the primary health network but also said that it does not appear to be running on an optimum level and they feel that they are not fully benefiting from the current provision. However only a few would be willing to ask authorities to enhance the current levels of provision or rectify ongoing lapses. There appears to be a widespread sceptical view among the respondents and some mentioned that even if they asked the authorities it would be a rarity to see any action taken. Therefore the apparent apathy by the respondents could be blamed on their high levels of scepticism.

3. Conclusion

The main highlights of this chapter can be interpreted as a description of the mismatch between the theory and practice of delivering primary healthcare in rural areas. The respondents do realise and value the provisions that are effectively delivered however there appear to be wide gaps where the providers and consumers appear to be completely unconnected. If we interpret the views of the respondents as the perceptions representing the villagers it would appear to be quite clear that the vast majority of people will not take any measures to ensure that provisions are consistent or on a reliable level. Neither does the government appear to feel the urgency of resolving the major problems. The government must be credited for establishing the primary infrastructure required for delivering healthcare but with regard to the day-to-day management it would fare quite poorly.

In this chapter the differences in perception between the types of village is reiterated and found to be statistically significant on numerous occasions. There appears to be a greater acceptance and acknowledgement of the services provided in the PHC villages. Here the respondents appeared to be much more connected with the day-to-day running of these centres. However in non-PHC villages it becomes quite apparent that the services provided have not yet penetrated thoroughly as the respondents have indicated that they do not fully feel the benefits of current provision. This apparent gap felt mainly by the non-PHC villages has allowed alternative providers to thrive virtually unrestrictedly. Accessing some of the alternative providers like RMPs could have drastic consequences but people have inadequate choices and these providers are mostly readily accessible. Hence the villagers do not seriously take the potential risks involved whilst engaging with such personnel into consideration, as it would appear that they are willing to access healthcare from anyone who could solve their health problems. These risks could be avoided if the government puts more effort in effectively delivering healthcare in such a way that not only the PHC villages benefit but the entire rural population can rely on a standard provision by the government. Reducing and eventually eradicating the function unqualified doctors have in rural areas should be a high priority for health authorities. To expect any major impetus from the general public in order to ensure proper provisions are made at present would be a

very optimistic position. The Indian government and society to an extent is structured in a top-down format like a pyramid and the power structure is designed in the same manner where decisions and realms of power are taken or held with a few on the top level which get filtered down to the basement. Very little feedback or suggestions go up this structure as the process usually entails an uphill struggle. However if the status quo is maintained it would appear that the vital resource of healthcare is being squandered because most PHCs are running on a suboptimal level and do miss the targeted goals mainly by not reaching the most vulnerable in society. The government should take measure to tighten and regulate attendance, monitoring day-to-day needs and try and supply provisions according to the specific requirements of each PHC and the population it is meant to serve.

In this chapter it appears that variables like gender, age, position held in household, number of members in household, education and income did not have the same level of significance as type of village. Occasionally the validity of the results did have a greater significance when the analysis was done using these variables as opposed to using the type of village. For example when gender of the doctor (refer to table 11) and peoples preferences were analysed a strong significance was found. It might be suggested that if the authorities took these results in table 11 seriously they could ensure initially that doctors irrespective of their sex should be employed in rural areas as most villagers have indicated that they do not mind who serves them. Idealistically both sexes of doctors serving in villages would be a preferred choice but this option can be pursued as a goal to be achieved in the future by the government. Perhaps this may not be a goal to achieve if society will change completely over time to accept doctors irrespective of their gender, which should make healthcare access much broader and inclusive. Similarly there were other instances where income, education and occupation had significant results as opposed to the type of village. These results were mainly in line with the worldview that those with the poorest financial status usually have to face the worst effects on society. Some results in this chapter could be closely associated with this kind of worldview where the problems of the poorest of poor people are highlighted and their vulnerability exposed.

Though this chapter may portray the government healthcare programme in a very poor light, this was not the intention. The services provided are relevant and important and

there is scope to see vital improvements made. For instance the villagers irrespective of all the problems they face accessing healthcare do appreciate the fact that doctors are working in villages although the regularity and dependability is still unreliable and there is a lot of room for improvement. Similarly it could be said that if the right set of reforms are introduced the poor perception that most respondents have would perhaps change for the better, which would result in higher rates of access and good health indicators.

V.

Can doctors deliver health care effectively in rural India?

1. Introduction

The intention of this section is to examine the likelihood of doctors serving in rural areas being able to provide healthcare effectively to the population, when most of them have to work under severely adverse circumstances. A series of (21) interviews was conducted with doctors who work in rural Primary Health Centres (PHCs) and Sub Centres (SCs) from May to July 2004 in Bidar district, Karnataka state, India. The intention of these interviews was to obtain doctors' views about the ongoing policy of the Government of Karnataka (GOK) to attract doctors to work in rural areas with the offer of Post Graduate (PG) seats on completing six years of rural posting. Subsequently questions were asked about their views on the present state of affairs with regards to working conditions, levels of resources available, deterrents from working in rural areas and possible strategies to attract medical personnel to work in rural areas.

Most of these interviews were conducted in Bhalki and Aurad Taluk of Bidar district; these Taluks were specifically targeted as they represent the least developed sections of Bidar district. In Aurad and Bhalki Taluks there are 8 and 9 PHC's respectively. One or two doctors per PHC manage them. There are 3 SCs (also known as Primary Health Units or PHUs) in each of these Taluks, which have a doctor running them.

Traditionally it has been an uphill task to recruit doctors and other highly trained medical personnel to work in rural areas (MOHFW). Nevertheless it appears that (GOK) seems to have solved this problem, as almost 95% of the vacancies for doctors in rural postings have been taken up in Bidar district. Since the doctors have taken up their rural posts it should have been reflected by the villagers getting a higher level of healthcare provision. However chronic absenteeism, endemic corruption and limited resources have led to a poor provision of services resulting in the rural population not benefiting much from primary health care. Some doctors admitted that their services in rural areas are mainly cosmetic with little chance of effectively delivering

healthcare due to the lack of provision of vital resources. A doctor who described the predicament doctors are in said:

“We are here to wipe the tears of the people and not to do anything about stopping it, as we are powerless to investigate the reasons behind the cause or to take any preventative measures to stop it in the future”.

This chapter will examine the role that doctors play and how effectively they can provide healthcare, highlighting their problems and prospects. It makes relevant recommendations to the policy makers, who perhaps could ensure that the rural population gets more benefit from primary health care.

In the previous chapters I have discussed perceptions which the villagers had on the delivery of healthcare and highlighted some of the major problems they faced and points they thought were important to ensure a consistent level of services could be accessed. This chapter will concentrate on the perceptions of the providers of healthcare in light of the policy to attract doctors and to a certain level it will try and explain their points on the failures and success of primary health care delivery in India.

Before I go into great detail about the various aspects of the views doctors have put forward I would like to give a brief background description of the working conditions and the prevailing scenario most rural doctors have to provide services from. It might be suggested that in spite of a doctor being well trained, it would not be of much help if he or she does not have adequate resources i.e. the right staff, drugs, adequate infrastructure and transport. These are essential resources that help the doctors execute their work effectively but it appears from the interviews that were conducted that the combinations of essential resources are not usually provided together at a given period of time or on a consistent level. The point many doctors made was that they were mainly told to manage PHCs with what they have rather than what they need. In theory the present primary health care network in India is intended to cater for all the rural population but in reality it reflects a different picture. Being rather blunt it could be described as dysfunctional in many ways and there are only certain places or occasions where it is working to its full potential. Doctors being the most highly trained medical personnel in the PHCs invariably shoulder most of the responsibility for the day-to-day management of the PHCs and most of the outcomes

depend on how well they can manage the system to effectively deliver healthcare. It may be suggested that, when there are occasions with good outcomes that proceeds to adulations being given for effective delivery of healthcare, doctors would not hesitate to acknowledge this fact and accept any felicitation. However whenever a system fails it is quite common for doctors to blame various aspects of the primary healthcare network or the population and absolve themselves from any form of accountability.

On the surface it might appear quite obvious why most doctors who play a pivotal role working in rural areas are not able to provide an effective delivery of healthcare but it is not simple to pinpoint the exact reasons for this to occur. Various complex, multifaceted and subtle reasons underlie the role that doctors play in the delivery of healthcare to rural areas. If one took into account only the consumer's view of healthcare provisions most of the problems faced by them could be apportioned towards the providers. Similarly the doctors tend to blame the public partly but mainly put the onus on the lack of resources. The public have not yet taken full advantage of measures to improve the services they access (refer to chapter 4); doctors on the other hand do have certain responsibilities and powers entrusted to them and cannot be allowed to blame everything else apart from themselves. It might be suggested the criteria under which doctors could be judged may go along the lines if the present blame could lie somewhere in between the following statements "a poor workman blames his tools" and "a good workman can work well, provided he has good tools". Perhaps the answer may lie in favour of one of the statements or a combination of both statements.

2. Interviewing doctors.

The doctors who I interviewed were not necessarily a homogeneous group of people. They represented a diverse set of interests and reasons for opting to work in rural areas. Some doctors were indifferent to the ongoing policy offering postgraduate seats because they considered themselves too old, and it seemed pointless at this stage of their lives to pursue any aspirations of enhancing their knowledge. In contrast, doctors who have been appointed to work in rural areas on a contract basis were perplexed by the dilemma they are in i.e. it is a common practice of the Government of Karnataka to recruit Junior doctors on a temporary contract basis where they are paid a stipulated

salary but do not enjoy the additional benefits and perks of a permanent appointed doctor. Furthermore the contract doctor's services in rural areas are not taken into consideration in order to fulfil the requirements for the criteria insisted on by the ongoing policy to offer postgraduate seats after completing six years of rural posting. Therefore such contract doctors have indicated a different set of priorities; primarily to get a full time position before any other options are considered. However the doctors who work on a contract basis have implied that they do have aspirations to take advantage of The Government's offer of postgraduate seats eventually, provided they can get regularised full time employment within a short period of time. In my discussions with many doctors I found that many doctors had to work about 4 years before they got full time positions and in extreme examples it had taken about 8 years.

Only a few doctors managed to get appointed directly on a permanent basis. Most doctors follow the pattern of initially getting a temporary contract, which eventually converts into a permanent one. However there is no stipulated time frame for this to automatically occur, hence there is a widespread discrepancy in the amount of time contract doctors serve before they are given a full time position. Perhaps at certain times there are delays due to the fact that The Indian Government practices positive discrimination i.e. where the government is obliged to offer vacancies only to a reserved section of society such as scheduled castes (formerly untouchables and the lower caste of society). This practice is primarily done to uplift and enhance the lower or underprivileged people in society to narrow the gap that presently exists. Therefore, accordingly at certain times if a doctor does not fulfil certain caste stipulations delays could occur in changing a temporary contract to a permanent one. Currently any change of temporary contract to permanent positions mainly depends on the political will of the state government and also the financial viability. Financial constraints play a vital role in the state's behaviour, where it appears at present the state tries to prolong and delay instating anyone with a permanent contract. It is relatively cheaper to hire temporary staff as opposed to permanent staff as they have to be provided with an array of benefits, which increases the cost.

Table 1 indicating the types of doctors interviewed.

Contract doctors	Permanent Doctors	Total number of doctors interviewed.
14	7	21

I have broadly categorised the doctors interviewed into 2 sections. From the table above it is quite clear that most of the interviews that I had conducted were with contract doctors. Only a third of the doctors interviewed have a permanent status. Only the doctors with permanent positions are eligible to be accepted on the current government policy, offering postgraduate seats. On the face of it, it did not appear that there was any significant difference in between permanent and contract doctors, in terms of gauging their aspirations of getting postgraduate seats. The doctors on contract just felt that they would need to cross another hurdle before they too could join the race. The value in terms of the offer that the government is making by giving postgraduate seats is widely acknowledged by all doctors and most of them would like to participate and take advantage of this offer. They valued this offer both in monetary terms as well as an easier option to avoid formidable academic competition for postgraduate seats. Currently if one would want to measure the monetary value of a post graduate seat in India in terms of the average yearly wage of a rural doctor it would range from a minimum of 8 years to 20 years salary at the maximum (average salary £1100 per annum). Postgraduate seats attract a very high premium and have a wide variation in price. This is similar to any goods or product wherever there is a high demand it fetches a higher price. Presently Master of Surgery (MS) and Doctor of Medicine (MD) degrees are immensely sought after. Therefore due to the high demand they are offered at the highest premiums unlike other specialities e.g. Radiology where there is not a significant demand and a lower price is fixed.

The competition on the academic level is very fierce and generally postgraduate seats are granted on a razor thin advantage in between students. The junior doctors who accept The Government's policy to offer postgraduate seats see this as one of the best ways to bypass the existing fierce competition. It may be suggested this scheme should be equally valued for the monetary benefit along with the avoidance of fierce competition, as this would be beneficial to broaden the intake of doctors as opposed to the present position that is only helpful to the brightest students or the affluent.

3. Views of senior doctors

Interviews conducted with senior doctors.

Primarily the intention of this field session was to conduct interviews with junior doctors to measure the effectiveness of the ongoing policy of the government of offering postgraduate seats after completing six years of rural service. However during the initial stages of making contacts with doctors and also through the snowballing effect (Valentine, 1997) I was able to interview a couple of doctors who have more than 20 years of service in rural areas. I was surprised to see that these doctors were still practicing in rural areas and unlike most of their colleagues they did not accept an urban posting. What factors have attracted these doctors to work in rural areas and why they have not opted to take an urban posting were questions that I had in my mind before I interviewed them. Moreover I wanted to ask them about their experiences working in rural areas and also ask about the fact that they would have seen the growth of the primary health care system in their lifetime. Perhaps they could give me certain insights into the system that others might not know.

There were quite a lot of similar views expressed. Both of them knew that there was a significant unmet demand for primary healthcare and a lot more work would be needed in order that the rural population can access at least a basic form of healthcare. They sincerely believed that their presence was only effective to the population that resided in the village the PHC is in and to those villages surrounding the PHC, which had easy access to them. People that lived in the peripheries and also the people that had very little contact or access to the PHC receive little or no primary healthcare. I mentioned that it was also the duty of the doctor to visit the villages and not all the onus should be on the patient to access PHCs. One of the doctors gave me an ironical answer, as it was in his PHC they were paying the salary of the driver but the jeep has been out of action for the past year. Whereas the other doctor implied that they sparingly used the jeep, as it was prone to have heavy maintenance bills, which their budgets could not afford.

When I asked about the ongoing policy of the government to encourage junior doctor to work in rural areas with the incentive of postgraduate seats, the doctors were quite indifferent to this scheme as they considered themselves too old to try and take advantage of it. However they did show their concerns regarding this policy, as it was a big disadvantage to the doctors who work on a temporary basis. They said that because there is a very little difference in the service or duty and responsibility in between a temporary and permanent contract doctor, why should service not be counted if done on a temporary basis? Another key area in which they showed concern was the fact that doctors are expected to stay in the quarters that are provided by the government in the villages and are expected to be on call on a 24-hour basis. Sadly their pay is only calculated on an 8-hour shift with no financial incentive added to their salary for any on call work. They did acknowledge that they do not have to pay any rent on these quarters but some of them are unfit for living in as they are poorly constructed or are very poorly maintained.

The main concern that they had was that the current policy is being loosely implemented, primarily for the following reasons

- (a) Temporary contract doctors are not given permanent positions within a specific time frame.
- (b) Six years is too long a time to serve in rural areas especially if one adds the years worked on a temporary basis. They said the long time spent in rural areas, just monotonously administering primary health care leaves them far behind the present day medical sciences, making it very hard to catch up in later years. The repetitious work they said made them encapsulate their knowledge leaving very little room for any progress.
- (c) Very little financial incentive is offered to doctors who work in rural areas. They said that The Government of Karnataka pays far less to their doctors in comparison with the neighbouring states of Maharashtra and Andhra Pradesh. At present there is no difference in pay between the doctors that are posted in rural areas that are easily accessible and those areas that are difficult or very remote to access. Therefore it is obvious why doctors would like to work in easily accessible PHCs.

When I asked what factors made them choose to work in rural areas they gave me similar answers. One of the main reasons for these doctors to work in villages was

that they were local, and they have grown up in and around the villages and they also felt comfortable to practice there. They suggested that they felt they could best serve the people they grew up with. They said they knew the people in the surrounding villages and had a good grasp of their needs, therefore making it very easy for them to work in the PHC for many years. They also suggested that working in rural centres has a different appeal as the pressures felt in urban centres are rarely faced, as their work tended to deal with relatively simple and routine episodes of diseases as opposed to the complex variety of treatments expected in urban centres. Interestingly some of these facts of being local claimed to be advantageous for the doctors was found to be a deterrent by some village respondents, as they feared to complain about existing provisions or the doctors. Mainly because they perceived that if they do complain it may be taken on a personal level and people with such influence can be vindictive which can have disastrous consequences, therefore advisable to avoid any cause for confrontation. Other respondents reflected a positive aspect that these doctors were more reliable to be at work as opposed to those who commute from greater distances.

Conducting interviews with these doctors was helpful though they were not interested in furthering their education to PG level but they did provide good inputs with regards to this policy and also shared their vital experiences of working in PHCs. Therefore I thought it was appropriate to include their views and opinions especially as they had in depth knowledge on the development and ongoing policies for primary health care by the GOK.

4. Interviews conducted with junior doctors having a temporary contract.

In this section I would like to elaborate on the interviews conducted with doctors who have temporary contracts. It is evident from table 1 that these doctors formed the majority of the interviews. I did not anticipate interacting with so many doctors in this category or designing the structure of my interviews to accommodate contract doctors but I made relevant adjustment and found out that they had an important contribution to make towards my research. These doctors also did not represent a homogeneous group of people because of the different periods of time they have been serving in

rural areas. There was quite a wide spectrum of representation in terms of time they have spent working for the government and also different stages of temporary contracts they perceived themselves to be in. On one hand some doctors have just joined recently to work in rural PHCs, whereas on the other hand quite a few doctors were on the verge of getting their permanent contracts within a short period of time. Hence there was quite a diverse set of views and opinions expressed. Overall there was a sense of a common bonding, where all the doctors interviewed in this section showed a keen interest in taking advantage of the ongoing policy offering PG seats, provided that the question of their eligibility to enrol for this programme is solved in the due course of time and that they cross the hurdle of getting permanent positions first.

The doctors without permanent contracts have a major drawback with the fact that their service in rural areas is not taken into consideration to fulfil the criteria stipulated by present PG policy i.e. currently only rural service of doctors with permanent positions is considered. A majority of doctors said that they feel the PG policy is quite discriminatory against them, as they personally felt that there was very little difference between them and the doctors holding permanent positions, in terms of the roles and responsibilities each of them are given. Therefore it appeared quite intriguing for these doctors, why is there a need for such a bias to exist? Presently the delays and inconsistent timeframe in which doctors are given permanent positions are seen as a big hindrance for them to get involved with the PG policy. None of the doctors I interviewed, including those who knew they would get their full time post soon, could precisely mention from when they would get their full time positions. It was a case of helplessly waiting for the government to issue orders according to whenever or whatever suited the political party running the state, without considering on what effects this inaction might have on the junior doctors or the PG policy. Due to the inconsistency in the time taken to convert temporary contracts by the state government most junior doctors with temporary contracts had a different set of priorities, firstly to get a permanent position and somewhere down the pipeline to fulfil their ambitions of getting a PG degree.

Some doctors who had recently joined PHCs on temporary contracts expressed that at present they are in a helpless predicament with regards to the PG policy and can do

very little to change their status. Because they feel it would be an enormous task to challenge the policies of the Government of Karnataka, as it would involve relentless representation and formidable lobbying to make any change. Being very pessimistic a junior doctor expressed that *“the PG policy is a distant mirage and after an arduous process approaching it, it appears to be very close but then it seems to go further away as new obstacles come in place of the old ones”*. However other doctors were more optimistic as they were hopeful that eventually there might be a change for the better. They expected these changes as they were inclined to join certain unions that have good influence with the government or to join a forum representing junior doctors through which their views could be expressed.

The question that kept arising in my mind regarding the doctors who work on a temporary contract was ‘why do junior doctors choose to work in PHCs?’ And what factors really attract them to work in PHCs? Because on the face of it, it appears that by taking a temporary position one takes on a very unfair bargain where most of the odds are set up against them. The answers to the above questions, although I did not get it explicitly explained whilst conducting the interviews, were indicated implicitly in the discussion and dialogues that I had with the doctors. Initially it might be considered that it is just a norm for most employees to be taken on a temporary basis for a certain amount of time on a probationary period but in the case of junior doctors it appears that the Karnataka government keeps this status lingering for long periods of time e.g. a doctor mentioned that he worked for 8 years before his permanent position was awarded. There were allegations made that in extreme cases doctors had to wait 10 to 12 years before they got their permanent position. The doctors mentioned that there are only a few instances of doctors getting appointed directly on a full time basis; hence it was the norm for them to take temporary contracts. Though the inevitability of accepting temporary contracts might appear to be the only way out for the junior doctors at present, there is a sense of a concealed hidden agenda whilst working in the PHCs.

The reason I suggest there may be other motives for doctors to work on temporary contracts is with regards to what appears to be a paradigm shift. Doctors are supposed to be under a Hippocratic Oath, which is very service oriented and focuses on patient care over any other motive or incentive the doctor may have. In India this type of

oath is still relevant but due to over commercialisation of medical colleges and most of the medical practices, nowadays it appears that commercial success is the main motivator, and to a lesser extent the privileged social status attracts doctors to join their profession as opposed to it being a service oriented work. Medical education in India requires a lot of financial resources to be invested the rate of which is much higher if one took into consideration private medical colleges. People invest large sums to become doctors but not with an altruistic motive but mostly to make handsome returns on this investment. Quoting Vasenwala 2005

“In India the quintessential reason for students going to the medical profession is not because of service but economy. You stop the migration of doctors or their lucrative mega-hospital practice in the metros and you will find no one wanting to become doctors.”p.1.

I partially agree with this statement as it portrays an ongoing view of most doctors but there are bound to be other motivations that attract doctors into their professions. However the path to becoming commercially successful for every doctor is still relatively elusive unless a number of factors aid this progression. Presently in India after graduating in medicine a doctor has the option of working either in the private or the public sector. In the private sector a doctor either joins an established firm or opens a sole proprietorship practice. To run and own a practice would be most desired by doctors as they themselves can solely enjoy all monetary benefits but this requires a doctor to be businesslike and be able to make a profit. To run a successful private practice requires a lot of initial financial investments and also a steady flow of patients. To gain the confidence of the patients takes a relatively long period of time. Like any other business elements of competition, new inventions, creation of new laws and restrictions can have a detrimental effect on running a private practice therefore making it quite a risky field. The option of working for an established firm is also difficult unless a doctor is financially viable (i.e. the firm makes a profit over the amount it spends on the doctor). It is highly unlikely that the firm would employ a doctor who is financially unviable. However enticing the private sector may appear at present it is not suitable for all doctors as it is very ruthless and only the highly skilled entrepreneurs, risk takers, those who are financially sound or have some sort of lineage (e.g. where a junior doctor can join his father's practice), can actually take on such a task. Though the option of establishing oneself in the private sector is always

left open very few doctors take it up initially because their inexperience might be their downfall.

Option of temporary contract

Given that private practice although potentially very lucrative is not very easy to make commercially successful, hence some doctors do not mind joining the government service albeit on a temporary contract basis. The government offer of work on a temporary contract basis might not be so bad after all according to the feedback I got from some of the doctors. It became quite apparent that many doctors saw this option as a stepping-stone before they ventured into various other choices available. Many doctors took advantage of the fact that presently the public healthcare system is monitored very loosely at best hence does not put much pressure on those who work in it. Therefore doctors have relative freedom to do as they please with very little need to worry about any repercussions. One of the doctors I interviewed said, *“We get paid for doing nothing. Rarely do we have inspections therefore we have a lot of time for ourselves”*. Although the PHCs are meant to be working throughout the day it might be suggested that rarely this was true in practice. Only for a few hours a day did the doctors practice in the PHCs, the rest of the time they used according to their own agenda. Certain doctors used the relative free time to study for PG courses whereas other doctors established private practices and concentrated on promoting their own plans. The main reason, most doctors implied, as to why they have taken to work in PHCs on a temporary basis is because they intend to gain vital experience and to create a niche for themselves i.e. once they are recognised and their service well established it makes it much easier to set up a private practice for financial gains.

Other doctors gave a different perspective. They said that they intended to work in government service on a temporary basis primarily to get a steady source of income irrespective of the fact whether they worked or not and all additional income from private practice would act as a bonus. Nevertheless if any other opportunities that are favourable appear they would be quick to abandon the government service for the better prospects.

These facts should be worrying for health authorities, as they appear not to have thoroughly considered all the aspects of appointing doctors on temporary contracts or prolonging their status for many years. It appears that the GOK is filling vacancies in PHCs mainly by appointing through temporary contracts. This will look good in an accountants view as these doctors cost far less than permanent doctors but in the long run acts as an obstacle to the smooth running of the PHCs. Some doctors on temporary contracts did mention that they felt unmotivated to work when they compared their salary with other health workers i.e. when compared with nurses and other technicians who had permanent jobs some doctors earned in between half and three quarters of their salary. The salary offered to doctors working on temporary contracts presently is about ₹100 a month, which is very low even by Indian standards and virtually any doctor, knows that he or she could earn much more. The government also appears to be taking advantage of the fact that Karnataka produces quite a lot of newly graduated doctors every year when compared with other states. The fact that there is a relatively large supply of doctors cannot be literally interpreted as most of them wanting to serve in rural areas, as there are quite a number of options to choose from. The logical conclusions for these doctors to work for such low pay could lie in the assumptions that either they are incapable of earning more on their own or that they have ulterior motives. Ulterior motives would follow this route of thinking where it is commonly known that in certain circumstances people pay more money than what they will officially earn. For example it might be suggested that a custom official pays a huge bribe (more than anticipated salary) to be positioned in a lucrative airport where he or she can earn unofficially much more than the bribe paid. There are other examples that may appear to defy logic like it is commonly known that people pay Rs 30000 to an arrack (distilled spirit) contractor to manage a shop where the salary is Rs 12000 per annum. Although it may appear unsound but the logic behind such ludicrous moves is that no financial gain will be made selling arrack but on the sale of other extras that arrack drinkers like, such as potato chips, pakoras, boiled eggs and chillies there is a huge margin to be made and as sales increase it will eventually lead to a good profit. Similarly by working in a PHC on a temporary contract to a certain extent can be seen in this kind of warped view of earning.

There is another disadvantage of paying doctors poorly as the doctors do not feel the payment received is not attractive enough to keep their positions and hence do not feel

the impact of leaving their jobs as opposed to walking out of a well paid position. There have been examples where doctors when being reprimanded by the authorities which brought about an immediate reaction of tendering their resignation (DH 2006). It might be suggested that the government should seriously rethink their policy of recruiting doctors on temporary contracts, as these doctors do not appear to be firmly involved with all the policies or are securely attached to the government's agenda of properly delivering healthcare. Financially it may be suitable for governments to use temporary contracts, as it appears to be solving two problems with one stroke i.e. filling vacancies in PHCs and also reducing the financial burden. However it became quite apparent from the numerous interactions I had with these doctors that they felt discriminated against and were not motivated enough to effectively deliver healthcare.

Opinions of PG policy from doctors on temporary contracts

The views expressed by temporary doctors with regards to the policy promoted by the GOK did not differ much from those of the doctors having a permanent position. Therefore I took their views expressed into consideration for evaluating the policy promoted by the GOK. If at all there appeared to be an observable differentiation it was to do with the levels of enthusiasm anticipating getting PG positions as it appeared that their main priority was to get the permanent position first before they can aspire to higher academic achievements. Among the doctors with temporary contracts the ones who had recently joined were quite explicit with the fact that they were not primarily attracted to join the government's services with the hope of getting PG positions but they had other reasons for joining this service. Most of the doctors belonged to Bidar district and wanted to find work within the district and the prospect of working even in remote and isolated PHCs did not deter them as opposed to migrating to other districts to find work. Neither did the thought of commuting between the PHCs and mostly from the town stops them from working in PHC although some did strive to get PHCs that were easily accessible. Some of the doctors did not have to commute very long distances as they lived in villages close to the PHCs therefore this aspect formed their main attraction towards working in the public health system. There were some advantages for PHCs having doctors who lived in close proximity, as they tended to know the local needs and the most vital benefit was that they were more inclined to be attending their work regularly and it appeared that

the villagers knew where to access them if they were unavailable after official hours. The disappointing fact that the doctors on temporary contracts were not eligible for the PG policy promoted by the GOK did not stop them from expressing their views on this matter.

Firstly they did not see that their services provided in rural areas were valued appropriately by the government as opposed to working for the defence forces that work in remote and inaccessible border regions but almost all aspects of life's needs are catered for by the government. Although the doctors are battling diseases and illness they felt there was not even a token acknowledgement for the services provided perhaps by awarding medals or awards. It is well known that people serving in the country's defence forces are relatively well taken care of, and are helped with additional needs like housing; the government normally provides schooling and other amenities. In the same light it is a pity that similar levels of support are not offered to doctors serving in rural areas where getting all the other support networks needed for an effective healthcare system still appears a distant feature yet to be realised. Instead their experience was that doctors on temporary contracts are thrust into the forefront of healthcare delivery with virtually no support or powers to enable them to manage the system properly.

Secondly they felt that the PG policy was not thought through thoroughly as there appeared to be no uniform procedure in allotting seats according to one's desired field of interest i.e. if they desired to be a surgeon there was no guarantee that they will get a PG seat in that field. Similarly they said that six years was too long a time for anyone to work for a PG position and they saw the prospects in the neighbouring state of Maharashtra were much better as the time scale taken for the eligibility of PG seats was much shorter. At best they saw the PG policy as something that they could aspire to but at present the system is not straightforward and easy enough to build, into future plans for doctors. There were some doctors who were very critical and said that the PG policy was just an illusion whereas some others had the view that at present it worked like a lottery and not something that was reliable and only those who are lucky can benefit from this policy. However all the doctors with temporary contracts said if the policy was made very clear and it could meet the demands that modern medicine creates it will be a worthwhile goal to pursue this policy. Similarly they

jointly voiced their concern that the periods they served working on temporary contract should be taken into account for the eligibility for a PG position as opposed to it being considered only from the time of them getting permanent positions. At present due to their circumstances they may appear not to value this policy but in reality all the doctors knew the financial and academic benefit that they could get if they participated in the policy.

Finally with regards to their perception of the services in rural areas, the people's perception and regarding the problems and prospects of serving in rural areas there appeared to be no differentiation between the types of doctors. They did mention that provided they regularly attended their duty they can make a good impact delivering healthcare and people have a good regard for the services they provide. Virtually all of them faced the same problems and prospects in every field along with doctors who have permanent positions apart from the aspect that is finance in which there appeared to be a wide rift. Doctors with temporary contracts said in most cases they earn less than 50% of their colleagues who have permanent positions which they said was unjustifiable as the workload and responsibilities were the same. In some cases the low wages gave grounds for some to justify forms of corruption and absenteeism (refer to page 209-216). In a slightly related matter with finance but mostly related with the power structures some doctors said that they found it blatantly insulting due to the claims that some of the salaries they got paid were less than other health workers who had lower qualifications but permanent positions. This aspect often meant that even though the doctor was supposed to be in charge and manage the PHC, subordinate workers with permanent positions often did not consider their advice as important, as they knew he/she did not have the same amount of power as doctors with permanent positions.

The power structures are designed in such a manner that most of the actual power lies with the district health officer and all the health personnel are accountable and are managed from that office. Doctors have only a limited role to play. Hence even if the doctor especially when working on a temporary contract knows that a particular problem is occurring he or she can directly do little to make right the situation and has to follow protocol by alerting higher authorities. However securing equity of pay with colleagues who have permanent positions may be a distant goal and not a common

situation throughout the world as it would be a rarity to see people earning the same amount of pay as colleagues with permanent positions. Health authorities should at least bring down to a reasonable level the disparity between the types of doctors. During the interviews some doctors said *“if they were paid well and got proper financial incentives like hardship allowances for serving in rural areas it could eliminate the need for corrupt practices to occur in PHCs”*.

Perhaps conceding to such demands may be an appropriate action to take into consideration by the health authorities. In practical terms achieving such financial goals may appear a bit idealistic because there could be the potential of triggering an effect where a succession of groups of employees start making inflationary demands which the authorities will find difficult or impossible to meet. However if the right balance could be made between satisfying doctors' demands and other health workers' needs, perhaps then one could see doctors concentrating and seriously considering their role in primary healthcare delivery. As opposed to the present terms where the financial incentives are relatively poor and even the process of relinquishing temporary contract work does not have much of a serious impact as financial loss is relatively low. If doctors were well paid the fact that they will lose substantially if they lose their job may act as a major deterrent and possibly induce them to work appropriately.

5. Views expressed by permanent doctors.

These doctors I interviewed can be considered the most important with regards to the GOK policy, as they were most likely to benefit from participating in this programme. All the doctors in this segment have expressed a keen interest in ensuring that they will take advantage of the existing policy to get postgraduate seats. It must be noted that their priorities are different with regards to the intensity and keenness with which they would like to pursue the goal of getting postgraduate seats. Primarily they felt that this policy is a positive policy, which works as an incentive to encourage doctors to work in rural areas. Presently there are not many incentives to encourage doctors to work in rural areas and this policy offering postgraduate seats is something that they would look forward to take advantage of in the future. The doctors expressed that they were not given any additional financial benefits for working in rural areas as opposed

to those who work in urban areas. Neither was their work viewed or appreciated in their own personal view as a service to the nation and by the authorities in charge of overseeing the primary healthcare delivery. Therefore the offer of postgraduate seats by the government appears to be the only alternative that is presently available for junior doctors to benefit from. Junior doctors working in rural areas can bypass the monetary value as well as the fierce competition that is otherwise involved in procuring postgraduate seats, which is very much appreciated by the doctors.

However these doctors have expressed sincere reservations and severe criticism in the way this policy is currently being implemented and enforced. They blame the loose implementation as a drawback. The doctors said that even though they completed the stipulated criterion of working in rural areas for six years the postgraduate seats were not available on the time of completion. They expressed that it is very rare to see that junior doctors get their preferred post graduate course on time, hence this makes them constrained to work for longer periods in their rural postings. A suggestion was made that if doctors were given a fixed period of time to choose their preferred choice of PG and after that phase the government can organize and groom them in such a manner that it ensures the doctors can fulfil their desired choice near to completing their rural posting. In other words in the initial 2 years of getting a permanent position the doctors should be given time to form their choices after which the other 4 years could be used to strive for that goal. As opposed to the present form in which there is no clear designation of PG choice and it almost appears as if it is a lottery after doctors finish the stipulated time working in rural areas.

Another area of concern passed by some doctors was the fact that they perceive that a similar policy of offering PG seats is used by neighbouring Maharashtra State, where it appears that the state has classified the PHCs into different categories and those doctors who work in the most rural interior and inaccessible PHCs could be eligible to get PG seats after completing only a year's service, thus proving quite enticing to take up such an offer. It must be noted that the apparent differentiations between Karnataka State and Maharashtra State in terms of offering PG seats was conferred by the interviewees and not by the governments concerned. My research was intended to concentrate on Karnataka State hence I did not try and get the opinion of doctors from neighbouring states to confirm this policy but the pursuit of getting any documentary

evidence appeared to be futile as sources were limited and hard to access. Whereas in Karnataka State there is no distinction with regards to the accessibility of PHCs, and therefore it was quite obvious why certain doctors were unhappy with this policy.

Moreover in Karnataka private institutions run most of the medical colleges and they tend to give PG seats to individuals who they prefer (students from within their institutions) or for a premium fee. There are some measures endorsed by the state that irrespective of the type of institution there is a quota for the government candidates the proportion of which stands at 50-50 for most institutions and in exceptional cases 75- 25 in favour of the private college. Even with all the reforms being introduced the government seats are limited to about 30% of all the seats allotted (DH2005). In addition the annual common entrance exams that the government conducts for PG aspirants who appear to get first preference on their choice of PG and only a small fraction is allotted to those candidate who are termed as in service candidates or who come under the umbrella of the PG policy. Many doctors said that they felt this type of low priority for doctors working for the government getting selected for PG was discriminatory, as it appeared that their services were not valued as opposed to those who can acquire PG seats by merit or other means. They said that doctors working in rural areas should be rewarded for their service and not put through to the same level of struggle as those who do not work in PHCs.

Impact of corruption on the PG policy.

One of my main emphases in this field session was to probe the possible effects of corruption on the policy to offer PG seats. Corruption in India is rampant and has filtered down to the lowest level and presently India is accredited to be one of the most corrupt nations in the world (CI 2003). Therefore I had expected that one of the main reasons that the present policy of offering PG seats might not be fully working, would be that corrupt methods were accommodated into the policy hence making it quite ineffective. Therefore I asked the question whether they experience any form of corruption with regards to this policy or do they know of anybody bypassing / bending the rules by using such methods. I was surprised that all doctors except one said that the policy offering PG seats is corruption free. They did not practice it or knew anyone who got through the system by using any method of corruption. Only

one example was given by a doctor, of someone who used his or her influence or corruption to bypass the stipulated period of six years service in PHCs. The allegation was made against a doctor who came from a prominent family who are politically active. Often people with a major clout of political power are susceptible to misuse it hence it was not surprising to conclude that such a doctor could manage to bypass the policy to get a PG seat. It might be suggested that unless one has very good political influence the present PG policy is virtually free of corrupt practices. Perhaps such an example only highlights the cynical perceptions that in India that rules and laws apply to the general public and for the elites they are a law unto themselves. It must be noted that as a researcher I did not probe into this allegation mainly due to the fact that it will entail a painstaking process and also there would not be a guarantee of my safety.

Almost all doctors said that they did not have the money or influence to alter the course of the PG policy. Certainly some doctors mentioned that they had to use money or political power in order to get posted into a PHC of their choice. This was done for their convenience i.e. in order to avoid travelling long distances whilst commuting to work. However at present it appears that these internal corrupt practices did not have any overbearing influence on the general procedure of the PG policy i.e. doctors are given PG seats only after six years of service and not less. I have come to this conclusion because most of the doctors interviewed expressed that they do not have the means to influence or could not use methods of corruption to alter the PG policy in their interest. Neither could most of the doctors give examples of instances where other doctors or colleagues used any form of corruption to get PG placements.

Therefore I could say that the PG policy is relatively corruption-free as most doctors are given PG positions only after completing six years or longer in some cases of rural service. Nevertheless one cannot rule it out completely as it may be well hidden and not common practice or knowledge for the time being. Perhaps at present corruption may influence the type of PG seat being offered. Perhaps if I conducted these interviews in affluent regions of Karnataka where doctors have got the means to offer bribes, I might have come to a different conclusion.

The financial and academic edge this policy has was much appreciated by permanent doctors but on a similar level as other doctors. The main frustration was that it did not appear to be very tangible and it was subjective to numerous conditions being fulfilled. This did not completely subdue their outlook but most doctors had a high level of hope to qualify under this policy eventually. It might be suggested from the interviews I conducted; most doctors thought it was good that the government at least has some form of an offer of PG seats in comparison to nothing being offered.

6. Field observations on the functioning of the PHCs

In this section of the chapter I would like to discuss the perceptions and observations I had during my research sessions where the theory and practice of primary healthcare delivery can be discussed in detail. Furthermore questions answered by doctors regarding other aspects of primary health care as opposed to the specific questions regarding the PG policy will also be included and discussed. Describing the present state of the primary health care network in Karnataka especially in its north-eastern regions, one would not have any qualms in saying that it is poorly functioning and there is a lot of room for improvement. It is an accepted fact that the northern districts of Karnataka comprising Bellary, Bidar, Bijapur, Gulbarga, Raichur and Dharwad show poor health indicators due to the uneven development in the health infrastructure and in the delivery of services (Seshadri 2001). However there are various reasons for the primary health network to be in the present situation. In this segment I would like to illustrate certain reasons for the primary health network in rural Karnataka not being up to the mark according to my observations.

The basic physical infrastructure to facilitate the PHC network is still lacking in many parts of India according to (WHO1). However during my field trip what I could distinctly notice when I visited 25 PHCs in the district, all of them had a building to administer healthcare from and barring three centres all of them had facilities provided for the doctor and other staff to reside in. However these buildings varied in the condition they were in. On the one hand some buildings were very old and in a dilapidated state requiring essential repair and maintenance, while on the other hand some of the PHCs were built recently (estimated to be built within the past 5 years)

and stood in relatively good condition providing basic amenities such as drinking water and toileting facilities. In spite of most of the PHCs having provisions for housing quarters for the doctor and other staff only a handful of doctors actually resided in the house provided for them in the village. Most doctors preferred to commute either from the town or from neighbouring villages where they had their own homes. Although the provision of residence for staff and doctors was meant to solve the problem of villagers accessing healthcare during off duty hours, the consequences of the fact that most doctors do not stay in their official residence meant that during off duty hours the villagers are most likely not to have any provision of healthcare. Certain doctors had particular valid reasons for not staying in the house provided; for example women doctors feared their own security and felt vulnerable if they were to stay. Some doctors said that due to the poor state of building and lack of basic facilities like drinking water, toilets and regular provision of electricity made it very unlikely for them to stay in the village. Most doctors voiced their concerns and were vehemently opposed to staying in the villages, as there was no financial incentive to do so. Staying at the village will result in patients accessing healthcare during their off duty hours, they mentioned that they did not have any objections to treating patients but said that it is unfair that the government never pays for the extra hours of service contributed. Plainly put in the words of some doctors *“the government expects us to work on a 24 hour basis but pays us on an 8 hour scale. How can they expect us to stay in the village and work during our free time?”* Doctors also mentioned the lack of basic amenities like schools or higher educational facilities and other vital resources that are readily available in the cities e.g. variety of shops, government offices and entertainment and amusement venues. Therefore they consider it is pointless to bring up young children or family in the villages, as it appears to them that it leads to backwardness rather than progressing in life. Hence most of the doctors found it convenient to commute and opted not to stay in the village.

The fact that the doctors are commuting between the town and PHCs or from neighbouring villages, leads to serious repercussions for the functioning of the PHC. The acuteness of these repercussions depends mainly on those who commute from towns and to a lesser extent those who commute from neighbouring villages, because of the perception of the time taken to travel to the PHC. Of course other factors like

the poor accessibility because of deteriorating conditions of roads, public transport and factors such as remoteness and inaccessibility are also counted. Perhaps only on rare occasions does one find that doctors arrive on time or work for their stipulated 8-hour shift (rare occasions are for example when there is an immunisation drive or external observers with authority have come to scrutinise their work). According to what I observed, doctors arrived at the PHC to start work for about 11-11:30am. They tended to work until early afternoon 2-3pm and left the PHC. They tended to work only for half the day hence making the chances to access healthcare for the villagers bleaker. Few doctors depended on public transport to commute, which are reliable i.e. they ply daily, but are not known for keeping good time. Quoting a doctor I interviewed *“The government should improve the frequency of busses. If I miss the bus I have to wait another 5 or 6 hours to get the next bus. Hence it can deter my going to the PHC on that day”*. This further reduces the chances for the people to access healthcare, as there is no stable timetable of when the doctor will be available.

Absenteeism

Apart from the irregularity of the doctors attending and keeping time whilst working in PHCs the predicament is further worsened by chronic absenteeism. Chronic absenteeism by doctors is very common and is an ongoing practice by many doctors similar to the situations mentioned in a report conducted in rural Rajasthan on the provision of healthcare (TNYT 2004). The remoteness of certain PHCs along with the poor monitoring of medical personnel by authorities has created an atmosphere of virtual impunity where only on rare occasions is any punitive action taken. The worst example that I came across of chronic absenteeism was when I pursued a doctor to interview him, over a period of 2 months I passed his SC more than 10 times and I made enquiries of whether he has been in. However all attempts were futile as the doctor was not available even once during this period. When I enquired with other staff and the villagers, they said the doctor hardly ever comes and it is quite common that he does not turn up for weeks. The perception that I got regarding the problem of chronic absenteeism is that it is due to a poor monitoring of medical staff by the authorities because at present they are mainly monitored on a monthly basis when they meet at the Taluk level. Rarely do they get surprise visits by officials perhaps occasionally one gets to read in newspapers about vigilance committees making some

checks (Deccan Herald 2005) but the probability of any action being taken is still relatively low. Presently many doctors get away with being absent mainly because of the remoteness and inaccessibility of the PHCs, which creates favourable circumstances to avoid any detection by authorities. Moreover the people in such villages consist of mainly the voiceless poor who do not tend to complain to the authorities due to the fear of reprisals or unwanted hassles. Primarily the people in such places do not complain not because they do not want to but along with the fear of reprisals from different angles i.e. from the person who they complain about or from supporters of that person (perhaps the person's caste members and other associates). There is a combination of effects that stop them from complaining firstly sheer ignorance of the procedures; secondly, the subsequent financial cost that will occur for example on transportation to the town, time and money spent on waiting to meet the right authorities. The financial aspect of the complaints procedure has a debilitating effect on poor people who cannot afford to give up what little they possess especially when they are living on a hand-to-mouth existence. Thirdly illiteracy also confines them to a very limited level of what they can carry through. What came to my notice was that the absenteeism is more prevalent in PHCs that are not located on main motorable routes but in remote and inaccessible areas. However it was quite common to see a doctor absent on Saturdays even though they are supposed to be working for half the day, usually they are entitled to a whole day's holiday every second Saturday but it appears that they have ignored that fact. Being absent on Saturdays is quite widespread and is not just a phenomenon of remote and inaccessible PHCs.

The unreliability of doctors perhaps may not prove to be a difficulty with the villagers that stay in the location of the PHC, as they do not need to commute for long distances to access healthcare. Moreover they have got adjusted to the pattern by which the PHC works and literally know when to approach the PHC even if the window of opportunity may be small i.e. the PHC works for a short period of time in a day. However this has a detrimental effect on the population that wants to access healthcare from villages that are more distant or remote in the peripheries of the bounds of the PHC. I say this as it involves an element of risk to be taken by the population of such villages because on getting to the PHC they might find out that there is not anyone to deliver healthcare. This might be disappointing to them and

most likely not a risk worth taking. Currently with the network of telecommunications¹ in between villages still in its infancy and most communications still done by word of mouth it entails a very slow process and it does not help those seeking healthcare from distant villages to take the risk of going to PHCs where the provision of healthcare is infrequent and unreliable. However if there was a good network of quick and reliable communications between the villages it would help greatly to reduce the risk, time and money wasted in pursuing healthcare where the providers of it are irregular at work. The perception of irregularity of medical staff is widely acknowledged by the rural population. They responded overwhelmingly that almost all of them are irregular. (This was the opinion that rural people gave me when I asked them during their interviews.)

The lack of staff, drugs, equipment and other vital resources.

Numerous studies have been conducted (see chapter 1) on various aspects of healthcare in rural areas of India and most of them have pointed out that those deficiencies in vital resources and poor coordination in administering the levels of staff required are having an adverse effect on the primary health network. Mavalankar et al (1996), Kamat (1995), Rao (1998) and Murthy (1999) have all pointed out that the deficiencies in the delivery of healthcare in rural areas are due to the fact that all the components of primary health care are rarely organised together at a given period of time. In other words for example when the human resources are made available with the stipulated amount of doctors, nurses, lab technicians, MPHWS and ANMs there is a lack of effective drugs or basic components for a laboratory to function. On the other hand perhaps this situation is also apparent where the primary health network may get the human resources and other vital resources to adequate levels, however the infrastructure is in a dilapidated state and requires urgent repairs, hence healthcare cannot be delivered effectively. Deficiencies in the primary health network are mainly portrayed on the following fronts: human resources, drugs and equipment and basic facilities like electricity, drinking water and transport. Unless proper

¹ The government has an ongoing programme to provide at least 1 telephone in every village. Most PHCs have a telephone. However the rural telecommunications service is still very temperamental and the population have yet to take advantage of its use as the majority of the rural population, say over 90%, do not use telephones.

combinations of all these resources are put together, the smooth running of the PHC will still be affected.

My observations are similar to the research previously carried out in this field and personally cannot highlight any new information regarding the deficiency. However these were a few of the perceptions that I got during my field session. When vacancies arose due to ANMs and nurses being on maternity leave, it appeared from discussion with doctors and staff that rarely are such vacancies advertised for or filled. It is still an ongoing problem to recruit female doctors in most of the remote PHCs. Laboratories functions were impeded sometimes due to the lack of lab technicians or poor supply of essential agents to enable it to function.

The government (PCI) acknowledges that the present state of health care provision is not up to standard and offers the following reasons for its shortcomings (refer chapter 1 page 37). The limited availability of effective drugs, primarily restricted due to the cost, leads the doctors prescribing them to ration such drugs. Sometimes due to such rationing it enables corrupt practices to prevail for example in Kamat (1995) where the doctor justified charging patients for effective drugs with the pretext that if he was to give it free it would finish within weeks, as all the patients desired to get the best treatment available even if they do not require it. However whilst I was observing many PHCs the doctors there mainly complained that they are well stocked with drugs that are very low in demand and usually they end up throwing them out after the expiry date is over. Even though they have repeatedly mentioned to the authorities about them not wanting the quantities given to them at present of such slow moving drugs, the authorities appear to have ignored their plea.

The functioning of the PHCs is seriously impeded by the lack of vital resources and this has ensured that the primary health system limps on instead of running smoothly. Of course there are financial restraints on any healthcare network and no system in the world has the luxury of unlimited resources. In developing countries such as India there are severe restrictions on the amount of finance it can make available towards its health budget. Such countries have to ensure that they stop all levels of wasting resources however small to enable an increase in investment on health.

The role of endemic corruption in PHCs.

Corruption is endemic in India and has infiltrated virtually all the public departments (TI 2004). Unsurprisingly the health department is also affected and it is in the vice-like grip of corruption. I would like to discuss two levels of corruption that exist at present according to the observations and perceptions that I got during my field session. Firstly it is claimed that there is widespread corruption within the health department but I do not want to probe deeply into these claims, as it is hard to substantiate any of them with facts and figures of the internal working of the health department. Because most of the corrupt practices of the health department are done secretly, hidden away from the public gaze and it is done with the convenience and collusion of corrupt officials along with their business partners/agents. Hence it makes it hard for any researcher /outsider to examine such allegations. However a few examples of internal corruption were given to me by the doctors that they have allegedly paid authorities higher up to be transferred to a particular PHC of their choice or sometimes if they do not want to be transferred from their existing position. Though these allegations cannot be substantiated because if anybody is proven to be corrupt in any public department he or she gets suspended immediately and consequently they have to relinquish their position if proved guilty. Doctors also made allegations that they are over supplied by infrequently required drugs and equipment because it was implied that financial margins could be made and hence a source for corrupt practices to materialize. Occasionally such allegations are backed up with reports that show any action taken by officials as reported in the newspaper (DH 2005). Most corruption that takes place within the health department occurs quite efficiently, with only a few hitches and mostly unseen by the eye of the public. The general public are aware of such practices but at present appear unable to do much. It would not be justified to say that corruption in India is carried on in an untrammelled way as there are laws against the practice of corruption and punitive action is taken on those who are found guilty. Nevertheless corruption has cleverly managed to avoid obstacles placed in its path and appears to be a step ahead of the law. Corruption that takes place within the health department may not affect the general public directly

because they personally do not participate in it, as opposed to them actually offering bribes to acquire healthcare from a government doctor or other medical personnel.

The second aspect of corruption that I would like to explore is the corruption that takes place in between the provider and consumers of healthcare. The consumers of healthcare have to pay unofficially for drugs and healthcare when it is actually supposed to be provided to them free of cost. This type of corruption has a direct effect on the public as they are forced to pay money which most of them can ill afford, especially those who live in poverty in rural areas, as they appear to be in most need of healthcare, and feel the ill effects of corruption. When I asked the rural respondents about their experience of corruption over 90% of them replied that it had a major impact and that they had to pay in one way or another to get cared for properly as opposed to them being neglected or given ineffective drugs. A few of the respondents who said that they were not affected by corruption in the PHC, came from the category of those individuals who rarely use the PHC or do not use it at all, hence it was quite obvious why they were not affected by corruption. Of course some people did not have any opinion regarding this matter regardless of their use or non-use of the PHCs. People's experience of corruption varied according to their requirement i.e. some people said that for virtually all healthcare requirements they had to pay whereas others said it depended on the severity of the ill health. They might not pay for a few aspects like immunisations, slight headaches or fevers and contraceptives but pay for deliveries, operations and effective drugs.

The impression that was given to me by the people about the way in which doctors and other medical personnel solicit corruption is by making it economically viable. For example the doctor may say to the patient that the patient might need a specific drug to get healed quickly; however the PHC is out of stock. The patient will be given a choice of getting it from the town, which would entail further cost to the patient. However if he/she is willing to pay the doctor might have the same drug in his suitcase. The reason the patient accepts this offer is mainly because the doctor's offer may cost a fraction of the actual cost it would have taken a person to go to the town and get it and this also saves a great amount of time. This tactic could rightfully be called a scare tactic where the doctor instils fear into the patients about the cost one might have to incur if they do not accept his or her offer. According to the example I

have just mentioned above in a skewed sense would not have been objectionable if there was a genuine shortage of drugs in the PHC and the doctor was providing a convenient way of helping the consumers and perhaps enhancing his own financial position by this. However the consumer in this case has absolutely no knowledge about the stock position or the availability of drugs hence he is at the mercy of the provider who may or may not be telling the truth. Invariably at present the providers of healthcare are in a dominating position and the consumer has very little choice but to accept what the doctor offers and pay for the services he or she requires. A similar example of soliciting for remuneration by doctors was given by Kamat (1995). Where an offer of healthcare to patients is made by the doctors and they are asked, “*do you want to be treated ordinarily (Sarkari²) or very well (Bari³)?*” It would be quite obvious that most people would prefer to be treated well hence choose the *Bari* option however this option implies that the consumer is willing to pay for the service. It is quite understandable why people choose the *Bari* option, as most people want to be rid of illness as soon as it is possible seeing that there is no welfare provision by the state to rely on when people are sick. Therefore it is vital for the villagers to get well soon especially those who live in severe poverty because their lives are a struggle for survival i.e. only when people are able to work can they find means to survive however if they are sick it reduces their chances of survival even further.

What I found surprising was that the people I interviewed were not appalled about the rampant corruption that takes place within the PHC. The perception they gave me was that as long as they were cured properly they did not mind paying the doctor for doing so. When asked if they know that the service from the PHC is supposed to be free of charge, they said that they were aware but, as one said, “*Corruption takes place in almost all government departments and there is nothing different about the PHCs*”. The rural population were rather fatalistic about the problem of corruption and accepted the situation rather grudgingly. They implied that in order to be seen properly it is always better to pay for the service or else one would be neglected which would have a detrimental effect. The perception that villagers had was that if they paid a price it would imply that the doctor would also be held responsible if the

² Sarkari actually means official or to do with the government. In this case it denotes an accepted view by the public that a product or service is usually of a very low quality produced by the government.

³ Bari means very good or excellent.

desired intention of being cured was not fulfilled as opposed to receiving free treatment where they cannot hold the doctor responsible for action because there was no money exchanged. Most of the people said that they did not pay money when they perceived that their illness does not require a lot of attention, however on the contrary when they perceived their illness to be on a higher scale it was almost essential that they paid for proper services. The people reiterated that they intended to pay only if it made economic sense to them i.e. where they weighed all the options and considered all the cost and only then took a decision of whether or not to use corruption as a method. The prospect of rural people sorting out the problem of corruption appears to be bleak according to the views they gave me. Most of them appear initially not to have a clue about the procedure they have to follow, they also feared the cost that will be involved in the process and finally they feared any kind of reprisal that might take place.

I must admit that during my field session I did not see any money being exchanged between doctors and patients. However there were other indicators that implied that corruption is taking place. For instance I conducted an interview with a doctor who was not found in the PHC but working in his private clinic during the PHC working times catering to patients. This example fits quite aptly for absenteeism but it also highlights the abuse of the system for personal gain, which could be deemed as corruption. I also witnessed some doctors who with the pretext of treating patients properly would ask them to come and meet them in the doctors' residence. This ploy is mainly used as a mode of convenience because in the privacy of the doctor's residence money can easily be exchanged as opposed to them having to exchange it in the PHC where a lot of people may be watching. It might be suggested that the doctors vetted the patients during their routine practice in the PHC and they targeted those who have the potential of paying and ensured that they visited them in their residence. Some of the villagers have adapted according to the way in which each doctor works and instead of going to the PHC they go directly to the doctor's home and get treated knowing that this action will mean that they would need to pay for the services provided by the doctor. Allegations that the doctors actually administer medicines and equipment provided by the government in their residence to patients appear to be quite common. Substantiated occasionally by reports in newspapers

(DH 2004) where doctors were actually suspended from work when they were found to have government medicine in their homes.

The present primary health network does not appear to be in a good state as a complex web of facts and attitudes hampers its progress. It might be suggested the progress of the primary health system is largely affected by the following: insufficient finances, poor monitoring of existing resources and personnel and finally the lack of resolve of the rural population.

7. The impact of meagre financial resources.

In this section I would like to highlight the role of financial resources and the effects they have on the effective delivery of healthcare. India spends about 4-5% of its GDP on healthcare that is about \$4US per person (WHO2). The way in which each state operates its financial obligation is by getting grants from the Central Government and matching it with their own individual budget. It is explained quite well in the words of Garg.

Centre, State and local Governments responsibilities in financing healthcare cost: Funding mostly originates from central government ministry of finance who directly allocate funds to Ministry of Health and Family Welfare at the Central level and also to state governments through center's Planning and finance Commissions. The state government further allocates funds to state departments of health and also to local governments. Further, there are inter-sectoral allocations of grants-in-aid and other earmarked funds from centre to state.

Source: (Garg 1998) p.7.

Depending on the state up to two thirds of the budget is provided by the central government's allocation and certain programmes are solely sponsored by the central government e.g. immunisation and family planning (Garg 1998). In real terms the amount spent on health care in India is very little when compared with developed countries. Of course it would not be compatible to compare public health expenditure with developed countries, as there is a contrast in the levels of care provided and also

the amount of care that is made available by public health. However on the contrary when compared with some of its neighbours India does not look good as it spends less than most of its neighbours (refer to table). Hence it should not be surprising that countries like Sri Lanka have better health indicators than India.

Per capita government expenditure on health at average exchange rate (US\$), 2001

Definition: Public Health Expenditure (PHE) per capita is the per capita amount of the sum of outlays on health paid for by taxes, social security contributions and external resources (without double-counting the government transfers to social security and extra-budgetary funds).

China	18
Sri Lanka	15
Bhutan	8
Bangladesh	5
India	4
Pakistan	4
Nepal	3

Source (WHO).

Healthy Life Expectancy 2002

From the 2004 World Health Report

Member State	Healthy life expectancy (years)					Child mortality (per 1000), 2003		Life expectancy (years)		
	Total population at birth	Males		Females		Males	Females	Total	Males	Females
		At birth	At age 60	At birth	At age 60					
Bangladesh	54.3	55.3	11.1	53.3	11.1	68	70	63	63	63
Bhutan	52.9	52.9	10.8	52.9	11.3	85	85	63	61	64
China	64.1	63.1	13.1	65.2	14.7	32	43	71	70	73.0
India	53.5	53.3	10.8	53.6	11.4	85	90	62	60	63
Nepal	51.8	52.5	10.5	51.1	10.8	80	85	61	60	61
Sri Lanka	61.6	59.2	10.5	64.0	12.7	17	13	71	68	75
Pakistan	53.3	54.2	11.4	52.3	11.4	98	108	62	62	62

Source (WHO 3).

According to the tables above one can clearly see that the health indicators of those countries which spend more than India, have a better profile. China has a large population, diverse terrain and cultures like India but has excelled in setting an example for large countries of what can be achieved by investing more in health. Sri Lanka on the other hand is a smaller country but has much better health indicators

than India even though it does not have the financial strengths like India i.e. India can rely on various sources of income in comparison with Sri Lanka's limited means. Even countries like Bhutan that spend marginally more on its healthcare than India have better health status in some fields even though Bhutan has to face an uphill challenge posed by its mountainous terrain, almost no industrial manufacturing base for drugs and health equipment and relatively minimal provision of public health care. Perhaps Bhutan's relative better health status may be solely due to the fact that its people enjoy a cleaner environment with few ill effects of pollution.

However India has a plural form of healthcare provision where healthcare is provided by private and public sources. It is estimated that approximately 80% of the population approach private sources to access healthcare in cases of ambulatory or out patient care, but this figure is also matched by public healthcare in terms of preventative medicine such as immunisation where the government appears to be dominant (Mahal et al 2001). Although public provisions play a significant role providing mostly a service free at the point of access on the contrary private provision of health involve a fee and charge patients for its services. It is also argued that the population actually pays much more out-of-pocket than the state actually invests on each individual (Berman 1998) (refer chapter 3 pg 94-95).

Out of pocket expenses virtually involve all segments of Indian society where it will be a rarity to notice anyone who does not spend money to access various aspects of healthcare irrespective of whether one accesses private or government sources. Private sources of healthcare are designed in such a manner that costs are inevitable as it could be suggested that income is the primary source of motivation to ensure services are provided. The government's approach is different as it is not based on how much income can be generated but on the levels of services it can make the public access mostly for no direct charge. Whilst accessing government services there are some unavoidable expenses that have to be borne by individuals like transportation, prescription drugs that have to be bought from private sources and generally services that the government may not be able to provide e.g. there are occasions when certain machinery may not be working like the x-ray and people may be advised to get it done privately. These expenses are quite inevitable and have to be borne by the public as an out of pocket expense. Studies have indicated that out of

pocket expenses on health have an adverse effect on those who are poor as opposed to those in better financial positions. Nevertheless India will have to improve the levels of money it makes available for public health provision at least to the current levels of its neighbours with genuine reform of public health delivery. Perhaps only then one may see significant improvements in its health status of individuals.

During my discussions with doctors they mentioned that at present they have a budget of about Rupees 100,000 to 110,000 (£1200-1400) per month per PHC, which is mostly spent on salaries and Rupees 70,000 (£900) per annum allocated to drugs and equipment (this is in the process of being increased to Rupees 100,000 p.a.). It is quite clear that this structure of funding has created an imbalance in the resource allocations. Although provisions are made to accommodate the human resources of PHCs very little is provided in terms of them actually delivering healthcare. Only a paltry sum of less than Rs 6000 per month is made available for all the drugs, reagents and chemicals for the laboratory and other vital elements needed for the running of a PHC. I personally blame this imbalance of resource allocation as a cause of the present predicament where the PHCs are running on a sub-optimal level. On the one hand it is essential and necessary that human resources are catered for in the best way possible, as they will finally bear the brunt of delivering healthcare. However on the other hand if they are only provided with very little resources to actually provide for the curative aspects of the public health it leads to severe shortages and inadequate provision of healthcare and creates an atmosphere of frustration, which leads to a poor delivery of healthcare. The present situation is best described as an army well placed and ready for combat but with very little ammunition thus susceptible to be overrun. Perhaps, given a hypothetical situation where the PHCs run on an optimal level with the current provision of drugs, the drugs will run out of stock within a few days rather than a month's time that they are allocated for.

The doctors I interviewed said that they are constrained and unable to deliver healthcare by the limited resources made available to them, where they have virtually no control over what is supplied to them in terms of drugs, equipment and trained staff. They apportioned the blame for this situation on the centralised structure of planning and its execution where someone in the capital orders and sends the supplies without verifying whether it is required or not in the PHC. They also mentioned that

the government always bemoans that they do not have the financial resources to meet all the demands that are placed on the health department. The government stresses that the primary health network needs to tackle ill health by either taking preventative or curative measures and it is not necessary for the PHC to concentrate only on one measure. Therefore it allocates its budget according to its priority of how much will be spent on preventative and curative measures. Preventative measures such as immunisation, public awareness campaigns and providing proper hygiene and safe drinking water play a pivotal role in reducing the risks posed by disease and ill health. However curative measures are much more compelling in nature and usually require urgent and immediate action, especially in the cases of the most vulnerable in society like expectant mothers, infants, children below 5 years and also in tackling epidemics and endemic diseases that the population suffers from. Therefore it is vital that the policy makers rethink and make essential adjustments in their budgets to allow more to be spent on both preventative and curative aspects of healthcare and to allow more local determination of priorities.

Poor monitoring of existing resources and personnel by the authorities.

In the previous section I highlighted the role of finance and its vital role in ensuring a better provision of health. However in this section I would like to show how the existing resources are not applied in an optimal level thus creating a conducive-environment for apathy and the relatively lethargic progress of the primary health system. Perhaps if India could magically find the required finances for an adequate provision of healthcare, it would be pointless to spend all that money in retrospect if there were no corrective measures taken in order to stop the pilferage, corruption, loose monitoring, apathy, lethargy and sheer neglect by those who are supposed to be administering healthcare. It would be quite disastrous to invest further in the current set up without taking into account the inefficiencies that exist. It would be like pouring sugar into a bag full of holes, hence causing a drain on resources as opposed to them being used effectively.

According to the observations made on my field sessions the DHO mainly monitored the performance of PHCs on a monthly basis and only occasionally visited PHCs on routine or surprise visits. However the doctors appear to be well versed in their ability

to convince authorities that the PHCs are operating smoothly even if the contrary is true. One of the methods by which the doctors were able to escape any repercussion from the authorities with regards to them being chronically absent from work was discussed with me in confidence by a doctor who said it was relatively easy to dodge the onslaught of the authorities by mentioning that he was in another village fulfilling the healthcare needs there. Similarly other devious and clever methods are used to hoodwink the authorities for example by leaving with colleagues or those who will be present at the PHC with a sick / casual leave letter signed but undated so that if it is required one may just need to fill in the date and get the leave approved. However if nobody comes to check that person does not need to use his or her leave. The impression the authorities gave me appeared to be that they were aware of various ingenious methods adopted by staff but they also have to share the responsibility for the present state of apathy and neglect in the PHCs as they found it difficult to get an upper hand over the situation at all times. From my experience in the field session I can recollect an instance of neglect and apathy where the Taluk Health Officer (THO)⁴ could not give me directions to a PHC because she did not know where it was. Obviously she had never visited that PHC. Hence the proper running of that PHC really depended on the integrity of the doctor and other staff, which at present is seen in a poor light even where there are minimal amounts of supervision. However my example may be an exception as the THO involved in this example was a woman and at present in India women tend to like to work mainly in secure urban areas and are not yet adventurous enough to directly confront issues in remote and rural areas whilst taking into account their own safety, imbalance of power with regards to men and other pressures that society may put on them. However it would not be far-fetched if one states within the public health network there is widespread neglect routinely. Only on rare occasions and instances can one find the PHCs running on an optimal level especially when a lot of external pressure is applied i.e. when there is a visit by say the health minister or other higher level authorities or even when the plight of the population comes to the attention of the authorities who then are compelled to react.

⁴ THO is a subordinate officer of the District Health Officer but is only in charge of the affairs of the activities in the health department of a specific Taluk. THO usually works from the Community Health Centres, which are located within each Taluk.

Another issue that came to my notice was the poor coordination and lethargic pace at which the system is managed. I observed that many laboratories were not fully functioning because the reagents were not made available on time. Drivers were paid to work without a vehicle as it was under repair for over a year. Temporary vacancies caused due to women taking maternity leave were left vacant at most times with little effort taken to fill them hence in many instances causing severe shortages of staff. I put forward to the doctors and asked them for any apparent reason for these situations to occur. The overwhelming response was that there was poor coordination between health authorities and the PHCs. The doctors said that they were powerless to do much as most of the authority lies with officials higher up and they could not deal with even obvious issues that could be easily solved but have to go through a laborious process of bureaucracy. A hypothetical example of the laborious process involved would be as follows a doctor might notice that a few panes of glass are broken in the operating theatre; this is a cause of concern as it may lead to infecting the apparent sterile environment of the theatre. It may just cost a few Rupees to get it fixed locally but the department procedure will require 3 quotations/ tenders and then sanction accordingly but this whole process may last for months as it has to pass through many heads before it is finally approved and delivered. To avoid all the hassles and confronting unwanted complications it is quite normal for doctors not to be bothered about solving even relatively simple problems that they face and allow the deterioration of existing structures and equipment to go on unabated.

8. People's resolve in solving their problems.

I would like to only briefly discuss the issue of the people actually doing anything about the problems and prospects of them being able to access proper healthcare from the public system. However in the previous chapter I have discussed and elaborate some specific reasons why certain segments of society behave in a particular manner and also about the choices they make.

According to the dialogues I had with numerous respondents the following aspects significantly protruded out over all the other issues that were highlighted. Most of the people realised that it was a great sign of progress that now even though it is still unreliable the fact of doctors in the rural areas is very good. Of course this view is

arrived at historically when compared with them having almost no doctors in their vicinity just a few decades earlier. Therefore they do appreciate that doctors mean a lot to them as a lot of lives have been saved by their services as previously they suffered greatly when it was harder to access healthcare.

Most people realise that corruption and various malpractices do occur in the public health system but only a few actually even know about trying to rectify or complain about such practices. Rather that they have accepted corruption as an ongoing aspect of Indian society and they will participate in it as long as it makes economic sense to them. The issue of corruption appears to have affected all segments of society rather than only the poor and vulnerable. Historically the poorer segment of society could not use money to influence any issue in their favour, as the caste base structure prevented lower caste and poorer people from doing so. For example during my lifetime in certain villages I would not have been able to buy a cup of tea in a tea shop because of the caste I would represent even if I offered double the going price. However at present it appears that corruption affects all segments of society and in order to be examined properly or get treated appropriately they all accept that they will have to pay something. Of course there is a difference in the price each person pays and also it depends on the levels of literacy and power that individual represents. Obviously individuals having low or no literacy and power tend to be drained of more money in terms of proportion of income than those who have better positions.

Village Politics

Village politics is another issue, which has both good and bad aspects affecting the health of the population. Historically it was the village landlord or headman who controlled the entire village. However at present this power base appears to have become more plural and representative. This of course is good as the voice of people can be heard and proper changes can be implemented without ignoring entire segments of society. However due to the fragmented nature of Indian society and politics a lot of groups want their views expressed over others and they try and insist on their authority by meddling with various aspects of government, wanting it to act according to their will. Many doctors mentioned that serving in the villages has become a great problem because one cannot manage to satisfy all the groups. Village

politics is one of the most significant hindrances that doctors perceive for them to work in rural areas. For example a female doctor was pressured by a leader in the village to attend his wife who was ill at his home. However this doctor refused and tried to persuade him to bring his wife to the PHC. This leader did not take the refusal by the doctor kindly and hence she had to face an array of allegations and abuse. Therefore she insisted on getting a transfer from that village. Although the village leader may have had a genuine reason for the doctor to visit his home, however there are other cultural and sexual connotations which would say it is wrong to take an unmarried woman into ones' home. Inevitably the villagers lose out, as they do not have a woman doctor to cater for their needs especially for the women of that area who prefer to be seen by a woman. Traditionally as a sign of one's superiority (in a financial sense) or esteemed position in society, it could be seen as a privilege to be able to get services provide in one's home and such advantageous positions are keenly sought after and desired by virtually all who aspire to gain such status. The established elite and privileged sections of society have customarily maintained and closely hold on to such positions within their fiefdoms. However with the growing political power of various groups it appears that nowadays more people want to assert their authority by insisting on an erstwhile privileged position. Therefore catering to all their demands will be virtually impossible to fulfil especially for PHC doctors. Perhaps if doctors consistently provided services on a fairer basis irrespective of the individual's financial status people should be catered to similarly. Accordingly if such a process was adopted it may reduce and in future stop the demands made by village leaders to be seen at home to represent their status in society as opposed to a genuine call where the doctor is required to cater to the patient's need.

Another instance was brought to my attention when a doctor who worked in one of the remotest PHCs where the levels of village politics was rather high. It was quite apparent that different groups of individuals were trying to gain influence with this doctor to ensure he adheres to their agenda. However a certain group that was unhappy with the service provide managed to get the doctor in an inebriate condition. After which they humiliated him by stripping most of the clothes off and allowed passers-by to glance at him freely. The main casualty of this incident was that the doctor involved did not want to return to that village any more and a broader impact was that even other doctors feared and resented to go to that centre.

People have a genuine appreciation of good health and take pride in keeping it. Almost all of them want the public health system to improve but most do not know how to go about making these changes. Village politics, although a good force to emphasise the will and aspirations of the public, needs to be kept at bay when extreme elements try and exploit it. Customs that have an aristocratic tendency in villages where government officials and other dignitaries consult and get consent from village elites before they proceed with the rest of the village has to be toned down and only used when it is vital or unavoidable. Perhaps if the government's services were perceived to be impartial and not subject to certain manipulations by influential people it would be most likely that the public will act according to what is required. For example if someone has to catch a train they need to go to the station and not expect it to stop at their home. Similarly most medical needs could be met at the PHC but in certain compelling times there may be need for a flexible approach. However when such a flexible approach is adopted it should be done on the grounds of the severity of the illness and not to satisfy inflated egos of the elites.

9. Conclusion and recommendations.

In theory the ongoing policy of The Government of Karnataka State to attract doctors to work in rural areas with the intention of offering PG seats after they complete six years of rural service may appear satisfactory within the precincts of this policy. However in practical terms, a lot of work is required in order to rectify and implement this policy and ensure its full effectiveness is felt. The way, in which it is presently being implemented, neither is the government programme being commended as an outstanding feature nor are the junior doctors fully satisfied with the outcome. As the doctors have pointed out there are discrepancies in the time taken to alter their appointments from temporary to permanent ones. Doctors on changing their status from temporary to permanent waste copious amounts of time, that it makes the prospects of getting PG seats distant. If there was a proper timetable in enforcing permanent contracts doctors can prepare a schedule to get PG seats. It would be very helpful if the government would consider the time spent by doctors working in PHCs on a temporary contract in effect to be eligible for this policy. Moreover it is about time that the government takes measures to allow doctors to make their choices of PG

seats whilst they are serving in the PHCs so that when it is time to complete their rural posting they can get the seat they aspired to.

Progress in terms of the rural population gaining access to doctors may appear futile at this point of time as some doctors have found ingenious ways to avoid spending time in their PHCs. However if the government can devise some sort of progressive monitoring, perhaps by offering realistic financial incentives for those who show good signs of progress. On the other hand stringent action should be taken where malpractices and corruption are highlighted as in the case of Dr Prathibha and Dr Asha (D H 2004). These doctors were suspended immediately by a vigilance committee set up by the government, who found these doctors had stocked drugs issued by the government in their homes and were prescribing them to the public for a fee instead of issuing them free of charge at the PHC. India does have a good set of deterrents with regards to stopping the practices of corruption however the question of enforcing such laws remains to be answered.

Undoubtedly there are many other issues that need to be considered properly in order to pass on the benefit of the PG policy finally to the intended population that is in most need of accessing primary health care. Doctors play a vital role in delivering healthcare to the people and given their present position they head all the operations and plans organised for the PHC. The pivotal position they hold can reflect on how well the rest of the team under them can perform. It is a simple fact that if the doctors work regularly in the PHCs and they monitor the rest of the team it is possible for a good outcome to be expected in terms of actual delivery of healthcare. However if the head of the PHC (doctor) is absent most of the time or pays little attention to enforce the programmes of the PHC, little or nothing can be expected in terms of delivering healthcare. Unfortunately in case of the PHCs not functioning properly it is the rural population who bears the brunt, as it may not have such an impact on the doctors or the government. The rural population will be denied even the little that has been promised to them.

The question 'can doctors effectively deliver healthcare in the rural areas?' can be answered in a word 'yes' provided there is widespread genuine reform within the current public health network. Rather than loosely assigning post and position without providing the means to effectively deliver healthcare the government has to meticulously plan and execute its actions in such a way that they have a grip on the situation persisting in the field, as opposed to plans made centrally without taking into account the ground realities that exist in the villages. A hands on approach would be much appreciated where the government is proactive and creates means through which it can tackle issues according to the need.

Decentralisation of the planning and execution process has been thought of by the government and ongoing measures are being processed (Varatharajan et al 2004) but it still appears that the reins of power are centralised with only a few instances of marginal slackening of the grip in real terms at the grassroots level. Further strides of progress will need to be taken in order that the public benefit from healthcare. If there was better coordination of existing resources and the need it will be most likely to see positive results and better health status for the public. The public on the other hand needs to quell the forces of disruption but become enlightened and empowered to seek for better treatment and accessibility of healthcare. Unless the people themselves realise and pursue better means of healthcare it appears that the government is distant and tends to neglect those areas that voice their concerns the least.

Investing in health should be one of the top priorities of the government as the benefits are measurable in terms of health indicators. India should consider and ensure the funding of public health is increased at least to the levels of its neighbours and then anticipate better outcomes, provided the monitoring regimes are well placed and there can be an avoidance of high levels of pilferage. The imbalance in the levels of money India puts towards its human resources and the amount it makes available for preventative and curative medicine should be corrected in order that those who are serving in the field can have a genuine chance of effectively delivering healthcare. In contrast, most of the current budgets are spent on salaries and maintenance and only a small fraction is used on effective drugs and equipment. Other serious issues such as corruption need to be tackled properly but the big question is this: 'Do the government/ people have the resolve to challenge this phenomenon?' The answer to

such a question is 'yes and no' depending on the type of government, type of persons involved and of course the priority of solving such a problem. At present although there may appear to be a lot of rhetoric and policies to tackle such a problems, it is quite apparent that the urgency does not appear to be a high priority.

VI.

Concluding comments, recommendations and future expectations.

1. Introduction.

It will appear to be a daunting task to expect that changes will be enacted once my recommendations are made. Even with a clearer understanding of the views respondents have expressed, it will be highly optimistic to see any radical change. In countries like India to influence change the general pattern followed is normally through the long term strategies of social / religious and political movements that have harnessed the support of the people or made it possible to alter the thought process of individuals and the government. There are rare examples of an individual making vast differences e.g. Gandhi, but usually the previous sentence would hold sway in describing how things work in India.

This negative vein of thought can be applied to those conducting research on primary health care with the intention of improving aspects by providing useful suggestions and hoping for better outcomes. Such intention then can be deemed unproductive. It could be suggested that writing about primary health care, especially exposing the dysfunctional nature of certain aspects of the delivery of healthcare in rural India, will be critically analysed and deemed futile with very little prospects of ever finding fruitful results. Aspects such as corruption, absenteeism, lack of resources and poor management give the view of an unending downward spiral and a virtual incapacity for anything good to emerge from the present system. At present there always appears to be a plethora of problems plaguing the system, which often are interlinked and quite complex. Attempts to resolve a problem occasionally result in others arising or taking the place of the original problem. For example a problem of shortage of drugs was blamed for the poor functioning of PHCs; the government intervened and supplied these drugs. However it transpired later that allegations emerged that these drugs were dumped or burnt but not supplied to the patients (DH 2005).

This being said, a negative overview of the primary health system in India, brushing aside any obligation towards finding sustainable solutions, would be a relatively easy stance to take. However until a better system is introduced or the benefits of ongoing reforms are fully entrenched and the system is able to deliver effectively it is appropriate to support and try and make a difference for the better with the existing system. To the pessimist this support to the existing system may appear like flogging a dead horse and expecting results. In reality the vast majority of the rural population have only one major system that they can virtually rely on to access, which is the public health system as opposed to the fragmented and risky provision of services supplied by unqualified practitioners and private sources.

Researchers should strive to give new perspective and the impetus to rethink how the system could deliver healthcare more effectively. A common phenomenon is for researchers to point out the bottlenecks, inefficiencies and downfalls; perhaps now they need to concentrate on factors that could turn around this current trend and change the perceptions that exist at present. Certainly at present one could speculate that in India there is the potential provided all the relevant factors are blended in the proportion required. It would not take much to see such a transformation, especially in the light of India producing indigenous doctors and all the other relevant medical personnel, drugs and equipment that are needed to achieve such goals. Most important is the tremendous gain made in financial resources, which the country has never had since independence. Does it mean that it could be possible to see a turnaround happen shortly where the primary health system is functioning optimally? My optimism is not without considering the ground realities, as I reckon it would be after my lifetime before even basic healthcare is accessible by all. If current trends predict that it would take 50 years to achieve such goals, my sincere hope would be this prediction should be narrowed down by a few decades. Even if it takes 45 years to see this happening it would still be a goal worth striving for.

This of course does not mean that I would like to ignore the negative aspects of the primary health care system but I do not want to reiterate points that are relatively well

known and are repeatedly blamed for bringing down the system. Neither do I in any form want to endorse or condone the causes of the suboptimal and apathetic performance of the current system. However I would like to discuss some achievable goals perhaps by emphasising mainly aspects where minor adjustments could enable. For instance the government could stringently ensure that doctors work during the daytime regularly as opposed to making provisions for them to be accessible on a 24-hour basis. If the government takes this step it would at least allow the villagers to have a reliable time frame within which they can access care as opposed to taking a gamble on whether the doctor's services are available or not.

2. The long drawn out development of primary health care in India.

India was aware that there is a great imbalance in the provision of healthcare between urban and rural areas. Soon after gaining independence committees were formed and health planners were given the task to redress this issue. At one level the country had to develop and strengthen the existing urban centres but at the same time India also recognised that the emphasis needed to change from promoting large hospitals to that of community based centres to deliver healthcare in rural areas. The succession of events that show how the concept of primary health care has been evolving is explained in chapter 1 hence I will not go over similar terrain but I will highlight certain landmark strategies that have steered this movement. Initially the processes of delivering basic health services were promoted then the Alma Ata conference of 1978 triggered the comprehensive approach of primary health care and later the slogan 'Health for all by 2000' was advocated. However the euphoric acceptance of the Alma Ata declaration by many developing nations appeared not to be matched with equal political and economic backing. Primary health care was perceived in some nations to reduce expenditure on healthcare by making its availability only at a basic level, which was a cheaper option. In such countries most healthcare resources still went towards supporting urban centres. Problems regarding the management and corruption lead many donor agencies to doubt

the comprehensive approach and they in turn started promoting time based vertical programs that specifically targeted certain aspects of healthcare. It did not take long before critics of the comprehensive approach started promoting selective primary health care as they envisaged that a broad notion of healthcare could not be effectively delivered especially in poor developing nations. Hence they stressed that a specifically targeted approach will be much more effective in delivering services. India has adopted both of these aspects of primary health care to deliver services where the broader vision is to deliver at a comprehensive level but also to include specifically targeted programmes.

The debate between both of these approaches went on throughout the 1980s until the next set of strategies were promoted mainly by bodies like the World Bank and the International Monetary Fund. The strategies developed by the World Banks in the World Development Report of 1993, “Investing in Health” initiated the concept of Health Sector Reform (HSR). According to Hall and Taylor (2003),

“Changes in political and economic philosophy in the late 1980s and 1990s marked a major change in how government services were delivered throughout the world. Emphasis was placed on reducing government involvement in all aspects of society. Market forces became the dominant model for service delivery”. p.19.

International donors normally insisted that in order to receive any grants the recipient nation should embark on market driven economic reforms. HSR strongly promoted aspects such as user fees, cost recovery, private health insurance and public private partnerships to deliver health services (Hall and Taylor 2003) but aspects such as equity of access to services especially for the poor appeared to have little provisions under this sets of reforms. The results in some developing countries of adopting such reforms have had a negative impact on primary health care delivery as Wagstaff and Yu (2007) described in China and Lloyd-Sherlock (2005) in Argentina. Whitehead et al (2001) pointed out that market oriented reforms often have contrary outcomes to the objectives, as economic access for the poor people declined and total cost have increased. This kind of detrimental effect perceived due to user fees that have the potential of alienating poorer segments of the population from accessing healthcare.

In India HSR has had a mixed bag of good and bad outcomes. For instance the gap between the poor and rich has increased therefore the negative effects seen in some African and Latin American countries will apply here. Aspects such as user fees promoted by HSR, which are supposed to provide additional resources to the health sector, often have the potential of alienating the poorer sections of society. In India although provisions are made so that those below the poverty line are not charged any fee for accessing services but it will be a relatively hard task for the government to ensure more fee paying patients access services. Because most of those who can afford healthcare tend to access it from private sources especially due to the higher quality of care they provide. The perception that government provision is for the poor and those who cannot afford is still very strong in India. Moreover in the present environment the government often faces direct competition from private providers who often can afford to undercut the prices charged by the government, hence making it even harder for the government to attract paying patients to access the public health network. This situation may not be the case in areas where the government hold a monopoly on the provision or where the competition is perceived not to be equally qualified. In such situations it can be possible to see paying patients accessing healthcare from the government. Therefore it will be most likely to see virtually little benefit from having user charges unless the provision are of a better quality, a higher standard and cheaper than the immediate competition.

HSR at a different level has been instrumental in the growth of many private speciality hospitals that are mainly there to cater for the needs of the rich and the growing middleclass. These hospitals were permitted to import modern equipment and technology in order to upgrade the existing system. This can be perceived as a good thing for those who can afford such treatments as the quality of healthcare provided could meet the standards acceptable in most of the developed nations. However this burgeoning of private hospitals and institutions has mainly improved the availability of healthcare in major cities and State capitals leaving most of the rural areas virtually untouched. Sometimes such hospitals are engaged in public-private-partnerships where certain

aspects of healthcare are provided by them. Often aspects such as eye surgeries are contracted out to private hospitals and institutions where people can access service from such places. Even PHCs are being handed over to some private medical colleges and institutions to be run by them. However these kinds of public-private-partnerships are few and far between and not equally spread through the state hence not beneficial to everyone.

Aspects such as health insurance can be very effective if people are informed properly about the benefits and begin to use the facilities whenever they need to. Definitely health insurance will reduce the burden of expenditure on treatments and operations by individuals as cost of many medical procedures are getting out of the reach of most people. However it appears that the concept of insurance has not yet penetrated into rural areas especially remote and inaccessible regions, as the concept of insurance in India is still not widely applied as seen in western developed nations. Moreover HSR was introduced in India post 1993 but it was 2003 before the health insurance began operating (WHO-India 2007). The Government of Karnataka can be commended for fully subsidising health insurance for those below the poverty line and partly for some categories under the scheduled castes. However the concept of health insurance in Karnataka is still relatively new and unless it is implemented widely and people regularly use this resource, it will be rather premature to pass judgement at present on the effects of this scheme.

India knows that there is a big problem for the rural population to access basic healthcare and has been adopting many strategies to resolve this issue. At each stage from basic health care services to comprehensive primary health care and then selective primary health care and finally HSR, India appears to take on board the recommendations with the exception of not abandoning previous approaches. Currently it would not be unusual to see new PHCs being opened on one hand and on the other hand health insurance schemes being promoted. Although reports like the (WHO 2000) virtually write off primary health care and see it as a strategy not worth pursuing anymore and World Bank (1993) makes very little reference to it. In India primary health care is still vital and an

ongoing strategy being implemented. It must be noted that some of the problems associated with primary health care in India cannot be solely blamed on the concept but rather on the slow implementation. Aspects thought of in the 1970s are still being pursued at present e.g. strategies for immunisations and eradications of certain diseases are still being used. Therefore primary health will still be relevant at present times as the nation is yet to be developed in all aspects. However I do accept that there are major problems with primary health care delivery but to abandon it and blindly pursue HSR as an alternative will have detrimental affects as HSR has the potential of making those poor even worse off.

In the discussion that follows, I have divided the effect of government policy based on the problems and prospects of the research I conducted broadly into two categories. Firstly the problems and prospects of the people and the impact of primary health care. Secondly the impact of the policy to guarantee postgraduate places to doctors who serve for six years in rural areas is analysed. Recommendations will be discussed in the latter part of the chapter.

3. Strategy for villagers to gain greater access to healthcare.

The need for the rural population to access healthcare is undoubtedly recognised and it is apparent that the nature of their need is compelling and is urgently required for the most vulnerable members of society. Arguments made by Johnson (1964), Navaneetham and Dharmalingam. (2002), and Rao (1998) strongly support improving the access of healthcare in rural areas. The results presented in chapter 4 appear to support most of their claims but also to highlight the various differences between PHC and non-PHC village. It is approximately 8% of the villages in Bidar district that have PHCs. The impacts of primary health care appear to affect mostly those in PHC villages and it becomes quite apparent that the penetration levels into non-PHC villages are barely scratching the surface. Therefore it transpires that a significant majority of the population

seldom access the system and hence a lot more needs to be done in order that everyone benefits from the primary health system. A major cause for grave concern for health planners would be to see the number of villagers especially those from non-PHC villages accessing alternative providers of healthcare in the form of RMPs. On the one hand the government should learn from RMPs the way they can ingeniously be accessible to most villagers, providing a timely service when people need it. On the other hand, although the villagers know they might be accessing services from an unqualified source, they feel helpless, yet according to their pressing need they take the risk and approach RMPs for healthcare. In the research I conducted it becomes quite apparent that where the provisions of healthcare are readily available there the villagers do not access services from RMPs at the levels of those who do not have any provision. This should give a clear indication to the authorities that the impacts of having proper provisions in place will naturally decrease the level of people accessing healthcare from alternative sources. It could be argued that providing a PHC or SC in every village would be absurd and highly unlikely to ever occur but small steps like introducing more ANMs and MPHWS would increase the number of people accessing services from them and when required they could be referred to the relevant centres.

From the interviews I had with the villagers it became quite apparent that the villagers tended to rely only on PHCs that could effectually deliver services or else they did not have any qualms about abandoning the services provided there and looking for alternatives. Where provision was available aspects such as the doctor's gender, caste and religion, and even distances travelled, did not appear to matter to them. They appeared to be ready to accept any treatment irrespective of these factors and were satisfied as long as they became well or the illness subsided. Therefore it must be noted that the government should attempt to ensure that services are provided regularly and not to put too much emphasis on other factors although in an ideal world it would be appropriate, for example having a woman doctor working in every PHC. The provision of services by doctors appeared to supersede their general view on matters like caste, gender, religion and income and people still have a general goodwill towards the service provided by them. However certain behaviour adopted by some members of the public does not appear to be

conducive for a smooth provision of services by doctors. The corrosive level of village politics exhibited by some members of the public appeared to hinder provisions for example when the doctor's service was demanded to be given at somebody's home not for the severity of the illness but in order to show the amount of power that person can show to other members of the public. Such unwarranted practices by the public should be stopped. Although I would say that having good political awareness is an excellent attribute it should be used to benefit society as a whole and not only an individual.

On another front it transpired from the views of doctors that villagers are often very anxious about their illnesses and they want to be cured almost immediately. This could be because India is a religious country where medical miracles are an accepted part of faith but having this type of view also has its share of problems attached. People usually want to be cured hopefully with just one interaction with the doctor and seldom do they have the patience to see through a course of treatment. Moreover cultural beliefs inherited down generations, such as the idea that one drug can cure all ailments, are still quite widespread. Hence it is quite normal to see people being lured by those offering such treatments e.g. Ram Ban injections (see chapter 4). Attempts to modify such views held by the public will take a lot of learning and understanding, which could only happen if awareness of treatment procedures were made more widespread. Until then one can actually sympathise understandably to an extent with the anxiousness exhibited by villagers, as each episode of ill health is relatively more severe on them as opposed to their urban counterparts who have more access to a variety of healthcare.

Finally it was quite apparent that the villagers did have good perception of what they thought is good service and where they saw that it was lacking. Although factors like low levels of literacy and high poverty levels should have worked against them surprisingly people's awareness in terms of assessing existing services, provision of medication, corruption, regularity of staff, even future expectations and ideal changes needed were voiced quite assertively. The results in chapter 4 duly ratify their claims with most outcomes showing statistically significant relationship to possession of a PHC in their village. However with regard to people taking the initiative to try and rectify problems

they face or that are known to occur regularly there appears to be a situation where most of the voices were muffled at best, with a sense of inability to do anything. The worrying factor in my data set was to see that even those having good financial positions, which would normally entail high caste status, largely avoided doing anything about the plight of the system. It was indicated that over two thirds of the respondents in this category preferred to avoid attempts to confront authorities. Therefore it should not be surprising to see that other more vulnerable and weaker groups would feel much more helpless to do anything about improving the services provided. Perhaps it is about time that the powerful elites play their part at least to initiate processes that should hopefully snowball into a bigger movement involving all and bring about a change for the better. Simultaneously the process of making complaints should be made much easier and confidential where people should eventually be able to rely on this process to give results without having to fear reprisals. However until villagers make a combined effort and keep a constant pressure on the government to deliver services adequately (Rice and Jones 1985), we will be most likely to see the levels of apathy; indifference and the gross mismatch between the demand and supply of healthcare persist for a long period of time. Alternatively I strongly believe if there are improvements in the levels of literacy and education, better prospects for income and an overall progress in development especially infrastructure and basic amenities (Parashar 2005; Jalan and Ravallion 2003), then gradually the health status of people should be better than what is seen at present.

4. Comments on the policy, junior doctors and future prospects.

It could be suggested that health planners who implemented the policy of attracting doctors to work in rural areas have attempted to solve two problems at the same time. Firstly it is intended to solve the ongoing problem of recruiting highly skilled personnel to work in the primary health system, secondly providing a route for doctors to bypass the fierce academic competition by assuring them postgraduate positions on completing their

rural posting. My initial reaction was to give all the credit for implementing such a policy to the Government of Karnataka. Broadly the policy has many positive attributes that should eventually help solve the problem of recruiting doctors to work in rural areas. However to perceive this policy as being solely responsible for recruiting doctors would be rather overemphasising the part it plays in the primary health system. The question of the importance of this policy still remains unanswered to an extent, as the outcomes were usually quite open which could be interpreted in different ways. Hence the question whether this policy is being implemented fairly and is it able to satisfy either of the envisaged goals? By this I mean whether doctors are attracted to work in rural areas because of this policy and are they getting relevant postgraduate seats by participating in the procedure? Undoubtedly it did transpire from the interviews I had with the doctors that the concept of getting postgraduate positions is strongly desired and the monetary value put on this policy is very high. In terms of the tangible aspects of getting postgraduate positions it appeared to be like an illusion, quite distant (due to the copious amounts of time taken to get the eligibility) and relatively frustrating even after fulfilling all the obligations required.

In theory this policy could be considered as a good idea that could help resolve a major problem faced in India and in many other developing nations, but in terms of it being implemented there seem to be lots of problems associated that virtually make it irrelevant, at least during the initial stages of the recruitment process. According to the discussions I had with junior doctors they mentioned that most doctors are given temporary contracts with no definite period or timeframe to get it changed into a permanent one. The stipulation, which enables doctors to access, the postgraduate policy is only after completing 6 years on a permanent contract. Many doctors spend numerous years initially just getting a permanent position as that was considered their top priority. Therefore a lot of doctors put the postgraduate policy on the sideline and only think about it if and when they are interested in taking it up. One doctor mentioned that working over a number of years in PHCs doing repetitive jobs has the effect of numbing their minds and incapacitates their interest in gaining further knowledge. Furthermore they felt by the time they eventually get to qualifying for the postgraduate position, medical science

would have moved so far that keeping up with the levels would be a daunting task by itself. The seriousness of this policy is dwarfed by the claim that some doctors have spent up to 12 years by the time they work on temporary contracts and then go onto permanent ones and in such periods of time it could be quite natural for interests to change and the lure of a postgraduate position become almost nonexistent.

It was suggested by many doctors that setting a timeframe should be a vital part of the government's recruiting policy. I strongly agree. Many even suggested that the criterion of 6 years is too long and perhaps if it was halved it would be much more appreciated. Recruiting on a temporary basis does make financial sense but I do feel that the government has not seriously thought about all the implications of carrying out such practices. It could be suggested that the potential of allowing corrupt practices to occur begins with the monetary imbalance perceived by temporary doctors when compared with those who have permanent positions and as a process of bringing financial parity an easy route suggested is corruption. I do not say that no doctor should be taken on a temporary basis but it should not be seen where provisional contracts are stretched for long periods of time just to fit budgetary requirements of the state. When it is viewed by an accountant's perception it appears that virtually no thought is being put towards the possible aspiration of doctors to further their education. Yes it could be argued that the commercial value or a postgraduate seat is worth more than 10 years of the average wage a doctor gets at the moment but surely if more doctors were allowed to enhance their academic status it would mean that the government could count on a higher level of resources around the network. It must be noted that unless doctors see a properly guided route to achieving a postgraduate position this policy will not have a great relevance in attracting doctors to work in rural areas. Perhaps the syndrome of sour grapes will apply to it in its current form. Here the doctors just joining the system will see this policy as distant and not worth trying for and those in the position of actually achieving it find it not a goal worth trying for. If the government really wants to see this policy be effective and work its good for the doctor and the general public to benefit, my ideas are that a total rethinking of the implementation should be considered. The seriousness of assisting doctors through their academic progress needs to be evaluated to weigh all aspects that

can be analysed. The policy should be not just loosely bound ideas, which do not appear to have the impact intended at the conceptual stages.

5. Recommendations for the government.

Primarily I would suggest that there is a vital flaw with the government structure of power and also to a lesser extent a similar view can be seen in what constitutes the hierarchy of society, where structures of power are designed in a pyramid like manner in which a few on the top impose their decrees on those below. For instance the example in chapter 2 pages 60-61 of the District Health Officer (DHO) who acted as a gatekeeper and had the potential of ensuring that none of the doctors I intended to interview participated in the study. Similarly the lackadaisical approach of doing nothing and virtual clueless position described in chapter 4 pages 180-181 about the villagers not complaining to authorities when the system fails them. These examples highlight and emanate the situation that I describe about power structures within government and society at large. The fault in this structure is that it virtually never allows those in the bottom level to share their views or give relevant feedback. In contemporary Indian society though the hierarchy of caste structure still plays a vital part, presently another formation has an equally strong influence i.e. a dominant economic position of individuals / groups and companies appear to be in a similar pyramid like structure. Such individuals have privileged access and close communications with the higher levels in the government structure that virtually allows them to hold sway over all matters. This structure of elite people in Indian society usually gives very little consideration for the people classed lower than their privileged section and especially now those of a weaker economic status, for the better to ever have enough influence to take decisions which could make significant differences. Because the elites within society and the government apparently live in their 'citadels' of power having mutually exclusive lives from the lower segments of society it should not be surprising to see that the top level has virtually no grasp of ground realities. Unless there is a radical change in the government structure and it has a hands-on approach on matters related to the grass-roots level, or unless society adopts a proper process through which all sections of civilization can redress their

problems and everyone is allowed to voice their concern irrespective of status (perhaps this could be done by allowing the process of religious reform), it would be highly unlikely to see most people benefiting from development.

This being said, it might be suggested that writing this section is a feeble attempt to solve a serious problem. This attempt may appear to be an audacious try where it can be compared to make inroads into a huge Himalayan mountain with only a trowel. Perhaps my comfort should come from the thought I am trying as opposed to fatalistically waiting for providence of any sort to enable improvements in provision of healthcare to ever happen. I do realise that in India unless one has vast political support, the right levels of religious elements backing and finally a close nexus of an influential level with the hierarchy of the civil services it will be most unlikely to induce any change in the service provided by the government. None of these aspects I have in my favour. It might be suggested that recommendations produced in this thesis may take an enormous effort to reach those who have the power to implement programmes. That being said it does not mean that I should not voice my concerns.

In order that this policy has a significant impact and is not just conceived as another aspect of government rhetoric, I present my thoughts that I reckon should be considered to make a difference. The main benefactors of this policy, initially being the doctors and, through the services they provide, the rural population are mutually supposed to benefit. The first aspect of the policy that needs to be fine-tuned is that doctors should be nurtured very closely by a method, which should be devised to see them right through the initial stages of being recruited to them actually getting the postgraduate position. I say this as opposed to what is the case at present where doctors are mostly left by themselves to sort out the arduous and frustrating route through which they achieve the postgraduate position (refer to chapter 5). Doctors should be closely monitored right from their initial years of joining the primary health system, where they should be given a period of time to recognise the field that they want to do their postgraduate work in. After that period passes all efforts should be made by the government to ensure that doctors' aspirations are catered for. Hopefully such action would reassure doctors working in PHCs that the

probability of benefiting from the policy is very high. This I say as opposed to their current plight, which resembles the Darwinian Theory of the survival of the fittest but with an Indian twist paraphrasing it as the survival of the craftiest. If doctors were nurtured and their progress closely monitored it would give the sense of making them feel that the government really is concerned and is assisting them. Whereas at present by just leaving doctors to virtually fend for themselves and not being helped by vague guidelines from the government seems to cause widespread scepticism, haphazard academic progress and to an extent a reduction of interest in the postgraduate policy.

Another aspect of the policy, which is very unfair, was that doctors working in PHCs on temporary contracts do not have their service rendered in the villages taken into consideration towards getting postgraduate positions. The doctors I interviewed did mention that the level of responsibilities and the workloads did not differ depending on their status of being permanent or not (refer to chapter 5 p.194-197). Therefore the discrimination against temporary doctors is unjustified and needs to be rectified. The government should put serious thought into considering the services doctors provide whilst working on temporary contracts. This can be done by enabling them to get eligibility by taking into account this period under the postgraduate policy. Such measures would drastically reduce the time taken for doctors to avail themselves of this policy. Therefore there is the potential of making this policy appeal even to doctors working on temporary contracts.

I would like to advise the government on certain impediments that appear to block the smooth running of PHCs. Although I have deliberately avoided going into great detail in my thesis on financial aspects of primary health care there are some aspects that need an urgent revision. For instance it was noticed that temporary doctors are paid such a paltry amount that it not only demotivates them to work effectively and for some encourages them to justify corrupt practices. Perhaps their pay scales could be reconsidered to levels earned by permanent doctors or specially enhanced packages could be created where an allowance is added to encourage rural services. This could lead doctors to take rural services more seriously as the financial loss would have a higher impact than what it

would be at present if they were to lose their jobs. In the same vein of thought the government should seriously consider investing more on virtually all aspects of primary health care in order to make the services provided more effective. However this should be done after taking measures to avoid undue wastage of precious resources. A number of doctors said that they never had control of the drugs or equipment supplied to them as there was a contrast where the effective drugs were in short supply whilst other rarely used ones were excessively provided and sometimes had to be thrown out after the expiry date. Sometimes losses of resources are also caused unwittingly when parts of the system are not functioning properly, for example when replacement of staff is not done on time hence the system is found lacking. It must be noted that doctors cannot work in isolation and need a combination of inputs by both human and other resources to deliver services effectively. Therefore it becomes vital that GOK put serious thought and take action in managing the day-to-day running of PHCs at a local level, as opposed to having a superficial influence, which appears to elude the ground realities.

With the current levels of doctors being produced in India especially in states like Karnataka I feel that it is a great opportunity to ensure their services are made available. That should in turn help and give a basic level of healthcare accessible to all especially those in rural areas. The policy of attracting doctors with postgraduate positions sounds good but its lure to draw in and motivate doctors to work in rural areas is a bit lacklustre given the way in which it is being implemented. However metaphorically if teeth were provided to this policy it has the potential of being replicated in other states and countries that face a similar problem in rural areas.

Finally unless healthcare is made more accessible to the public it would remain the prerogative of the rich, predominantly urban and a fortunate few in rural areas to enjoy. This of course is unacceptable in the light of the current economic strengths of the country. For instance it has become quite common to see Indian companies and business buying multinational firms, hosting cricket matches by paying players astronomical sums and India being perceived as a key player in the emerging world markets. Surely some of this wealth could be used to invest in a better health system.

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Questionnaire regarding primary healthcare provision and policy that encourage doctors to work in rural areas.

Name

Age

Village

Occupation

Number of people in the house

Position held in the house

Education

Income status according to the ration card they hold.

Yellow Green Pink Other

1. Where do you go first to when you have a health problem? / Why?

- | | |
|---------------------------------------|--|
| a) ANM | e) Household remedies |
| b) MPHW | f) Go to the city (urban centres) |
| c) PHC | g) Other |
| d) Local doctor (RMP) or nurse | |

2. Are you aware of the availability of doctors in rural PHCs? Yes/ No

3. How often do you use the PHCs or access public healthcare system this year?

- a) Never**
- b) <5**
- c) >5<10**
- d) >10<15**
- e) Regularly**

4. Does the public healthcare system meet all your health needs?

- a) Yes
- b) No
- c) Other

5. Who do you find in the public health system the easiest to approach or readily accessible when seeking treatment for ill health?

ANMs	MPHWs	F.P. Ws	Nurses	Doctors	Specialists	Other
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6. What kind of care do you expect from the public healthcare system? E.g. FP or a basic level etc

7. Do you consider the public health care system adequate?

Perfectly adequate	Fairly adequate	Moderate	Fairly inadequate	Very inadequate	Other
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8. How would you rate the quality of care in the public healthcare system?

Perfectly adequate	Fairly adequate	Moderate	Fairly inadequate	Very inadequate	Other
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9. How would you like to see the public health system work in the future?

- a. Provide more ANMs
- b. Provide more MPHWS
- c. Provide more doctors
- d. Provision of free medication
- e. Corruption free service
- f. Easy accessibility
- g. All of the above
- h. None of the above
- i. Other

10. Does the sex of the doctor matter if you require treatment? Yes / No

11. Do you think an enhanced or a better-equipped staff and a higher level of medical care by ANMs and MPHWS could solve your need for basic healthcare? Yes / No -- Other

12. Does the working time i.e. 9am – 5pm have any effect on your decision to use the system? Yes / No. Describe briefly.

13. What do you do during the night to access healthcare?

Options	Yes	No	Other
Do nothing			
Traditional remedies			
Traditional healers			
RMP / village doctor			
Access PHC staff residing in the village			
Urban centres			
Other			

14. Do the government health officials / staff regularly attend their duties or are they not found when needed? Yes / No (skip to question 17)

Regular	Irregular	Other
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15. Whilst using public healthcare system is there any occurrence of corruption or any malpractices (i.e. paying money for services that are meant to be free)? Yes / No.

16. Approximately when do you need to pay money for services supposedly free?

- | | |
|---------------------------------|-----------------------------|
| a. Treatment of minor ailments. | f. Delivery and childbirth. |
| b. Antenatal checkups. | g. Blood transfusion |
| c. Accident and emergencies | h. Referrals |
| d. Family Planning | i. Eye camps |
| e. Prescription drugs. | j. Most major illnesses |
| | k. Other. |

17. Do the PHCs have adequate facilities and resources?

	Very poor	Poor	No opinion	Good	Excellent System
Staffing					
Medicine					
Beds					
Amenities*					

***E.g. Electricity, running water, fridge and toilets.**

18. How much impact does the availability of doctors in villages has on the levels of healthcare provided?

Big impact	Moderate impact	No opinion	Minor impact	No impact

19. Do you consider your economic and caste status, causes certain impediments or is an advantage to access healthcare? Yes / No.

Explain in what ways?

20. What would you do if you had complaints about the public health care system?

Proposed questions to doctors and healthcare providers.



Name:

Male Female

PHC working in at present:

1. Is there a huge unmet demand for primary healthcare in rural India?

Very low demand	Low demand	Moderate demand	Significant demand	Very high demand
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2. Is there a need for doctors and other trained medical personnel in the rural areas?

3. What are the services that require trained medical personnel in the rural areas?

- Neonatal and maternal healthcare.
- Prevention of communicable and epidemic diseases.
- Immunization, vaccination of preventable diseases.
- Creation of health related awareness campaigns.

4. Does the presence of doctors affect (improve) the availability of healthcare in rural areas?

Insignificant	Slight improvement	No opinion	Good improvement	Highly significant
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5. Does the presence of doctors improve the people's perception rural primary health care?

Insignificant	Slight improvement	No opinion	Good improvement	Highly significant
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6. Does the presence of doctors reduce the flow of people seeking primary healthcare in the town (as opposed to being referred for more complex conditions)?

7. How do junior doctors respond to the policy encouraging them to work in PHC / rural areas?

- 8. Do doctors find ways to bypass the system?**

- 9. What effects does this have on the aims of the PHC policy?**

- 10. What do rural doctors feel they would need to make the system effective?**

- 11. What are the potential policy reviews needed to make the delivery of PHC attractive?**

- 12. Do doctors feel that they do not get adequate backup or additional support to make their work effective?**

- 13. What are the factors that prevent many trained personnel from working in rural areas?**

- 14. What would attract doctors and other trained medical personnel to work in rural areas?**

