

2012

# How Can Lucknow Improve the Sambhav Voucher Scheme?



Aliganj Bal Mahila Chikitsalaya evam Prasuti Grah (Maternity Home) after renovations and repairs.

Prarthana Ramdas  
University Of Utrecht  
8/15/2012

## Executive Summary

Maternal health care is an important issue. In order for the population to be healthy, it is essential that children are well nourished and health from the moment of their conception. Unfortunately, in many countries – especially developing countries – the emphasis is directed away from health care, and the concept of health care in pregnancy is nearly non-existent. This occurs for a variety of reasons; cultural biases against medical involvement in health, biases against women, financial barriers and infrastructural barriers. One of the problems is that governments in developing countries often do not have money to invest in improving the medical health care system, or to provide the necessary care for their populations.

There are a variety of solutions that have been suggested to solve this problem. Governments in developing countries have tried investing in programmes to raise awareness, or to increase institutionalisation of deliveries. However, they keep stumbling against the issue of lack of financial capital.

The private sector in developing countries has an as yet undefined role in providing health care to the masses. Frequently, the private sector is purely occupied with providing health care to households who can afford to pay, which leaves a large section of the population dependent on health care provided by the public sector. One of the options which has recently arisen has been to involve the private sector in the provision of health care to the underprivileged, using subsidies from the public sector. These are known as Public-Private Partnerships.

Voucher schemes are a form of Public-Private Partnership which specify exactly the sort of services which are included. Voucher schemes involve the distribution of vouchers to eligible individuals, subsidised partially or wholly by the Government, who can then redeem the vouchers at a specific private facility of their choice, conditional to the fact that the private facility has agreed to participate in the scheme. The private facility then provides the services that have been agreed upon to the voucher-holder, free of charge, but withhold the vouchers to hand back to the Government, in order to be reimbursed at a previously agreed-upon rate.

The city of Lucknow, in Uttar Pradesh, has recently introduced the Sambhav Voucher Scheme, using similar reasoning. The Scheme itself is well thought-out, but the reality is somewhat different than the initial hopes for the project were. While the Scheme has excellent potential, there are certain improvements which are required, particularly in implementation.

This thesis seeks to understand the background to the Scheme, and to provide suggestions for its improvement. The research question around which the thesis is built, is therefore:

*How can Lucknow improve its Sambhav Voucher Scheme using the concept of Public-Private Partnerships?*

In order to answer this question, the conceptual framework within which the recommendations are framed were distilled from a reading on literature regarding Institutional Economics and the Rights-Based Approach. These two perspectives were chosen, because of the interaction between

economic demand and supply, on the one hand, with humanitarianism, on the other. Institutional Economics looks at the financial viability of programmes, based on economic reasoning, while the Rights-Based Approach keeps human rights central. In combination, both of them can bring a holistic perspective to developing a voucher scheme.

Within the theoretical framework, the following recommendations were given on how to improve the Sambhav Voucher Scheme:

### **Institutional Economics**

- High transaction costs
  - Increase the salaries and responsibilities of the Community Health Volunteers who are responsible for distributing the vouchers.
  - Establish a committee responsible for ensuring that the providers participating in the Scheme receive the medication and finance that they are guaranteed by the Scheme.
- Information asymmetry

Launch a large-scale media campaign to increase the information of poor women on the challenges they face in pregnancy, and how the Voucher Scheme can help them.

- Absence of insurance markets
  - Adverse selection

Increase the responsibilities and training of the Community Health Volunteers, so that they take more effort to select eligible women to participate in the Scheme, and prevent ineligible women from taking advantage of the Scheme.

- Moral hazard

Moral hazard is currently not an issue faced by the Sambhav Voucher Scheme. If the Scheme is scaled up, and more private facilities are involved, it may become an issue, but it is not at present.

- Freeriding

The problem of freeriding within the Sambhav Voucher Scheme can be solved by increasing oversight of the Community Health Volunteers, and by making the demands of participating in the scheme more stringent. This is linked to the issue of adverse selection, and of high transaction costs.

### **Rights-Based Approach**

- Personal choices
  - Education/background
- Make all visits included in the Voucher compulsory. There should be a good reason for women who participate in the voucher scheme *not* to take up a visit, and sanctions should be included in the Scheme if they do miss a visit without a good reason.

- Increase information and awareness of pregnancy and pregnancy care. More information should be given to the women on how important pregnancy care is, and also more information on what the symptoms of pregnancy are.

- o Geographical location

There are few private facilities currently in Lucknow that participate in the Scheme. The question of geographical location can be combatted by persuading more facilities to join the Scheme. By making the Scheme more attractive and including more facilities, a larger section of the population of Lucknow can be reached.

- Lack of regulation

- o Lack of rights/responsibilities and lack of accountability

The biggest problem in the Sambhav Voucher Scheme is implementation. The failure arises in the fact that supplies such as medication and funding often does not reach the health care providers. Since no specific individual is held accountable for the medication and finance reaching the providers, complaints from the providers did not reach the authorities. This problem still has not been solved, and needs to be tackled by increasing Government oversight. However, this relates to the much larger issue of corruption in the Indian Government, and will presumably not be solved in one campaign.

In conclusion, the Sambhav Voucher Scheme has a great deal of potential. The recommendations above are suggestions on how the Scheme may possibly be improved.

**Contents**

- 1. Introduction..... 1
- 2. Literature Review..... 5
  - 2.1 Institutional Economics ..... 5
  - 2.2 Market Failure: Private Sector and Health Care in Developing Countries..... 8
  - 2.3 Rights-Based Approach ..... 11
  - 2.4 Government Failure: The Public Sector and Health Care in Developing Countries ..... 13
  - 2.5 Public-Private Partnerships ..... 15
  - 2.6 Conceptual Framework..... 16
  - 2.7 Voucher Schemes..... 19
  - 2.8 Conclusion ..... 21
- 3. Case Studies: Voucher Schemes in Developing Countries..... 22
  - 3.1 Argentina..... 22
  - 3.2 Bangladesh ..... 24
  - 3.3 Cambodia..... 26
  - 3.4 Africa..... 29
  - 3.5 Thematic Analysis of Case Studies..... 34
    - Institutional Economics ..... 34
    - Rights-Based Approach..... 38
- 4. Case Study: Lucknow ..... 40
  - 4.1 Background ..... 41
    - 4.1.1 National context..... 41
    - 4.1.2 Regional and Local Context..... 41
  - The host organization..... 43
  - 4.2 Methodology ..... 44
  - 4.3 Maternal Health Care in Lucknow – Data ..... 46
    - Profile of hospitals ..... 46
    - Infrastructure..... 48
    - Eligibility to access free treatment..... 52
    - Referral systems ..... 53
  - 4.4 Sambhav Voucher Scheme ..... 56
  - 4.5 Limitations..... 66
- 5. Analysis and Recommendations ..... 67
  - 5.1 Analysis ..... 67

5.2 Recommendations.....	69
5.3 Conclusion .....	72

# 1. Introduction

25% of all maternal deaths around the world take place in India per year, more than in any other single nation in the world (Shiffman & Ved, 2007). Of these, 28,000 deaths take place in Uttar Pradesh, the highest rate of maternal deaths per year in a single state, within India (Saha, 2010). This is often linked to the low utilisation of maternal health care facilities, especially by poor women. Recognition is growing that although the poor may often not pay for their health care, it does not necessarily mean that they will accept inferior treatment. Wealthy people can afford to change hospital, or health care provider if they are not satisfied with the treatment they receive. The poor simply go home.

66-93% of women in India do not give birth in a health facility (Hulton, Matthews, & Stones, 2007), for a multitude of reasons. Many of these are rural women, who live far away from facilities and infrastructure. The reasons they do not are mostly linked to this distance, and the quality of the existing infrastructure (the supply side of the story), and also how Indian communities view childbirth and its institutionalisation (the demand side of the story). The patriarchal structure of most Indian communities means that childbirth is often not seen as a dangerous condition or one that needs assistance by medical facilities (Saha, 2005; Mistry et al., 2009). Additionally, family financial resources are either not available for the process of institutionalisation, or are not made available, for the reason quoted above. Consequently, women face considerable barriers to the access of medical resources for maternal health. The high maternal death rate is therefore attributed, to a large extent, to women's lack of access to qualified health care. This is not limited simply to lack of availability; often in developing countries, governments actually provide financing for facilities, with free access for poor women. The problem therefore is not that the facilities do not exist; it is that they are equipped neither to handle the quantities of patients that need help, nor to supply the quality of help those patients need. This is referred to as the 'dehumanisation' of the care process.

Emphasis has been increasing all over the world on this 'dehumanisation' process, particularly in government institutions in developing countries (The Lancet, 2004). This process mainly has to do with the fact that care in institutions is dependent on the availability of resources, both human as well as material. Often, in government institutions, there is a shortage of drugs, or personnel, due to lack of available funds, which often leads to brusque and careless treatment of patients. Doctors frequently do not have the time to deal with all of their patients, or facilities cannot supply drugs to the patients, at subsidised charges (Hulton, Matthews, & Stones, 2007). There are also reports of poor quality of food, lack of cleanliness, and essentially poor treatment of patients, especially in free Government facilities, which are dependent on funding and subsidies rather than payments, for the treatments they deliver (Malavankar & Rosenfield, 2005).

The factors mentioned above have two main implications for the utilisation of health care by poor women in developing countries; firstly, even women who want and need health care, cannot necessarily access it, because often the waiting lines in hospitals are too long. Secondly, the facilities develop a bad name among patients due to the unfriendliness of staff, and perceived high death rates which are often a consequence of overburdened medical infrastructure. Therefore, women prefer to deliver at home, having heard bad stories, or having had bad experiences at medical facilities.

For Government facilities, a poor reputation is less important than for private facilities for two reasons. Firstly, as they are not dependent on the number of patients they receive for their funding, but on subsidies which are often not performance related, their performance is less important than private facilities which lose patients if their care is not good enough. Secondly, in developing countries there are so many people who cannot afford private health care, and are therefore compelled to use Government facilities, that those facilities are overburdened no matter what they do.

The role of the private sector in the provision of maternal health care is as yet not established in many developing countries. More sophisticated social security systems, as well as a generally higher level of welfare allow inhabitants of developed countries more equality in terms of access to services, particularly those in the medical sector. In developing countries, however, inequality extends beyond simply that of income (Harikumar, 2010). Poor women often have to settle for services of far inferior quality to that which women from richer families can aspire to. In other areas this may not mean much beyond inconvenience, but in maternal health care terms it can often mean death. The private sector is often the provider of better quality services, which are accessible on the condition that the consumer is able to pay for them, which frequently poor women are not.

It is possible to conclude, therefore, that maternal health care must be provided for the women who are not able to afford it for themselves. Unfortunately, the current programmes instituted by the governments of developing countries in order to increase uptake of the existing facilities have not been very successful. In India, they have been unable to surpass a coverage rate of 55% of the population of the areas where they have been implemented (Kumar Paul et al., 2011). Since these programmes in consideration do not only focus on delivery, but also antenatal nutrition, this means that childbearing women in India not only face lack of intra- or post-partum care, but also are frequently not fit to bear children. 33% of married women have a BMI of below 18.5 kg/cm<sup>2</sup>, which means they are underweight; 74-96% are anaemic, and a growing number are obese (Balarajan, Selvaraj, & Subramaniam, 2011). The maternal health care system in India faces extensive, and growing, challenges. Increasing supervised deliveries is not sufficient to decrease maternal mortality; maternal antenatal and postnatal health needs to be improved too.

In order to identify the challenges to the system, and develop a suitable solution, it is necessary to understand the problems at a grass-roots level. For this reason, the author of this thesis spent three months in Lucknow, Uttar Pradesh, India, to gain a closer knowledge of the health care system there. With the ultimate goal of identifying ways to improve service delivery, therefore, this investigation will analyse the results evolving from the research carried out in Lucknow.

Firstly, an introduction will be given to two theories which may provide relevant insights into provision of health care; Institutional Economics and the Rights-Based Approach. Institutional Economics theorises on the basis of supply and demand, which is the approach that the private sector takes to health care provision. The positive aspects of this approach are that quality is not compromised on, as demand for their services has to be high enough in order for facilities to survive. This provides an incentive for the facilities to provide a suitable quality of health care. The problem with this approach, however, is that service provision is conditional to patients

being able to pay for them. As a result, this approach is exclusive, which causes problems in developing countries, where a large proportion of the population *cannot* pay.

This is where the Rights-Based Approach complements Institutional Economics. Under this approach, all individuals are entitled to an equal quality of care, regardless of ability to pay. This is a humanitarian approach. While the positive side of it is that it encourages facilities to provide the same care to all their patients, the problem is that it does not take into account the supply side, or service provision. As a result, facilities are often expected to provide good quality services on very low subsidies or grants.

Therefore, a comparison will be drawn between private and public maternal health facilities based on their approaches to patient care, within the context of the theoretical frameworks outlined above. This will be done in order to identify areas in which public health centres can improve within the existing restrictions (financial and policy-based) they face.

The solution that this thesis advocates is Public-Private Partnerships, using the mechanism of Voucher Schemes. Voucher Schemes are a method of Demand-Side Financing, which permits consumers – even those who do not have financial resources – to make the choice of which facility they patronise. Since the Government provides the subsidy, even poor households can (technically) take advantage of the opportunity, and since funding to the facilities is provided on the basis of consumer choice, facilities have an incentive to provide good service. In theory, Voucher Schemes combine the positive aspects of public facilities with the positive aspects of private facilities. In practice, however, the story is often very different, as in the case of the Lucknow Sambhav Voucher Scheme. This thesis seeks, therefore, to find a way of suggesting improvements to the Sambhav Voucher Scheme, thereby improving the accessibility of maternal health care, especially for poor women who associate institutionalisation with excessive financial outlay, mistreatment and very likely, death. The suggestions outlined in this thesis are supported using examples from other developing countries who have either successfully or unsuccessfully introduced similar schemes. Lessons can be learnt from these schemes and applied in the context of Lucknow.

The main question this thesis therefore seeks to answer is:

*How can Lucknow improve its Sambhav Voucher Scheme using the concept of Public-Private Partnerships?*

In answering this question, it is important to keep the following sub-questions in mind:

- 1. What lessons can be learned from Institutional Economics and the Rights-Based Approach with respect to understanding the difference between public and private service provision?*
- 2. How can Voucher Schemes be seen as Public-Private Partnerships, and what benefits can be gained from this perspective?*
- 3. What lessons can be learned from Voucher Schemes implemented in other developing countries, and how can these be applied to the context of Lucknow's Sambhav Voucher Scheme?*

The structure of this thesis will be the following: Chapter 2 will introduce the concepts which will be used to draw the conclusions later; Institutional Economics, the Rights-Based Approach,

Public-Private Partnerships and Voucher Schemes. This chapter will also sketch the context within which the analysis will take place, in the conceptual framework.

Chapter 3 will introduce voucher schemes in the context of various developing countries. In this chapter, the goal will be to identify lessons from the successes and failures of other schemes. Subsequently, Chapter 4 will introduce the case study of Lucknow's Sambhav Voucher Scheme, with an extensive introduction to the regional and local context. The relevance of this chapter lies in the fact that it will seek to show what an important role the Sambhav Voucher Scheme could potentially play in improving maternal health care in Lucknow, given the alternatives that poor women are currently faced with.

Chapter 5 will then analyse the case studies, including the Sambhav Voucher Scheme, within the context of the themes introduced in Chapter 3. This chapter will attempt to draw conclusions on possible improvements to the Sambhav Voucher Scheme, provide recommendations, and conclude the thesis.

## **2. Literature Review**

In this chapter, the theoretical framework within which the maternal health care system of Lucknow will be assessed and compared will be laid out. Two main theories were found relevant.

Institutional Economics and the Rights-Based Approach both analyse service-delivery. The contrast between their approaches raises an interesting discussion regarding the most efficient, effective way to deliver services in developing countries, especially under circumstances where infrastructure is not of a quality to make it easy. The purpose of this chapter is to lay the groundwork for this discussion, and to support the conclusions drawn by the comparison of the different case studies, in chapters 5 and 6.

### ***2.1 Institutional Economics***

Institutional Economics is the study of “collective action in control, liberation and expansion of individual action” (Commons, 1931). By this is meant that the actions of individual people in society are said to be regulated by the rules and actions of collectives of people. To distil the meaning of this definition, a certain perspective of society is required. This is because the definition presupposes that institutions are developed by collections of humans and human action. In this way, the legal framework of society can be seen as a collective effort to regulate individual action, especially under circumstances where human quality of life is in question.

In medicine this goes back to instances such as the Hippocratic Oath. Hippocrates was believed to have written the first rules for doctors to abide by, with which doctors swear to practice medicine ethically, and not to take advantage of the power they are given by their knowledge. This gradually evolved into an institution (the Oath), which is the foundation of contemporary medical practice, and the laws that have been built around it. The reason that this Oath is considered so important is that doctors have two main advantages over the rest of society; firstly, they have specialised knowledge on the human condition which requires dedication and time to learn, in which they have chosen to invest. This means that their statements regarding health and safety, which most people value more than anything material, have a degree of authority, reflected in how promptly and unquestioningly many lay-men follow the directions they give. This consequently gives medical doctors the stronger hand in almost any negotiation (Jesani, 1996). Secondly, unlike other specialists, medical doctors are specialised in the care of the human condition, which means that even withholding their knowledge can cause greater harm than in any other field. Yet, how does one regulate to whom any person distributes their knowledge? In Institutional Economics, the solution is: by regulating the context in which they perform.

In Institutional Economics, the ‘rules of the game’ are important in transactions (Commons, 1931). These ‘rules’ can be organisations, individuals, religions, cultures and norms and values. These ‘rules’ generate the institutional context within which transactions take place. In the context of maternal health care in developing countries, this refers to the environment within which the health care services are offered to various sections of the population.

Firstly, education and socio economic background has been shown to have a positive effect on the health-seeking behaviour of women (Singh et al., 2010). Of course the reasons for this differ

per family, but it is possible to generalise and say that to a large extent this is because women with a higher education are better informed regarding the risks of pregnancy and childbirth, and are more likely to demand professional health care. Also, women from a wealthier socioeconomic background are more likely to receive the education which helps them be informed, which could explain why there is a higher chance of them receiving qualified health care (Balarajan, Selvaraj, & Subramanian, 2011).

Secondly, another factor which shapes the environment of health care accessibility in developing countries is the rapid urbanisation that those countries experience. Urbanisation refers to the proportion of the population of a country living in the cities. The level of urbanisation has been estimated to grow to 70% by 2050, according to a projection by the United Nations (Arora et al., 2011). The United States took 90 years to reach a degree of urbanisation above 75%, but Korea and Brazil took 30 years for the same phenomenon (Henderson, 2002). This reflects the speed with which individuals are moving towards cities, particularly in those developing countries that have productive and growing industries in those cities. Examples of these countries would be the BRIC (Brazil, Russia, India and China), as well as Singapore, Malaysia and other South East Asian 'Giants'. Among the problems faced by these countries as a result of this urbanisation movement is an increasing burden on a frequently inefficient medical health care infrastructure (Malavankar & Rosenfield, 2005).

That the infrastructure is insufficient is due to the fact that in order to increase accessibility to health care, regardless of ability to afford, many governments substantially subsidise health care. These subsidies take the form of cash reimbursements to facilities, but also can be programmes which are launched for a short time to stimulate use of care, or raise awareness. This happens in developed countries too (such as the United Kingdom, the Netherlands, and Germany) but in those countries, the taxes are higher, as is the government budget (Rapley, 2008). In addition, the funding coming from private individuals who are able to afford health care is also higher. In developing countries, far less is spent on health care, relatively as well as absolutely. In addition, the demand for free services is higher. The stress that this places on the infrastructure means that the quality of service therefore suffers excessively.

Thirdly, there is the question of household finances. Financial resources are required to be able to afford superior quality care, but the question of finances reaches beyond that of simply paying for the services. It also affects the ability of individuals to access the services physically; by paying for transportation, stay at medical facilities, and medication (Arora et al., 2011). These are called out-of-pocket expenses, and they are problematic because in developing countries, although there are officially programmes instituted by governments to increase accessibility to health care for poorer individuals, sometimes even the costs surrounding the health care can be prohibitive enough to prevent them from seeking out care (Balarajan, Selvaraj & Subramanian, 2011). Additionally, poorer individuals and households can often not afford the food or water that provides them with nutrition, are frequently malnourished, and therefore physically weaker when it comes to dealing with health related issues (Rehman et al., 2009; Kumar Paul et al., 2011).

Briefly, these are some of the factors which generate the environment within which care needs to be provided in developing countries. In summary, due to financial, infrastructural and social constraints, poorer individuals face problems of access to quality care in developing countries.

These constraints frequently arise as a consequence of institutions; poverty is often hereditary, since parents pass on debts, or financial problems to their children. Also, in countries such as India, with a strong cultural bias for knowledge, poverty is often also related to caste, or position in society. These are all institutions that affect, in varying degrees, the ability of an individual, or family, to access health care.

Institutional Economics considers institutions as important, because they are seen as influencing the outcomes of transactions. They reduce inefficiency and uncertainty in human exchange (North, 1992), because they provide a framework within which transactions, even between strangers, occur. By defining the institutions, it makes it easier to eliminate, or control variables, and therefore reduces the uncertainty of transactions. As such, Institutional Economics seeks to explain the context within which transactions occur, in order to allow a greater understanding, subsequently increasing the efficiency of transactions.

Transactions involve goods. These goods can have varying characteristics, but generally fit into four categories:

**Table 2.1 Types of Goods**                      **Source: (Commons, 1931)**

	<b>Rival</b>	<b>Non-rival</b>
<b>Excludable</b>	Private	Club
<b>Non-excludable</b>	Common	Public

These features refer to the extent to which the goods can be simultaneously consumed by multiple consumers, and therefore their scarcity and value. This has implications for the type of transaction costs which are then relevant for the consumers of the goods. The details are explained in Table 2.2 below.

**Transaction Costs**

The concept of Transaction Costs is central to Institutional Economics. It refers to the charges placed on negotiating for a good. In the case of health care in developing countries, it refers to the fees and out-of-pocket expenses incurred in receiving health care.

In an economy where the price mechanism exists, and there is information asymmetry, there are bound to be high transaction costs which are created in the process of discovering the appropriate price for a certain good, both from the demand and the supply side (Ricketts, 2008). In the case of medical health care, the transaction costs are created because of the misalignment of power in the market; medical health care providers have far more information than patients, especially poor patients. In developing countries, the transaction costs on the side of the patients are therefore exceedingly high, which often means that health care becomes inaccessible for poor patients. As Douglass North (1993) stated, when transaction costs are high, institutions become even more important, in order to prevent this injustice. Unfortunately, in developing countries, existing institutions are incapable of handling the burden, which results in poor individuals being denied access to health care altogether.

According to the classification of Institutional Economics, outlined in Table 2.2, medical care can be argued to be a Private Good. It is possible to prevent certain individuals from accessing health care, from a variety of perspectives; either by using transaction costs, or through the discretion of the health care staff (they can refuse to provide service). Additionally, since medical care

needs to be provided by trained individuals, who are necessarily scarce, the price on their service can be high, especially if they are not inclined to provide their services. Additionally, two individuals can rarely benefit from the services of a single doctor or nurse at the same time. Health care can be an excludable and rival good (see Table 2.1).

**Table 2.2 Types of Goods** **Source: (Commons, 1931)**

	<b>Rival</b>	<b>Non-rival</b>
<b>Excludable</b>	<i>Private</i> - Cannot be consumed simultaneously by two consumers - A consumer can be prevented from consuming	<i>Club</i> - Can be consumed simultaneously by two consumers - A consumer can be prevented from consuming
<b>Non-excludable</b>	<i>Common</i> - Cannot be consumed simultaneously by two consumers - A consumer cannot be prevented from consuming	<i>Public</i> - Can be consumed simultaneously by two consumers - A consumer cannot be prevented from consuming

In the case of maternal health care, there are two specific circumstances which make the current situation under discussion unusual, and undesirable; firstly, health care is a good for which there are ethical reasons that the market should not be allowed to determine supply and demand of, and there are certainly reasons against allowing it to be excludable (Dasgupta, 2011). Secondly, in developing countries, markets are far from ‘perfect’. A ‘perfect market’ in Economic terms entails certain conditions; perfect information regarding the functioning of the market to all participants, no individual supplier with more power than the others for any reason, no barriers to participating in the market for potential new entrants, and equal access to supplies for all participants so that no provider can provide more or less of the good (Pemberton, 1997). As is evident from the listing of these factors, none of the conditions are fulfilled in developing country markets, particularly not in a knowledge-intensive sector such as health care.

In developed countries, all these conditions are more or less violated too. One factor, however, is less deeply violated than the others – that of information. Consumers are generally better informed than in developing countries, if only because of a higher overall level of education (Ravindran & Mishra, 2001). Even those consumers who are not better informed, are far better protected by the legal institutions in their countries (Jesani, 1996). Consequently, it is particularly important in developing countries to ensure that the drawbacks of the excludability of the medical health sector are counteracted. One option is to do this by using government policies, and public health provision complementary to the private health sector. Many people, in fact, hold that the Government is *required* to perform this duty (Dasgupta, 2011).

When the market fails, as happens with providing health care in developing countries, and the Government does not, or cannot interfere, there can be drastic consequences. This is explained in Chapter 2.2 below.

**2.2 Market Failure: Private Sector and Health Care in Developing Countries**

Providing health care is a complex process, whether it is provided by the public sector, or the private sector. Health care as a good is difficult to define. It has features of both private and

public goods, but is never clearly one or the other (Preker & Harding, 2000). This creates problems for deciding whether the public sector should be responsible for providing it, or whether market forces should be allowed to determine the demand and supply. In developing countries, there are humanitarian grounds for arguing that market forces cannot be left to provide health care, such as the lack of a social security system.

There are clear explanations in Institutional Economic theory for why the private sector fails to achieve an optimal allocation of resources within this particular market:

#### 1. High transaction costs

Transaction costs arise from imperfect information (North, 1993). In health care markets, transaction costs are unavoidable, simply because of the nature of the relationships involved. There are three main actors; patients, health care professionals, and health care administrators (representing the system). Because of the imbalance in power relations between these actors, there is extensive information asymmetry within the health care system, and this contributes to the existence of two main problems; the continued presence of inefficiency in the system (Furubotn & Richter, 2008), and the development of institutional rigidities.

Institutional rigidities arise because of rent-seeking behaviour on the part of health care administrators and professionals (Preker & Harding, 2000). This behaviour is stimulated by the fact that it is difficult to define property rights within the health care system. It is difficult to characterise health care; there are significant externalities attached to the distribution of health care, and yet, it is a rival good (consumption by one person reduces the amount available for another person). Finally, it is difficult on moral and ethical grounds to deny health care on the basis of inability to pay. This leads to an unclear definition of property rights (in other words, who is entitled to what), and therefore, high transaction costs (North, 1993).

Consequently, there are claims that can be made to residuals which arise from the functioning of the system. Residuals in this are, for example, income, drugs, goods, or time. Opportunistic health care workers take advantage of the existence of these residuals, and the lack of clarity regarding their distribution by selling these residuals at high margins outside the market, or by withholding them without fearing any punishment (Furubotn & Richter, 2008). This leads to problems of continued poor functioning of the system, as well as perhaps even a worsening of the situation. The cause of this problem is the lack of accountability within the system, which is stimulated and propagated by the inherent information asymmetry in medical health care.

#### 2. Information asymmetry

Information asymmetry arises when one party has more information than another. Within the health care system, the relationships between the actors are such that the health care professionals and the health care administrators both have far more usable information than the patient, but from different perspectives (Preker & Harding, 2000). On the one hand, health care professionals are specialists in their field, and have their own jargon and lingo within the community, which prevents lay-persons from having a complete understanding of their transactions. This is, of course, made worse in India by the fact that a large section of the population is not even literate, while the health care professional, indeed, is educated. This is one asymmetric relationship. On the other hand the relationship is also asymmetric in the other direction, since the health care professional can never have as much information regarding the

patient's condition and situation as the patient. In combination with this, the patient is frequently unaware of the information imbalance in this direction (Preker & Harding, 2000), particularly in developing countries, where the health care professional is regarded as nearly omniscient.

Finally, there is the health care administrator, in this case the Government system, organising the interventions to ensure that basic health care is provided even to those who cannot afford private health care. For obvious reasons, the Government does not have enough information on the patient, and what the patient needs, and this leads to a gap between what the Government provides, and what the patient needs. There are frequent cases where there are no detailed patient records, no statistics on utilisation and an ignorance on the side of the health care workers of the unit costs of the services they provide (Preker & Harding, 2000).

### 3. Absence of insurance markets

In developing countries, among the lower socio-economic classes, there is no possibility for an insurance market to exist. This is for the following reasons (Preker & Harding, 2000):

- Freeriding

Many people are not in a financial position to afford to pay a regular premium on health care, especially given the uncertainty of whether or not they will need to use it. It therefore, to them, signifies a potentially unnecessary and large loss of liquidity which they cannot afford. In what some people call shortsighted, therefore, they do not take out insurance policies, and consequently cannot afford health care when they need it.

- Moral hazard

Given the financial situation of the majority of the poor, and the lack of availability of so many resources, the danger of an insured party taking unnecessary risks, or making unnecessary use of available resources is extremely high. For example, using a hospital bed when there is no real need for it, because there is no bed at home, or making use of analgesics when there is no need for a surgical procedure, while understandable from an ethical point of view, are unfeasible and unsustainable when it is a question of another party bearing the financial consequences of these actions.

- Adverse selection

Finally, of course, there is the problem of adverse selection. The parties concerned (low socio-economic classes) present a large risk for the insurance company, because they are already in circumstances not conducive to health. Therefore, to insure them represents a danger for the insurance company, and in a private market, would simply not occur. As for public insurance under the umbrella of the Government, the sheer number of individuals who need to take advantage of this option makes it completely unfeasible.

However, on the basis of humanitarian concerns, medical care is frequently attributed to the responsibility of the various Governments. It is not ethical to leave medical care entirely to the price mechanism, primarily because it would then be the market which would decide who would live or die (Kirkemann Boesen & Martin, 2007). Therefore, the public sector becomes involved, by creating regulations which ensures access to medical care of the entire population, regardless of ability to pay. This perspective of equality in health care is based on the **Rights-Based Approach**.

## 2.3 Rights-Based Approach

Until not long ago, development was seen as a quantifiable goal, something to be measured in terms of income, finances and concrete items. Since recently, however, a more humanistic perspective has been gaining ground (Rapley, 2008). With support from theorists such as Amartya Sen, John Rapley and others there is increasing recognition that without human rights, there can be little speak of progress.

The change began in the 1970s, when the prevailing neoclassical perspective, which believed that funding and money could solve most problems, began to be supplemented by a viewpoint that industrial and economic development would never be complete without ‘freedom’ and rights (Sen, 1999). Sen strongly promoted the view that encouraging human rights and freedoms, specifically political and civil, would contribute far more to economic growth than repression. As an example, Sen refers to famines never having occurred in states not under authoritarian rule.

The Rights-Based Approach is based on the equitable allocation of responsibilities and rights between duty-bearers and rights-holders (Theis, 2003). It promotes equality, placing importance on the issue of inequitable distribution of power within society. According to the Rights-Based Approach, all human beings are entitled to equal rights (CARE, 2009), and are both rights-holders, as well as duty-bearers (Kirkeman Boesen & Martin, 2007). The greater the power that an individual or institution holds, the greater is their responsibility to uphold the rights of others.

The basic principles of the Rights-Based Approach are shown in the text box to the right. These are the basic values upon which laws and regulations based on the Rights-Based Approach build (Theis, 2003). Rights are universal, which means that they apply to everyone, without exception. They are inalienable, and cannot be taken away by anyone. Rights come with responsibilities; duties towards others, as well as responsible use of the rights themselves. Everyone has a right to participate, in society, decision-making regarding their own lives, and societal development. Rights are indivisible – one right cannot be divided among more people – and interdependent, which means the right to one thing does not deny the right to another.

### Basic Principles of the Rights-Based Approach

Figure 2.1 Source: Theis, 2003

- Rights are inalienable
- Rights come with responsibilities
- Participation is a fundamental human right
- Rights are indivisible and interdependent

Since the main tool of the Rights-Based Approach is laws and regulations, it is easy to violate these rights in developing countries, particularly those of the poor. Their lack of education, in combination with lack of political ‘punch’ means that even when they are aware of their rights – which frequently they are not – the poor cannot always generate enough interest in the political arena to achieve justice when their rights are violated (CARE, 2009). The ‘playing field’ is certainly not level; certain parties have more power than others. In developed countries, this is sometimes a problem, but in developing countries, because of the incomplete legal infrastructure, the huge inequalities, and lack of oversight, such cases are more often overlooked than fixed. No one has been able to quantify the magnitude of this problem yet (Fukuda-Parr et al., 2009).

Another important factor in the Rights-Based Approach (one which corresponds to the Institutional Economics theory) is that it views the respondents (in this case the rights-holders) as proactive elements (CARE, 2009). Where other development theories view poverty as inescapable, and a large disadvantage, the Rights-Based Approach views the poor as equally capable of making decisions, from all perspectives. Part of the approach is therefore that the poor should be given the opportunity to make choices and decisions, even those their position technically withholds them from making (Kirkeman Boesen & Martin, 2007). This approach will return later in the description of the Voucher Schemes and Demand Side Financing. In that approach, individuals of poorer financial resource bases are empowered by the government and other financing bodies to make decisions as if they had the resources, through a ‘voucher’, which replaces the function of money. In concrete terms, they are given a voucher to use certain services, which they would not be able to afford otherwise.

The medical care system and the Government are the duty-bearers in the case that we address in this thesis, and the populace are the rights-holders. The foundation behind the rights-based approach stems from the idea that states have an obligation to fulfil towards their populations, to keep them healthy, as duty-bearers (Theis, 2003). This responsibility does not mean that they must provide the health care themselves, but they are required to provide the environment in which other providers can justifiably be expected to do so. This is where many developing countries run into problems. The rights-holders, on the other hand, are the recipients. Here, it is important to define what exactly rights are. Proponents of the Rights-Based Approach often feel that there is too much emphasis placed on the needs of individuals, and that their fulfilment somehow requires gratitude. The Rights-Based Approach regards needs as rights in themselves, and that therefore their fulfilment should therefore be taken for granted as an obligation, not as a favour (Kirkeman Boesen & Martin, 2007).

The modern health care approach places the patients as consumers in health care markets (Newdick & Derrett, 2006). This means that their choices and rights are dominant, but based on their abilities to pay. The problem with this is that when patients are unable to pay, they also do not have access to health care. Particularly in populations where a majority of patients is unable to pay – such as in developing countries – the state has a large obligation to fulfil. Most often, the state is not able to fulfil all its obligations to its entire population, and what it *is* able to achieve is seen as a favour to the poor.

In understanding the Rights-Based Approach, it is useful to have a representation of the types of rights which have been defined. This can be found in the table below.

**Table 2.3 Types of Rights**

	Positive Rights	Negative Rights
Procedural Rights		Emphasise right to liberty of individual
Substantive rights	Emphasise equity	

The table above gives some information regarding the possible rights that rights-holders can evoke.

- Positive rights: Economic freedoms and claims
- Negative rights: Freedom from external interference and right to self-determination
- Procedural rights: The right to have a decision made according to a certain procedure

- Substantive rights: Rights to have access to specific resources.

The combinations above create certain dilemmas which can be derived from the information above (Newdick & Derrett, 2006). For example, the Procedural Rights clause generates problems which arise when self-interest is brought into the question, because it enables parties to pursue their individual interests using established procedures. This means that sometimes the outcomes reflect individual efforts rather than collective good. This is because individuals can claim the rights to economic freedom according to specific procedures. This sometimes means that simply following the procedure gives individuals economic claims that they are not necessarily entitled to. This could mean claiming insurance reimbursement when there is no substance, or perhaps, as is more common in developing countries, claiming the right to free care when the financial resources are available to pay.

The Substantive Rights clause raises the question of resource constraints, faced by the Government. It reflects the idea that, although individuals may claim the right to access certain resources, the Government cannot always afford to provide them. The dilemma in this case is that although according to the Rights-Based Approach, individuals have the right to make their own decisions regarding their lives, health care, and nutrition, the government does not always have the resources to fulfil those decisions. Therefore, difficult decisions sometimes have to be made where the government overrides what the individual believes is necessary, in order to provide what they can.

Finally, the question of priority also comes into play; although the presence of rights may be indisputable, whose rights come first, those of the individual (patients) or those of the community? This is particularly relevant when there is a possible conflict of interests; allowing the rights of the individual may harm the rights of the community (Newdick & Derrett, 2006).

The reason that this approach is being considered more important, by various sub-groups, is because of the growing recognition that many lives are being lost in poor countries, not because the technology does not exist, but because it is not readily accessible (Benatar, Daar & Singer, 2003). Accordingly, it becomes necessary to apply available knowledge more effectively. This is particularly relevant for the current situation, where global capitalism places greater importance on the presence of free trade, than on population health.

## ***2.4 Government Failure: The Public Sector and Health Care in Developing Countries***

According to Rights-Based theorists, the high maternal mortality rate in India, and other developing countries, reflects inequity in access to health care (Lancet, 2004). Primarily, poor maternal health care outcomes are, in this perspective, affected both by poor quality of care available to poor women, as well as the choices these women make. These choices are affected by the educational background of the women, in addition to their geographical location, both of which relate directly to their socio-economic status.

The failure of the Government stems from the fact that, under the Rights-Based Approach, the government is responsible for providing quality care to women, regardless of their socio-economic condition. However, although this is officially often the case, pregnant women, particularly in rural areas do not receive quality care at public facilities (Edouard, 2009).

The main reasons for the lack of quality available at public institutions in developing countries can be traced back to the Rights which are outlined in the framework above. Firstly, the substantive rights, which refer to the right of access to specific procedures (in this case, the right to involvement in the health care system) are not in place, because the procedures themselves are not sufficiently in place. This is largely due to the fact that there is no clear delineation of responsibilities and duties among the various facilities. In addition, there is very little accountability in the public service delivery system (Ackerman, 2005).

Additionally, the public health systems in developing countries face the problem of difficult conditions, specifically very little infrastructure and inadequate staffing. This leads directly to a lack of motivation among the existing staff (Dasgupta, 2011). A resulting problem is therefore that the medical staffs attempt to limit the demands made upon them, by limiting the amount of information they make available to the public. They can do this because of the perceived lack of capacity of their poor patients to make complaints, or expose the limitations of the medical system, due to their 'inferior' status in the socio-economic system.

The main problems of the health care systems in developing countries, therefore, are the personal choices that patients make, with the limitations of their education and socioeconomic background and their geographical location, and the lack of appropriate legislation and regulation, which leads to unclear accountability and blurry definition of rights and responsibilities (Balarajan, Selvaraj and Subramanian, 2011). 66-93% of women in India do not give birth in a health facility (Hulton, Matthews, & Stones, 2007), for a multitude of reasons, and other developing countries have similar statistics. In Malawi, for example, the Maternal Mortality currently stands at 527<sup>1</sup> per 100,000 live births, which development scientists claim are almost entirely avoidable, under circumstances of better access to care (Ratsma & Malongo, 2009). An important factor is, therefore, the quality of the existing infrastructure (the supply side of the story), and also how developing communities view childbirth and its institutionalisation (the demand side of the story). The patriarchal structure of most developing communities means that childbirth is often not seen as a dangerous condition or one that needs assistance by medical facilities (Dasgupta, 2011; Ratsma & Malongo, 2009). Additionally, family financial resources are either not available for the process of institutionalisation, or are not made available, for the reason quoted above. Consequently, women face considerable barriers to the access of medical resources for maternal health.

On the supply side, emphasis has been increasing all over the world, on the dehumanization of the care process (Hulton, Matthews, & Stones, 2007). This mainly has to do with the fact that care in institutions is dependent on the availability of resources, both human as well as material. Often, there is a shortage of drugs, or personnel, both of which lead to brusque treatment of patients (SAMA, 2011). Either doctors do not have the time to deal with all of their patients, or facilities cannot supply drugs to the patients, free of cost, due to lack of financial resources (Hulton, Matthews, & Stones, 2007). There are also frequent reports of poor quality of food, lack of cleanliness, and essentially poor treatment of patients, especially in free Government facilities, which are dependent on funding and subsidies, rather than payment for the treatments they deliver.

---

<sup>1</sup> CIA World Factbook, 28 July 2012

Having discussed the positives, negatives, and implications of public and private involvement in health care in developing countries, it is now necessary to discuss the combination of the two. Public-Private partnerships often take the best of both sectors, and attempt to suppress the negative aspects, and may provide some options for developing countries that face the problems above.

## ***2.5 Public-Private Partnerships***

Public-Private Partnerships are becoming recognised as an effective method of combatting the problem of insufficient resources. In the past one and a half decades, the Government of India has generated a series of policies and regulations to attempt to stimulate and control this mechanism in the economy, but the general consensus is indeed that it is a desirable tool. In this particular study, it is relevant as a background to explaining Voucher schemes. Voucher schemes are a form of public-private partnership, which have specific characteristics to distinguish them. These will be explained in detail in section 2.7, but section 2.5 will give the background of public-private partnerships, to introduce them.

Public-private partnerships are effective in meeting the gaps in providing basic health services, particularly in developing countries, whose public sectors are dependent on insufficiently large tax-bases and government funds to finance them (World Bank, 2006). Infrastructure in developing countries is generally not satisfactory, and yet there is a large proportion of the population that is dependent on the services that it provides, since they cannot afford the services of the private sector. Public-private partnerships can therefore attempt to fill the gap, by taking advantage of the resources of the private sector to provide the basic services which are the responsibility of the public sector.

Public-Private Partnerships (PPPs) have been defined by the Department of Economic Affairs (DEA) (2011) in India as an “arrangement between the government sector and private sector entities”. The Department of Economic Affairs goes on to specify the following aspects of PPPs:

- PPPs entail investments made, or management undertaken by a private sector entity
- PPPs require well-defined allocation of risks between the entities entering into the venture
- PPPs require performance-linked payments made to the private sector from the public sector, linked to performance standards
- A common characteristic, although not a prerequisite, is that the PPP usually involves service for public benefit which the public sector is responsible for, but does not have the resources to carry out

These are the elements of the definition which best explain how governments of developing countries can use PPPs to improve provision of basic services in their countries. One of the benefits of the system is that it can use output parameters to define performance of the providers, which can maintain accountability to the public sector while leaving the private sector free to innovate and execute according to individual ideas (Department of Economic Affairs, 2011). It is, however, important that a suitable enabling environment is provided by the government to ensure that the PPP is capable of fulfilling its potential. A World Bank study (2006) identified certain factors which developing country governments may like to focus on if they wish to encourage PPPs in their economies, among which are included suitable legislative

support, capacity building measures and efficient participation and communication on the part of the public wing of the partnership. Additionally, an important factor has also been found to be suitable fiscal mechanisms, which is where most developing countries run into problems. Due to lack of oversight within the public sector itself, corruption and lack of quality management, the financing frequently meets roadblocks. Often, financing for PPPs is inadequate, delayed, inflexible, and linked to unwieldy oversight mechanisms (USAID, 2004). This aspect will return in the analysis of voucher schemes in developing countries, but it is important to recognise that it is an inherent problem in cooperation with the public sector in developing countries.

In order for a PPP to be sustainable, certain factors are required. Adequate financing, good management, organisational stability and qualified staff are necessary (USAID, 2004). These are not always available in developing countries. Satisfactory incentives need to be found in order to make PPPs as effective as they potentially can, which is why different types of PPPs have been innovated. Voucher schemes are one such attempt to combat some of the problems that average PPPs face. However, whatever the PPP design, sustainability and potential scalability need to be kept in mind. A scheme should be developed on the assumption that it might be applied later in other areas, or on a larger scale, and organisational capacity and resources need to be sculpted with this view in mind. Importantly, the governments in developing countries need to realise that they cannot simply take on the role of dictating actions and expecting the private sector to follow in a PPP. The relevance of a partnership also lies in the fact that the partners are to a large extent equal, and that problems can be discussed with mutual interest in order to solve them (USAID, 2004). This simple recognition would be of assistance to many developing countries in coming up with a more effective solution to providing basic services with the limited resources that they possess.

## ***2.6 Conceptual Framework***

Before describing the solution – in this case proposed as Voucher Schemes – it is important to discuss the framework within which the solution is required. In this case, the framework consists of the problems generated in the health care sector due to the contextual problems described in the theories of Institutional Economics and the Rights-Based Approach. In a graphic format, the combination of circumstances leads to the issues as described in Figure 2.2 below.

In brief, the conceptual framework can be described as the following:

Health care provision involves three main functions; finding financing, generating the inputs (such as providing medicines appropriate to situations, finding staff who can perform the necessary services) and providing the services (such as consultations, carrying out medical operations, and blood, urine and sputum tests). These are the functions that the medical sector as a whole is required to carry out in order to be a properly functioning sector.

The medical sector faces certain barriers to providing effective and qualitative health care. These barriers come both from the supply side, as well as the demand side. In combination, they can be thematically summarised within the categories of Institutional Economics and the Rights-Based Approach. Within Institutional Economic theory, the barriers that are faced are high transaction costs, information asymmetry, absence of insurance markets, and the desire for sovereignty. These factors are explained in detail in section 2.2. In summary, an institutional environment in which it is difficult for patients – particularly those from lower socioeconomic

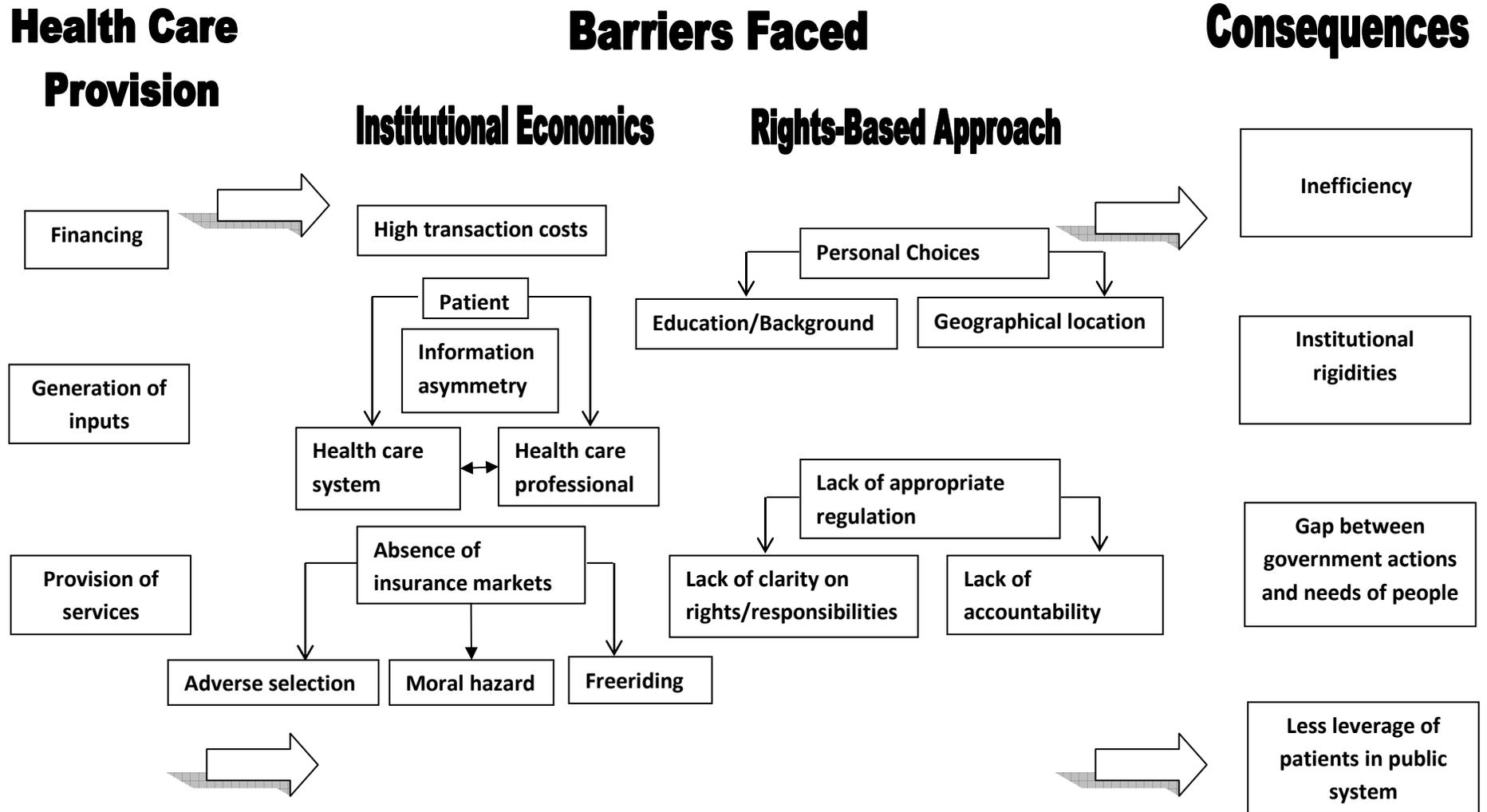
backgrounds – to claim their rights as patients is created, because of the misalignments that arise between the providers and the patients as a consequence of the factors mentioned above. These are problems created by the involvement of the private sector in the health care market, which need to be corrected by the government.

From the Rights-Based Approach, it is difficult for the patients to claim their rights because of two main issues. Firstly, the personal choices that individuals make act as barriers, since the individuals are limited by their education, socioeconomic background and geographical locality. These limitations often force individuals to accept services which are below par, or to rely on home-based care, since they do not have access to the services they have a right to as humans. Secondly, the lack of appropriate regulation and legislation in developing countries forms a problem, since it results in a lack of accountability on the part of Government health providers, as well as unclear distribution of their rights and responsibilities. This lack of regulation is often abused by Government health providers, often not through malice aforethought, but simply because they do not have the infrastructure to cope with the demand, and since accountability is not a problem, they do not feel the need to improve their system.

These factors combine to result in a contextual environment that is inefficient, rigid, unsatisfactory (does not perform the required functions), and does not take the patient into account (the 'dehumanisation' of the care process). Worst of all, these problems are kept in place, and exacerbated by the system, which does not provide any incentive to change or improve. This is where Public-Private Partnerships, in the form of Voucher Schemes, can be put in place to combat the problems specified here. Voucher schemes and their benefits will be outlined in the Chapter 2.7 below, as well as an introduction into why they might be suitable here.

Figure 2.2 Conceptual Model

Source: Adapted from literature



## **2.7 Voucher Schemes**

Voucher schemes are a method of Demand-Side Financing (DSF), where the barriers faced by the poor to accessing health care are attacked. They transfer purchasing power to specified groups, for defined goods and services, to increase access to specified services (Schmidt et al., 2010). Voucher systems have been shown to have an excellent track record of achieving results, in terms of accessing the target population (Montagu, Mohan, & Visconti, 2008). As a result, if voucher schemes are successfully introduced, one of the powerful results they achieve is that they empower the consumer, thus encouraging competition between providers.

The reason that they generate so much interest in developing countries, is that they provide a way of including the resources and inputs of the private sector into service provision in unprofitable markets, while still allowing the government to retain oversight, to ensure that exploitation of consumers is minimised. At the same time, Voucher Schemes permit the private sector to retain the extent of autonomy which stimulates more efficient and effective service provision, which is where the public sector often fails, in developing countries.

In the studies that have been performed to evaluate Demand-Side Financing, results frequently indicated that there may be a rise in facility-based deliveries in DSF areas, as opposed to non-DSF areas. The reason that the result cannot be unequivocally established, is that the causality is difficult to identify; is the increase in facility-based deliveries due to the DSF schemes, or due to other factors? The more evaluations that are done, however, the clearer it becomes that DSF schemes indeed do seem to have a positive effect on the communities they are implemented in. The concept of Demand-Side Financing was formed as a response to the lack of accessibility and utilisation of health services among the poor in developing countries (Gupta, Joe & Rudra, 2010).

Voucher schemes, specifically, work by allowing people to overcome the financial barriers they face with accessing services. The outcome of the scheme can be extremely positive in more than one way; it can make the service less inaccessible and more desirable, stimulate the habit of using the service among those sections of the population unused to doing so, and raise awareness of the positive externalities associated with the service. These are the externalities that come along with the scheme itself. In this way, maternal health services, by raising awareness of the importance of ante-natal nutrition, can actually improve ante-natal health without surgical involvement. This consequently makes natal and post-natal care easier.

One strong argument for involving voucher schemes in promoting services with positive societal externalities, is that it gives an opportunity to involve the private sector, but under more control than simply using the market (Bhatia & Gorter, 2007). In Chapters 2.1-2.6 above, it was shown that neither the government alone, nor the private sector alone, has been able to successfully provide health care to all sections of the populations, specifically in developing countries. This is an argument for a Public-Private Partnership, but not an unregulated one.

The reason that Voucher Schemes are more desirable than simple Public-Private Partnerships are that they are shorter-term, easier to regulate, specific to a certain service or facility, and much easier to evaluate. Voucher schemes enable governments to apply the ethical arguments of providing health care to everyone, regardless of ability to pay, to the argument of involving the private sector for reasons of efficiency and effectiveness (Lancet, 2004).

The strength of voucher programmes is that they are output-based; that is, they are connected to outcomes (Bellows, Bellows & Warren, 2010). Financial support is only guaranteed if specific targets are met. Although these targets might be difficult to meet sometimes, which can be considered unfair to the providers, on the whole it ensures that progress is made. Also, these targets can be used to improve the quality of care; by making standards a condition for participation in the scheme, a financial incentive can be provided to the providers to improve their infrastructure.

There are, of course, also problems associated with vouchers. There are high administrative and transaction costs, because of the importance of keeping track of participants, results and progress (Bhatia & Gorter, 2007). There is also the potential problem of moral hazard on the part of the consumers; over-use of services when it is unnecessary, simply because it is 'free' for the consumer. Additionally, there is the chance that the wrong people may get access to the services through the voucher scheme, through a defective or insufficiently effective targeting process. This is one problem that is being experienced in Lucknow, which will be extensively discussed in Chapter 4 below. Finally, there has to be effective communication between the public and private sectors, otherwise the lack of clarity may lead to problematic service delivery.

Despite these problems, in the few evaluations which have taken place until date, vouchers have been shown to address underutilisation of health care, improved targeting of beneficiaries, and generally achieve positive responses. In the case studies in Chapter 3, different voucher schemes will be discussed in the context of their local environments. These will be compared to the Sambhav Voucher scheme currently in place in Lucknow, Uttar Pradesh, to see in what aspects the scheme can be improved.

A careful review of the literature referenced in this chapter, on public and private involvement in maternal health care, provided the following themes within which developing countries generally run into problems in delivering health care. These were also outlined in the conceptual framework:

### **Institutional Economics**

- High transaction costs
- Information asymmetry
- Absence of insurance markets
  - Adverse selection
  - Moral hazard
  - Freeriding

### **Rights-Based Approach**

- Personal choices
  - Education/background
  - Geographical location
- Lack of regulation
  - Lack of rights/responsibilities
  - Lack of accountability

All these themes appear in the conceptual framework above, and were distilled into the categories above with the purpose of analysing the case studies in Chapter 3, in order to draw structured conclusions on the effectiveness of the Sambhav Voucher Scheme. These themes will recur in the analysis and the suggestions for improvement for the Sambhav Voucher Scheme will be based on them.

## ***2.8 Conclusion***

In Chapter 2, private and public service delivery in maternal health care were discussed, within the context of Institutional Economics and the Rights-Based Approach. These two theoretical perspectives were selected to give some structure to the various approaches to delivering maternal health care in developing countries. Developing countries face a complex situation; on the one hand, they are ethically required to provide health care to their population, and there are also economic benefits associated with a healthy population. A healthy population is a better working, and more productive population. Nevertheless, where developed countries can rely on their tax incomes and substantial financial contributions from their populations to finance their medical programmes and facilities, developing countries are mostly dependent on their tax bases. Additionally, the poverty level in most of these countries means that the tax base is far smaller than the demand for services. The dilemma is, therefore, how to provide financially viable services, without compromising on the quality.

In the chapters above, the solution that is suggested is to involve the resources and capacity of the private sector, using Demand-Side Financing, specifically in the form of Voucher Schemes. This concept stems from the idea of using Public-Private Partnerships, but Voucher Schemes are specific to certain services, and are therefore easier to oversee. Chapter 3 below will outline various schemes which have been implemented in different developing countries, to assess the positive and negative outcomes, in order to establish whether the Sambhav Voucher Scheme can contribute to improving maternal health care in Lucknow more effectively than at present.

### 3. Case Studies: Voucher Schemes in Developing Countries

The section below studies different cases where vouchers have been used, with varying degrees of success. Chapter 3.5 will analyse the case studies according to the 10 different themes listed in Chapter 2.7 above.

#### 3.1 Argentina

##### World Bank (2009). Provincial Maternal and Child Health Insurance: A Results-Based Financing Project at Work.

###### Background

In the early years of the 2000s, Argentina faced a problem of quality and access in maternal and child health care. A third of the population lacked access to care, despite a high proportion of per capital health spending, with Argentina ranking among the top 20 countries in the world.

In 2004, Plan Nacer was introduced, supported by the World Bank. At a cost of US\$ 135.8 million, the Plan was intended to provide a free basic package of cost-effective mother and child health care services to the 9 poorest provinces in Argentina. The target population was uninsured pregnant women, and children below the ages of 6.

###### Plan Details

The plan works on a system of results-based incentive mechanisms for health providers, which are intended to improve the quality and the accessibility of maternal and child health care. The incentives are called Tracers. There are 10 Tracers which are established as targets for the providers, which vary per province, which are negotiated annually, and which are meant to increase accountability and improve quality in the health system. The 'accomplishment' is all-or-nothing, so unless health providers meet all the Tracers, they do not receive their reimbursement. 60% of the funding is given upon the verification of enrollment in the scheme, and 40% after the accomplishment of the Tracers, annually. As of September 2009, 5,481 health providers were involved in the scheme.

The tracers are shown in Figure 2 above. These are the basic indicators which are used to measure the standards of the facilities involved in the plan.

The plan involves the National Ministry of Health, as overall administrator and provider of funds, the Provincial Governments as regulators of membership, and the Health Providers as service providers.

Figure 3.1 Source: World Bank, 2009

###### Box 1. TRACERS

1. Timely inclusion of eligible pregnant women in prenatal care services
2. Effectiveness of neonatal and delivery care (Apgar Score)
3. Effectiveness of pre-natal care and prevention of premature birth (weight above 2.5 kilos)
4. Quality of pre-natal and delivery care (number of mothers immunized and tested for STDs)
5. Medical Auditing of Maternal and Infant deaths
6. Immunization Coverage (measles vaccine)
7. Sexual and Reproductive Healthcare
8. Well child care (1 year or younger)
9. Well child care (1-6 years old)
10. Inclusion of Indigenous Populations

## Results

<b>Positive</b>	<b>Negative</b>
80% of target population reached by September 2009 (5 years after the plan was instituted)	Payment will only be made on achievement of the tracers, regardless of circumstances
Institution of a service tracking system	Complicated administrative system, involving the National Government and Provincial Governments, in addition to external auditors.
Strict adherence to Tracers	Extensive bureaucracy because of individual agreements with health care providers
Tracers adjustable to province, which makes them more achievable	
Insurance-based billing and reimbursements	
Not a drastic reform of the health sector, simply uses strategic financing within the existing health care framework	

In conclusion, the scheme's results were positive, but perhaps because the requirements were strict. Also, information regarding actual results are only available from one source (the World Bank) which makes the objectivity questionable. In short, the scheme has strengths, but may need to be improved, and more information is required regarding the specifics of the 80% target population success which is claimed.

## 3.2 Bangladesh

*Schmidt et al. (2010). Vouchers as Demand Side Financing Instruments for Health Care: A Review of the Bangladesh Maternal Voucher Scheme. Health Policy, 98-107.*

*Ahmed, S. and Khan, M. (2011). A Maternal Health Voucher Scheme: What Have we Learned from the Demand-Side Financing Scheme in Bangladesh? Health Policy and Planning, 25-32.*

### Background

Bangladesh has a unsatisfactorily high Maternal Mortality Ratio, although stable at around 320 per 100,000 live births for the past few decades. One possible contributing factor to the high MMR could be the low utilization of public maternal health care services by poorer individuals, due to the extensive cultural and financial barriers they face. Currently, 80% of women deliver their children at home, without support from professional medical staff.

Under the previous system, poor individuals had free or highly subsidized access to public health care services. This system nevertheless had an insufficient reach, because the system does not have, and has never had, the necessary infrastructure. Additionally, poor individuals do not have the money to afford even what is unavoidable (such as transportation costs, etc.). This makes it clear that one of the biggest barriers to a higher level of health care utilisation is finance, since women in the higher socio-economic classes have been shown to be more likely to use medical care. Therefore, the purpose of the Voucher scheme, set up in 2007, was to improve the quality of programmes using consumer empowerment, by reducing the financial barrier. This empowerment would be tapped using the power of choice. By empowering the clients to choose the provider, the health care provider is made dependent on the clients for their finance, and the clients are empowered by the reduction of out-of-pocket costs of medical care.

### Plan Details

In Bangladesh, a selection of disadvantaged geographical areas was made. It was narrowed down to 33 sub-districts. In 9 of those sub-districts, universal targeting was applied on the assumption that residence in those areas meant eligibility. In the remaining sub-districts, means testing was used to determine the economic status and potential eligibility of beneficiaries. The target women were in their first or second pregnancy, and functionally landless, meaning that whether they legally owned land or not, they were not capable of farming it, for whatever reason.

**Figure 2.2 List of Services** Source: Ahmed & Khan, 2011

Voucher service components	Reimbursement rate (US\$)*
Registration	0.15
Lab tests for 3 ANC visits: 2 blood and 2 urine tests	2.15
Consultation fees for 3 ANC visits and 1 PNC visit	3.07
Conduct of safe delivery Safe delivery	4.61
Medicine	1.54
Forceps/Manual removal of placenta/DE&C/ vacuum extraction	15.38
Eclampsia management	15.38
Caesarean section with medicine	92.30
Transportation to referral facility	7.70
Referral fee from sub-district to district level	7.70
Gift to pregnant women and baby after delivery at facility	7.70
Incentive to mother after delivery at facility	30.76

\*1 US\$ = 65.00 Taka.  
Source: Demand-Side Financing Pilot Maternal Health Voucher Scheme Proposal (MOHFW 2007).

The benefits of the scheme included the services shown in Figure 3 to the right. These services will be compared to the services provided in the Lucknow Sambhav Voucher scheme to assess the completeness of the scheme.

The health providers are authorised by the Ministry of Health and Welfare, and reimbursement is achieved through locally assigned banks. 50% of the reimbursed money is transferred directly to the provider, to be used as seen fit to improve the infrastructure, and 50% of the money is placed in a seed-fund account, directed towards the improvement of service provision, maintenance and repair, as well as other MCH activities. A very strong focus was laid on keeping the responsibility with the Government of Bangladesh.

The target population is found using Community Health Workers, who register women using a form to check their eligibility. Vouchers and cash (for transportation allowance) are distributed at monthly meetings to the Community Health Workers.

### Results

<b>Positive</b>	<b>Negative</b>
Increase in facility-based delivery	An initial lack of communication regarding targeting of women led to a temporary suspension of voucher distribution: initially all women could use the scheme, which meant non-poor women got precedence once again
Initially public providers were not allowed to receive any reimbursement directly. Once that changed, the results quickly became more positive because of the positive incentives	Difficult and unfair selection of women, harsh eligibility criteria
	Because the scheme requires a parallel administrative mechanism, it means an increased burden and workload for the staff
	Administrative staff do not receive reimbursement for the additional time they need to spend on the scheme
	Although the intention is to provide a choice for consumers, effectively, this does not occur. In the sub-districts, there were no private facilities or NGOs located close by, providing health care.
	The existing infrastructure lacks basic equipment and staff. For example, one district lacked an anaesthesia consultant for several months

Therefore, the ultimate conclusion was that, until the existing infrastructure was strengthened, and competition was cultivated to encourage the entrance of private providers and NGOs into the field, this voucher scheme would not have all the desired effects.

### **3.3 Cambodia**

***Ir et al. (2010). Using Targeted Voucher and Health Equity Funds to Improve Access to Skilled Birth Attendants for Poor Women: A Case Study in Three Rural Health Districts in Cambodia. BMC Pregnancy and Childbirth.***

***Bitran. Preserving Equity in Health in Cambodia: Health Equity Funds and Prospects for Replication. World Bank.***

#### Background

Cambodia has an even higher MMR than Bangladesh. In 2005, it was estimated at 472 per 100,000. Only 21.5% of deliveries took place at a facility, and 43.8% with skilled attendants. Part of the reason is the high inequality in Cambodian society. Only 20.7% of women in the lowest quintile delivered with health professionals in attendance, and only 6% of women delivered in a health facility. This is in contrast to the richest quintile, where 89.9% of women delivered with health professionals in attendance, and 67.4% in a health facility. Out-of-pocket expenditures (expenses which are paid for by the individual patients) are around 85% of total funding received by the sector, while the Government provides only 4-5% of the finances. For a country as poor as Cambodia, this figure is too high. Evidently the financial barrier is significant, among other reasons, in keeping facility-based deliveries low, although education and cultural beliefs undoubtedly also play a role.

Cambodian Government facilities provide waivers of user fees, but there is evidence of corruption. Beneficiaries complain of having to pay bribes, and for services even when they have an official waiver, which should mean that they do not have to pay. In addition, the official waivers themselves are difficult to receive. This is partly due to the fact that the revenue from user fees contributes considerably to the incomes of Government Health Workers. This means that the salary of health workers depends on the funding they receive from patients, not from what the Government pays. If they grant a waiver, it effectively means that they are paying for the patient themselves, since their income accordingly reduces. They are therefore extremely – and understandably – reluctant to grant waivers. According to Bitran's study, only 18% received a waiver in the entire country in 1997, although of course statistics vary per province. Additionally, individuals from wealthy households were more likely to receive waivers. The Sambhav Voucher scheme in Lucknow faced similar problems, with vouchers being distributed to wealthier individuals, who had contacts, and not the poor for whom it was intended.

In 2007, the Cambodian Government introduced a voucher scheme to complement the Health Equity Fund and waiver system already in place. This Health Equity Fund (HEF) is a system which acts as a third party payer for health care for the poor. The waiver system has just been explained above, but the Health Equity Fund requires some explanation. It was instituted in 2001, parallel to the Calmette system, and together the two approaches formed the Cambodian health care system for the poor.

- Calmette System: In the Calmette Government hospital, a third of available beds is reserved for the poor. This is a tried and tested system, which works well (all free beds are taken, while 65% of the normal beds are occupied) but also results in extensive problems. For example, there is always more demand than the hospital can take on, the staff are overloaded with work, and the infrastructure is not always the most up-to-date.
- Health Equity Fund: In Sotnikum, 51 individuals were hospitalised in June and July 2001, and reimbursed for their hospitalisation expenses, according to a predetermined structure, fixing the maximum amount for different types of expenditures. However, the Fund did not match the structure of patient spending. Patients usually spend most on food, during hospitalisation stays, followed by hospitalisation fees, and finally, transportation costs. The reimbursement structure was different, which meant that beneficiaries ultimately ended up paying anyway.

Clearly, the programmes already in place were not sufficient to solve the problem of underutilisation of maternal health services. Therefore, in order to support the Health Equity Fund, the voucher scheme was consequently established.

### Plan Details

In 2007, the voucher scheme was introduced to complement the existing Health Equity Fund. The Fund had positive effects, but was not entirely tailored to the needs of the poor. Therefore, the voucher scheme was introduced to incentivise deliveries in referral centres with skilled personnel.

Under the scheme, women are given 5 coupons for health care. They are encouraged to use as few as possible. Additionally, the coupons are only valid for the current pregnancy, which is identified by the NGOs dedicated to identifying eligible beneficiaries.

Health providers are chosen on the basis of Performance Based Contracting (PBC). That is to say, they are selected on the basis of certain criteria, and continuously re-evaluated. If they do not match the criteria, they are removed from the scheme.

The voucher scheme was introduced in the area of Kampong Cham. This area has a population of 1,680,000 and 10 Operational Health Districts, each of which have their own referral centre. The study on which this evaluation was based consisted of 3 Operational Health districts, containing 3 referral hospitals, 42 health centres and a population of 938,000. There were no operating theatres in the area covered, so surgeries were referred to the provincial hospital.

The benefit package consisted of full or partial remuneration for costs incurred during hospitalisation, for which eligibility was based on the criteria listed in the Health Equity Fund scheme.

## Results

<b>Positive</b>	<b>Negative</b>
Management of the scheme was given over to NGOs. This meant that they were relatively objective, and could devote their time to interviewing candidates. However, not all NGOs were equally qualified, or honest in their task	More than half the women who received vouchers did not use them for deliveries
Because of the Performance Based Contracting, general performance of the health providers improved. Additionally, the question of low staff income was counteracted, through performance and output-based cash incentives.	Private providers were not included in the scheme
Improved access to maternal care was achieved, which could be seen by the increased number of deliveries in facilities	The schemes do not address the problems of extra financial barriers; transportation costs and hospital stays are not reimbursed
	Distribution of vouchers depends purely on the physical presence of voucher distribution staff, which is not always possible
	Ruling out centres from participation in the programme on the basis of the fact that they do not meet criteria improves the quality of services, but rules out the participation of poor women in the scheme who live close to those centres and cannot afford to go anywhere else

### 3.4 Africa

**Obare et al. (2012). Community Level Impact of the Reproductive Health Vouchers Programme on Service Utilisation in Kenya. Health Policy and Planning.**

#### Plan Details

In 2006, the Kenyan Government, together with the German Development Bank (KfW), set up a Voucher Scheme to provide maternal and reproductive health care to poor women in Nairobi. The vouchers were to be made available to women who matched 8 criteria, based on household assets, income and access to health services. These women would be eligible to buy subsidised vouchers for maternal health services (+/- €2) and family planning (+/- €1).

The maternal health services that the vouchers provide access to are 4 ante-natal check-ups, delivery, post-natal care up to 6 weeks after delivery, and a caesarean operation if necessary. All this is provided for under the voucher scheme, upon displaying the voucher at one of the accredited facilities.

There were 54 private and public health facilities that were contracted to participate in this scheme. The vouchers themselves were distributed to eligible women by NGO distributors, in the first two years of the scheme, but later through other channels.

#### Results

<b>Positive</b>	<b>Negative</b>
Women who were exposed to the voucher scheme were shown to be more likely to deliver at facilities, using skilled care	Access within the first trimester still remains low; women are not informed enough to know how important that is
Post-natal services were used more after the introduction of the scheme	Poor women were still less likely to use skilled care, compared to non-poor women; the subsidy was not enough
	The problem of additional finance still exists; transportation costs and stay were not covered
	Initially, when vouchers were distributed and a commission was granted per voucher to the distributors, there was excessive leakage of vouchers to non-eligible women. This problem has still not been completely solved

**Johannes et al. (2008). Performance-Based Contracting in Health: The Experience of Three Projects in Africa. OBA Approaches: Supporting the Delivery of Basic Services in Developing Countries.**

#### Rwanda

#### Plan Details

In 2002, two pilot schemes were introduced in Rwanda. Both public and non-profit NGO facilities participated in the scheme. In this scheme, the providers were to be compensated for services

provided to the poor, not through vouchers, but by keeping track of the number of services provided. This was monitored by a steering committee and Monitoring and Evaluation officers drafted for that purpose.

### Results

<b>Positive</b>	<b>Negative</b>
There were increases in the use of core primary health services during the period of the schemes (2001-2004)	No visible attention has been paid to the corruption in the country which causes problems in such schemes. The extent of leakage is still unknown, and the results are therefore extremely unreliable.

## Uganda

### Plan Details

Two groups of Private Non-Profit Providers (PNFP) were given grants which they could spend according to their discretion. In addition to the grant, they were given the possibility to earn a bonus of up to 11% of the basic grant, if they achieved certain performance indicators. Additionally, they were told that if they did not reach the indicators, they ran the risk of their contracts not being renewed in the future.

They were assessed against a control group who also received grants, but were not promised bonus incentives. The only incentive they were given was renewal of contract upon good performance.

### Results

<b>Positive</b>	<b>Negative</b>
Giving the facilities autonomy in decision making with the grants is a positive approach, with positive effects	Bonus payments were paid to facilities, and not to individual workers
Most of the facilities achieved at least one performance indicator, and some achieved all three.	The payments did not have much of an impact, given that they were too small
	Bonus systems require time to get started

*McDowell. A Tale of Two Countries: Contracting for Health Services in Afghanistan and DR Congo. World Bank.*

*Johannes et al. (2008). Performance-Based Contracting in Health: The Experience of Three Projects in Africa. OBA Approaches: Supporting the Delivery of Basic Services in Developing Countries.*

## Democratic Republic of Congo

### Plan Details

In 2002, the DRC was just emerging from decades of civil war, mismanagement and corruption, with no external help or internal funding for the health sector for at least 10 years. In order to

change this, the Health Zone system was set up, funded by the International Development Association (IDA).

The purpose of the system was to contract both international and church-based providers in order to cater to 80 health zones within DRC, to provide quality and accessible health care. The contracts would be performance-based, and reports written regarding the care provided was to be verified by health administrators and independent NGOs, and incentive payments would be given to high achievers.

### Results

<b>Positive</b>	<b>Negative</b>
The number of consultations rose all around the country	The results are questionable, as the source is a World Bank report
Coverage of assisted deliveries ostensibly rose from 25%-74%	Corruption is not dealt with, and presumably had a hand in influencing the results
The consultation fee declined universally in facilities around the country	Control was too centralised; the focus was on the process, not necessarily on results. Approval of work plans and the procurement process were both required which slowed down the process of service delivery
	The organising bodies were not able to collaborate very well with each other, which led to bureaucratic bottlenecks.

## **Summary**

Table 3.1 below summarises the general points of the different schemes. While the case study summaries are interesting to identify the various key points of the schemes, they are not sufficient to draw general conclusions. The reason for this is that the contexts are too different. In addition, in order to identify the areas in which the Sambhav Voucher Scheme can improve, it is important to structure the lessons that can be learned from the other case studies. To that end, in section 3.5, a brief analysis of the case studies above will be laid out according to the themes distilled from the literature.

**Table 3.1 Case Study Summary**

Argentina	<b>Positive</b>	Results were achieved without too much overhaul of the existing system. Patients were positive about the new system
	<b>Negative</b>	Much administration was required for the system to work and current administrative staff were not given a higher salary, or more staff support.
Bangladesh	<b>Positive</b>	Some positive effects were seen, of the programme, and the administrators also showed that they were paying attention to the flaws in the system, and attempting to work around them
	<b>Negative</b>	Excessive administration was required in order to maintain the system, and the fairness of the selection procedure for women is questionable. Additionally, existing infrastructure is too poor to provide the support necessary for such a system to work
Cambodia	<b>Positive</b>	Independent reviewers were used to assess the scheme, but not all were equally reliable
	<b>Negative</b>	Voucher distribution was problematic, and almost unsuccessful, in addition to which the scheme did not address the external problems of transportation, hospital stay, etc., which meant that the financial barrier still existed
DRC	<b>Positive</b>	Some positive results were achieved, according to a few reviews – however the authority is questionable
	<b>Negative</b>	Too much control was exercised by the central body, including the review and approval of work plans and procurement processes
Kenya	<b>Positive</b>	Positive result were seen of exposure to the

		plan
	<b>Negative</b>	The external barriers to accessibility (such as transportation costs) were not addressed in the scheme
Rwanda	<b>Positive</b>	Some positive result were achieved by the plan, although the extent is unclear
	<b>Negative</b>	Corruption was not addressed, so the extent of leakage is unclear.
Uganda	<b>Positive</b>	Autonomy stimulates innovation, and incentivises achievement of performance indicators
	<b>Negative</b>	The bonuses were too small to have a clear effect on behaviour.

### ***3.5 Thematic Analysis of Case Studies***

In this section, the case studies will be analysed using the themes outlined in the conceptual framework. The purpose of this section is to lay the groundwork for the analysis in Chapter 5, which will attempt to draw lessons to improve the Sambhav Voucher Scheme.

#### **Institutional Economics**

##### High transaction costs

High transaction costs arise from the fact that markets are imperfect. This means unfair advantages for some of the parties. In the health care markets in developing countries, health care providers, particularly those in the private sector, have a very highly unfair advantage. They have the opportunity of catering to the market that can afford them. All countries that are introducing programmes and schemes to increase the accessibility of services for the underprivileged and disadvantaged are trying to combat this problem. The Demand-Side Financing schemes outlined in the case studies above attempt to do this by providing an opportunity for targeting subsidising of services. In some cases, such as in Bangladesh (Schmidt et al., 2010) and Cambodia (Bitran, Unknown) the original approach was to provide free services for all poor households. Since this did not appear to work, voucher schemes use a more targeted approach, by providing vouchers which transfer rights to services to the patients. This reduces the transaction costs because poor households either do not have to pay for the vouchers, but are entitled to receive the services which they would not be able to access otherwise (as in Bangladesh, Cambodia, Kenya and DR Congo) or they pay a nominal amount and receive an array of services (as in Kenya).

This problem of income distribution inequality, combined with a lack of regulation results in two main problems; institutional rigidities and unclear property rights (see section 2.6). The problem of property rights is tackled by the specification of the services that vouchers entitle the holder to. Voucher schemes work by a two-way definition of responsibilities; on the one hand, the government provides subsidies to providers on the condition that they fulfil certain requirements of quality, as well as upon delivery of services (Montagu, Mohan, & Visconti, 2008). On the other hand, the voucher defines the services that the holder is entitled to receive from the provider. Any more services are optional to the provider, but they may not provide less. This clarifies the problem of responsibilities and rights – if the system works as intended.

Two of the problems arising from high transaction costs have not yet been solved by any of the case studies presented above; claims to residuals by staff members who happen to have access to them, and opportunism from both the providers as well as the patients. The problem of residuals will always be there in imperfect markets, because demand determines the price of a good. When demand is not balanced with supply, excessively high transaction costs occur. This is a common problem with medication in developing countries. Since medication is difficult to come by, information on how and where to access it is not always available to the patients, and health care providers frequently have as good as a monopoly on the sale thereof, poor patients often end up paying far more than is just. This is a recurring problem in almost all the case studies above, where services cost more than they should because of petty corruption in the system.

Opportunism is an issue which arises in every market, but is more difficult to combat in developing countries because of the lack of oversight and regulation. From the providers' side, it frequently results in physical or mental abuse of power, or declaration of services which have not been provided. From the patients' side, it returns in the form of ineligible candidates taking advantage of the free or cheap services, as was documented in the case of Cambodia and Kenya. None of the schemes mentioned above has found a solution to this problem as yet. Attempts have been made to increase oversight and accountability, but frequently this simply results in an increase in bureaucracy.

### Information asymmetry

Information asymmetry is the problem where one party has more information on a certain issue than another. In this case, health care providers know far more than patients what they offer, and frequently patients do not even know what they are entitled to once they are in the facility and are receiving their services. Additionally, the government faces the problem with respect to health providers that they need to reimburse them for services, but cannot afford to check and counter-check every action or claim that is filed. Effectively, therefore, this category refers to the importance of clarity from the government with respect to the contracted facilities. It is important that the public sector emphasises what the private sector can expect to receive, in terms of benefits, from participation in the scheme. Additionally, it is very important that the private sector is clear on the potential problems of funding, how much they can receive, what the procedure is of applying for reimbursement, and where the bottlenecks could arise. Providers should also be made aware of the potential drawbacks of participation in the scheme, as well as what their responsibilities are towards the patients.

Argentina tackled this problem by settling individual agreements with each of the health care providers (World Bank, 2009), and deciding on separate contracts for each of them. Additionally, the targets for each of the providers depended on which province they were located in. The 10 "Tracers" which were decided upon as targets were common to all the provinces, but the target itself varied. While this is an effective way of handling the question of transparency, since each of the providers is clear as to what the case is according to their specific contract, Argentina involved over 5,000 providers in the scheme as of 2009. This means extensive bureaucracy, excessive administrative work, and a very long process before the scheme can actually be started. A compromise is therefore necessary.

In Bangladesh, public providers were initially not permitted to receive reimbursement for participation in the voucher scheme directly, since the logic was that they were already being subsidised by the government (Ahmed & Khan, 2011). The logic was that they would have to compete with the private sector for patients, under the scheme, which would provide them with an incentive to improve their performance. Unfortunately, there are very few private providers in Bangladesh which meant that ultimately competition within the sector was too low to have an impact (Schmidt et al., 2010). Ultimately, part-way through the scheme, the Government introduced direct subsidy also to the public sector providers, which stimulated service provision effectively.

This compensates for low initial subsidies and the lack of competition within the market, although whether it is cost-effective is not entirely clear.

Cambodia was effective in its Performance-Based Contracting. The scheme apparently set achievable goals, since the evaluation found that both the problem of low staff income was counteracted, as well as the performance of facilities improved using cash incentives (Ir et al., 2010). Of course the advantage that Cambodia had was that the voucher scheme was supplementary to the existing waiver system, and Health Equity Fund. The evaluation clearly does conclude that it is the combination of systems which generates the positive effects (Bitran, Unknown).

None of the case studies above made a concerted effort to inform the patients on their rights, although all the countries included some form of information dissemination, largely through their voucher distributors. However, this seems to be an issue which has not been effectively tackled.

#### Absence of insurance markets

- Adverse selection

Adverse selection is a problem that is inherent in developing voucher schemes, since all the patients are underprivileged, and not able to finance themselves. However, in this case, it also refers to the problem of identifying eligible households to participate in the scheme. Since it is difficult to determine who is more deserving of two households, and yet problematic to provide vouchers to the entire population below a certain income level, certain decisions have to be made. Most of the case studies included in this investigation approached the problem using designated eligibility criteria to assess who should participate in the scheme.

The case studies above show that although different procedures are used to identify the target group, there is more homogeneity regarding whether a commission should be given to the distributors. Although in most of the case studies no commission was given, the ones where it did occur had bad experiences, and stopped the commissions. Most of the case studies approached patient targeting using certain eligibility criteria based on residence location, income data and community-level information. These criteria are naturally dependent on the location and context, so they cannot be generalised. It is, however, possible to suggest that the most successful targeting procedure combines quantitative data with qualitative information from community elders or leaders, to maximise the chance of targeting the most eligible women.

In Kenya, instead of distributing the vouchers free of charge, the vouchers were charged to the women. The fee was nominal (+/- €2) and the voucher covered the entire process of pregnancy, from conception to post-natal care (up to 6 weeks) (Obare et al., 2012). The purpose was to grant some degree of choice to the poor women, without providing it completely free of cost. Unfortunately, since their information distribution was somewhat lacking, it was difficult to inform women of the opportunity, which meant that uptake in the first trimester was still low. Also, initially a commission was paid to the distributors of the vouchers, which led to excessive leakage. The distributors would sell the vouchers to women who were not eligible for the scheme. This

problem was partially fixed when the commission was removed, but leakage still exists. The question is, how is it possible to incentivise sale or distribution of vouchers to eligible women without also providing an incentive to leak them?

In order for the voucher scheme to work successfully, it is important that the target group is reached. With voucher distribution, two main goals are targeted; firstly, to bring quality health care to the underprivileged groups in society, and secondly, to provide those underprivileged groups with an element of choice in which facilities they choose, thereby stimulating competition between providers. In order to achieve these aims, an effective system of voucher distribution is necessary, because if the target group is not reached, the aims cannot be reached. An effective voucher distribution system therefore needs to have two main aspects; a method of identifying the target group, and an incentive for the distributors to get the vouchers to them.

- Moral hazard

Moral hazard is also a problem inherent in voucher schemes, but even more so when services are provided for free. To that extent, vouchers are somewhat of a solution to the problem. Moral hazard occurs when individuals do not feel ownership of an item or a service, and feel entitled to abuse it. With free services in developing countries, this problem encompasses two issues; firstly that patients can claim services that they are not entitled to, on the grounds of 'free service delivery', such as private care, private rooms, or services and medication that are not included in the package. The second possibility is that patients, especially from poorer socioeconomic backgrounds, may unwittingly commit moral hazard. There is not much information available to poor households on suitable nutrition and hygiene, nor do they necessarily have access to the appropriate food and tools to maintain a healthy lifestyle. As a result, they are more likely to need the services offered by the government, specifically when it comes to deliveries complicated by UTIs, anaemia or malnutrition. The voucher schemes and Demand-Side Financing schemes outlined in the case studies above attempt to use two methods to counteract this problem; firstly by encouraging the use and identifying the importance of health care, by showing that governments are willing to invest in health. Secondly, most of the schemes in the case studies have some element of information dissemination, partially using the voucher distributors, whose responsibilities can also encompass encouraging poor patients to use the services.

- Freeriding

Freeriding is a central problem in Institutional Economics, and can easily be given a place in the theorising on voucher schemes. Although it can be argued that there are people who are ineligible to receive health care, and who can easily afford the services provided at subsidised rates by the Government and other organisations, but who choose to use the free health care, on a moral level it is difficult to justify this viewpoint with respect to health care. Firstly, it is difficult to place a numerical value on health, since it differs per person, and also, it is possible to argue that every single person who does not pay taxes and yet uses the free or subsidised health care system is on some level a freerider. Nevertheless, the Economic reasoning behind voucher schemes is based on

the concept that investment in the health of a population will be beneficial for a country in the long-run, which suggests that the freerider issue is factored in.

## **Rights-Based Approach**

### Personal choices

- Education/background

Education and socioeconomic background have been shown in every case study to be a key reason that many poor households lack access to sufficiently effective health facilities. Minimising the negative consequences of the fact that large proportions of the populations in developing countries have this disadvantage is often a stimulant for governments to introduce schemes such as the voucher schemes outline above. The Rights-Based Approach advocates the fact that a lower education, or family income, should not affect the ability of individuals to be able to access health and security. To this extent, Demand-Side Financing attempts to provide poor households with the luxury of choice that is usually associated with more advantaged families.

- Geographical location

All the schemes mentioned above face the problem of out-of-pocket expenses. Since it is not possible to refund all expenses associated with hospitalisation (such as transportation, hosting accompanying family members and medication), these expenses often need to be paid by the patients themselves. Unfortunately, especially in developing countries, even the nominal amounts required to pay transportation and food are too much for households suffering from poverty.

This problem returns in all the case studies, explicitly mentioned in Cambodia and Bangladesh. The problem in those schemes was that emphasis was placed on selecting facilities that matched the criteria of quality. As a result, not as much focus was placed on the location of the facilities. As a result, certain communities were underserved, with facilities far too distant to be accessed. Nevertheless, it is worthwhile to note that under almost all circumstances in developing countries, transportation costs, residence during the period of hospitalisation for accompanying family members, food and other related expenses are too high to be paid by the target groups in question. This is an aspect that unquestionably plays a large role in the success of voucher schemes.

### Lack of regulation

- Lack of rights/responsibilities

One of the factors which is given a great deal of importance in all the evaluations is the degree of autonomy that the facilities are given in the process of the contracting. On the one hand, it is important that the facilities are able to decide their day-to-day activities without having to run everything by their oversight agency. On the other hand, however, it is not appropriate to simply subsidise the facilities without having a system to ensure that the money is being spent according to the requirements, and not according to a scheme of profit-making.

One of the problems in Cambodia was that the management of the scheme lay in the hands of NGOs. These were not all equally qualified, or honest (Ir et al., 2010). This was also a problem in the case studies in Africa; the rampant corruption, both at the end of the providers, as well as the overseers. In Kenya, this problem resulted in the German Development Agency (KfW) placing a great deal of emphasis on oversight (Obare et al., 2012). This occurred in the Democratic Republic of Congo too, where it actually caused problems by limiting the innovativeness of the facilities. Additionally, it slowed down the process of providing health care immeasurably, because it involved every decision needing to be approved by the central authority (McDowell, Unknown). In the countries where emphasis was placed on results, but not on the way the results were achieved, greater progress was found to occur.

- Lack of accountability

Accountability is a problem that returns again and again in developing countries. The consequence of poor accountability is corruption. Unfortunately, as was explained above, excessive focus on accountability can also lead to the problem of excessive bureaucracy and stifling of innovation, as occurred in the DR Congo case. A suitable halfway point needs to be identified which can stimulate honest dealing, while still preserving the autonomy which is required for fluid working of the service provision mechanism. The perfect balance has not yet been found, as is evident in the case studies above, but some cases have found certain approaches which are suitably effective.

## **Conclusion**

In summary, the success of projects depends on the institutional context they are implemented in, as well as the details of the projects themselves. A seemingly important element is the degree of autonomy that facilities receive, in combination with the quality and honesty of the monitoring agencies. In applying the lessons learned below to the Sambhav Voucher scheme in Lucknow, certain lessons might be learned. These will be discussed in Chapter 5. In the next chapter, the details of the Sambhav Voucher Scheme will be discussed in the context of the institutional environment in Lucknow, Uttar Pradesh.

## 4. Case Study: Lucknow

The case of Lucknow is particularly interesting, because India is a country which is willing to invest in maternal health care, as many programmes have shown. Nevertheless, Uttar Pradesh, the state of which Lucknow is the capital city, is one of the states with the highest Maternal Mortality Ratio. Under the circumstances, special care is needed for programmes which are oriented towards reducing this ratio. Medical infrastructure in Lucknow is haphazard, at best. Additionally, while there has been extensive study done on the circumstances of maternal health care in rural India, urban care has received little attention. For this reason, it is interesting to take a closer look at the circumstances surrounding the Sambhav Voucher scheme in Lucknow. Section 4.1 gives background information on the national and regional context, to place the local Lucknow situation within a framework to facilitate analysis. Section 4.2 discusses the methodology used to collect the information on the health system in Lucknow, including the Sambhav Voucher Scheme, and 4.3 details the data collected. Section 4.4 gives information on the Sambhav Voucher Scheme, which will be analysed in Chapter 5 in combination with the other case studies from Chapter 3. Section 4.5 explains the limitations of the study

### Objectives

The main objective of this investigation was to identify the problems that are faced by women of lower socioeconomic position living within Lucknow city, in accessing maternal health care services, in order to use the data to draw a conclusion on how to improve the situation; specifically the Sambhav Voucher Scheme.

The study focussed on women living in urban areas, in order to complement the vast array of existing data covering rural women. The research questions that the data will be required to assist in answering are the following:

*How can Lucknow improve its Sambhav Voucher Scheme using the concept of Public-Private Partnerships?*

### Subquestions

*1. What lessons can be learned from Institutional Economics and the Rights-Based Approach with respect to understanding the difference between public and private service provision?*

*2. How can Voucher Schemes be seen as Public-Private Partnerships, and what benefits can be gained from this perspective?*

*3. What lessons can be learned from Voucher Schemes implemented in other developing countries, and how can these be applied to the context of Lucknow's Sambhav Voucher Scheme?*

The data below, in combination with the information collected from the case studies from Chapter 3, will be used to give recommendations on how the maternal health care scenario in Lucknow can be improved. These recommendations will be supported by the theoretical framework outlined in Chapter 2.

## **4.1 Background**

### **4.1.1 National context**

India is a country of 1.2 billion people (CIA, 2012) and the largest number of maternal deaths in any single country in the world. Maternal mortality occurs for a series of reasons, amongst which are early marriage, illiteracy, lack of control that women have over decisions regarding their own bodies, and poor access to quality care (Human Rights Watch, 2009). These are factors relating largely to an individual's socioeconomic position in society. These factors need to be counteracted using intelligent policy, and effective action from both the public and the private sector.

Despite India's status as a growing economy, and its excellent private health care sector, the public health care sector is still dramatically underperforming. In addition to this, there is extensive discrimination against patients, on the basis of caste, religion and income (Human Rights Watch, 2009). To combat maternal mortality, several interventions have been started. However, they face the challenges of a lack of amenities and resources. A consequence of this lack of resources and staff which frequently occurs is early discharge of the patient, both because of pressure from families as well as from the health facility (Kumar Paul et al., 2011). This can lead to complications, even if the delivery does actually take place in a health facility. There is also still a care-seeking bias against girls, as well as poor pre-natal maternal health. Delivery of the first child before the age of 20 has been shown to increase the chance of a low birth weight by 50%, and the average age of first childbirth is 16 years among the urban poor in India (Kumar Paul et al., 2011).

There is a huge need for an increase in education, especially for the gravely disadvantaged urban poor who have largely been neglected in favour of the rural poor. It has been shown that 64% of children whose mothers received 5 years or more of education were immunised, while only 26% of those who did not were. Additionally, out-of-pocket expenditures increased dramatically in the last 50 years, with drugs consisting of 70-80% of these expenditures (Balarajan, Selvaraj, & Subramaniam, 2011), despite the fact that these are supposed to be distributed free of cost by public health centres. And finally, the quality of care that is eventually distributed is poor, facing challenges of unskilled support staff, weak resources, inadequate systems of referral in emergency cases, and of course, corruption (Human Rights Watch, 2009). These are all issues that can be found on a national scale in India. Targeted and effective policy development is necessary to develop programmes, which can help alter the figures and statistics in a positive direction.

### **4.1.2 Regional and Local Context**

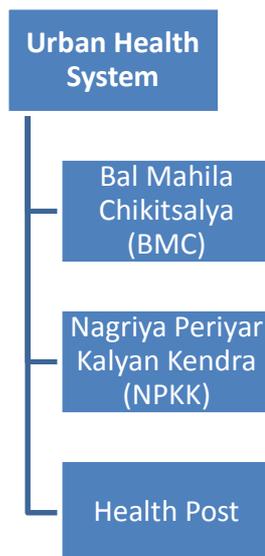
Uttar Pradesh is the state with the highest number of maternal deaths in India per year, with a maternal mortality rate of 359 per 100,000 live births (Dasgupta, 2011). Although regional disparities between states are understandable, the level of progress in Uttar Pradesh is far too slow in maternal health care (Kumar Paul et al., 2011). The problem is exacerbated because improving maternal health care in Uttar Pradesh would not require ground-breaking improvements in medicine; often the issues are essentially minor problems for which solutions have been developed. Additionally, the coverage of intervention programmes has not reached a sufficient level, staying at

55% (Kumar Paul et al., 2011). This figure signifies not only the unsatisfactory progress of policy in Uttar Pradesh, but also gives an indication of the state of nutrition and health of many of the poor. Since the programmes in question are not simply targeted at uptake of facility use, but also frequently at prenatal and postnatal nutrition, education regarding hygiene methods, and women's empowerment, this statistic suggests that Uttar Pradesh is not a context in which maternal health care is likely to be improved simply by increasing the number of facility-based deliveries; information also needs to be spread.

Uttar Pradesh lags behind in terms of maternal care, at all stages of pregnancy. Only one in ten women in urban slums in Uttar Pradesh received 3 or more ante-natal check ups, and seven out of eight deliveries among the urban poor happen at home (Ministry of Health and Family Welfare, 2011). The general statistical increase in institutionalisation from 35% to around 45% in the last 10 years in Uttar Pradesh is therefore not representative of the state among the low socio-economic classes (Varma, Khan & Hazra, 2010). The complexity of the situation is made more pressing, given the high rate of rural-urban migration, and the high level of mobility among the poor. Registration and tracking of patients becomes extremely difficult because of these factors, which means that tackling the problem becomes more complicated.

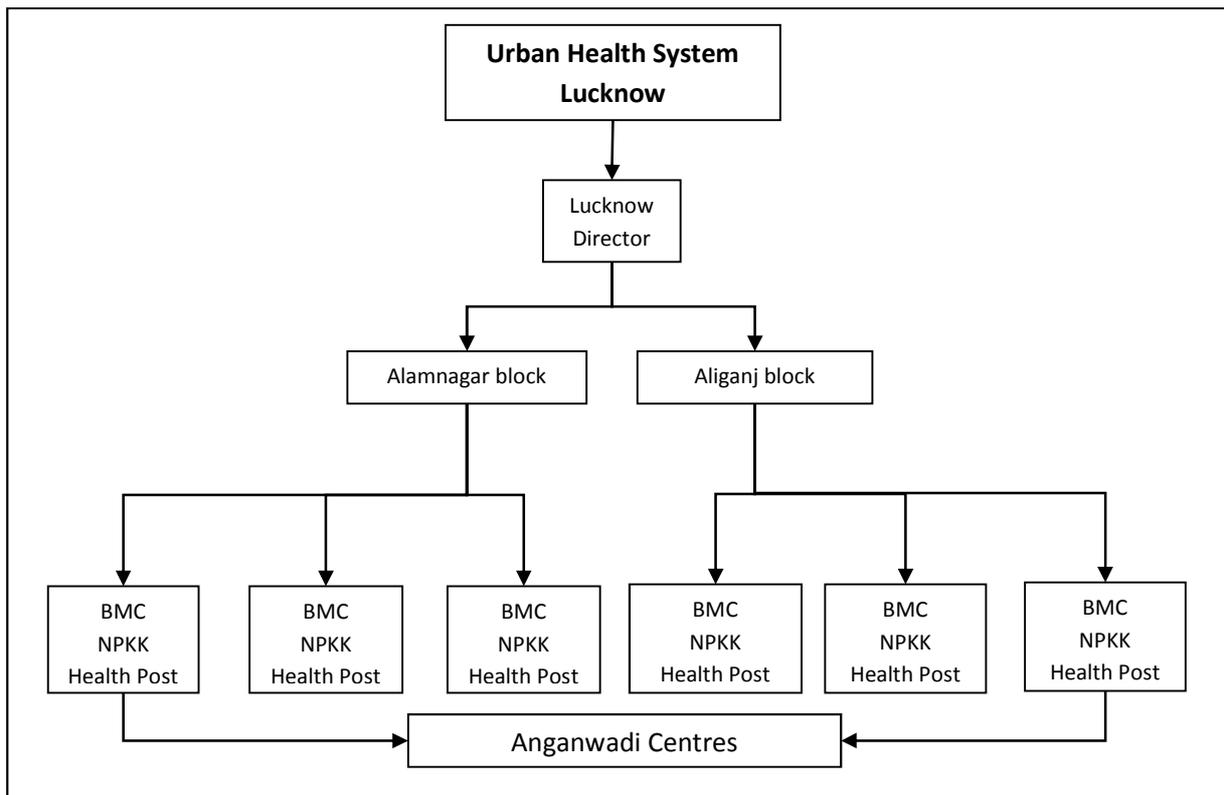
The structure of the public urban health system within Lucknow is based on the structure of the rural health system, as shown in Figure 4.1 below. Bal Mahila Chikitsalya – BMCs – (Child and Mother Care centres) are approximately equivalent to Community Health Centres, Nagriya Periyar Kalyan Kendra (NPKKs) are approximately equivalent to Primary Health Centres and Health Posts are equivalent to Sub-Centres. However, policy on urban health systems is extremely backward, with the National Urban Health Mission (NUHM) being developed only last year (Ministry of Health and Family Welfare, 2010), in contrast to the National Rural Health Mission (NHRM) which has been in force for the past five years. In addition, the NUHM does not even seem to be implemented in practice yet, as of May 2012.

**Figure 4.1 Urban Health System** Source: Sahayog, 2012



Lucknow city's health administration itself is divided into two blocks; Aliganj and Alamnagar. These blocks are purely for purposes of medical administration, and most of the health workers in the facilities are not even aware of the separation. Aliganj is the newer, richer section of the city, while Alamnagar contains the older part of the city, including the informal settlements and most of the slums. Both of these blocks have their own administrative centres and both blocks are essentially independent of each other in terms of functioning. Referral between units and exchange of patients occurs (officially speaking) only within blocks. In reality, patients are referred to whichever institution has space to take them.

**Figure 4.2 Urban Health System Lucknow, City Blocks**



*The host organization*

Sahayog is an Indian NGO founded in 1992 and is based in Lucknow, Uttar Pradesh. The organization's mission is to "promote gender equality and women's health from a human rights framework by strengthening partnership-based advocacy" (SAHAYOG, 2011). Values that play an important role in the way this organization operates are equity and equality, participation, transparency and effectiveness. The strategic issues that the organization has focused on in the past include the themes "Maternal Health and Rights", "Gender Equality, Masculinities and ending Violence against Women" and "Youth Sexual and Reproductive Rights and Health". The following four strategies are being used within the organization:

1. Facilitating and building capacities of community-based organizations

2. Anchoring civil society networks for campaigns and advocacy
3. Capacity building for research and monitoring
4. Information production and dissemination

The theme “Maternal Health” is translated to an approach that promotes women's right to maternal health. Focus is placed on access, accountability and entitlements. Sahayog’s interventions to improve maternal health adopt rights-based approaches that “*put women at the centre and enhance their agency in claiming their right to health*” (SAHAYOG, 2011). Attention is given to different levels ranging from community to policy level.

During the course of a three month period, Sahayog was the host organisation. From this central point, visits to the various facilities were made, and grass-roots information was collected from the employees in as much as they knew basic information regarding Lucknow and the surroundings which foreigners could not know.

This is the context in which the Sambhav Voucher Scheme is implemented. The information below gives an idea of the data that was gathered on the Lucknow health care system.

## 4.2 Methodology

For the purposes of this study, it was important to identify the areas of Lucknow where the individuals of lower socio-economic background would be located. Since migration leads to the scattering of living spaces in urban areas, socio-economic target groups cannot always be mapped out using geographical location as a guide. This is also the case in Lucknow city where large numbers of poor live scattered throughout the city (Urban Health Initiative, 2010). Therefore, it was recommended that individuals who are familiar with the area, be used to identify the locations where the poor can be found (Ministry of Health and Family Welfare, 2010). As Sahayog employees have a lot of knowledge concerning this topic, the help of Sunil Kumar Mourya was requested. He identified two urban blocks within Lucknow city; Aliganj in the North and Alamnagar in the west. As Alamnagar encompasses several slum areas, and Aliganj is the newer, higher-income section, Alamnagar was considered more suitable for the current scope of research.

**Figure 4.3 Alamnagar City Block**      **Source: Google Maps**



Alamnagar was also found to be suitable because of the presence of several health facilities offering maternal health services in this area, both public and private. Within Alamnagar, the area encompassed by the radius created by Saadatganj, Kaiserbagh, Charbagh and

Rajajipuram, will be used as a basis for research.

### **Public Health Centres:**

The methodology used to approach the public health centres was the following:

First, the Indira Nagar Bal Mahila Chikitsalya (BMC) was visited, in the company of a Sahayog employee, who came along to translate and guide, in order to gather a preliminary idea of the functioning and set-up of the centre. The original intention was to include the associated Nagriya Periyar Kalyan Kendra (NPKK) in the visit, but as was discovered, the NPKKs in the city did not seem to be functioning. This was one of the roadblocks that the investigation faced in the first few weeks, which caused a minor setback, since it meant that half the facilities which were originally to be taken into the investigation were no longer accessible.

The Indira Nagar BMC is located in the richer, newer block (Aliganj) and was therefore not included in the ultimate conclusions drawn from the research. Nevertheless, the results of this visit were used to hone the investigation, prior to commencing.

During the course of the following weeks, 4 BMCs, 2 Government Hospitals, and 3 private facilities were approached for interviews. The main reason for this selection was the location of the various facilities. All were located in the Alamnagar area, in close proximity to slums, and were associated with each other in the question of referrals.

All 4 BMCs responded adequately, and interviews were carried out with varying degrees of success. Of the Government hospitals, Queen Mary's responded positively and allowed interviews, but Balrampur flatly refused to allow interviews to be held, even while being approached on two different occasions, on the second occasion with a letter of authorisation from the University of Utrecht.

During the field visits, several interviews were carried out. Two main methods were used to gather data:

1. Data on the provisions that the facility has will be collected using a table drawn up on basis of Indian Public Health Standards (IPHS). This information will be used to see the reality of what the facilities actually have as compared to what the standards prescribe.
2. Interviews were carried out with various professionals during the field visits, in order to obtain a picture of the working of the facilities. These interviews mainly took place with gynaecologists working in the facility, and when possible, with administrative staff. On one occasion, at Queen Mary's, a resident was also interviewed.

These professionals were selected on the basis of their availability, position within the facility, and their willingness to be interviewed.

### **Private Health Centres:**

The private health centres which were investigated were chosen on the basis of a) participation in the Sambhav Voucher scheme and b) proximity to the public health centres investigated. Participation in the Sambhav Voucher scheme is voluntary, and will be explained in section 4.4 which discusses the Scheme.

The following hospitals were chosen:

- K.K. Hospital, Daliganj
- Miranda Clinic, Aishbagh
- Madhu Gupta Nursing Home, Nishatganj

On each occasion, a reconnaissance visit was made to the facility. An appointment with the gynaecologist was requested, and granted on each occasion. Subsequently, information was collected from the administrative staff regarding registration and treatment figures. On one occasion this was not possible due to the occurrence of a medical emergency, although the interview was completed successfully.

## ***4.3 Maternal Health Care in Lucknow – Data***

### **Profile of hospitals**

The hospitals that were investigated within the framework of this investigation can be divided into three groups; the district hospitals, the Bal Mahila Chikitsalya's (or community hospitals) and the private clinics. The hospitals were all investigated for the purpose of identifying services provided by the Government of Uttar Pradesh, so the focus was laid on what the role of the Government is in providing the infrastructure, or medicines, according to regulations. This is specifically important with respect to the involvement of the private facilities, since they are not officially Government regulated.

Table 4.1 below is a summary of the facilities which are located in Lucknow, and details the facilities which were visited within the context of this investigation. Balrampur Hospital refused to participate in the investigation, so unfortunately only one district hospital could be studied – Queen Mary's. Two of the BMCs were closed at the time of our visits – and since they were not accessible on the telephone, no contact could be made to make an appointment. Finally, although BMC Indira Nagar was visited, the results were not as relevant, since Indira Nagar is located in Aliganj, the newer part of the city.

The private facilities entered into the investigation late, which is why only three were surveyed. One was automatically not eligible for the study, since it was located in Indira Nagar (Swarna Hospital), but the others would have been interesting to survey too.

In all the interviews, except that of Queen Mary's, the doctors asked for their names to be kept anonymous. Presumably, this was because at Queen Mary's, we interviewed the head Gynaecologist, whereas in the other facilities the doctors were more inferior in position. For convenience, the names of the doctors have been retained, and only the facility names have been used in quotes.

**Table 4.1 Summary of Facilities**

Facility	Completed?	Location	Interviews	Administration?
<b>Public</b>				
Queen Mary's	Yes	Chowk	1	yes
Balrampur	-	Kaiserbagh	-	-
BMC Naval Kishore Road	Yes	Huzratganj	2	Yes
BMC Silver Jubilee	Yes	Chowk	2	Yes
BMC Red Cross	Yes	Kaiserbagh	2	No
BMC Aishbagh	-	Aishbagh	-	-
BMC Indira Nagar	Yes	Indira Nagar	2	Yes
BMC Tudyaganj	-	Tudyaganj	-	-
<b>Total</b>			<b>8</b>	
<b>Private</b>				
Miranda Clinic	Yes	Aishbagh	1	Yes
K.K. Hospital	Yes	Daliganj	1	Yes
Madhu Gupta Nursing Home	Yes	Nishatganj	1	No
Govind Hospital	-	Sardanagar	-	-
Sanjeevani Medical Centre	-	Tudyaganj	-	-
Saraswati Hospital	-	Faizabad Road Chinhat	-	-
Swarna Hospital	-	Indira Nagar	-	-
St. Mary's Polyclinic	-	Gudamba	-	-
Susrat Hospital	-	Sitapur Road	-	-
Surya Nursing Home	-	Adilnagar Kursi Road	-	-
<b>Total</b>			<b>3</b>	

## Infrastructure

Figure 4.3 below shows the structure of manpower of the facilities in Lucknow, as according to the National Rural Health Mission. According to the National Urban Health Mission, urban health facilities should have similar structures, and contain the following relevant infrastructure, in addition to certain prescribed medicines. As the results show, however, most facilities in Lucknow do not even pretend to have the infrastructure, nor are they entirely aware that they are entitled to it. In the interviews which were carried out, only in one facility were they aware that they were entitled to an ambulance, and did they have a hypothesis on why they did not have one.

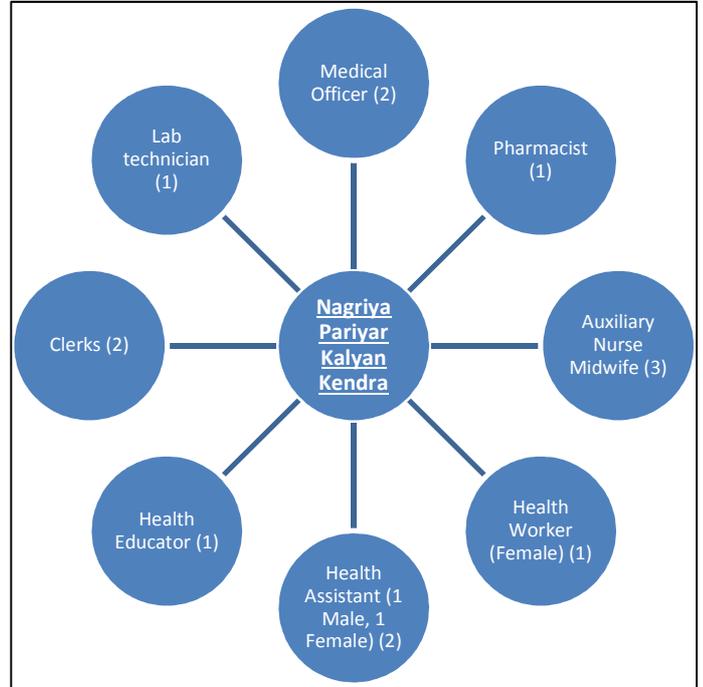
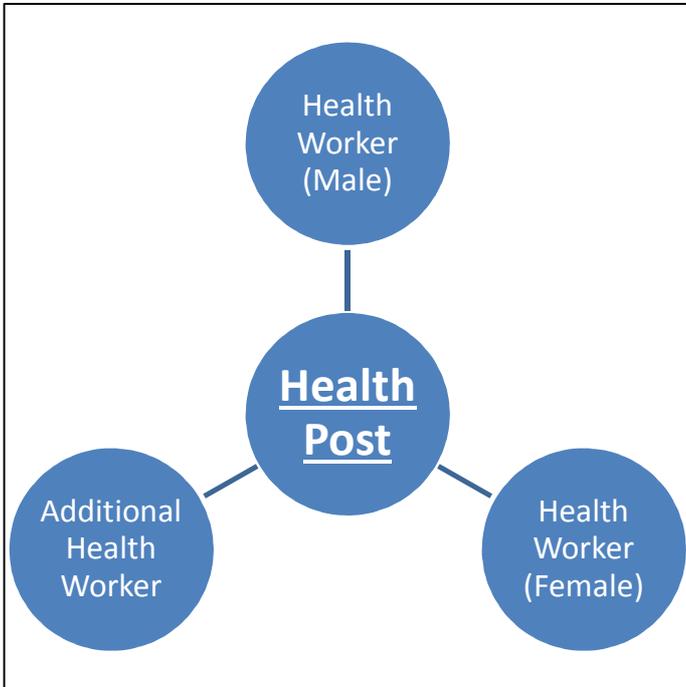
“No, we don’t have an ambulance, we haven’t had one since April... I think there is a problem because of the NRHM scandal, but we are not given information. We just don’t have an ambulance. I don’t know if we will get one again.”

- BMC Silver Jubilee

As a result, the 'free care' that poor women are officially entitled to, does not amount to much. This makes the Voucher Scheme very relevant, since it is effectively the only good care that they can

Figure 4.4 Structure of Urban Government Health Centres

Source: National Rural Health Mission (Unknown)



			<b>Public Facilities</b>	<b>Private Facilities</b>
<b>Facility</b>				
<b>Manpower</b>	<b>Block health officer</b>		0	0
	<b>General surgeon</b>		1	2
	<b>Physician</b>		1	2
	<b>OBGYN</b>		4	2
	<b>Pediatrician</b>		2	2
	<b>Anesthetist</b>		0	1
	<b>Medical superintendent</b>		4	1
	<b>Medical officer</b>		3	1
<b>Drugs</b>	<b>ARI</b>		4	2
	<b>Diarrhea</b>		4	2
	<b>Fever</b>		4	2
	<b>Worm infestation</b>		4	2
<b>Services</b>	<b>Assured services</b>	<b>General Medicine</b>	2	2
		<b>Surgery</b>	0	2
		<b>Obstetrics and gynaecology</b>	4	2
		<b>Pediatrics</b>	2	2
	<b>Blood storage unit</b>		1	1
	<b>Operation theatre</b>		4	2
	<b>Labour room</b>		4	2
	<b>X-ray laboratory</b>		0	2
	<b>ECG</b>		0	2
	<b>Referral transport</b>		0	1
	<b>24*7 Delivery and Newborn Care</b>		4	2
	<b>Adolescent Reproductive and Sexual Health (ARSH)</b>		0	0
	<b>Immunization</b>		4	2
	<b>Permanent FP methods</b>	<b>Ligation/copper tube</b>	4	2
	<b>Medical Termination of Pregnancy (MTP) using MV technique</b>	<b>DNC</b>	4	2
	<b>Common eye diseases and refraction services</b>		0	1
	<b>School health</b>		0	0
	<b>Nutrition</b>		0	1
	<b>Laboratory services</b>	<b>Malaria</b>	0	2
		<b>TB</b>	0	2
		<b>STI/RTI</b>	0	2
		<b>Enteric</b>	0	2
		<b>Routine (blood/stool)</b>	4	2

## Reality of Infrastructure: Public Facilities

Table 4.1 above shows the reality of infrastructure in the Bal Mahila Chikitsalya (BMC) facilities which were incorporated in the study. Data for Health Posts and Nagriya Periyar Kalyan Kendras (NPKKs) was not collected, because as far as could be established, these forms of facilities are not yet in existence.

In terms of manpower, none of the facilities even come close to meeting the requirements of the NRHM/NUHM. None of the public facilities have an anaesthetist, which means that operations cannot take place on short notice. Additionally, while all the public facilities have labour rooms, none of them have operation theatres. All the facilities have a medical superintendent, which is primarily an administrative position. Also, the total number of staff is generally disproportionate to the number of patients that need to be seen.

Most of the women who come here are malnourished, they have iron deficiency and lack nutrition. We try to give them iron tablets, and give them information on how they can improve their nutrition. We try to encourage them to get in touch with their community health workers... We also see a lot of Uterine Tract Infections and other such problems... More information needs to be disseminated on hygiene and nutrition.

- Queen Mary's

"When we need an anaesthetist, we call one of our contacts who works at Balrampur. He comes and assists with the operation... He charges Rs. 4000... We try to limit our use of anaesthetist because reimbursement is difficult to receive."

- BMC Naval Kishore Road

On average, doctors see more than 25 patients per day, which comes to approximately 500-600 patients per month. None of the facilities had the infrastructure of an ultrasound machine, an x-ray, or an ECG machine. Ironically, an ultrasound machine is not even on the list of required infrastructure by the NRHM/NUHM. If any of these tests is required, the patients are sent through to Queen Mary's or Balrampur Hospital. Unfortunately, those hospitals are extremely crowded and heavily burdened by patients, in addition to being in one of the busiest parts of Lucknow in terms of traffic. Considering the difficulty of getting to the hospitals, combined with the presumed waiting times of hours which can be anticipated before any test is completed, the prospect is daunting.

While the facilities are officially expected to be open 24/7 to accommodate deliveries and neonates, on 2 visits to different facilities (BMC Aishbagh and BMC Tudiaganj), we found that they were closed, with no one accessible. All the staff members were away, and the delivery and recovery rooms were empty.

## Reality of Infrastructure: Private Facilities

In the case of private facilities, the disappointment was that only 3 facilities could be interviewed, and in the case of one of those facilities, an emergency case came in and had to be handled immediately, by the only doctor on duty.

Private facilities are not bound by the regulations of the NRHM/NUHM, nor are there specific regulations or laws which they have to abide by, apart from the Consumer Protection Act (Bhat, 1996). Any infrastructure that they have, therefore, is at their own discretion. Nevertheless, as Table 4.1 shows, they lack 3 of the items that the NRHM/NUHM prescribes, and two of those are Adolescent and School Health information dissemination practices. The third is a Block Health Officer.

In short, private facilities have more and more effective infrastructure, both in terms of manpower as well as medical equipment.

### **Eligibility to access free treatment**

The various facilities that were surveyed were selected on the basis of the fact that they provide free services to women living under the poverty line. For the public facilities this means that they work with BPL cards as eligibility criteria, to prove that the women are eligible to receive the free services. In the case of the private clinics, they worked under a scheme called the Sambhav Voucher Scheme. In this case, the vouchers are held and distributed by community workers, to needy women (judged on the basis of community knowledge, and subjective reasoning). The women can then take the vouchers to the affiliated private institutions, and receive free treatment, under better circumstances (due to higher quality of infrastructure, lower levels of demand and the frequently better qualified doctors and nurses, who work in private institutions).

**Table4.2 Eligibility Criteria**

<b>Facility</b>	<b>Eligibility Criteria</b>
<b>Public</b>	
Queen Mary's	BPL
BMC Naval Kishore Road	BPL
BMC Silver Jubilee	BPL
BMC Red Cross	Nothing
BMC Indira Nagar	BPL
<b>Private</b>	
Miranda Clinic	Voucher
K.K. Hospital	Voucher
Madhu Gupta Nursing Home	Voucher

Table 4.2 above shows the criteria based on which the various facilities accept patients for free treatment. As can be seen, the private facilities use vouchers to accept patients. The reason for this is that the facilities chose to use the voucher scheme, mostly out of a sense of duty, since the remuneration is pitifully small (as will be shown in section 4.5 on the Sambhav Voucher Scheme). As a result, they accept patients with only vouchers, and nothing more. Additionally, sometimes in

the Miranda Clinic they said they accepted patients even though did they not have vouchers. If they did this, it meant that those cases were pure charity, as the vouchers were necessary to prove to the Government that the services were provided, and were needed to receive reimbursement.

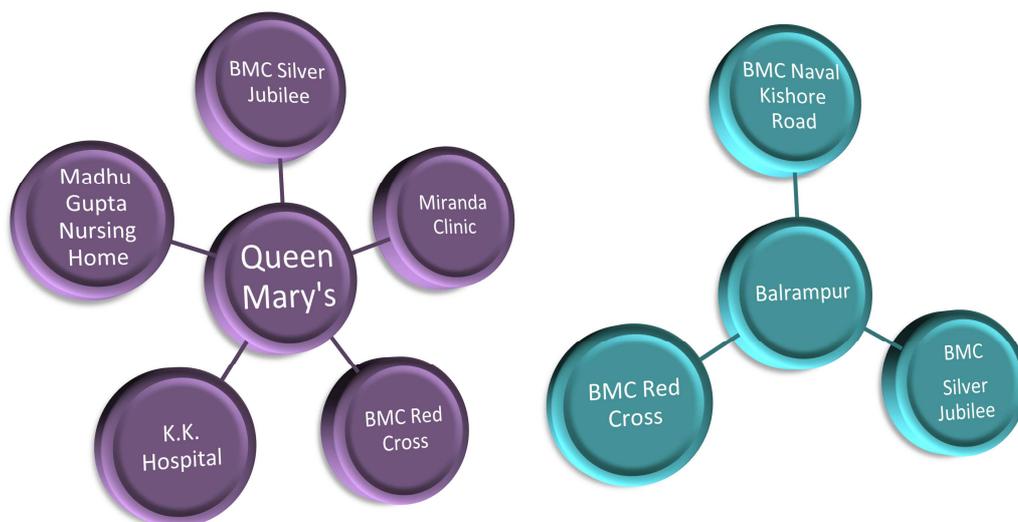
The public facilities, on the other hand, performed their services upon the evidence of a Below Poverty Line (BPL) card. These cards can be granted by the local municipality upon proof of low income, and not only provide access to public facilities, but also other services such as access to gas, or electricity, officially speaking.

Of course, one of the biggest problems in India when it comes to poor people, just as in other developing countries, is the corruption. Therefore, although it is difficult to prove, in the public facilities their actions may be different than their words. Although most of the facilities gave the impression that they were truly sincere in their work, and at most, simply overworked, in the Red Cross BMC particularly there was some questionable behaviour. For example, they clearly were unaware that they were entitled to ask for a BPL card, since they claimed that they do not ask for one upon admittance. In addition, they were extremely suspicious during the course of the interview, and flatly refused to show us the records they keep.

### Referral systems

The referral system among the public facilities works in the following manner: most facilities referred their patients through to Queen Mary's, because it has a better reputation than Balrampur. This decision was made on the basis of quality, rather than location, as can be seen by the fact that the referring facilities were located all around Lucknow. Ironic is also the fact that the private facilities almost exclusively referred to Queen Mary's, and not Balrampur. This was due to the fact that Balrampur was recognised as a facility which was less capable of dealing with the population pressure than Queen Mary's, presumably because Queen Mary's as a teaching hospital had more staff, primarily doctors.

Figure 4.5 Referral System Lucknow Source: Sahayog, 2012



## **Public Facilities**

The table above shows that the District Hospital (Queen Mary's) charges Rs. 150 for in-patient services. However, this fee can be waived upon the patient's displaying a BPL card. If the patient does not possess a BPL card, there is a procedure to waive the fees, but the doctors also admit that it is a complicated process. It involves the patient receiving a signed statement from the village or community elders, confirming that she cannot pay the fees.

The Bal Mahila Chikitsalya's (BMC's) or community maternal and child health facilities do not charge fees, even if a BPL card is not displayed (according to the testimony of the doctors). The reason for this is because the facilities are mainly outpatient set-ups, and are essentially for consultations, not for surgeries, or for medical operations. As can be seen from the table below, although all the facilities have a labour room, none of the BMCs have an operation theatre. Neither did they have an ultrasound machine. Effectively, this means that unless patients are in search of a consultation, and not for a medical emergency, they must go to one of the district hospitals; either Queen Mary's or Balrampur. Both of these facilities are located in the middle of the city, are extremely crowded, and do not possess enough infrastructure to cater to Lucknow's population of 4,500,000.

Most of the facilities recorded a 95-100% success rate in deliveries, but this is, of course, difficult to cross-check. In addition, since most deliveries taking place in the BMCs would be normal deliveries, and the more complicated cases are referred through to Queen Mary's or Balrampur, it is not representative of the number of maternal and child deaths which occur in Lucknow. Queen Mary's delivered 341 live babies out of 479 in February 2012. Finally, many deliveries - especially among the poorer families - take place at home, without any formal help aside from the local midwife. These deaths are, of course, not recorded by hospital staff.

## **Private Facilities**

The private facilities, by contrast, have less homogenous data. The number of patients varies between facilities, in addition to the fact that it varies between months. Since the beginning of the scheme, there have been differing reports on the involvement of private facilities in maternal health care in Lucknow. Initially, because of the lack of information available on the scheme, very few women knew what to do with the vouchers. There was also a considerable emotional barrier which had to be surmounted, which still holds – poor

We don't have a lot of maternal deaths here under the Sambhav Voucher scheme because we refer the complicated cases... because we were requested by the SIFPSA people to take mostly the easy cases, and give them as much of a positive experiences as possible... these are the first few months of the programme, and the SIFPSA people are worried that if the Scheme gets a bad reputation, it will not pick up... the public hospitals already have bad reputations..."

- K.K. Hospital

women consider private hospitals beyond their reach, and are afraid of being treated without dignity if they go there. Not to be dismissed are the bad experiences they may have had at public facilities, which would taint their view of private facilities, and finally, poor women still do prefer to deliver at home, with a midwife whom they are familiar with.

In the private facilities, the data is less evocative. The most interesting factor which was mentioned during the interviews, was that the facilities were apparently told by the SIFPSa implementing agency to refer the difficult cases through to Queen Mary's and Balrampur, because 'it did not matter if women died in district hospitals, since they had a bad name anyway'. Despite this, the number of referrals is small, and the number of deliveries is approximately equal to the number of patients who come in their third trimester. Many patients did not come for check-ups during their first and second trimester, but this is normal among poor women. Although they are unfamiliar with the concept of post-natal care, the doctors at the facilities take a great deal of care to try and encourage them to come back after delivery. Of course, this brings with it additional transportation expenses and such for the women, which may have proved as a deterrent to those patients who did not return.

In conclusion, the private facilities clearly have the infrastructure to cater to more clients than they are taking on at the moment, but the reimbursement they receive has consequences for their funding. Additionally, they have to battle with the existing misconceptions about health care, private facilities, and lack of information available regarding the Sambhav Voucher Scheme. There is clearly extensive scope for improvement.

The table below gives information regarding the available infrastructure in the various facilities that were visited. As can be seen, the public facilities do not meet many of the requirements that the IPHS places. More to the point, in none of the facilities were the doctors actually aware of regulations for public facilities. They are not responsible for administrative tasks, so perform their duties as best as they can with the infrastructure they have. Private facilities are more likely to meet the requirements, but still do not meet all of them (since data could not be collected for the Madhu Gupta Nursing Home, the maximum number that is possible for the private facilities is 2, but it is presumable that the Madhu Gupta Nursing Home also meets all the requirements, as seemed to be the case during our visit).

#### **4.4 Sambhav Voucher Scheme**

The purpose of this section is to explain the working of the Sambhav Voucher Scheme in Lucknow. Having given a broad introduction to the context within which the scheme is placed, and having given information on the theoretical framework within which the scheme will be analysed, it is now time to explain the scheme itself.

Having recognised the need for a supplementary programme to increase accessibility and utilisation of maternal health services in India, the Indian Government began looking at Public-Private Partnerships as a possible solution. In 2005, during a meeting on Public-Private Partnerships, it was decided that the Sambhav Voucher Scheme would be piloted in three states of India; Jharkhand, Uttarakhand and Uttar Pradesh. The pilot programme would last between 2007 and 2010, depending on the state. In Uttar Pradesh, the programme was piloted between 2008 and 2010 (USAID, 2012).

The purpose of the Voucher Scheme was to empower poor households by giving them the opportunity to choose between quality maternal health care providers, with the purpose of increasing awareness on the benefits of institutionalisation during pregnancy, as well as decreasing maternal mortality by shifting some of the burden from the Government facilities, to the private facilities.

After a successful pilot, it was decided to continue with the voucher scheme. During three months in Lucknow, the following information about the Voucher Scheme was collected from three facilities participating in the project.

##### **Structure of the Scheme**

Figure 4.6 below shows the structure of the Sambhav Voucher Scheme as it was set up in the pilot, which has not been substantially altered. Funding is provided by the National and Local authorities – although most of the burden is carried by the State Governments – as well as donors from the different states. The only non-State donor in Uttar Pradesh is currently the State Innovations in Family Planning Agency (SIFPSA). Coordination of the programme is carried out by the District Chief Medical Officer (DCMO), on behalf of the district medical association. As was explained before, in medical terms Lucknow is divided into two blocks; Aliganj and Alamnagar. Each block is relevant as a district, and has its own DCMO, who is responsible for the implementation of the scheme. The DCMO is the acting head of the Voucher Management Unit (VMU) which is responsible for overall coordination of the scheme.

There are three main advisory bodies that are responsible for assessing the challenges of implementing the scheme in Uttar Pradesh and suggesting improvements:

- Partner Advisory Group (PAG): this is a group consisting of representatives from the Government health system, NGOs, training partners, ITAP and USAID|India.
- State Innovations in Family Planning Agency (SIFPSA): this is a joint endeavour of USAID and the Government of India. Set up in order to regulate the flow of funds to programmes

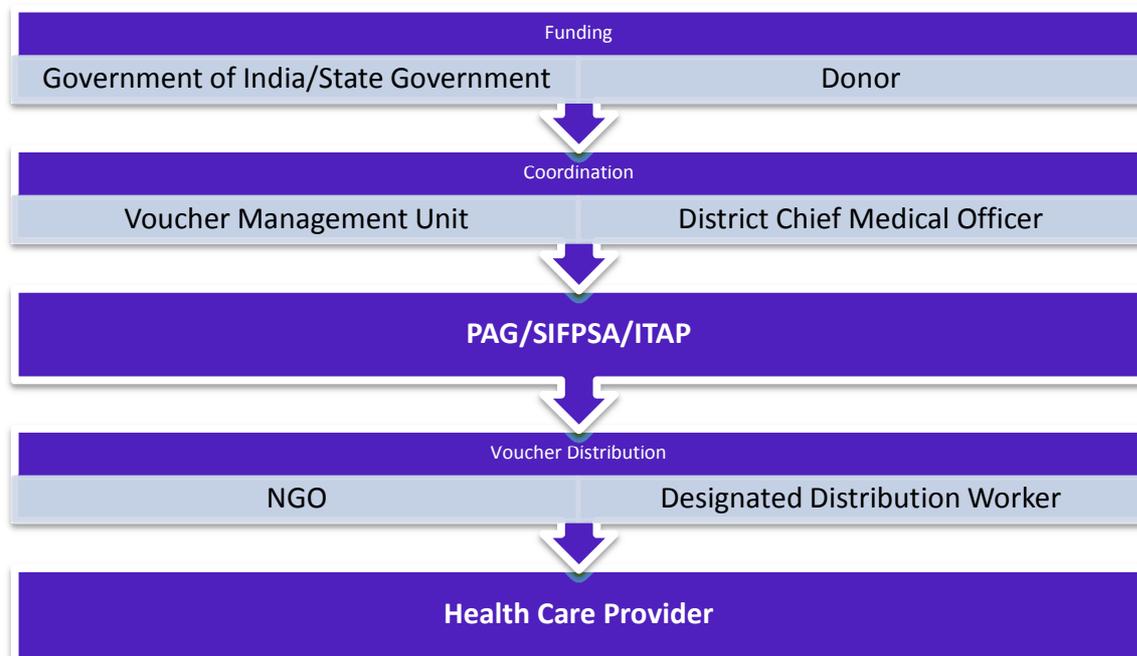
oriented towards family planning, in this particular context it is relevant as an organisation serving as an advisory body to the Sambhav Voucher Scheme

- Indian Technical Assistant Project (ITAP): this is an international organisation, oriented towards assisting in capacity building in various projects. That is the role it plays in this particular project

These are the key decision-makers in the scheme. The vouchers themselves are distributed by designated NGOs whose responsibility it is to spread awareness of the scheme, train community workers, keep records of distributed vouchers, and hold monthly meetings to keep track of developments. All of these activities do come under the direct responsibility of the relevant VMU, which needs to keep track of the NGOs and ensure that the activities are carried out appropriately.

The designated distributors can have any of three titles; Accredited Social Health Activists (ASHA), Community Health Volunteers (CHV) or *sahiyyas*. In Uttar Pradesh, the workers are called Community Health Volunteers, for no specified reason. The CHV's are given monthly trainings, including role plays and discussions to teach them how to identify and inform their clients on the possibilities of the Sambhav Voucher Scheme. They also have weekly meetings with their NGOs during which they hand in their records of vouchers distributed, and collect their reimbursement for distributing the vouchers. They also receive a reimbursement for travelling with their clients to hospitals to use the vouchers, when the client requires it. These CHVs are drawn from the communities in which they work, in order to improve the quality of targeting, including qualitative information to the quantitative criteria that are used.

**Figure 4.6 Structure Sambhav Voucher Scheme**



**Eligibility Criteria**

Although in principle a BPL card is sufficient to gain access to a voucher, other criteria is used in the targeting procedure of the CHVs. This involves checking to see whether the woman lives in a slum area or not – either using a BPL card, or other methods – focussing on married women between the ages of 15 and 49, and also using individual and household targeting (that is, going door-to-door).

While the ultimate goal is to use a BPL card as the entire eligibility criteria, some problems have been found with this approach, since many of the poorest members of the population do not actually own a BPL card. Other solutions have been found, such as using an address proof to prove residence in a slum area, or receiving a signed affidavit from the municipal corporation confirming that family income is indeed Below Poverty Level (USAID, 2012).

I am given the vouchers... and then I go to women whom I know are pregnant and give them the vouchers. If they want, I go to the hospitals with them...

- CHV (translated from Hindi)

During the course of the investigation, it was found that since facilities voluntarily agreed to participate in the scheme, they were not difficult about eligibility. As for the voucher distributors, in the course of conversation it appeared that eligibility was established on the basis of community knowledge. The CHV would, through means of contacts within the community and her own knowledge of the women, approach the women likely to need the vouchers on maternity care or family planning. The goal is to approach the women as early as possible, but even if it is only for delivery a voucher is encouraged.

### **Facilities provided under the Sambhav Voucher Scheme**

The facilities that are provided to women of lower socio-economic status by private facilities are determined by the Government, who establish which services will be refunded, and for how much, under the scheme. The services are listed below, with the charges that the institutions receive when distributing the services. The services are refunded on a reimbursement basis – that is to say that the institutions keep the vouchers, file the documents, and receive money per time that the service is distributed, in retrospect. Figure 4.7 shows the official figures determined by the Government and advisory bodies (the relevant column is ‘Agra’), and table 4.3 shows the data collected at K.K. Hospital in Lucknow. We were permitted to look into their records, which maintained data on the number of patients, the services they received, and the money which was to be reimbursed on the basis of these services.

The amounts that have been settled upon for reimbursement match the rates given in the official table, but are far below the actual prices according to the interviews carried out in the facilities. Estimates by the doctors themselves set the prices for a Caesarean at around Rs. 10,000 (approximately €150). The anaesthetist alone costs approximately Rs. 4000 for one operation (at least). For this reason, many facilities – both private and public – do not perform Caesareans, but refer the cases through to the district hospitals; Queen Mary’s or Balrampur.

**Figure 4.7 Official Data**

Type of Service	Agra Rate	Kanpur Nagar Rate	Haridwar Rate	Gumla
ANC (three visits)	Rs. 75	Rs. 75	Rs. 100	
PNC (two visits)	Rs. 50	Rs. 50	Rs. 100	
Normal deliveries	Rs. 1,500	Rs. 1,500	Rs. 2,200	
Complicated deliveries	Rs. 3,500	Rs. 3,500		
Cesarean deliveries	Rs. 5,000	Rs. 5,000	Rs. 8,000	
Ultrasound examination		Rs. 100	Rs. 150	
RTI/STI treatment		Rs. 150		
Sterilization	Rs. 1,000	Rs. 1,000	Rs. 1,500 (sterilization) Rs. 2,000 (ligation)	Rs. 2,000
IUCD	Rs. 100	Rs. 100	Rs. 100	Rs. 200
Injectables				Rs. 95
Standard Days Method				Rs. 25
Neonatal care				
RDS			Rs. 2,500	
Phototherapy			Rs. 1,000	
Neonatal complication			Rs. 500	
Incubator cost			Rs. 500/day	

Note: Vouchers also covered a range of lab tests, including Hb level, blood group and Rh factor, urinalysis, and VDRL.

**Table 4.3 Services offered by Sambhav Voucher Scheme**

Type of Services/test in voucher	Amount Given to Hospital (Rs.)
Ante Natal Care 1	33
Ante Natal Care 2	33
Ante Natal Care 3	34
Delivery	1850
Post Natal Care 1, DPT-I	50
Post Natal Care 2, DPT-II, DPT-III, Measles	15
Haemoglobin blood test	15
Blood group and Rh	45
Sugar	15
Urine	15
Venereal Disease Research Laboratory test	45
Ultrasonography	100
Sterilisation	1000
Intra Uterine Contraceptive Device	100
General Health Check-up	100
Reproductive Tract Infection/Sexually Transmitted Infection	150
Hepatitis C Virus	15
Counselling	30
Clinical examination-Blood Pressure	30
Blood test	15
Urine test	15

## **Analysis**

### **Institutional Economics**

- High transaction costs

The Sambhav Voucher Scheme does face high transaction costs. Although the existing system in Lucknow is oriented towards providing free care to the poorer households, this comes at a cost of quality, and does not achieve the maternal health scenario which it aims at, as the current Maternal Mortality Rate of Uttar Pradesh shows. Also, despite the ostensibly free care, there are frequently out-of-pocket costs incurred by the poor households in finding health care associated with transportation, medication and bribery. These costs are often a significant barrier to accessing health care.

The Sambhav Voucher Scheme seeks to counteract this problem by providing a more structured approach to subsidising. The Voucher Scheme is based on a negotiated set of rates for a fixed series of services which are provided upon displaying the voucher. As a result, there is more clarity on the amounts of money which are involved and more information available on the distribution of expenditure. One of the problems, however, is that the negotiated rates of the scheme are too low, according to the health care providers. As a result, the Vouchers are not distributed sufficiently, since the commission for doing so is too low, the women who are treated by the private providers are essentially treated on the charity of the health care providers, since their expenses are not met by the reimbursement, and significant out-of-pocket expenses still have to be met by the patients on transportation and medication.

- Information asymmetry

The Sambhav Voucher Scheme seeks to combat the information asymmetry by contracting NGOs to train community members to disseminate information on maternal health care, and the options provided to them by the Scheme. The Scheme also uses mass media, posters, role plays, street theatre, and every option that they can to minimise the knowledge gap between the health care providers and their (frequently) uneducated patients. Additionally, by lowering the financial barriers to accessing maternal health care, the Sambhav Voucher Scheme also intends to increase awareness on the importance and relevance of maternal nutrition, hygiene, and care. However, this is a process which extends beyond simply being a branch of another scheme, it is a task in itself. While the Sambhav Voucher Scheme attempts to correct this asymmetry using the tools available, the problem requires a much more intensive approach. As the results above show, the uptake of the programme is extremely limited, oriented towards a small group of women who happened to have stumbled across the scheme and who have had good experiences. The private health care providers are in agreement that the women who have used the scheme have been very happy, and have passed on this information to their family and friends. Some increase in uptake occurred due to that. However, awareness on the street of the existence of this scheme is limited, according to the experience of this investigation.

- Absence of insurance markets
  - Adverse selection

Adverse selection is indeed a problem in the scheme. All the gynaecologists who were interviewed with respect to this investigation agreed that there was a significant proportion of patients who came with vouchers, who did not seem to be eligible. None of the providers turned the patients away, since in their eyes they provide a service for the community, and they have no way of assessing whether their feeling is correct with respect to an individual patients' eligibility. However, in the monthly meetings, it appeared that there has indeed been some degree of leakage to ineligible patients. This could partly be due to the small commissions which are paid to the Community Health Volunteers for the distribution, which might incentivise easy distribution, without regard for the values of the scheme.

- Moral hazard

Moral hazard is not necessarily relevant in the Sambhav Voucher Scheme, because the purpose of the Voucher is to stimulate use of all health care check-ups related to maternal health. There is a stipulation regarding the number of visits that a Voucher is valid for, and this therefore reduces the chances that an individual uses the voucher for a 'wrong' purpose, or in a 'reckless' manner. An additional control factor is the fact that in pregnancy, there are a stipulated number of visits during the different phases. It is not possible, therefore, to have an Antenatal consultation during the Post Natal phase.

More likely is the chance that patients do not take advantage of all the visits that are provided for in the Voucher. This is something that the gynaecologists remarked upon; that the uptake during the first and second trimester was remarkably low. This can also be seen in table 4.4 below, and is a common problem, even remarked upon by the gynaecologists in the public facilities.

- Freeriding

Freeriding is the not really a problem that the Sambhav Voucher Scheme faces, whose original purpose is to bring accessibility of maternal health care to the entire population of Uttar Pradesh. As such, no individual is necessarily debarred from using the Scheme. However, in order to give some form of direction to the targeting in the scheme, a BPL income is generally used as the guideline to assess whether or not an individual is eligible to participate. Since in India, however, not all BPL households possess proof that they are so, this can be problematic to establish. As a result, it is difficult to prove that freeriding is indeed a problem faced by the Sambhav Voucher Scheme, but the general consensus is that it appears to be so. The Voucher has not yet come up with an appropriate solution to the problem.

### **Rights-Based Approach**

- Personal choices
  - Education/background

The Voucher scheme can be argued to have a foundation in the Rights-Based Approach. As such, the belief is that all individuals are entitled to a good quality of life, regardless of past advantages or disadvantages in terms of education and background. The population of Uttar Pradesh, with its high illiteracy rate, particularly among women, where it stands at 60% (CIA World Factbook, 2012), faces this problem, because women make choices without sufficient knowledge of alternatives. The experience of this investigation is that many women choose to deliver at home, simply because it is safe. One woman provided the information that she delivered her own child, because her family was away from home and she did not trust anyone else to help her, not even the local midwife (Bennink, 2012). In order to combat this, the Sambhav Voucher Scheme attempts to provide both information, as well as the necessary finance to provide the quality care to the entire population of Uttar Pradesh.

- Geographical location

One of the problems that poor households face in accessing maternal health care is the costs and time taken up in travelling, especially in an area with poor road infrastructure. Lucknow does not necessarily face this problem, since it is entirely an urban area (at least, the scope of this investigation), but women have more of a problem than simply distance. In Lucknow, a relatively conservative society, women have difficulties leaving their homestead, and rarely perform activities that take them away from their husbands and families, especially women in slums. As a result, travelling to a facility even 5-10 kilometres away is a daunting task. The purpose of the Sambhav Voucher Scheme is to use the distribution of private facilities in order to increase the reach of the public health sector, without having to perform the extensive outlay which accompanies setting up new facilities. However, due to the poor remuneration, at present not many facilities are willing to participate in the scheme, since there is very little benefit for them. They have to pay, effectively, for participating, because reimbursement does not cover costs, and they do not have the advantage – as in other developing countries – of being assured participation in future government contracts, since those themselves are scanty and do not pay as well as their private patients do. India, being a booming economy, has a substantial middle class capable of paying for private care. Private facilities in India, therefore, do not face the same uncertainty of income as in the Democratic Republic of Congo, for example. The stability of a government contract is therefore not as attractive to them, and as a result they are hesitant to participate in the Sambhav Voucher Scheme.

- Lack of regulation
  - Lack of rights/responsibilities

One of the issues that Lucknow faces is an unclear distribution of rights and responsibilities between providers and patients. Patients are unaware of their rights, and providers are not always aware of their responsibilities. At an administrative level, the roles are well distributed, but at a lower level (such as nurses and medical staff in the facilities) there is often little concern for the patients well-being to stimulate a proper shouldering of the burden of care. Thus, women who have visited public facilities have often complained of long waiting times, brusque treatment, and insufficient information regarding their care. Sometimes they even complain of physical or mental abuse. Staff in public facilities are overburdened with the number of patients, have too little

infrastructure to effectively handle all their patients, and are often not held accountable for their actions.

The Voucher Scheme seeks to combat this problem using two features; firstly, by redistributing the patient load the intention is to give medical staff more time and space to improve their quality of care. Secondly, by defining very clearly a limited number of services that the private providers are expected to perform, it makes it easier to inform both providers and patients of what they can expect. This is the intention, and in principle it seems to be working. Patients and providers have a very clear idea on what they have on offer, and providers have a stimulus to keep very clear records, since their reimbursement is dependent on them.

- Lack of accountability

The problem of accountability is one that is in every developing country. Because of corruption and general chaotic management, it is difficult to keep a clear oversight of the activities that occur. At the moment, corruption within the Sambhav Voucher Scheme is not a big problem, because the scale in Lucknow is still very limited. However, within the government it is indeed a problem. One of the most common complaints among the health care providers was that the reimbursement and the medication supply, both of which were supposed to be provided to the health care facilities upon participation in the scheme, were not properly delivered. One facility received one delivery of medication, and subsequently no more, and another did not receive any at all. As a result, different approaches were taken to solve the problem; one facility passed on the patients to public facilities with a prescription, in the hope that they would receive medication there, and another provided the patients with medication from their own stocks. Either way, both facilities agreed that the current approach was not sustainable.

The Sambhav Voucher Scheme attempts to solve this problem by clearly delineating the chain of command, and by frequent meetings between stakeholders and participants. However, according to the gynaecologists in the private facilities, these meetings have not resulted in improvements, since they have been complaining about the lack of supplies since the very first few months of the scheme. The lack of supplies has been a reason for one of the facilities to seriously reconsider participating in the scheme at all.

## **Conclusions**

The Sambhav Voucher Scheme is well set up, and clearly has the best intentions in terms of organisation. The most recent report was published in March 2012, by USAID, which is the first complete evaluation and summary of the scheme. However, the report seems to paint a rosier picture than the reality seemed to be in Lucknow. While the report expressed satisfaction with the progress of the scheme, the following data was taken from a single facility, and when cross-checked with the other two facilities, proved to paint an accurate picture, according to the gynaecologists. As table 4.7 below shows, the total number of vouchers which were used at the facility were 529. These include all tests and visits, including the three ante-natal visits. It does not mean, therefore, that 529 patients visited the facility, but simply that 529 uses of the facility under the voucher

scheme were made in the month of February. In the same month, BMCs in the same district receive 400-500 patients, simply for consultation (with an average of 5 deliveries). Queen Mary's received over 7000 patients in the same month (see Appendix II for figures), with nearly 4000 of them being new patients. The Voucher Scheme is therefore not performing its responsibility of relieving the public facilities of some of their patient burden. In the analysis, a discussion will be made on the reasons behind this, and how best to combat them.

Table 4.4 Summary of Services K.K. Hospital

<b>SUMMARY OF SERVICES AND AMOUNT PROVIDED IN PRIVATE NURSING HOMES</b>			
District name Lucknow		District Code 05	
Month of Reporting - February-2012			
Name of the Nursing Home: K.K Hospital, 87/88 River Bank Colony, Lucknow-226018			
S.No	Type of Services/test in voucher	No. of Services	Amount Due
1	ANC 1	48	1584
2	ANC 2	67	2211
3	ANC 3	126	4284
4	Delivery	37	68450
5	PNC 1, DPT-I	42	2100
6	PNC 2, DPT-II, DPT-III, Measles	0	0
7	Hb test	124	1860
8	B.Gp & Rh	123	5535
9	Sugar	0	0
10	Urine	127	1905
11	VDRL	122	5490
12	USG	107	10700
13	Steril.	1	1000
14	IUCD	17	1700
15	General Health Check-up	9	900
15	RTI/STI	182	27300
16	HCV:	0	
17	Counselling	All	
18	Clinical examination-BP	All	
19	Blood test	As above	
20	Urine test	As above	
	<b>TOTAL</b>	<b>529</b>	<b>135019</b>
Name and signature of doctor:- Dr. Sunita Singh			

## **4.5 Limitations**

This study covered a range of interesting options, but could have been more useful and complete if more facilities had been included in the study. Regarding public facilities there were only 3 which were not covered, which was due to two of the facilities being closed, and the third refusing to participate. Additionally, access to the facilities was extremely difficult, with many people in the surrounding areas not aware of its location or existence. This was especially true of the BMCs. The district hospitals were easier to find, but only one was willing to participate in the study.

The main problem with accessing the facilities was transport and infrastructure. Particularly with respect to the smaller facilities (the BMC's) and the private facilities, which were not very well-known, and difficult to find, either on the internet, or through hearsay. It would, on average, take 1.5 hours to find a certain facility. This meant that an entire day could be spent in canvassing two facilities. Additionally, the authorisation of a university study was not always enough to get all the information that we sought. However, despite these odds, we managed to visit 9 different facilities, from which we were only barred from 1.

Regarding the Government Hospitals, a more thorough study should include Civil Hospital and Balrampur. Repeated attempts were made to make appointments with doctors no longer working at Balrampur, which led to no results. This led to time being wasted, and subsequently meant that Civil Hospital could no longer be visited.

Regarding private facilities, 3 facilities gives a broad introduction into the facilities which provide the Sambhav Voucher Scheme. There are a total of 10 facilities in Lucknow, of which we are aware, that take part in the scheme. A follow-up study could be held to investigate these.

## **5. Analysis and Recommendations**

### ***5.1 Analysis***

The purpose of this chapter is to assess the Lucknow Sambhav Voucher scheme, with a view to keeping it within the regional context, and to draw a conclusion on the areas in which it may improve, and the aspects in which the scheme has an edge over contemporary schemes under similar circumstances. Therefore, the scheme will be compared to similar schemes in Argentina, Bangladesh, Cambodia, and different countries in Africa.

Demand-Side Financing mechanisms transfer purchasing power to specified groups, for defined services (Schmidt, Ensor, Hossein & Khan, 2010). The purpose is to increase access, for all members of a particular community.

Vouchers are an example of Demand-Side Financing. In essence, it gives individuals and groups which would otherwise not be relevant, the opportunity to 'vote with their feet'. In other words, it gives (for example) socio-economically challenged groups, the chance to choose whom they would like to provide custom to. In this way, it gives poorer families the chance to access services of a quality they would otherwise be excluded from, because of the price.

Lucknow's case is interesting because of the circumstances. A city in a relatively poor state, there are contrasting circumstances. On the one hand, there is infrastructure, which is comparative to that in other big cities. However, since it is a relatively poor state (Uttar Pradesh) there is not extensive investment in the medical care sector, let alone the maternal health care sector. As a result, there is a poor record of maternal health survival.

The public sector that is involved in maternal health care consists of 3 large district hospitals, several smaller community hospitals, and health centres. Only the district hospitals have any form of infrastructure. This is to the extent of the community hospitals not even having x-ray machines, or ultrasound. The result of this situation is that often, women who do not have the money to buy themselves priority, simply suffer from the lack of infrastructure. In order to tackle this, the Uttar Pradesh government introduced the Sambhav Voucher scheme. This scheme was to make private facilities, which are normally beyond the reach of poor women, more accessible. The way this is tackled is by providing vouchers for different aspects of maternal care (ante-natal, delivery and post-natal), so that women can make use of the services provided by the associated private facilities.

There are enough similarities between Lucknow and the other voucher schemes in Argentina, Bangladesh, Cambodia, Nicaragua, Kenya, Uganda, Tanzania, Afghanistan, in terms of context. In most developing countries there is a problem of underutilisation of existing infrastructure, poor accessibility for lower socioeconomic classes, and relatively poor responsiveness to schemes aimed at poorer classes (Schmidt, Ensor, Hossein & Khan, 2010). These are all issues that voucher schemes have been shown to be capable of tackling.

Another problem frequently faced by developing countries is corruption, misdirection of resources, and excessive bureaucracy (McDowell, 2010). A system is required where an overview can be held by the organisation sponsoring or organising the scheme, without increasing the level of bureaucracy or monitoring which is currently required. In Afghanistan, this was well achieved by the scheme. The World Bank set priorities and quality standards, but outsourced the managing of results to young, local NGOs. In doing this, it enabled the NGOs to figure out their own ways of achieving the standards. Annual certification of the NGOs and a system of only re-contracting them if they meet the standards ensures compliance. By contrast, in DR Congo, there was far more control – the Government required organisations to come to them with process issues, procurement issues, as well as the approval of work plans (McDowell, 2010).

Argentina was in a similar situation; ten tracers were settled upon, with standards that varied per period, as well as per region. By varying the standards, it was possible to ensure that each region was able to meet them. Using a similar compliance system of contracting, the World Bank ensured that each NGO not only achieved the targets, but also only remained in contract for as long as they did (World Bank, 2009). As a result, the achievements of the scheme were more than they would have been otherwise, according to the evaluation of the World Bank. Although there are some questions regarding the objectivity of the evaluation (World Bank evaluations tend to be extremely positive), the fact that excessive bureaucracy hinders results is relevant. Additionally, the voucher scheme in Argentina was effective in that it used the existing infrastructure. The scheme used facilities existing already, but the contracts contained built-in enforcement mechanisms. One of the positive aspects of this programme was that it was easier to reach the target population, because they already were involved with the health care framework. Essentially, it was only necessary to focus on expanding the existing base.

Bangladesh is an interesting comparison, because of its similarity in terms of context to Lucknow. However, one of the areas in which the Bangladeshi scheme could be improved is in the fact that it does not use the existing infrastructure, or does not have quality assurance mechanisms.

One of the main problems with Bangladeshi scheme is that investment in the supply-side infrastructure is insufficient (Schmidt, Ensar, Hossein & Khan, 2010). As a consequence, the outcomes are less positive than they might have been under other circumstances. This is comparative to Lucknow, since investment in Lucknow in health care services is also too little. Also, the Bangladeshi scheme is not necessarily the best to encourage competition between health care providers (and therefore improve the quality of services), because there is no competition between providers for the contracts – there are already too few providers, and the remuneration from the scheme is not enough to encourage more to enter the sector. The scheme requires a parallel administrative structure, which simultaneously requires time from the health care staff, but does not provide them with additional income. These are all aspects which return in the Lucknow case.

Bangladesh also faces extensive bureaucratic problems; there are therefore frequent problems with the release and reimbursement of the vouchers (which also occurs in Lucknow). Cambodia took a different approach; it introduced the vouchers to supplement the existing Health Equity Fund scheme (Ir et al., 2010). This resulted in a positive outcome, since the combination of schemes

ultimately contributed to a large increase in the uptake of services. This is because poor individuals do not simply have to rely on one scheme, but can take advantage of multiple schemes.

In the Cambodian approach, the entire scheme was focussed on the public sector. This is also because there are too few private facilities which can be incorporated in the scheme. As a result, the scheme focussed on improving existing facilities, not introducing new ones. This also meant that a greater overview of the scheme could be held by the Cambodian Government.

Additionally, stringent criteria ensured the quality of services provided. Since the money was remaining in the public sector, it was also possible to be generous in terms of other benefits, alongside the remuneration, such as the possibility of participating in future contracts. Nevertheless, the Cambodian government is considering introducing private facilities into the scheme.

In conclusion, the voucher scheme worked best under circumstances where the existing infrastructure was already strong, or where investment in the existing infrastructure was stimulated. In Lucknow, the existing infrastructure is not strong, but it is possible to visualise a situation where the existing infrastructure can be stimulated by the scheme; either by including incentives for the public sector to participate in the scheme, or by encouraging competition. These recommendations will be expounded in the following section, using the conceptual framework outlined in chapter 2.

## ***5.2 Recommendations***

Based on the theoretical framework outlined above, the information gathered on voucher schemes in developing countries, data gathered on the Sambhav Voucher Scheme in Lucknow and the analysis in the previous chapter, the following recommendations can be distilled on how to make the Sambhav Voucher Scheme more effective.

### **Institutional Economics**

- High transaction costs

Since the Sambhav Voucher Scheme is effectively set-up in order to combat the high transaction costs present in the maternal health care sector in Lucknow, the important step now is to ensure that implementation of the scheme is carried out in such a way that the potential of the scheme is reached. Since corruption and leakage of costs at the provider level is little to none, considering that the provider participates in the scheme as a favour to society, and is therefore encouraged to perform this task to the best of their abilities, corruption at the Government and administrative level needs to be tackled. Therefore, oversight needs to be improved in two areas:

- Firstly, oversight of the Community Health Volunteers needs to be made stricter, in order to prevent leakage of the vouchers to ineligible candidates. This can be done by increasing the commission on sale of the vouchers, but simultaneously also increasing the responsibilities of the CHVs. Currently, CHVs have monthly meetings where they can share their questions,

and improve their training, but their responsibilities are not structured enough for them to constitute a full-time job. As a result, they do not have the motivation to perform their duties with the dedication required of a full-time job. By increasing the responsibilities to full-time, it also justifies increasing the salary. This could be compensated by reducing the number of Community Health Volunteers, and increasing their scope of action.

- Secondly, a committee needs to be established to ensure that the health care providers receive the supplies they are guaranteed. This is necessary in order to keep the providers who are currently in the scheme participating, and to encourage new providers to join the scheme.

- Information asymmetry

Information asymmetry needs to be combatted by increasing the information available to the patients. This needs to be undertaken with a concrete and concentrated media campaign to inform patients on their possibilities. As of now, there have been sporadic attempts made to inform potential patients on the advantages of the scheme, but these have not been enough to counteract the prevailing opinion among many poor households on the impotency of the health care system. More information needs to be disseminated on the dangers faced by poor pregnant women, and the possibilities that the health care system can offer them. Above all, emphasis needs to be placed on changing the prevailing negative perception of medical health care among poor women, by bringing them into closer contact with the health care system as a system that also cares for the psychological aspect of care.

- Absence of insurance markets
  - Adverse selection

Adverse selection is still a problem in Lucknow. One of the issues is that ineligible women use the vouchers, mainly due to the problem described above; of too little being invested in the Community Health Volunteers and their tasks. The problem of adverse selection would be tackled by the solution presented to high transaction costs; by investing more in the Community Health Volunteers as the links between the communities and the health sectors.

- Moral hazard

The question of moral hazard is not very relevant to this scheme, and in terms of problems is probably low on the priority list. Additionally, the set-up of the scheme is currently such that the problem of moral hazard is limited as far as possible. When schemes become bigger – as in the examples of Cambodia and Kenya – and more health care providers are involved, the problem of moral hazard may become more imminent, primarily since oversight becomes more difficult. At present, however, the fact that there are only 10 facilities involved in the Scheme in Lucknow means that the problem of moral hazard is not very relevant for the Sambhav Voucher Scheme.

- Freeriding

The problem of freeriding within the Sambhav Voucher Scheme can be solved by increasing oversight of the Community Health Volunteers, and by making the demands of participating in the

scheme more stringent. This is linked to the issue of adverse selection, and of high transaction costs.

### **Rights-Based Approach**

- Personal choices
  - Education/background

The Sambhav Voucher Scheme is effective at counteracting the negative effects of education and background, since it offers a series of services which are clearly laid out for both providers and patients. Patients are not required, therefore, to make their own decisions on when and how they go to receive the services. However, it is still far too optional on which services the patients take up. There is no sanction imposed, for example, if the patient fails to take up one of the ANC visits. As a result, in the first trimester, there is very little uptake of services, because patients are not aware of how important the first trimester is. In addition, many patients do not even know that they are pregnant in the first trimester, as the gynaecologists in the facilities noted in this study of the Scheme.

On this issue, there are therefore two recommendations that can be made:

- Firstly, make all visits included in the Voucher compulsory. This can be effected by increasing the salary and responsibilities of the Community Health Volunteers, to ensure that they are responsible for bringing home the importance of all the visits included in the voucher scheme. There should be a good reason for women who participate in the voucher scheme *not* to take up a visit, and sanctions should be included in the Scheme if they do miss a visit without a good reason.
- Secondly, increase information and awareness of pregnancy and pregnancy care. More information should be given to the women on how important pregnancy care is, and also more information on what the symptoms of pregnancy are.

- Geographical location

There are few private facilities currently in Lucknow that participate in the Scheme. The question of geographical location can be combatted by persuading more facilities to join the Scheme. By making the Scheme more attractive and including more facilities, a larger section of the population of Lucknow can be reached.

- Lack of regulation
  - Lack of rights/responsibilities and lack of accountability

One thing that the Sambhav Voucher Scheme cannot be accused of is poor regulation. The set-up of the Scheme is effectively done, and well-coordinated with other stakeholders. The outline of the Scheme is neat, and the chain of command is clearly delineated. The biggest problem is implementation. As of now, the definition of rights and responsibilities in the Scheme is clear, from the administration on. The failure arises in the fact that supplies such as medication and funding often does not reach the health care providers. As such, the problem is in the delineation of rights

and responsibilities within the Government body that is in charge for supplying the health care providers with finance and medication. Since no specific individual is held accountable for the medication and finance reaching the providers, complaints from the providers did not reach the authorities. This problem still has not been solved, and needs to be tackled by increasing Government oversight. However, this relates to the much larger issue of corruption in the Indian Government, and will presumably not be solved in one campaign.

### ***5.3 Conclusion***

The Sambhav Voucher Scheme is an excellently developed Scheme with broad potential. The regulations and set-up of the Scheme is clearly delineated and neatly laid out, and communication between health care providers and their administration is not difficult. There was no uncertainty on the part of health care providers regarding their rights or responsibilities. The main problems came up in the lack of smooth provision of funding or medication, which is largely due to the haphazard oversight in the Indian Government system. The solutions given above are easily applicable and not difficult to implement, and also do not require a large outlay of finance. They would solve most of the problems listed above, except those which arise from the overriding issue of corruption in the Indian Government.

The Sambhav Voucher Scheme has a lot of potential to fill the gap in the maternal health care sector. However, the current implementation leaves something to be desired. With the recommendations above, a great deal of progress could be reached.

## Bibliography

- Urbanisation in Developing Countries. (2002). *The World Bank Research Observer*, 89-112.
- AC Nielsen. (2006). *Community Based Maternal & Child Health Nutrition (MCHN) Project*. Lucknow: ORG Centre for Social Research.
- Agrawal, S. (2009). *INDIA'S NATIONAL POPULATION POLICY (2000) An Evaluation*. Minnesota: Hubert H. Humphrey Institute of Public Affairs.
- Ahmed, S., & Khan, M. (2011). A maternal health voucher scheme: what have we learned from the demand-side financing scheme in Bangladesh? *Health Policy and Planning*, 25–32.
- Annigeri et al. . (2004). *An Assessment of Public Private Partnership Opportunities in India*. USAID |India.
- Arora et al. (2011). *Innovative Ways to Meet Health Challenges of Urban India: A White Paper*. PUBLIC HEALTH FOUNDATION OF INDIA.
- Balarajan, V., Selvaraj, S., & Subramanian, S. (2011). India: Towards Universal Health Coverage 4 - Health care and equity in India. *Lancet*, 505–515.
- Bellows, N., Bellows, B., & Warren, C. (2011). The use of vouchers for reproductive health services in developing countries: systematic review. *Tropical Medicine and International Health*, 84–96.
- Bhat, R. (1999). Characteristics of private medical practice in India: a provider perspective. *Health Policy and Planning*, 26-37.
- BHATIA, M., & GORTER, A. (2007). IMPROVING ACCESS TO REPRODUCTIVE AND CHILD HEALTH SERVICES IN DEVELOPING COUNTRIES: ARE COMPETITIVE VOUCHER SCHEMES AN OPTION? *Journal of International Development*.
- Bitran, R. (Unknown). *Preserving Equity in Health in Cambodia: Health Equity Funds and Prospects for Replication*. Santiago: Bitran & Associates.
- Björkman, J., & Venkat Raman, A. (2006). *Public/Private Partnership in Health Care Services in India*. Hyderabad: IDPAD Symposium.
- CARE. (2009). *Right-Based Approach Guidelines*. Copenhagen: CARE Danmark.
- CHAKRABORTY et al. (2003). Determinants of the use of maternal health services in rural Bangladesh. *HEALTH PROMOTION INTERNATIONAL*, 327-338.
- CII. (2010). *The Emerging Role of PPP in Indian Healthcare Sector*. KPMG.
- Commons, J. (1931). INSTITUTIONAL ECONOMICS. *American Economic Review*, 648-657.

- DAS, A. (2007). Public-private partnerships for providing healthcare services. *Indian Journal of Medical Ethics*.
- Dasgupta, J. (2011). Ten years of negotiating rights around maternal health in Uttar Pradesh, India. *BMC International Health and Human Rights*.
- Department of Economic Affairs. (2011). *National Public Private Partnership Policy*. New Delhi: Ministry of Finance, Government of India.
- FUKUDA-PARR, S., LAWSON-REMER, T., & RANDOLPH, S. (2009). An Index of Economic and Social Rights Fulfillment: Concept and Methodology. *Journal of Human Rights*, 195–221.
- Furubotn, E., & Richter, R. (2008). The New Institutional Economics - A Different Approach to Institutional Economics. *Economic Affairs*, 15-23.
- Gupta et al. (2010). Newborn Care Practices in Urban Slums of Lucknow City, UP. *Indian Journal of Community Medicine*.
- Harikumar, S. (2010). *Utilisation of Government and Private Health Services*.
- Hirsch, P., & Lounsbury, M. (1996). Rediscovering Volition: The Institutional Economics of Douglass C. North. *Academy of Management Review*, 872-884.
- Hulton, L., Matthews, Z., & Stones, R. (2007). Applying a framework for assessing the quality of maternal health services in urban India. *Social Science & Medicine*, 2083–2095.
- Human Rights Watch. (2009). *No Tally of the Anguish: Accountability in Maternal Health Care in India*. New York: Human Rights Watch.
- International Institute for Population Sciences (IIPS). (2010). *District Level Household and Facility Survey (DLHS-3), 2007-*. Mumbai: IIPS.
- Ir et al. (2010). Using targeted vouchers and health equity funds to improve access to skilled birth attendants for poor women: a case study in three rural health districts in Cambodia. *BMC Pregnancy and Childbirth*.
- JEJEEBHOY, S. (1998). ADOLESCENT SEXUAL AND REPRODUCTIVE BEHAVIOR: A REVIEW OF THE EVIDENCE FROM INDIA. *Soc. Sci. Med.*, 1275-1290.
- Jesani, A. (1996). *LAWS AND HEALTH CARE PROVIDERS A Study of Legislation and Legal Aspects of Health Care Delivery*. Mumbai: Cehat.
- Kirkemann, J., & Martin, T. (2007). *Applying a rights-based approach*. Copenhagen: THE DANISH INSTITUTE FOR HUMAN RIGHTS.
- Kruk, M., Galea, S., Freedman, L., & Prescott, M. (2007). Health care financing and utilization of maternal health services in developing countries. *Health Policy and Planning*, 303-310.

- Kumar Paul et al. (2011). Reproductive health, and child health and nutrition in India: meeting the challenge. *Lancet*, 332–49.
- Kumar, A., Bhardwaj, P., Srivastava, J., & Gupta, P. (2011). A STUDY ON FAMILY PLANNING PRACTICES AND METHODS AMONG WOMEN OF URBAN SLUMS OF LUCKNOW CITY. *Indian Journal of Community Health*, 27-29.
- Malavankar, D., & Rosenfield, A. (2005). Maternal Mortality in Resource-Poor Settings: Policy Barriers to Care. *American Journal of Public Health*, 200-204.
- McDowell, M. (Unknown). *A Tale of Two Countries: Contracting for Health Services in Afghanistan and Congo (DRC)*. RBF Health.
- Meadowcroft, J. (2008). Universal, Free Health Care: Don't Believe the Hype. *Economic Affairs*, 1.
- Ministry of Health & Family Welfare. (2006b). *Draft Final Report of the Task Force to Advise the National Rural Health Mission on "Strategies for urban Health Care"*. New Delhi: Government of India.
- Ministry of Health and Family Welfare. (2010). *National Urban Health Mission*. New Delhi: Government of India.
- Ministry of Minority Affairs. (2008). *BASE LINE SURVEY IN THE MINORITY CONCENTRATED DISTRICTS OF UTTAR PRADESH*. Lucknow: Government of India.
- Ministry of Wealth and Family Welfare. (2006d). *Uttar Pradesh National Family Health 2005-06*. Mumbai: Government of India.
- Mistry, R., Galal, O., & Lu, M. (2009). "Women's autonomy and pregnancy care in rural India: A contextual analysis". *Social Science & Medicine*, 926-933.
- Montagu, D., Mohan, R., & Visconti, A. (2008). *Private Health Care in Developing Countries: Vouchers*.
- Mukhopadhyay, A. (2000). Public-Private Partnership in the Health Sector in India. In *Public-Private Partnerships in the Social Sector: Issues and Country Experiences in Asia and the Pacific* (pp. 333-344). Tokyo: Asian Development Bank Institute.
- Newdick, C., & Derrett, S. (2006). Access, Equity and the Role of Rights in Health Care. *Health Care Anal*, 157–168.
- North, D. (1992). THE NEW INSTITUTIONAL ECONOMICS AND DEVELOPMENT. *American Economist*, 3-6.
- North, D. (1993). THE NEW INSTITUTIONAL ECONOMICS AND DEVELOPMENT. *Economic History*.
- Obare et al. (2012). Community-level impact of the reproductive health vouchers programme on service utilization in Kenya. *Health Policy and Planning*, 1–11.

- Phillips, D. (1992). A Comparison of the Use of Traditional and Modern Medicine in Primary Health Centres in Tamil Nadu. *GeoJournal*, 21-30.
- Preker, A., & Harding, A. (2000). *The Economics of Private and Public Roles in Health Care: Insights from Institutional Economics and Organizational Theory*. Geneva: World Bank.
- Raban, M., Dandona, R., & Dandona, L. (2009). Essential health information available for India in the public domain on the internet. *BMC Public Health*.
- Radwan, I. (2005). *India - Private Health Services for the Poor*. The World Bank.
- Ramarao, S., Caleb, L., Khan, M., & Townsend, J. (2001). Safer Maternal Health in Rural Uttar Pradesh: Do Primary Health Services Contribute? *Health Policy and Planning*, 256-263.
- Rapley, J. (2007). The End of Development, or a New Beginning? In *Understanding Development*. Chicago: Cambridge University Press.
- Ratsma, Y., & Malongo, J. (2009). Maternal health and human rights. *Malawi Medical Journal*, 51 - 53.
- Ricketts, M. (2008). EDITORIAL: THE ECONOMIC ANALYSIS OF INSTITUTIONS. *Economic Affairs*, 2-6.
- Saha, N. (n.d.). *Landscaping Women's Empowerment*. Copal Partners.
- Saha, S. (2005). Dynamics Governing Women's Decision on Reproductive Health Matters Reflections from a Qualitative Study in Central India. *Online J Health Allied Scs*.
- SAMA. (2011). *Free Treatment in the Private Sector: Myth of Reality? A Pilot Study of Private Hospitals in Delhi A report*. New Delhi: SAMA - Resource Group for Women and Health.
- Schmidt et al. (2010). Vouchers as demand side financing instruments for health care: A review of the Bangladesh maternal voucher scheme. *Health Policy*, 98-107.
- Scott, R. (2004). Institutional Theory: Contributing to a Theoretical Research Program. In K. Smith, & M. Hitt, *Great Minds in Management: The Process of Theory Development*. Oxford UK: Oxford University Press.
- Sen, A. (1999). The Perspective of Freedom. In *Development as Freedom*. Oxford: Oxford University Press.
- Shah, U., & Mohanty, R. (2010). Private Sector in Indian Healthcare Delivery: Consumer Perspective and Government Policies to promote private Sector. *Information Management and Business Review*, 79-87.
- Sharma, K., & Zodpey, S. (2011). Demand and Supply Analysis of Human Resource Capacity for Hospital Management in India. *Journal of Health Management*, 155-176.

- Shiffman, J., & Ved, R. (2007). The state of political priority for safe motherhood in India. *International Journal of Obstetrics and Gynaecology*.
- Singh, M., Singh, J., Ahmad, M., Kumari, R., & Khanna, A. (2010). Factors influencing utilisation of ASHA services under NRHM in relation to Maternal Health in Rural Lucknow. *Indian Journal of Community Medicine*, 414-420.
- Srivastava et al. (2009). Care-seeking behavior and out-of-pocket expenditure for sick newborns among urban poor in Lucknow, Northern India: a prospective follow-up study. *BMC Health Services Research*.
- Sudha, S., & Morrison, S. (2011). Marital Violence and Women's Reproductive Health Care in Uttar Pradesh, India. *Women's Health Issues*, 214–221.
- THE LANCET. (2004). Basing treatment on rights rather than ability to pay: 3 by 5. *HEALTH AND HUMAN RIGHTS*, 1071-1072.
- USAID | India. (2012). *Sambhav: Vouchers Make High Quality Reproductive Health Services Possible for India's Poor*. New Delhi: USAID | India.
- VARATHARAJAN, D., THANKAPPAN, R., & JAYAPALAN, S. (2004). Assessing the performance of primary health centres under decentralised government in Kerala, India. *Health Policy and Planning*, 41-51.
- Varma, D., Khan, M., & Hazra, A. (2010). INCREASING INSTITUTIONAL DELIVERY AND ACCESS TO EMERGENCY OBSTETRIC CARE SERVICES IN RURAL UTTAR PRADESH. *The Journal of Family Welfare*, 23-30.
- WHO. (2010). *Demand Side Financing in Health: How far can it address the issue of low utilization in developing countries?* World Health Organisation.
- Williamson, O. (2008). Transaction Cost Economics: The Precursor. *Economic Affairs*, 7-14.
- World Bank. (2006). *India: Building Capacities for Public Private Partnerships*. New Delhi: World Bank.
- World Bank. (2008). *Performance-based contracting in health: The experience of three projects in Africa*. GPOBA.
- World Bank. (2009). *ARGENTINA: Provincial Maternal and Child Health Insurance A Results-Based Financing Project at Work*. World Bank.

## Appendix

<b>Infrastructure Available in Facilities Lucknow</b>			<b>Public</b>				<b>Private</b>			
			<b>IPHS</b>	<b>NKR</b>	<b>SJ</b>	<b>RC</b>	<b>IN</b>	<b>K.K.</b>	<b>M.G.</b>	<b>M.C</b>
<b>Manpower</b>	Block health officer		1	x	x	x	x	x		x
	General surgeon		1	2	x	x	x	1		1
	Physician		1	2	x	x	x	3		1
	OBGYN		1	2	3	2	1	4		1
	Pediatrician		1	1	x	x	1	1		1
	Anesthetist		1	x	x	x (Rs. 1000)	x	3		on call
	Medical superintendent		1	2	1	1	1	1		x
	Medical officer (at least 2 female)		6	4	2	6	x	9		15
<b>Drugs</b>	ARI				0	0	0			0
	Diarrhea			0	0	0	0	0		0
	Fever			0	0	0	0	0		0
	Worm infestation			0	0	0	0	0		0
<b>Services</b>	Assured services	Medicine		0	0	x	x	0		0
		Surgery		x	x	x	x	0		0
		Obstetrics and gynaecology		0	0	0	0	0		0
		Pediatrics		0	x	x	0	0		0
	Blood storage unit			0	x	x	x	0		x
	Operation theatre			0	0	0	0	5		0
	Labour room			0	0	0	0	1		0
	X-ray laboratory			0	x	x	x	1		x
	EKG			x	x	x	x	0		0
	Referral transport			x	x	x	x	0		x
	24*7 Delivery and Newborn Care			0	0	0	0	0		0
	Adolescent Reproductive and Sexual Health (ARSH)			x	x	x	x	x		x
	Immunization			0	0	0	0	0		0
	Permanent FP methods	Ligation/copper tube		0	0	0	0	0		0
	Medical Termination of Pregnancy (MTP) using MV technique	DNC		0	0	0	0	0		0
Common eye diseases and refraction			x	x	x	x	0		x	

## Appendix

services									
School health			X	X	X		X	X	X
Nutrition			X	X	X		X	X	0
Selected surgeries			X	X	X		X	0	0
Laboratory services	Malaria		X	X	X		X	0	0
	TB		X	X	X		X	0	0
	STI/RTI		X	X	X		X	0	0
	Enteric		X	X	X		X	0	0
	Routine (blood/stool)		0	0	0		0	0	0

IPHS – Indian Public Health Standards (as prescribed for rural areas under NRHM)

NKR – BMC Naval Kishore Road

SJ – BMC Silver Jubilee

RC – BMC Red Cross

IN – BMC Indira Nagar

K.K. – K.K. hospital (private)

M.G. – Madhu Gupta Nursing Home (private)

M.C. – Miranda Clinic (private)

**Comparative data on service distribution of the facilities covered**

(All data for February 2012)	Public					Private		
	Queen Mary's	BMC Naval Kishore Road	BMC Silver Jubilee	BMC Red Cross	BMC Indira Nagar	K.K. Hospital	Madhu Gupta Nursing Home	Miranda Clinic
Admission private patients (Indoor)	Rs. 150	-	-	-	-	Rs. 150	Rs. 200	Rs. 150
Registration	Rs. 1	Rs. 1	Rs. 1	Rs. 1	Rs. 1	-	-	-
Delivery charges of hospital	With admission	With admission	With admission	With admission	With admission	Rs. 1850	-	Rs. 1850
Ultrasound	Rs. 150	Rs. 200*	Rs. 200*	Rs. 200*	Rs. 200*	Rs. 100	-	Rs. 100
# Caesarean monthly	41	1	8	0	2	0	-	0
Deliveries	459	3	100	15-20	70-80	37	-	5
Referrals	N/A	3	3-4	4-5	4-5	4	-	1
Live births	341	3	83	15-20	70-80		-	5
Number of patients (month)	7090 (total)	+/-350	+/- 400	+/-400	+/-100	529	+/-400	400-450
New patients	3878	-	220	700	10	48	-	15
Old patients	2666	-	160	200	90	481	-	60
Family planning	546	-	52	15-20	15-20	18	-	15-20

\*Included in admission charge