‘Filling the Gap’ – An NGO’S Role in Making Maternal Healthcare More Accessible in Rural, Gujarat

by

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ABSTRACT

‘Filling the Gap’ – An NGO’S Role in Making Maternal Healthcare More Accessible in Rural, Gujarat

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This thesis investigates an NGO's primary maternal healthcare services, provided by the NGO's health worker in rural Gujarat. The focus of this research is on the beneficiaries who utilize the primary maternal healthcare services provided by the NGO's health worker to determine changes the NGO has brought into the region, especially related to access and availability of maternal healthcare services in the region. This research focuses Paul Farmer's framework of structural violence, and examines how the NGO has addressed the issue of structural violence in the region to make maternal healthcare services accessible, and affordable particularly for the women. By focusing the perspective of the beneficiaries this research intends to determine if the NGO addresses the needs and demands of the region it works within.

Key Words: Community health worker/Health worker, Non-government organization (NGO), primary maternal healthcare services, structural violence
DEDICATION

This thesis is dedicated to my family who have been my backbone throughout my graduate program. Thank you.
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I would like to acknowledge and thank all of the women who took the time to be my research participants. Without you this thesis would have been impossible. I would also like to thank Action Research in Community Health and Development (ARCH) - Dharampur for permitting me to carry out my research. I would like to acknowledge all the staff at ARCH who gave me a warm welcome and made me feel at home. I will never forget the warmth and generosity.

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CHAPTER 1: Introduction

2010 was my first trip back to India since I had immigrated to Toronto, Canada 12 years earlier. I was going to be a research volunteer for a non-government organization (NGO) in Gujarat, India where I would conduct a small-scale research project to determine if there was a feasible market for low-cost sanitary napkins (sanitary pads) in the region the NGO operates in. I was very excited for this trip, because this would be my first research trip in my academic life (in other words, not "arm-chair" research). I was finally getting an opportunity to conduct my own fieldwork like a "real" anthropologist. I could not wait to get started.

My field site for this project was a rural village in southern Gujarat, in the Bharuch District. This project was my first introduction to rural India and gave me an opportunity to explore and experience the challenges the rural population faced in accessing healthcare services. Through this experience I was able to witness the physical challenges - such as the lack of health facilities, transportation, and poor infrastructure - which made healthcare trips difficult and expensive. One of the most vivid memories I have from this trip is of the long lines which formed in villages where the NGO conducted mobile clinics. Many of the women in these lines walked many kilometers while they were heavily pregnant just to seek pre-natal care. Some women had even carried small infants during the hottest time of the day and yet remained patient under any kind of shade they could find, for their turn to see the physician. This image stayed with me, and made me grateful for the healthcare services I receive in Toronto.

* * *

In all of the field visits, most of the time the line-up had already formed, prior to the arrival at the location at least an hour or two before the mobile clinic, to avoid walking under the sun, and to get home before the mid-afternoon heat. This was also my introduction to the idea of
a mobile clinic and I got to witness the importance of this service was for rural women who lived in the remote areas of Bharuch District. The mobile clinics not only reduced the physical barrier but services were much more affordable since they eliminated travel costs associated with reaching a healthcare facility.

As a research volunteer working for the NGO, I was always able to witness the positive aspects of the services provided by the NGO, which created a positive image of the NGO in my mind. Maternal healthcare services, cataract surgeries, hospital and women's empowerment programs were just a few of the services the NGO provided within the region. It seemed to me that the NGO was providing great service to the community. However, sometimes I wondered how the beneficiaries or service users of the NGO, particularly the women I met during my field visits on the mobile clinic, felt about the NGO's services. My perspective was simple: the mobile clinic made healthcare services simpler because it eliminated two major barriers, expenses and accessibility of healthcare services. Nevertheless, did the women waiting in the long line share my perspective? How did they feel about the services provided by the mobile clinic? Did the services meet their needs and demands? As these questions suggest, I had only one side of the story, but during that trip I never found out the perspective of the NGO's clients. My perspective was biased because I was conveniently placed in a position to view and experience only the positive aspects of the NGO.

This experience stayed with me and made me wonder how the field of development worked, in particular it made me question the work of NGOs, in regards to whether NGOs met the demands and/or needs of their clients. Hence, the purpose of this thesis is to provide the perspective of the beneficiaries, whose perspective is rarely equally represented in the field of development. In order to do so, I ask: How have the beneficiaries evaluated the primary maternal
healthcare services of Action Research in Community Health and Development (ARCH)? The focus of my thesis is on the interactions between the beneficiaries and ARCH health worker and how the beneficiaries evaluate the health care services of the ARCH health worker working in their village.

Work by Lodhiya, Jogia, and Yadav (2014), Peterson, Deonandan, Arole, and Premkumar (2014), and Das (2012) focused on healthcare services providers, but has not examined the perception of service users. My thesis will describe and analyze how the beneficiaries evaluated the healthcare services of ARCH, the NGO whose services had been accessed by the participants of the research. I argue that the NGO has had a positive impact on the region through the introduction of health workers who are trained by the NGO to provide basic healthcare services which includes primary maternal healthcare services in villages (and nearby villages) where the health workers reside. I demonstrate the role the NGO's health workers have in the villages where the workers provide their services, with a focus on how they have made maternal healthcare services accessible, affordable, and available in remote parts of the region. My focus is the primary maternal healthcare services provided by the NGO's health workers who provide pre-natal services (which consists of education on proper nutrition, pregnancy, and safe delivery practice), and post-partum services (which consists of education on breast feeding, proper diet, and immunization of the new born) of the mother and the infant. This will demonstrate how the beneficiaries evaluated ARCH's primary maternal healthcare services by focusing on the services and their interactions with the ARCH's healthcare workers who are the "face" of the organization, in rural and remote areas of the region.

The remainder of my introductory chapter introduces Paul Farmer's theoretical framework of structural violence. This concept will allow me to develop an insight into the lives
of the participants of this research, and illustrate some of the barriers the participants face in accessing maternal healthcare services. For instance, they will show that the participants (or the beneficiaries of ARCH's services) are born into a socio-setting or circumstances that then became barriers for them in accessing maternal healthcare services. Hence, both of these frameworks will be utilized to illustrate how some of the circumstances an individual was born into became barriers in accessing healthcare services.

Chapter 2 begins with a description of the field site. In it, I introduce the subject of this thesis, ARCH, and provide a background information about the NGO's establishment, and the services the organization provides. This chapter focuses on the methods I used during the course of this research. This includes qualitative methods such as the ethnographic techniques of participant observation and field observation to collect data. This section also includes the research design and techniques involved in recruiting participants for interviews. I also discuss ethical issues and limitations for the research.

Chapter 3 begins with a discussion of India's healthcare system. This section examines some of the challenges and weaknesses of the country's health system. Next, this chapter analyzes the country's three healthcare sectors, public, private, and for the purposes of this thesis, semi-private. The aim of this segment is to illustrate how these three sectors influence the accessibility of healthcare services of the rural population. This illustrates the effect of these sectors on the health of the rural poor, particularly their access to healthcare services. Lastly, this chapter examines India's and the state of Gujarat's overall maternal health strategies whose aim is to reduce the maternal deaths and maternal mortality ratio (MMR), and increase hospital deliveries. The aim of this section is to give background information on maternal health, as it is discussed in the scholarly literature. In particular, this chapter focuses on maternal healthcare in
rural, India, including some of the challenges Gujarat's faces with regards to maternal health. It discusses some of the policies the Gujarat government and the central government introduced and implemented to improve maternal health strategies and help India achieve its Millennium Development Goal-5 (MDG).

Chapter 4 examines the role of community health workers, village level health workers who have become healthcare providers in many rural parts of the world, especially in developing countries. This chapter discusses the ways in which the introduction of community level health workers has made healthcare services affordable and accessible, especially for the poor. To be more specific, this chapter also gives an example of an international organization, Partners in Health (PIH), and the difference the community health workers have made in the areas where PIH provide services, and the impact these workers have had on the organization and the work it does in the community. In comparison, I also examine the work of village-level health workers in India, which will illustrate the similarities they share with community-based health workers. In this chapter, I provide three case studies that examines the impact of village-level health workers in a community. The aim of this chapter is to illustrate how community-based/village-level health workers have influenced accessibility of healthcare services in rural and remote areas of India.

In Chapter 5, I provide ethnographic insights into the perceptions of the women who utilize the primary healthcare services provided by ARCH health workers. This chapter looks at how the women have evaluated the services of ARCH, specifically the primary maternal healthcare services. The questions this chapter aim to answer are about the women's perception of ARCH, through their interaction with ARCH health workers and how the women evaluated the services of the health worker, working in their village. This chapter also looks at some of the
changes (positive and/or negative) their villages and/or the community has seen prior to the arrival of ARCH's health workers and after their arrival. Finally, the last chapter, Chapter 6, provides concluding remarks about my research findings and give suggestions on how ARCH could improve its services in the region. This chapter looks at the potential of village level health workers in field of development, especially in India on the national level, and how they could be utilized to their full potential to improve the access to primary maternal healthcare services in the most rural and remote areas of the country. The chapter also gives some recommendations on how Gujarat state (and India in general) could improve its existing healthcare system to make the services more equitable for the poor, mainly for those who live in rural and remote areas of the country.

Structural Violence

In this section I draw on Paul Farmer's framework of structural violence which "is violence exerted systematically - that is, indirectly - by everyone who belongs to a certain social order ... the concept of structural violence is intended to inform the study of the social machinery of oppression" (Farmer, 2004, p. 307). Essentially, for Farmer structural violence encompasses some of the challenges and weaknesses of a country's health system. It is when an individual is born into a community or circumstances (such as poverty, economical, and social circumstances) that are beyond their control. These circumstances create barriers for them, which influences their agency in terms of the actions they take in overcoming the barriers. Structural violence limits an individual’s agency because "it tightens a physical noose around their necks ... in which resources - food, medicine, even affection - are allocated and experienced" (Farmer, 2004, p.
Hence, structural violence is a major barrier or factor that impacts an individual's decision-making.

Structural violence is an idea that impacts the participants of this research. In terms of accessing healthcare services, participants are affected by structural violence factors such as economic (poverty), and environmental barriers (such as excessive rainfall), which negatively impact individuals' access to healthcare services. This affects the rural population because many of these individuals are born into circumstances that have become barriers for them. This structural violence is also shaped by the unequal distribution of disease and health that exist between the developed and developing world and the growing gap between the rich and the poor (Kleinman et al, 1996). The wealthy are in a better position to make knowledgeable decisions about good health, such as investing in healthy food, and having access to proper sanitary living conditions to prevent themselves from getting sick. In contrast, the poor are always at a disadvantage because of their circumstances of poor nutrition, and the lack of adequate sanitation that negatively impacts their overall health and makes them even more vulnerable to poor health and diseases in comparison to the wealthy. Individuals are born into a structure that has existing barriers and these barriers increase if an individual is poor and lives in rural and remote area. These barriers become structural violence.

Structural violence will be used as a framework to investigate the barriers the participants in this research face in accessing healthcare services. This framework will illustrate the inequality that exists for more than half of the world's population, the poor, who live on less than $1.25 per day (United Nations Development Programme [UNDP], 2015). The inequality increases if gender is identified as a factor because it becomes a key barrier in accessing healthcare services, and making decision in regards to one's health. Gender is thus a key
component of structural violence. This concept will be used to highlight and investigate how ARCH addressed the issue of structural violence in the region. I will also discuss the strategies that ARCH uses to attempt to eliminate and/or reduce the violence faced by the participants of this study. A key objective of this framework is to demonstrate that structural violence experienced by the individual is not the individual’s fault. It is the circumstances – the structure in which the individual finds him or herself - which cause inequality for the individual. This becomes problematic because the circumstances are so complex and tangled that people on all levels (bureaucratic to the individual) have to work together to ensure power (especially decision making power) is distributed evenly and equally throughout the system to improve circumstances for an average individual.

With this background, I now turn to a discussion of my research methods and the research community. The next chapter will begin with a brief description about the day I arrived at my field site, followed by an overview ARCH and some of the services the organization provides. The chapter will end with a discussion on the research methodology.
CHAPTER 2: Background on Field Site and Research Methodology

I watched as the symbols of "the city", tall concrete buildings, traffic noise, and the hustle and bustle disappeared as I headed south on National Highway 8 (NH-8). These symbols were replaced by the flat lands filled with sugar canes, bananas, mango trees, or vegetables. The stale and polluted air in the car was also replaced with a fresh, cool, crispy breeze. The sun was up but not so high up that you could not see the morning dew glittering on the large, bright green, banana leaves, and the tall, uncut, grass. Inside the car, I was trying to take in the beauty of the scenery as I was getting closer and closer to my field site, in Nagaria, Dharampur.

To get to my field site, I had to drive through two small towns, Chikhli and Khergam. Both of them had small narrow lanes, and old houses that appeared to have been around for at least 50 years. Three hours later, I had finally reached Dharampur, and saw the town's historic, entrance; "three-arches" or "Three Gates". Similar to Chikhli and Khergam, Dharampur is also an older town, but population wise it appeared to be much larger. As I drove through the town early in the morning, the town was just waking up. I saw shops being opened, men getting ready for work, and women were already busy with their daily household chores. The main town of Dharampur was getting ready for another ordinary day.

Just a short a distance from Dharampur, about 2 kilometers away, was the village of Nagaria. As I drove away from the main town, I noticed how the older houses were disappearing, and were substituted with colourful, detached homes, with a large swings on the verandas, and large front yards that had at least one or 2 cows, buffaloes, or both, one or 2 motorcycles, and at least one car parked in the front cover with a plastic cover to protect it from the flying dust. After we passed about 4 houses, the car turned left onto a small, narrow, beaten, and bumpy pathway that had only room for one small car to pass. After driving on the bumpy
road for a few meters, the car turned right, into a beautiful, well-managed landscaped compound. I had finally arrived at my field site, Action Research in Community Health and Development (ARCH).

The physical appearance of ARCH was beyond my expectations. Since I had arrived in India during the hottest months, I was expecting my field site to be an open space with no greenery, and dried trees with a dusty pathway designed for cars, motorcycles, and people all to share. On the contrary, the appearance of the compound was unexpected. I found that hot weather had not touched the plants there. I was mostly surprised by two large trees providing shade to a swing carefully placed underneath and the colourful flowers planted in front of the clinic, the main building of the compound. This reminded me of botanical gardens, but on a smaller scale. I got out of the car and wondered where the office of my contact, Dr. Daxa Patel (no relation to myself) was. I walked towards the main pathway which had beautiful plants and flowers planted on both sides of the pathway. I asked a passerby, (whom I later found out was an employee of the NGO) where I would find Dr. Daxa. He took me to a room, which was in the center of the clinic that had a long line of people waiting outside. I entered the room, and saw a woman talking to someone I assumed was a patient. As their conversation finished, the patient walked away as I approached her desk.

This was my first "official, face-to-face" meeting with my contact, with whom I had shared many emails about my thesis idea prior to my research trip departure. For the first few minutes we shared a few pleasantries and she told me she was going into the field to attend a meeting and invited me to join her. Immediately, as a naive, anthropologist (in-training) I accepted the invitation and got excited. After about five minutes she asked me to get settled into my room, and meet her after 30 minutes in front of the clinic so that we could travel together,
and complete our conversation. I got up and left her room as she called another patient into her room.

Half an hour later I was ready and met Dr. Daxa in front of the clinic where a jeep was waiting for us. During our drive, Dr. Daxa and I openly discussed my research topic and she was interested in finding out how I had heard about ARCH.

* * * * * * *

My introduction to ARCH was through a Google search. As an MA student I knew that I wanted to conduct my research in India and like any graduate student my research topic was always changing until I finally narrowed it down to maternal health care services. With a purposeful topic in my mind (finally!) my next step was to settle on a location, which I had already thought about: Gujarat, a western state in India. One of the main reasons for choosing Gujarat was because it is my home state, I was born there and spent my early childhood years in Baroda, a major city in central Gujarat. Therefore, I was familiar with the language, culture, and social norms of my potential field site.

Now one of my biggest challenges was finding an NGO that was working in rural areas of the state. My first choice was finding a NGO that worked in the surrounding rural areas of Baroda. I found ARCH which also operated in a rural area outside the city of Baroda, and sent them a brief email about myself and provided them with a statement of my interest in doing research on the NGO. I received a reply, which pointed towards the NGO's work in Dharampur, which focused on providing primary maternal health care services to rural women in the research. It was this initial cold email that set my research ball rolling, and I finally had arrived in Dharampur to conduct my fieldwork a few months later.

* * * * * * *
The objective of this chapter is first provide a brief background information about ARCH. This section will discuss the history of the NGO, and the various activities and services the NGO provides at their two main locations, Mangrol and Dharampur. Next, this section will discuss ARCH's health workers, and the services the health workers provide. Lastly, the remainder of this section will discuss ARCH's maternal health services provided by its health workers at the community level. The purpose of discussing ARCH is so that the work of the NGO could be analyzed in detail in Chapter 5. After I discuss the NGO, the remainder of this chapter will focus on the methodology that was utilized during this study. This includes research design, participant profile and recruitment, and ethical issues and limitations.

**Action Research in Community Health and Development (ARCH)**

ARCH was created in the 1980s and initially started operating in Mangrol (a village in Bharuch district, nearby Baroda) by providing primary health activities (ARCH, n.d.). Unlike other NGOs, the objective of ARCH was not to be a charity foundation, but to become an "actor of social change"(ARCH, n.d). Hence, the NGO did not choose a revolutionary pathway of liberating the poor, which was a popular approach during the 1980s; rather it chose to integrate itself within the community, initially in Mangrol through a peaceful and democratic approach towards social action (ARCH, n.d). During the initial years ARCH had created a medical dispensary in Mangrol, and also focused on issues that impacted the community during the 1980s, such as the problems faced due to the construction of the Narmada Dam. The construction of the Narmada Dam in Gujarat was a controversial project, whose purpose was to reduce water shortages in the state (Paranjape & Joy, 2006; Raina, 1994; Wood, 1993). In doing so, the dam affected the lives of many *adivasis* (tribal people) and villagers whose houses and farm lands
were flooded and were displaced (Paranjape & Joy, 2006; Raina, 1994; Wood, 1993). This became the NGO's early activism years, where ARCH focused on resettlement policies and organizing and taking an active role for tribal land rights. From here, the NGO expanded its services, in a different region, Dharampur, which was south from Mangrol. Along with the expansion of a new site, the NGO also increased the services it provided. Apart from tribal land rights issues (such claiming legal rights over tribal land), the NGO also began considering health care, and the education of the poor (ARCH, n.d).

In terms of health care, Mangrol and Dharampur, both have dispensaries, but the dispensary in Dharampur provided more health care services which included vaccinations, pre-natal care, child care (medically related), and also held mobile health camps for clinical services to villages that are inaccessible and located in remote regions of Dharampur and Kaprada (ARCH, n.d). To be influential in the community and work at the grass root level, ARCH had a subtle approach. Like anthropologists, ARCH workers took the initiative to learn more about tribal communities in Mangrol and Dharampur. This included learning their health needs, and their cultural beliefs and practices, so that the NGO could create customized programs to promote good health and wellbeing within the community (ARCH, n.d).

Some of the services provided at the Mangrol site included laboratory services, TB treatment, and an on-site dispensary (ARCH, n.d). The Dharampur site also provided the same services, but some of the additional services provided at Dharampur included dental services, pre-natal services, ultrasound or sonography (for at-risk pregnancies), maternal health services, and a dispensary that provided low cost services. Two remote villages within the Dharampur district, Vavar and Mamabhacha had small sub-centers which provided education on community health issues, educating younger children, and training old and new health workers. In addition
to all of these services, the NGO also trains traditional birth attendants (TBAs) in conducting a hygienic and safe delivery practices (ARCH, n.d). On a community level, the NGO takes the initiative in providing community education about reproductive health, and common illnesses such as diarrhea, malaria, coughs and colds.

**ARCH Village Health Workers**

ARCH village health workers have played a significant role in carrying out the NGO's health initiatives. One of the positive impacts these workers have had in the community is providing basic health care services at a lower cost, which has improved access to health care services for many villagers. These health workers are trained in diagnosing common illnesses such as malaria, anemia, and skin infections (ARCH, n.d). In total, ARCH has 32 village health workers, and serves 27 villages (ARCH, n.d). Out of this, Dharampur, ARCH caters to 25 villages in two regions, Vavar and Mamabhacha (ARCH, n.d). Some of the duties of these workers are to provide appropriate medication to the patient, keeping a record of all of these cases and referring any complicated cases to the Dharampur dispensary or nearby hospital (ARCH, n.d).

**ARCH's Maternal Health Services**

One of the major roles of ARCH health workers is providing maternal health care services. This includes registering pregnancies in the villages, following up during deliveries, and post-natal care until the newborn infant turns a year old (ARCH, n.d). Figure 1 illustrates all of the activities ARCH's village workers perform. Figure 1 illustrates that during pregnancy
ARCH's health workers conduct monthly visits to all pregnant women and provide treatment for common pregnancy related illnesses such as anemia and refer any at-risk women to ARCH.

**Figure 1 - ARCH Health Worker's Duties**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>DUTIES</th>
</tr>
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| Antenatal Care                 | • regular monthly check-ups of pregnant women  
|                                | • distributing iron and calcium supplements  
|                                | • educating women on nutrition and healthy eating  
|                                | • referring high-risk pregnancies to hospitals |
| Post-natal and Family Planning | • home visit after the delivery to examine the new born and mother  
|                                | • nutrition education to mothers (importance of proper diet post-delivery)  
|                                | • education on family planning |
| Infant Care and Immunization   | • educating women on the importance of breast feeding for the first 6 months and introducing supplementary food after the first 6 months  
|                                | • organizing immunization camps with local nurse to immunize eligible children |

dispensary or hospital (ARCH, n.d). Throughout the pregnancy and post-natal period, the health workers provide education on the importance of nutrition during pregnancy and post-delivery (ARCH, n.d). The purpose is to address the cultural and social beliefs of food taboos during and post-pregnancy. Following the delivery, the health workers educate, encourage, and remind women to have their newborn infants immunized, especially when immunization camps are being held in the village or nearby. Hence, ARCH's health workers have a vital role within the NGO. They become the symbolic representation of the NGO's mandate of being "an actor of social change" (ARCH, n.d). The health workers become the actors who provide the services in
rural and remote areas that the NGO caters to, thereby making them a vital component of the NGO's mission in integrating themselves within the community to serve and uplift the poor.

Research Design

I used a qualitative approach for this research because my aim was to conduct an ethnographic study "to study people in their natural social settings and collect naturally occurring data. It aims to understand the individual's view without making any value judgements during the data collection (an 'emic' perspective)" (Bowling, 2009, p. 380). The purpose of choosing an ethnographic approach was to gain descriptive insight on how the participants of this study evaluated the primary maternal healthcare services of ARCH. As a result, I chose two qualitative methods in collecting data; participant observation and semi-structured, in-depth interviews. Participant observation was utilized because it is an "observational technique that involves the observer (researcher) in the activities of the group being observed" (Bowling, 2009, p.387). This method of data collection was utilized during the initial phases of the research because it built trust and established connections within the field site to gain entry into the community so that participants could be recruited. In addition, this approach would also give the researcher the opportunity to experience and observe some of the challenges the participants faced in accessing maternal healthcare services. For instance, I travelled with Dr. Daxa and other NGO staff to various villages where education would be provided on having a healthy pregnancy. During these events I got an opportunity to understand and participate in some of the services ARCH provided such as importance of a balanced diet, institutional delivery, and proper pre-natal care such as healthy eating habits.

The second method of data collection that was utilized during the second phase of this research was semi-structured, in-depth interviews. All of the interviews were conducted face-to-
face, in Gujarati without a translator, in a private setting. A total of 20 interviews were conducted, where each participant was asked a combination of open-ended and close-ended questions (see Figure 2). The close-ended questions were general information

**Figure 2 - Interview Questions**

**BACKGROUND INFORMATION:**

- Name:
- Age:
- Village:
- Hamlet:
- Pregnancy month: 1 2 3 4 5 6 7 8 9 □ delivered □ don't know
- Education level: □ uneducated □ grades 1-3 □ grades 4-6 □ grades 7-9 □ grades 10-12 □ above grade 12
- Number of health workers in the village: □ 1 □ 2 □ 3 □ above 3 __________
- How long has the health worker been working in your village? □ 1-2 years □ 3-4 years □ 5-6 years □ 7-8 years □ 9-10 years □ above 10 years ______
- How did you know there was a health worker working in your village? □ Yes □ No
  - If yes, this was a: □ Government worker (ASHA or Angandwadi worker) □ Doctor □ Nurse □ Dai (Traditional Birth Attendant) □ Bhaghat (Traditional Healer)
- Can you tell me a bit about the health problems that people in this village mostly experience? Are there health issues that you are most concerned about for you and your family?
- Can you tell me a little bit about a time when you really needed health care? What did you need help with, and what did you do to try and get it?

**PAST EXPERIENCES:**

1. **When there was no ARCH health worker in your village, who did you seek healthcare services from regarding pregnancy issues?**
   - □ Doctor
   - □ Nurse
   - □ Dai (Traditional Birth Attendant)
   - □ Bhaghat (Traditional Healer)
   - □ Other (please specify: ____________________________) ie: family member
2. **Before the ARCH health worker came:**
   - ➢ What health care services were available in your village? What was it like to get pregnancy care?
   - ➢ Did the ARCH health worker make it easier to get pregnancy care? How?
What would make the village health care services even better for you?

How can the health worker improve his/her services for you or the village?

CURRENT EXPERIENCES:

3. How have health care services changed in the village after a health worker has started working in the village?
   - Do you think there are changes for your health since the worker came?
   - Has the ARCH health worker taught you new things about how to improve health for yourself or your family?
   - What is it like to go to the health worker? Do you like going? Why/why not?

4. What new health care services are available in your village, after the health worker has started working here?
   - Have you ever used any of these services? □ Yes □ No
   - If yes, what services have you used: ______________________
   - If yes, how was your experience: ________________________
   - If no, why have you not used these services?

5. What services do you seek from the health worker related to your pregnancy?

6. Do you still visit sometimes visit other people for help with your pregnancy? □ Yes □ No
   - Can you tell me a little bit about this? (prompt ie: Why do you go? What does this person offer that the ARCH health worker does not offer?)

7. How could health services be improved in your village?

8. How has the health worker impacted your health?

questions to ensure the participants met the criteria of the study, as well as gain background information of their village. The purpose of the open-ended questions was to gain an understanding about the current situation in accessing primary maternal healthcare services. This allowed for a comparison between their present and past experiences, when their village did not have ARCH healthcare workers providing primary maternal healthcare services. The aim of the semi-structured interviews was to collect data regarding the experiences of the participants with ARCH healthcare workers, and examine how the participants evaluated the work of ARCH through their interaction with its health workers.

Participant Profile and Recruitment

As the focus of this research was on access to primary maternal healthcare services, only women were selected for this study. All of the participants were above the age of 18 and they
had to have utilized ARCH's maternal healthcare services at least once in their lifetime. This was the criteria all participants had to meet because it was necessary for the participants to have been exposed to the services of ARCH, so that they could critically evaluate the services of the NGO through their experience.

Participants for this study were initially recruited through simple random sampling, therefore each participant had an equal chance of being selected for the study as long as the participant met the set criteria (see above). The initial recruitment process began with visiting villages during the first three weeks of the research, where I advertised the study and the purpose of my research. During this phase, I visited a few villages and randomly talked to potential research participants, after which a few participants were randomly selected. I then used snowball sampling, where the selected research participants recommended their friends and family members who may agree to participate in the study. All of the participants selected for this study were informed about their rights as research participants. They also signed a consent form that outlined their willingness to participate in the study, and a guarantee that anything that is shared with me would remain confidential. Since I was able to speak the local language (Gujarati) no research assistants, or interpreters were employed for this study.

**Ethical Issues and Limitations**

One of the ethical concerns in this study was the socio-economic difference between the researcher and the participants. To reduce these differences, I first established a relationship with the participants by visiting the field during the initial phases of the research. This was so the participants would feel comfortable discussing their experience with the NGO critically. Secondly, it is possible the participants would be also hesitant about discussing any negative
experiences with the NGO, since they utilize NGO's services. To address these issues, I reminded participants that their involvement with the study was voluntary, and of their rights as a research participant. Furthermore, I also reminded them that their identities would be protected throughout the course of the study, and that they would be given pseudonyms so that they remain unidentifiable. I reassured people that the NGO would have no access to any raw data I collected, and the any identifiable information shared by the participants would not be shared with the NGO or the NGO's health workers. The participants were also informed that all the information that was collected was stored in a password protected laptop that was safely locked away in a locked desk, which only I had access to.

Despite taking precautions, there were some limitations to my research. One of the main limitations was time. Since I was in the field site for a fixed amount of time, I had to allocate my time wisely, and divide my time wisely between participant observation and conducting interviews. Secondly, due to the time constraints, I had to select participants who were nearby one another, so that data collection from interviews could be completed, since many of the villages are scattered around the region. I had to be considerate about geographic terrain, because many of my participants were walking to the selected interview site, during the hottest season of the year. The geographical location of my field site was also impacted by methodology, because I could not physically live in the villages of my interviewees, because such regions do not have short-term temporary accommodation facilities such as hotel, guestrooms, or hostels. As a result of this limitation, I could not live and experience the daily lives of my research participants in their own villages.

The methodology used in this study was similar to that used in other studies in India (which will be discussed in Chapter 6). Qualitative researchers such as Desai, Pandit and
Sharma, 2012; Lodhiya, Jogia, and Yadav, 2014; Peterson, Deonandan, Arole, and Premkumar, 2014; and Das, 2012 have all conducted interviews with beneficiaries and/or healthcare service providers to analyze and examine the work of village-level and/or community level health workers. The methods used for this study (participant observation and interviews) are very common in this kind of research because as scholars mentioned above have shown in their research, these methods are effective tools to gather qualitative data, when accessing an organization, and/or role of healthcare providers at community, which is what this study aims to achieve. These methods are also successful for collecting qualitative data, evaluating services for a particular organization and/or results of a project. These methods were selected because they are effective tools to evaluate the services of ARCH and its health workers. These methods are also effective tools in examining how the service users (for the purpose of this paper, the participants of this study) perceive the services provided by ARCH health workers.

The methods utilized for this study made discussing intimate issues related to maternal health, such as childbirth easier. For instance, participant observation allowed me to observe the participants of this study, to observe how they react to and discuss sensitive issues. This gave me insight into how I should approach my participants when discussing sensitive issues. Most importantly, participant observation helped me develop and create a technique to discuss intimate issues during the second phase of data collection, interviews. Hence, the methods utilized for this study had limitations (such as time constraints) but they were selected for their effectiveness. As the work of the scholars mentioned above has illustrated, these methods were successful tools in accessing healthcare services, which is the focal point of this research.
Being a Woman in Dharampur

Being a woman researcher was also advantageous for this study because it made participants more comfortable discussing sensitive issues, which they would otherwise be more hesitant and reluctant to share with a man. My gender was important for this study, because similar to many communities around the world, the field site for this research is in a patriarchal society, hence women in this community are socially in a sub-ordinate position. In a rural community, such as this field site, woman often get married at a young age (once they are legally entitled to marry, the age of 18), and often have their first child within their first year of their marriage. As a result of being married at a young age, they in a sub-ordinate position to their husbands, as well as their mothers-in-laws, who are the decision makers in regards to the woman's pregnancy, such as the kinds of food the woman should consume and avoid, and where the woman should deliver her child. The issue of gender is important for this study because gender becomes a barrier for many women (in this study) in accessing healthcare services due to their social position in the family, which will be discussed in detail in Chapter 5.

Many of the women I met during this study did not work outside of their homes. They had modest plots of agricultural land, which they tended throughout the year. In many families the sole provider of the household were the men, who worked in nearby towns, and/or on their agricultural land. The women who did earn an income worked as accredited social health activist (ASHA) workers for the government, and/or other NGOs (including ARCH) to earn an income. Even with a job, many of these working women had to have permission to work from their fathers (if they were unmarried) or their husbands and/or mother-in-law (if they were married). Furthermore, despite working in the healthcare sector, their working hours were often determined by their household responsibilities. For example, due to her social position in the
household, the woman's first responsibility is to complete all of her household chores, before she heads out for work as an ASHA worker. Even in an emergency, when she is called (especially late at night) she cannot visit her client freely, she has to seek permission and be accompanied (especially if she is travelling a long distance to a different hamlet). Hence, a woman's position in society (especially in the household) also plays a crucial role in her access to maternal healthcare services, which will be analyzed further in Chapter 5.

The next chapter will begin by analyzing India's healthcare system. It will then discuss the structure of the system and the three sectors (public, private and semi-private sector) that work parallel to one another. Lastly, this chapter will end with an examination of the country's and Gujarat's overall maternal health status. The purpose this chapter is to introduce India's healthcare delivery system, and illustrate some of the issues that exist within the system. The analysis from this chapter will illustrate how ARCH addresses the weaknesses of the system and strengthens India's healthcare system in rural and remote areas of Dharampur, Gujarat.
CHAPTER 3: India's Healthcare System, Healthcare Sector, and Maternal Health

Introduction

The World Health Organization (WHO) defines maternal health as "the health of women during pregnancy, childbirth, and the post-partum period" (WHO, 2015). Maternal health is a significant aspect of women's health, so much so that in 2000 the United Nations had made a goal to improve maternal health by 2015 under their Millennium Development Goals (MDG) initiative. Many women around the world face significant challenges regarding access to adequate maternal healthcare services. In many regions, services are crucial, because they can reduce and improve maternal mortality rates in many parts of the world, which can ultimately save the lives of many women and their newborns. According to MDG-5, 289,000 women died around the world during pregnancy and childbirth in 2013 (WHO, 2015). Many of these deaths were the consequences of having no access to routine skilled personnel and emergency care (WHO, 2015). This can especially be an issue for women who live in rural areas, where services are inaccessible and for many, expensive. Hence, many efforts have been made to reduce maternal mortality rates, and improve maternal health, as it cannot be solved medically by medicines to cure diseases. The issue of maternal health can be addressed through a collaboration between policy makers, healthcare service providers (at all levels from the government level to the community level) and researchers who would examine the factors that influence maternal health, such as good nutrition, and access to resources and healthcare services. In this chapter, I first begin with introducing India's healthcare system, followed by discussing the country's healthcare sector and the country's maternal health that will illustrate some of the challenges that exist within the country in terms of accessing healthcare services.
India’s Healthcare System

India is a vast country with a large population that is dispersed throughout the country. A majority of the Indian population reside in the remote/rural parts of the country where accessing adequate healthcare can be challenging. To make healthcare more accessible, India created a three-tier system in delivering healthcare services effectively throughout the country. Figure 3 illustrates the country's healthcare system, which is divided into three parts: 1) Primary care, 2) Secondary care, and 3) Tertiary care (Chauhan, 2011; Shidhaye, Nagaonkar & Shidhaye, 2014). Primary care mainly provides health and family welfare services to a large rural population, and it is further divided into a three types of health institutions, where the lowest level of access is at the sub-center (SC), then the primary health center (PHC) followed by the community health center (CHC) (Shidhaye et al, 2014). Secondary care is care provided by specialists at district and sub-divisional level, and is the primary source of care for an urban population (Shidhaye et al, 2014). Lastly, tertiary care is specialized care that is provided at medical colleges and specialized hospitals (Shidhaye et al, 2014).

Figure 3 - India's Healthcare System:

Tier III: Tertiary Care
(specialized care in medical colleges and specialized hospitals)

Tier II: Secondary Care
(district and sub-divisional level care)

Tier I: Primary Care
(village level care)

3. community health center (CHC)/first referral unit (FRU)

2. primary health care (PHC)

1. sub-center (SC)
Since the 1950s, there has been no significant change in this physical structure of the Indian healthcare system, but as pointed out by Chauhan (2011) many improvements have been made to make health services more affordable, and accessible by reducing some of the economic and social inequalities which exist due to urbanization and industrialization. One of the weaknesses of the Indian health care system is its division into two sectors: (1) the public sector which is funded by the government and services are provided at government run facilities by government employees, and 2) the private sector which is predominantly funded by the private practitioners, in privately-run facilities which include private hospitals. Both of these sectors cater to and are utilized by two separate population groups. Those that are wealthy and reside in urban areas normally utilize the services provided by the private sector, and those who live below the poverty line (BPL) and live in rural and remote areas often utilize the services of the public sector. Though these two sectors are the official sectors within the Indian healthcare system, a third sector has been introduced and is rapidly growing. For the purposes of this thesis this third sector will be called the semi-private sector, where there is a collaboration between the private sector and the public sector. In other words, there is a public-private partnership (PPP) between the government and participating private sector in providing healthcare services at a reduced cost to the poor. A large part of this sector is occupied by non-governmental organizations (NGOs) that work with the government to provide services to the poor. Hence, within this sector, the PPP will be between the government and a NGO. As this section illustrated, India has complex healthcare system that caters to various groups of people from various economical background. The next section of this chapter discusses these three sectors separately and their contribution/impact on the health of the general population.
Public Sector Healthcare Provision

The effectiveness of public sector health care has been debated by the media rigorously since the outbreak of dengue in Delhi in 2015, because it enabled the public to visualize and experience the flaws within the public healthcare system. Many of these debates discussed some of the major issues within the public sector such as the lack of quality of care, lack of resources (which includes vital personals such as doctors and nurses) and lack of sanitation, and the impact of these issues on the patients who utilize the services of the public sector. As the result of these issues the public sector has been painted negatively and is viewed to be inferior to the private sector. Chauhan (2011) also supports this perspective by illustrating how the public health system has evolved, yet problems still persist within the system which impacts the affordability and accessibility of healthcare services.

In the most general manner, the public sector is funded by the government and is heavily subsidized to make healthcare services more affordable, particularly for the poor. The government provides subsidized care through government schemes that can be utilized by those who are eligible (such as BPL individuals). Regardless, the quality of care received at public facilities can be questionable. Nair and Panda (2011) pointed this out in their study when they examined the quality of care for maternal healthcare services by studying the impact of the National Rural Health Mission (NRHM) initiatives on maternal health. The results of Nair and Panda's (2011) were not surprising; they found that the public sector was viewed to be inferior to the private sector because patients believed and experienced that they received better treatment and quality of care in a private facility than the public sector. The lack of faith in the public system is also due to the slow growth rate of the public sector, which results in the lack of public health institutions (Chauhan, 2011). This leads to an inadequate national standard for public
health education, therefore creating an insufficient public health workforce (Chauhan, 2011). Putting all of these factors together puts pressure onto the public sector, which is not equipped to handle such circumstances, because it requires a greater usage of resources that the public sector lacks. In short, in many circumstances the demand for healthcare services outweighs the supply of resources, hence which negatively impacts the quality of care as discussed by Nair and Panda (2011).

If the public sector is compared to the private sector, it fails to meet the adequate standards of quality of care, quantity of resources and accessibility. This weakens the public sector, because as a result of these weaknesses the population is unable to trust the services provided by the public sector. Secondly, a large percentage of the population who is dependent on the public sector live in remote and rural parts of India, where the major issue is accessibility to adequate health care services. To appeal to this vulnerable population, the government introduced and integrated the NRHM within the public sector, to address the issue of accessibility and affordability of healthcare services to the improvised and rural population of the country, yet as the next section will reveal problems still persisted within the NRHM.

National Rural Health Mission (NRHM)

The NRHM was introduced in 2005 and it was aimed at providing good quality of care to a vulnerable population residing in rural parts of the country by making healthcare services accessible and affordable (Nair and Panda, 2011; Das, 2012; Bajpai, Sachs, and Dholakia, 2010). Good quality of care could be defined as, "the ability to access effective care on an efficient and equitable basis for the optimisation of health benefit/well-being for the whole population" (Nair and Panda, 2011, 80). To do so the NRHM had many components, but the main component of
this initiative was the Janai Suraksha Yojana - the safe motherhood intervention, whose purpose was to reduce maternal and neonatal mortality (Nair and Panda, 2011). The Janai Suraksha Yojana was launched in 2007 by the national government to encourage BPL women to have institutional delivery (Shah, Modi, Shah, and Desai, 2013). This scheme was funded by the national government and was integrated into the NRHM where BPL women involved in this scheme were given cash incentives for utilizing antenatal care services during pregnancy, having an institutional delivery, and receiving post-partum care at a health center (Nair and Panda, 2011; Shah et al, 2013). The purpose was to encourage and ultimately increase the number of institutional deliveries in the country and to improve access to healthcare services in a cost effective manner. This initiative was also intended to also aid the country in achieving the United Nations Millennium Development Goal 5 - to improve maternal health.

The second most vital component of the NRHM is the accredited social health activist (ASHA) worker (Scott and Shanker, 2010). Under the NRHM a population of 1000 people is provided with one ASHA worker (Scott and Shanker, 2010; Bajpai et al, 2010). An ASHA worker has three main roles. The first is that they are "service extenders" - their role is critical in rural areas because they aid in accomplishing the national health and policy goals (Scott and Shanker, 2010; Bajpai et al, 2010). Secondly, the worker lives and works in the same community he/she serves, hence they become a bridge between the population/people and the healthcare services (Scott and Shanker, 2010; Bajpai et al, 2010). Lastly, they become "agents of social change" because they encourage the population to utilize healthcare services and educate them on various health issues that affect the community (Scott and Shanker, 2010; Bajpai et al, 2010). For instance, some of the major responsibilities of an ASHA worker is to encourage pregnant women to register their pregnancies, visit the local health centers, escort patients to the PHC,
bring children to immunization clinics, encourage family planning, treat basic illness and injury, collect demographic records and improve village sanitation (Scott and Shanker, 2010; Bajpai et al., 2010). In terms of education, ASHA workers also educate and raise awareness on health issues such as women's health, social determinants of health, nutrition and sanitation and they act as counsellors on adolescent and female sexual and reproductive health (Scott and Shanker, 2010; Bajpai et al., 2010). Hence, within the public sector, especially within under the NRHM, ASHA workers play a crucial role.

For instance, Scott and Shanker (2010) conducted a case study of a community health worker (CHW) programme and the ASHA programme in the Indian town of Sukhir in Uttarakhand, mainly focused on the limitation of the CHW programme's success. By definition CHWs are bridges that promote good health to their peers through various activities such as clinical services and organizing preventative activities for at-risk individuals (Scott and Shanker, 2010). Both the CHW and ASHA workers have identical responsibilities. As pointed out by Scott and Shanker (2010), CHWs are perceived as service extenders because they help doctors and nurses in simple tasks such as weighing children, running immunization camps, and delivering health messages. In other words, similar to ASHA workers, CHWs would fill in the void in underserved areas that have with staff shortages. Secondly, just like the ASHA workers, they are viewed as "agents of social change" because they too become "cultural mediators" between the healthcare system and the locals (Scott and Shanker, 2010). The CHWs programme was based on the World Health Organization's (WHO) recommendation to address the issue of shortage of health workers in developing countries (Scott and Shanker, 2010). Scott and Shanker's (2010) study found four limitations to the ASHA programme.
The first was the outcome-based payment structure where ASHA workers only earned an income for bringing people to the clinic and helping them with biomedical interventions (Scott and Shanker, 2010). Therefore, despite being "an agent of social change" they did not earn an income for educating clients on health issues or promoting the government's agenda on population control and institutional births (Scott and Shanker, 2010). Secondly, Scott and Shanker's (2010) study also illustrated poor institutional support received by ASHA workers. For instance, in Sukhir, Uttarakhand, ASHA workers were attached to PHCs which were short staffed and under equipped, therefore making it difficult for the PHC to remain open for 24 hours, and to encourage people to utilize the services of the PHC.

The third limitation is the rigid hierarchical structure within the healthcare system, which undermines the skills, knowledge and experience of the ASHA workers (Scott and Shanker, 2010). This is problematic because as indicated by Scott and Shanker (2010) it leads to lost opportunities in improving services throughout the healthcare system. As Scott and Shanker (2010) pointed out, it also leads to the lack of faith on the healthcare system which becomes the reason for many women to opt-out of institutional delivery despite being offered cash incentives. This was because the women acknowledged the shortage of staff at their local PHC, which is a poor reflection of hospitals, therefore making them appear undesirable (Scott and Shanker, 2010). Furthermore, ASHA workers have a better understanding of the social familial structure where typically the mother-in-law decides where the daughter-in-law would give birth. In mother-in-laws' perspectives, hospitals may be understood as undesirable because the family cannot practice their traditional post-partum practices such as separate meals for the new mother (Scott and Shanker, 2010). This rigid structure also negatively impacts the relationship between doctors at the PHC and medical officers, because there is no coordination between the doctors
and administrations, which negatively impacts the care received by patients (Scott and Shanker, 2010). For example, in one instance doctor had to make six written requests for equipment to administrators, which went unanswered, which creates frustrations for the doctors who then move onto private practices as a result of poor management, and in which they could earn a higher income (Scott and Shanker, 2010).

The last limitation to the ASHA programme was the lack of participation by the locals, which is part of the NRHM guidelines to improve the overall health of the village (Scott and Shanker, 2010). One reason for this as discussed by Scott and Shanker (2010) is the lack of trust between the locals and the ASHA workers. Firstly, ASHA workers are supposed to be elected by the community but the villagers in Sukhir complained that ASHA workers were selected by auxiliary nurse midwife (ANM) without the consultation of the villagers (Scott and Shanker, 2010). As a result of this, despite making positive impacts (as noted by Scott and Shanker (2010)), such as the improvement in immunization rates and antenatal checkups, the locals in Sukhir were not active participants in some of the services provided by the ASHA workers.

Scott and Shanker (2010) concluded that the CHW programme endorsed by the WHO is effective in achieving quantitative health outcomes and closing the cultural gap between communities and biomedicine, but similar to the ASHA programme it has limitations. One of the major limitations of such programmes is structural as indicated above. Secondly, these programs offer financial incentives to rural people to utilize biomedical services, but no efforts are made by such programs to improve the biomedical healthcare system to make them desirable (Scott and Shanker, 2010). Hence, as Scott and Shanker (2010) pointed out, the CHW programme needs adequate institutional support to succeed, which should also include a strong healthcare
system that is willing to listen to the needs of the community, is flexible, and engages the community so that quality of care also improves, as much as the quantitative health outcomes.

**Private Sector Healthcare Provision**

Privatization in healthcare is "defined as a process in which non-governmental actors become increasingly involved in the financing and/or provisions of healthcare services" (De Costa and Johannson, 2011, 283). Privatization could be categorized into two types. The first is passive privatization, which occurs naturally as the result of a weak public sector, and therefore it is unplanned (De Costa and Johannson, 2011). The second is active privatization, which is planned and is created through public policies (De Costa and Johannson, 2011).

India in particular has a growing private healthcare sector and for those who can afford it, it is the preferred sector. In comparison to the public sector, the services provided by the private sector are expensive. Gujarat in particular, has three times the number of private hospitals and dispensaries compared the nation as a whole (Acharya and Ranson, 2005). This also means that more people are dependent on the private sector in both rural and urban areas. As a result of this, the state has reduced the amount it spends on healthcare despite having a growing net state domestic product (Acharya and Ranson, 2005).

The enlargement of the private sector is not a new phenomenon, even within the healthcare industry. For India in particular, the creation and widening of the private healthcare sector is not solely the result of neo-liberalism, it is also a passive act. In fact, historically India had a mixed healthcare sector, but after its independence from the British, it chose to adopt the British healthcare system, where the public sector financed and delivered health services (De Costa and Johannson, 2011). Over time this form of the healthcare system was overshadowed by the private sector as it grew and expanded. One of the main reasons for this defeat was the lack
of investment and expenditure on the public sector (Sengupta and Nundy, 2005; De Costa and Johannson, 2011). This became an issue with health care seekers because, in comparison to the public sector, the private sector guaranteed better quality of care, which included a cleaner environment, shorter waiting periods, better access to resources such as laboratories and better quality of care from doctors who spend more time with patients addressing their needs (Sengupta and Nundy, 2005).

Many differences exist between the public sector and private sector, and one such difference is that the private sector provided services for a payment, whereas the services within the public sector were free of charge. Regardless of the differences, India's healthcare system is still mixed, and both sectors still exist and work parallel to one another, yet differences do exist between states. For example, as mentioned by Acharya and Ranson (2005), Gujarat has a higher proportion of private healthcare facilities, compared to public healthcare facilities, within the state, and the ratio of public to private healthcare facilities varies between states. As a result of this situation the private sector continues to thrive and thereby makes the Indian healthcare system the most privatized healthcare system in the world (De Costa and Johannason, 2011). As Sengupta and Nundy (2005) pointed out, the private sector gained strength due to the government's involvement, which made it easier for the private sector to grow. For instance, Sengupta and Nundy (2005) showed that the government encouraged growth in the private sector by providing subsidized buildings, and/or land to private medical facilities, tax exemption for importing drugs and highly technical medical equipment in exchange that the facility provides free treatment for a quarter of the patients. By aiding the private sector to grow, the public sector became weaker, less reliable, and less desired. This made the public sector less competitive,
which had negative consequences on the health of the poor, especially those in rural areas, who are the most vulnerable and who sought reliable, adequate and affordable healthcare services.

De Costa and Johannson (2011) also elaborate on Sengupta and Nundy's (2005), argument by outlining three reasons for a larger private sector. In the study De Costa and Johannson's (2011) aim was 1) to study how the private healthcare system was created in India, despite the existence of a three-tier healthcare and 2) to understand why the private sector was able to expand. De Costa and Johannson (2011) interviewed policy makers in both public and private sectors in Madhya Pradesh, (state in central India) due to the state's growing private sector and its poor socioeconomic and health status. Their findings reiterated Sengupta and Nundy's (2005) points, but De Costa and Johannson (2011) elaborated on the reasons why the private sector outgrew the public sector throughout the country. The first reason was the weakness of the public sector, especially its inability to expand, its poor investment, and poor quality of care and lack of regulation within the public sector (De Costa and Johannson, 2011). The lack of government investment created poor policies and implementation of programmes, which led to inadequate delivery of healthcare services by the public sector (De Costa and Johannson, 2011). As a result of this void within the public sector, the private sector was able to expand unchallenged, hence becoming a "passive" actor in providing privatized healthcare services (De Costa and Johannson, 2011). The second advantage the private sector had according to De Costa and Johannson (2011) and Sengupta an Nundy (2005) was the fact that the sector was widespread even in rural areas, which was beneficial because the public sector was not easily accessible in rural areas. Lastly, the private sector was more professional and performed well in a market economy by providing services which were easily accessible and of a better quality than the public sector, which in many parts was broken (De Costa and Johannson, 2011;
Sengupta and Nundy, 2005). Hence, as argued by De Costa and Johannson (2011) and Sengupta and Nundy (2005) the private sector was the preferred sector of choice because the public sector had many flaws. As an official interviewed by De Costa and Johannson (2011) stated, "... people, even in rural areas, trust private providers much more even if their treatments were technically incorrect, as they were accessible anytime" (pg. 288), therefore as suggested by this statement, the services provided by the public sector were undesirable, thus increasing the demand for the private sector health services, which lead to a passive growth in the industry. The lack of faith and trust on the public sector, allowed the expansion of the private sector, but by doing so it made healthcare services more expensive and unaffordable for the poor, particularly those in rural areas.

**Semi-Private Sector (NGO)**

The semi-private sector is the third within the healthcare industry, and it is a mixed sector, where there is collaboration between the government and the private sector. This sector is largely governed by NGOs, and as mentioned earlier in this chapter, it is not solely a public or private healthcare provider. This sector incorporates strong partnerships where both the public and private sectors work together to provide adequate healthcare services. In the case of India, the Public Private Partnerships (PPP) exists between the government and the NGO, where the NGO adopts and implements government policies and schemes in practical terms. The partnership is also important for the government because through this collaboration they could achieve and fulfil their targeted goals, such as increasing the number of births within hospitals. Since some of the services provided are covered by government, the NGOs involved in the partnerships do not incur related expenses.
The semi-private sector was created by opportunists who saw the negative effects of neo-liberalism on the poor, specifically their access to adequate healthcare services. One of the biggest drawbacks of neo-liberalism in the healthcare industry was privatization, which made one of the most fundamental human rights, "access to healthcare services" out of reach for many. Privatization also increased the number of private health facilities, and the government facilities in comparison suffered the consequences because the private facilities provided better quality of services and care, and therefore where more desirable.

In contrast to the nation, the circumstances in Gujarat were slightly different. For one, compared to the entire country Gujarat has a higher concentration of health facilities, which include hospitals and dispensaries (Acharya and Ranson, 2005). As pointed out by Acharya and Ranson (2005) the state has triple the concentration of healthcare facilities, but they remain out of reach for the poor because a large majority of them are private facilities. Consequently, the state also has a long history of NGOs working in the field of development to provide healthcare services that cater to the poor in both urban and rural areas (Acharya and Ranson, 2005). Most of these NGOs focus in rural and remote areas of the state (otherwise known as the interiors of the state) that are inaccessible and therefore they have a strong emphasis on community participation (Acharya and Ranson, 2005).

One NGO that works in Gujarat is the Society for Education Welfare and Action - Rural (SEWA-Rural). This organization works in rural tribal parts of Gujarat and like many NGOs, they work in the semi-private health sector because they work in partnership with the government by adopting and implementing government schemes and policies which target the poor, and aim to help them access basic healthcare services. Shah et al (2013) examined the effectiveness of maternity schemes, (such as Chiranjeevi Yojana and Government of Gujarat
schemes) by the government and the initiatives taken by SEWA-Rural to increase hospital deliveries by examining where women chose to deliver their current infant, in comparison to women who have had other deliveries after the maternity schemes were introduced. Shah et al (2013) also compared the place of delivery before and after the initiation of maternity schemes for women who previously had home deliveries. Shah et al's (2013) study gave insight into the world of semi-private healthcare sector, especially how the partnership between a NGO and the government influenced the place of delivery. In the study, Shah et al (2013) found that the majority of the women who had hospital deliveries after the introduction of the maternity schemes chose hospitals for their second delivery and women who previously had home births also chose hospital deliveries, thereby demonstrating that women were satisfied with the government schemes (Shah et al, 2013). The justification for this change was because the government worked with private NGOs to reach the areas that lacked healthcare services and the schemes eased financial barriers in having hospital deliveries. Furthermore, this sector is deemed to be more trustworthy than the public sector because from the perception of the poor, the NGOs belonging to this category are viewed to be "private" since they operate privately by collaborating and working within the community. Secondly, many NGOs are able to provide better quality of care, and have adequate availability of resources to cater to the needs of the poor in comparison to public facilities. Shah et al's (2013) study also concluded that there was an increase in institutional deliveries, without any cash transfer schemes because the women in the study were informed about government schemes, access to free emergency transportation and good quality of obstetric care at public or a private facility through community mobilization, and by the NGO.
In conclusion, the semi-private sector is growing and is popular in India because it is considered to be more efficient than the public sector but not as expensive as the private sector. It is also more reliable than the public sector and it addresses the needs of the community the sector operates in. Partnership between the government and the NGO work well together in achieving the national and/or state level goals, while also reducing government expenditures. This is crucial because in many cases the NGOs are primarily financed through donations with some financial assistance from the government, but expenditure related to providing healthcare services (such as resources like personnel or equipment) are not covered and provided by the government. The government plays a political role in this partnership by designing schemes and policies that would allow the NGO to operate and effectively adopt and implement the schemes and policies on the ground level. To put it metaphorically, the government paves the way for the NGO to walk to make healthcare services easily accessible and affordable.

Maternal Health in India

The previous section in this chapter has illustrated that neoliberalism created a shift within the healthcare, and opened opportunities for the semi-private sector, like ARCH. This resulted in changes within the healthcare system, particularly access to primary healthcare services. This has been discussed by many scholars (Basilico, Weigel, Motgi, Bor, & Keshavjce, 2013; Farmer, 2013; Kim, Porter, Rhatigan, Weintraob, Basilico, Holstein, & Farmer, 2013), and examined through multiple lenses in various countries. For instance, Basilico et al (2013) provides a historical perspective of two of the most crucial decades, the mid-1970s and the mid-1990s, for international public health and global health policies. Basilico et al (2013) divided the two decades into four events. The first event discussed is the 1978 International Conference on
Primary Health Care, which created the Declaration of Alma-Ata, whose aim was to provide universal primary healthcare by the year 2000. This is a goal that has yet to be achieved (Basilico et al, 2013).

The Alma-Ata declaration had three strategic themes that would help attain their goal. The first was the utilization and introduction of "appropriate technology" where medical tools should be portable to resource poor settings (such as rural areas), which would strengthen the primary health system of rural areas (Basilico et al, 2013). The second was to decrease "medical elitism" by improving the healthcare delivery system through increasing community participation and stepping away from top-down initiatives, by adopting a combination of western and traditional medical practices (Basilico et al, 2013). The third was to create a framework of health for social and economic development which defined primary healthcare as "education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases ..." (Basilico et al, 2013, p. 80).

The second event focused on neo-liberalism and selective primary healthcare during the mid-1980s, which promoted four interventions; Growth monitoring (of children and infants), Oral rehydration therapy to treat diarrhea, promotion of Breastfeeding, and childhood Immunization (GOBI) (Basilico et al, 2013). GOBI was a successful alternative in addressing the complex issues of primary healthcare but the goals were short-term, hence were easier to attain and were cost effective, which had a high impact on the population because they were easier to monitor and measure (Basilico et al, 2013). Basilico et al's (2013) third and fourth points focused on the geopolitical shifts during the 1990s, which led to the rise of a major player in global
health, the World Bank, which had a significant impact on the decisions and/or policies concerning the health of the poor, particularly rural women. Birn, Pillay, and Holtz (2009) discussed how the Bank's aim and the strategy of improving the efficiency of health spending through decentralization, privatization, and reducing intervention coverage weakened the healthcare services provided by the public sector. In order to achieve their goals, the World Bank utilized structural adjustment policies, where conditions were placed on loan recipients. For example, the recipients had to adopt neo-liberal policies to open up the market, and increase and/or allow privatization of healthcare services. For instance, if the loan recipient country's healthcare services were provided by the central government (public healthcare service), restrictions were placed upon the country by the World Bank prior to releasing the loan. Examples of these restrictions include requirements to loosen policies and/or regulations (such as leasing land to the private sector at a reduced price) so that the healthcare market could be opened up private sector. These conditions negatively impacted the poor. Access to healthcare services was made more difficult because as a result of these conditions healthcare services became more expensive, and the public sector had become fragile compared to the private sector. Hence, for the poor, poorer quality of healthcare services were provided under the public sector, and healthcare services under the private sector were unaffordable.

Furthermore, the “geopolitical game” (Cold War) between the U.S. and the U.S.S.R had a major influence on the existing health systems of many countries today. Each superpower had a very different approach towards health. As pointed out by Basilico et al (2013), the U.S.S.R favored state-led programmes where the state would provide and regulate healthcare services, whereas the U.S. preferred the market-based programme where healthcare services were paid for by those who could afford them. Both programmes had advantages and negative consequences in
terms of primary healthcare in developing countries and rural areas. For instance, the countries that adopted the U.S.S.R. model, such as Cuba, had better and equal access to healthcare services, whereas countries that adopted the U.S. market-based approach, such as India, demonstrated health care access disparities between the rich and the poor.

The disparities within the market-based approach were exacerbated by the World Bank and the policies it created to tackle the issue of global health. Similar to the U.S, the World Bank adopted the market-based approach, which was reflected in many of the policies they created. The Washington Consensus is one example of World Bank policies which resulted from the economic turmoil during 1980s and became the foundation of many International Monetary Fund (IMF) and World Bank loans that required structural adjustment where government spending was cut and permission was granted for "government intervention in the market, including shrinking public deficits, opening economies to free trade ..." (Basilico et al, 2013, p. 87). Since the policies of IMF and the World Bank created a greater dependency on the private sector, many of the health services were also privatized. For the poor, this became a barrier because privatization of healthcare services prevented them from accessing services that were unaffordable for them.

Market-based approaches also changed the way health interventions were created. Initially under the Alma-Ata, basic healthcare services were delivered through horizontal intervention, where community participation was encouraged and there was an integration of Western and local medical practices (Basilico et al, 2013). An example is the barefoot doctors in China and rural doctors in India who combine traditional Ayurvedic and Chinese medicine with biomedical practices and depended on the participation of community members to be able to deliver healthcare services (Basilico et al, 2013; Weiyuan, 2008). The combination of traditional
medicine and biomedical approaches diversified health interventions, because it provided an inexpensive alternative for common illnesses, such as cough, fever, and cold. In regards to maternal health, the horizontal approach increased access to maternal healthcare services, such as pre-natal care through the integration and involvement of community members to provide basic maternal healthcare services. The market-based approach had negative consequences for women and maternal health, especially for poor women living in rural and remote parts of the world because this approach commodified healthcare services for a payment, which poor women were unable to afford. Hence, this negatively impacted their access to maternal healthcare services due to their financial constraints. The next section of this chapter will discuss the impacts of a market-based approach in Gujarat, India, the field site of this thesis to show the consequences the market-based approach has had on the state.

**Gujarat's Maternal Health Services**

Maternal health in India is gradually improving as India aims to attain the MDG-5 through policies, programmes and schemes (Scott, & Shanker, 2010; Shah, Modi, Shah & Desai, 2013; Nair & Panda, 2011; Bhat, Mavalankar, Singh & Singh, 2009; De Costa, Vora, Ryan, Raman, Santacatterina & Mavalankar, 2014). Programmes are long-term planned initiatives or services aimed at achieving national long-term goals in the future, whereas schemes are plans or policies adopted by the government to help or assist a group people so that the government could achieve their goal. According to the Indian Census, Sample Registration System (SRS), India's (and Gujarat's) maternal health has been on an improving trend. As Figure 4 illustrates between
Figure 4 - India and Gujarat's Maternal Death and Maternal Mortality Ratios (MMR)

Source: The information for this graph was collected from Census of India (2011).
2007-2009 India had 926 maternal deaths (per 100 000) and a maternal mortality rate (MMR) of 212, whereas Gujarat had 36 maternal deaths and an MMR of 148 (Census of India, 2011). Though Gujarat had lower maternal death rate than the country, the state's MMR in comparison to the nation was quite high. If this data is compared to the data from 2011-2013, it is found that India's maternal deaths have decreased to 718 and a significant improvement has been made to the nation's MMR, which reduced to 167 (Census of India, 2011). As shown in Figure 4, improvement has also been made in Gujarat, whose maternal deaths decreased to 26, but the a significant improvement had been made to the state's MMR which reduced to 112 (Census of India, 2011). India, with its large, dense population compared to its land mass, has many inequalities within the country. Some have the easiest and finest access to maternal health services, while others usually face many challenges. Others are the economically poor and live in the most rural and remote parts of the country, where some of the services are not easily available.

Many scholars have studied maternal health in India, and have placed maternal deaths into two categories. Category one consists of the medical causes of maternal deaths, which include haemorrhage (a major killer, especially post-partum haemorrhage), anaemia, sepsis, and obstructed labour (Mavalankar, Vora, Ramanai, Raman, Sharma, & Upadhyaya, 2009; Vora, Mavalankar, Ramani, Upadhyaya, Sharma, Iyengar, Gupta, & Iyengar, 2009). The second category is non-medical, and includes the lack of access to emergency obstetric care, lack of post-natal follow-up, and delivery without a skilled birth attendant (Bhat, Mavalankar, Singh, & Singh, 2009). The difference between these two categories is that the deaths in the second category could be avoidable with proper intervention such as skilled attendants and improvement in access of emergency services (Bhat et al, 2009). In contrast, risks from category one could be
monitored and addressed throughout a woman's pregnancy. The most vulnerable group of women who are affected by both of these categories live below poverty line (BPL), their socioeconomic status limiting their access to healthcare services.

Gujarat is an interesting state to examine because it is one of the most urbanized and developed states in the country (Mavalankar et al, 2009). The eastern tribal area and the northern areas remain the least developed areas within the state (Mavalankar et al, 2009). Many healthcare service facilities are situated in the developed areas of the state, the urban cities, and nearby rural areas. In addition, the public healthcare sector within the state has many challenges, which has a profound impact on the state's maternal health.

Mavalankar et al (2009) conducted a case study on Gujarat's maternal health and examined some of the challenges the state faced in reducing maternal mortality. This study mainly focused on the state's management capacity, and found that the problems within the public sector were related to a shortage of skilled staff, lack of supplies (especially in rural areas), and insufficient, limited, and/or inadequate infrastructure. The study examined the state's organization and management of its healthcare system from all levels, including state level, regional level, district level, and sub-district level. Under this structure, each level had responsibilities within the healthcare system. For example, as Figure 5 illustrates, state level doctors manage maternal health services and create policies, which are provided at the sub-district level, such as antenatal care and basic emergency obstetric care.

Scott and Shanker (2010), De Costa, Vora, Ryan, Raman, Santacatterina, & Mavalankar, (2014) and Mavalankar et al (2009) all point out that Gujarat has a shortage of qualified staff working within the public health care sector, which includes specialists such as obstetricians. This is problematic because it discourages patients from utilizing the services provided by the
public sector. Furthermore, the shortage of staff also affects the quality of services provided by the public sector because the staff in the public sector (such as doctors and nurses) are already overworked and underpaid, hence motivating them to move into the private sector instead.

Figure 5 - Gujarat's Healthcare System Responsibilities

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>State level</td>
<td>• manage maternal healthcare services throughout the state, at all levels</td>
</tr>
<tr>
<td></td>
<td>• create policies which would be implemented throughout the state</td>
</tr>
<tr>
<td>Regional level</td>
<td>• manage daily activities at health facilities and policy decisions made by the state level</td>
</tr>
<tr>
<td>District level</td>
<td>• introduce health schemes created by the state, within the district</td>
</tr>
<tr>
<td></td>
<td>• provide maternal and child health services, at the primary health centre and curative services at the community health centers</td>
</tr>
<tr>
<td>Sub-district level</td>
<td>• provide maternal healthcare services in the field, which includes antenatal care, emergency obstetric care, post-natal care, family planning services, and immunization services</td>
</tr>
</tbody>
</table>

Source: The information presented in this table is from Mavalankar et al (2009).

Shortage of staff also increases the waiting period for patients. For BPL women seeking emergency obstetric care, this could also increase their chance of developing complications if immediate medical assistance is not obtained in a timely manner, which could result in maternal or infant death. Shortage of staff is not just an issue at the district level, it is an issue throughout the system. As pointed out by Mavalankar et al (2009), De Costa et al (2014), and Lodhiya, Jogia, & Yadav (2014) in rural areas there are shortages of skilled birth attendants, trained personnel, and auxiliary nurse midwife (ANM) at first referral units to deal with emergencies. This is crucial for rural women because these individuals are their first point of contact in accessing maternal services, such as antenatal, delivery, and post-natal care (Mavalankar et al,
2009; Vora et al, 2009; Scott & Shanker, 2010; Lodhiya et al, 2014). If these individuals are not available for rural women, maternal mortality may increase.

In addition to the shortage of skilled personnel, the healthcare system has a lack of equipment at all levels of the healthcare system (Scott and Shanker, 2010; Mavalankar et al, 2009). This is a major issue in the public sector, but it is also concerning for private facilities, especially those operating in rural and remote areas. Having a shortage of staff, equipment and supplies negatively impacts maternal healthcare services because having an adequate infrastructure that includes staff and equipment is crucial to providing good quality of care (Mavalankar et al, 2009; Shah et al, 2013; Nair & Panda, 2011). In an emergency having a strong infrastructure that is equipped with resources is key in providing good maternal healthcare services, because it can save a woman and her infant's life, but most importantly, in a resource-poor setting, it would encourage more women to utilize the services that are available in their area.

That being said, a healthcare system that has a strong infrastructure and is fully functional can still be faulty if it is poorly managed. Poor management of Gujarat's healthcare system is the third challenge for the state. A poorly managed healthcare system leads to poor quality of services, which creates distrust and lack of faith between the beneficiaries of the services and the healthcare providers. This also affects relationships between healthcare providers and clients by impacting the quality of care provided to the clients. The healthcare system outlined by Mavalankar et al (2009) demonstrated a weak management capacity at higher administrative state level, which is affecting the healthcare services within the state. On paper, the healthcare system appears to be well organized, but as Mavalankar et al's (2009) case study, in Gujarat pointed out, at the state level the major issue is that doctors involved in managing healthcare
services do not have any management or public health skills. In addition, there are not enough officers to manage all the activities that fall under maternal health provision (Mavalankar et al, 2009). This is problematic because a shortage of staff and inexperienced staff higher up in the system means the state lacks the ability to provide adequate quality of maternal healthcare services to its citizens, especially in rural areas, where women are dependent on these services for their maternal health needs. If services cannot be managed adequately at the state level then the repercussions of the mismanagement can leak through other levels of the system. As pointed out earlier by Scott and Shanker (2010) and Mavalankar et al (2009) on the sub-district and district level there is already a shortage of staff, which includes doctors, nurses, and ANMs. Since there is a staff shortage in the state, health programmes at the regional level are poorly managed, which effects the scale programmes, in terms of the area coverage of ANM's services in a village or a rural area (Mavalankar et al, 2009; Scott & Shanker, 2010). On the regional level this is an issue because if programmes cannot be managed adequately, then the state would fail to address the issues that could improve its services state-wide, especially maternal health services. This also leads to poor data collection, which is important to keep track of the state's progress of a program or the average health of the population.

The other side of staff shortage is the number of positions that are vacant throughout the system at all levels. Unfortunately, as pointed out by Mavalankar et al (2009) staff vacancy is the result of poor planning and management by the Department of Health. Staff vacancy is also the result of the lack of training facilities and of recruitment strategies at the state and district level (Mavalankar et al, 2009). Hence one of the major challenges for Gujarat is to improve its management capacity, so that the state could improve its services in implementing and monitoring the programmes and policies it creates. More importantly, the need to hire more
qualified individuals (especially at the state-level) who are capable of handling the state's maternal health, especially in improving the quality of care and services is key (Mavalankar et al, 2009; Scott & Shanker, 2010; De Costa et al, 2004; Nair & Panda, 2011) to improving the health status of the vulnerable population and making healthcare services equitable. The next section of this chapter will discuss some potential solutions to improve Gujarat's overall maternal health through the introduction of government schemes to increase hospital deliveries, by making them more affordable and addressing the problems which exist within the system, such as poor management.

**Solutions and Suggestions to Address Maternal Health Challenges**

In order to address the issue of maternal health to the underserved areas, the state introduced schemes to encourage and improve its maternal care services. The first scheme that the Gujarat government launched was the Chiranjeevi Yojana ("plan for a long life") in 2006, whose target was to encourage BPL women to have hospital delivery at private facilities (Shah, Modi, Shah, & Desai, 2013; Bhat et al, 2009). As Shah et al (2013), De Costa et al (2014), Bhat et al (2009) and Mavalankar et al (2009) have pointed out, the Chiranjeevi Yojana scheme encouraged and promoted public-private partnership (PPP), where maternal services were contracted out to participating obstetricians who would provide their services to BPL women and in return the government would pay them a fixed amount. The beneficiaries of the scheme are also given incentives such as free food and medicines post-delivery and financial reimbursement of transportation for the family member who accompanied the women (Bhat et al, 2009; Shah et al, 2013; Mavalankar, 2009).
The Chiranjeevi Yojana scheme was initially launched as a pilot project in 2005, in five northern districts of the state (see Figure 6); Banaskantha, Dahod, Kutch, Panchmahals and Sabarkantha (Bhat et al, 2009; De Costa et al, 2014). These five districts as described by Bhat et al (2009), and Mavalankar et al (2009) were the most remote, and had a higher infant mortality rate than the rest of the state. These five districts in the pilot study were further divided into three groups, the first group was the eastern region of the state, Dahod and Panchmahals which had the highest number of deliveries and was considered to be the most backward with a high tribal population (Bhat et al, 2009). Group two had the northern regions state, Banaskantha, and
Sabarkantha, which were somewhat backward and had some tribal population (Bhat et al, 2009). The last group was in the northwest region of the state, Kutch, which was geographically the largest but had the lowest population and was the poorest (Bhat et al, 2009). Bhat et al (2009) examined the scheme's socioeconomic profile of the beneficiaries, and the financial incentives offered under the scheme in the Dahod district of the pilot study. Bhat et al's (2009) findings revealed that the clients of the scheme had advantages that helped them overcome some of the challenges they faced. The first was that under the scheme the clients were able to reduce household expenditures on maternal care, due to the financial incentives attached to scheme (Bhat et al, 2009). Secondly, since the scheme involved PPP, the clients under the scheme received antenatal care and had institutional deliveries (Bhat et al, 2009). In addition to this, due to the collaboration between the government and the private sector, issues such as shortages of staff or supplies were not experienced by the clients. On the contrary, Bhat et al (2009) found that the facilities always had a doctor and medicines readily available, therefore for the marginalized population of the state the scheme, "provided financial protection against the cost of delivery" (p. 257) and emergency obstetric care.

De Costa et al (2014) supported the findings of the pilot study conducted by Bhat et al (2009), by examining the scheme themselves and its effect on institutional deliveries in the public and the private sector. Overall, De Costa et al (2014) found that Gujarat's average institutional delivery doubled from 2001 (40.7%) to 2010 (89.3%) (Figure 7). The findings were
similar for deliveries in both public and private sector, but the private sector had a sharp increase, whereas the public sector had a slower growth (see Figure 8) (De Costa et al, 2014). The positive impact of the Chiranjeevi Yojana encouraged the national government to implement a nationwide initiative identical to the Chiranjeevi Yojana scheme. Under the National Rural Health Mission (NRHM) it implemented the Janai Suraksha Yojana (De Costa et al, 2014). The Janai Suraksha Yojana also targeted BPL women and encouraged them to have hospital deliveries for which they would receive financial incentives that covered the women's transportation and medical costs (Shah et al, 2013; De Costa et al, 2014). Similar to the Chiranjeevi Yojana these financial incentives broke the financial barrier to hospital delivery and encouraged more women to visit medical facilities for deliveries. The results for the Janai
Suraksha Yojana were also similar to the Chiranjeevi Yojana. As De Costa et al (2014) pointed out, under the Janai Suraksha Yojana there was a sharp increase in hospital deliveries, which reduced preventable maternal deaths such as post-partum hemorrhage.

**Figure 8 - Institutional Delivery in Gujarat's Public and Private Sector Under Chiranjeevi Yojana Scheme**

![Graph showing institutional deliveries in public and private sectors under Chiranjeevi Yojana]

Source: The data used for this graph was from De Costa et al (2014).

Hence, analysts agree that a government led initiative in partnership with the private sector made significant improvements in maternal health in Gujarat. Government schemes such as the Chiranjeevi Yojana addressed many of the challenges the vulnerable population faced in accessing maternal healthcare services. For instance, as illustrated by De Costa et al (2014) the Chiranjeevi Yojana increased hospital deliveries because it addressed the financial barriers associated with hospital deliveries. Though care for BPL women in a government facility is free of charge, the women faced financial strain in travelling to a facility because travelling from a rural village into a town or a city for a delivery was unaffordable. Since the Chiranjeevi Yojana
scheme reimbursed the transportation cost, women were more likely to take advantage of the scheme. The major influence the Chiranjeevi Yojana had on hospital delivery was that it improved the quality of care women received at a private facility in comparison to the public sector (De Cost et al, 2014). Since both the Janai Suraksha Yojana and Chiranjeevi Yojana were implemented at the same time and share many similarities, on the national scale there was also an increase in hospital deliveries in both the public and private sectors (De Costa et al, 2014).

The government took the initiatives to improve the status of maternal health in the state by introducing new schemes (such as those mentioned above). These schemes were improving maternal health for poor, especially their access to maternal healthcare services. The only drawback of these schemes as pointed out by Bhat et al (2009) was that they focused only on delivery care. They failed to consider post-natal care, which is also an important component of maternal health. These services were also poorly supervised by the management within the healthcare system.

Poor organization is another issue within the state's healthcare system, which impacts healthcare services significantly. As Mavalankar et al (2009) discussed, and as noted above, poor administration of the healthcare system leads to having poor access and quality of services. One of the major issues with the healthcare system was the shortage of staff, equipment, and supplies (Scott and Shanker, 2010; Mavanlanker et al, 2009). Therefore, one of the biggest tasks for the state is to examine and reconstruct the way the system is managed. The first step is to ensure that there are qualified personnel, who are familiar with various components of the health system and have management skills, handle portfolios, such as maternal health within the system. Each health portfolio should include planning, implementing, and monitoring duties, so that the personnel in charge could handle the portfolio adequately, and their experience could also find
any potential risks, or issues quickly, before the situation becomes dire (Mavanlanker et al, 2009).

On a district and sub-district level, the issue of shortage of staff should be addressed by innovative ideas to fill vacant positions, such as collaborating with non-governmental organizations (NGOs) (Scott and Shanker, 2010; Mavanlanker et al, 2009). This collaboration would include alternative measures such as training existing doctors, and ANMs for emergency obstetric care to address the issue of staff shortage within the public sector and semi-private sector, especially rural areas (Mavalankar et al, 2009). In rural areas specifically, training needs to be provided to more individuals working at the sub-district level. An example would be providing ANMs with extra training to provide basic medical services that do not require a physician's attention. To encourage and address the issues of shortage of staff, the government could adopt the Canadian idea of northern allowance, by providing financial incentives to encourage staff to serve rural and remote areas. In addition to this, administration needs to encourage and engage community participation towards recruitment of more people to fill in vacant positions, especially in rural areas. One strategy is for the sub-district officers to conduct field visits to get familiar with the villages within the sub-district and present the benefits of being a community health worker (or ANM), to persuade villagers to become active members and join the healthcare sector. Through community involvement the sub-district officers, would also familiarize themselves with some of the challenges community members face daily, this would then allow the officers to inform about the challenges to the levels above them. Through this strategy, policies would have a different approach, where instead of being created through a vertical approach (top-down approach), a reverse approach would be utilized so that the health status of women in rural areas, particularly could improve.
In order to improve services and find effective solutions it is important to record, maintain, and follow-up on data that is already collected. In relation to maternal health, as Mavalankar et al (2009) pointed out, that having proper data collection allows adequate monitoring and establishing patterns that could be concerning so that effective strategies could be created and implemented. The initial step in achieving this goal is to evaluate the existing healthcare system (from region to sub-district level) to find faults within the system that need to be addressed. Next, the problems that could be addressed immediately such as insufficient supplies and inadequate equipment should be dealt with in a timely manner. The issues that are time consuming such as improving how the system is managed should have smaller goals that can be monitored in consecutive segments so that the results could penetrate within the system positively. Most importantly, the changes that are made should be recorded and maintained so that an audit could be done in a timely manner in comparison to the initial study in order to measure how effective the changes were, and in the long-term enable system evaluation regularly. The aim of this section was to illustrate the initiative taken by the state to improve its maternal health statistics. This section showed how the state made hospital delivery affordable for the poor, and shifted, the place of deliver from home to hospital. This section also discussed suggestions that need to considered by the state to improve its healthcare delivery system, particularly at the management level.
CHAPTER 4: Community-Based/Village-Level Health Workers

Introduction

The previous chapter discussed India's healthcare system, healthcare sector and the country's maternal health. It illustrated the structure of the country's healthcare system, and how the healthcare services are divided into three sectors. The chapter concluded with the discussion of maternal health in India, and the state of the Gujarat. In this chapter, I continue my discussion of maternal health, but with a focus on community-based/village-level health workers. I begin with an excerpt from my field notes to give a visual description and image of the field site, followed by my field work findings. I then provide a brief history of community-based health worker programme. Next, I discuss the work of an international organization Partners in Health (PIH), and examine the work it does in Haiti. I do this in order to discuss the changes community-based health workers can bring in a resource poor setting, such as the field site of this study. Then, I shift the focus onto village-level health workers in India, who provide similar healthcare services as the community-based health workers. I illustrate the services India's village-level health workers provide, and the similarities they share with the community-based health worker programme. I will discuss three case studies conducted by Lodhiya, Jogia, and Yadav (2014); Peterson, Deonandan, Arole, and Premkumar (2014); and Das (2012) which analyze the impact of the village-level health workers in community.

My central goal with this chapter is to illustrate how organizations and governments have adopted community-based health worker models to make healthcare services accessible and affordable for the vulnerable. I also illustrate how community-based/village-level health workers have improved healthcare services, and strengthened the healthcare system. By focusing on community-based/village-level health workers, I show the importance these health workers have
on the lives of the community members for whom healthcare services became more accessible and affordable. Most importantly, my discussion in this chapter prepares for Chapter 5, which focuses on my analysis of how the beneficiaries (or the participants of this study) evaluated the maternal healthcare services provided by ARCH's health workers.

Before discussing my research findings, I offer excerpts from my field notes, to provide a visual description of the field site to provide an image of the field site. These vignettes highlight my observations from the field site, where I went to conduct interviews and interact with my research participants. The vignettes were selected to provide an illustration of the field site, and to demonstrate some of the physical challenges some of the participants face in accessing the services of health workers such as the weather.

**Ethnographic Vignettes**

April 14, 2015

*Field Interviews Day 1*

*Villages visited: Village A, Village B, Village C*

*Departure from ARCH: 9:00 AM*

*Arrived in Village A: 10:15 AM*

*It was a beautiful and a scenic drive to Village A with the cool early morning breeze hitting my face as I nervously wondered and worried whether the women I was to meet would be able to answer my questions and not be as shy as the women I observed and met in the field while conducting participant observation. I arrived at the first village, Village A at 10:15 AM and waited for two research participants to arrive. While I wait I take in the remoteness and the*

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1 The purpose of these vignettes is to illustrate some of the challenges women in this region face in accessing healthcare services. These vignettes illustrate some of the observations I made while conducting my field work and travelling in the region.
rurality of Village A. I noticed the barren land with a few houses made from a mixture of mud and manure sitting on top of it. In the near distance, I notice a group of young boys playing a game of cricket in one of the empty fields. All of the houses were scattered away from one another, and all of them sat on top small pieces of land, which I assumed belonged to the families that inhabited the scattered houses.

While I waited on this hill, next to a closed village convenience store or a small snack shop, I wondered about the number of kilometres the residents of this village would have to travel to seek any kind of healthcare, (particularly in an emergency) from a formal medical institution such as a doctor's office, or a government hospital or even a small clinic. This thought came across my mind because in order to calm my nervousness, I realized that after I had left the ARCH campus and the small town of Dharampur (which has 2 hospitals; 1 government and the other private), I had not seen a single formal medical institution on my way to Village A. I did however, see a primary healthcare center (PHC) on route to Village A which I assume would be the closest to the three villages I was visiting today, if anyone from these villages required emergency medical care. As the car sped past the PHC, I noticed that the shutters were closed, and there was no sign (such as a line-up of patients) that the clinic would be opening. To give the benefit of doubt, I assumed that maybe it was too early in the morning for the clinic to open, or maybe it opened only on certain days of the week.

Finally, I saw two women walking up the hilly pathway towards me, and after sharing brief pleasantries, I began conducting my interviews with each of the women, one after the other.

***   ***   ***   ***   ***

Arrived in Village B: 11:10 AM
When I finally arrived in Village B, the scenery had not changed at all. The same structure of houses and the same type of farms existed here as well. In fact, I could not figure out when one village ends and another begins, because like many places around the world, there were no clear markings or boundaries. I arrived at a small house at the end of lane, where I met my three research participants and I saw an elderly woman sitting on the floor near the entrance of the house where I was to conduct my interviews. Once again, I repeated the same procedure I had done in Village A, and individually interviewed all three of the women separately.

This time, my nervousness and fear gradually slipped away because the women were more engaged, and were able to understand and answer the interview questions. Some questions required some prompting (in terms simplifying the questions more to make them understandable for the women), but compared to my first two interviews, the interviews in Village B were more fruitful. Furthermore, an unexpected surprise awaited me. The elderly woman mentioned above was the dai (traditional birth attendant) of the village. When I finished the first interview, she sent in the second woman and told her to answer the questions properly and speak up. She also gave the same advice to the third woman. Thankfully, I overheard her advice and decided to talk to her and maybe consider interviewing her (though I was not sure at the time that this would be a good idea, because she did not meet the criteria I had set to recruit participants). Yet, I decided to take a chance and talk to her. After all, sometimes a researcher has to take a chance, because it can unleash something that he/she might not have anticipated (but for the purpose of this research the dai's interview will not be discussed or analyzed)².

² The reason why the dai’s interview was not discussed and analyzed was because she did not meet the requirements to be a research participant (ie: she had never utilized the primary maternal healthcare services of an ARCH health worker). Secondly, the dai talked about the negative impact ARCH health workers had on her income. She discussed the shift in women’s choice of maternal health care provider from a dai to a trained health care provider, especially when it is time for delivery.
After I finished with the village dai I thanked the women, and made my way to the third and the last village, Village C which was a few kilometres away from Village B.

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Arrived in Village C: 1:45 PM

Village C is many kilometres away from Dharampur, and throughout my journey I saw many forms of transportation that people took to travel between villages, and to the nearby town. One of the most common form of transportation was a motorcycle, which many households in the villages had, but many of the women living in these areas were dependent when it came to their mobility. For instance, though each household had at least one motorcycle, most of the women I met did not drive motorcycles, and if they had to travel short distances (such as between nearby villages, or between hamlets in a village) they often chose to walk. If the women had to travel long distances, they would either had to ask for a ride from their husband, brother, father or another family member or a neighbour. Otherwise they would take the local form of transportation, which was a rickshaw, which was often filled over the intended capacity. I noted that travelling long distances for accessing health care services was not the only issue for many of the women I met, how to access these services for an unexpected emergency was also a challenge for these women.

En route to Village C I noticed a jeep similar to mine, coming from the opposite direction. It had "BAPS Medical Service" written on top of the front windshield. This made me wondered how many other NGOs, or other organizations working in this part of Gujarat, especially in providing medical services to people within this region. If there were other NGOs and/or other organization working in this region, what made ARCH so special? More
importantly, did ARCH work in villages that already had other NGOs or organization working in them? Or did each NGO or organization choose their own individual village(s) to focus on?

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It’s 1:45 PM and I finally arrived at my third and last village of the day, Village C. The village appears identical to the previous two villages I had visited. I arrived at a large house, which had concrete walls, a small garden, and a large front porch. Here I met my last two participants of the day. I once again took each of the participants individually and interviewed them separately. Finally, it was 2:50 PM and I had completed all of the interviews that were scheduled for today.

I came outside and I noticed the weather had suddenly changed, grey clouds had replaced the blue sky and the sun had disappeared. Rain was about to come, so I decided to head back to Dharampur hoping to beat the rain.

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Fieldwork Findings

The excerpts above echo my experiences in similar visits to all of the villages I visited during the course of my fieldwork. I started to interview women who were geographically closer to ARCH and gradually I moved further away from ARCH campus to interview women who lived further away, such as women living in Vavar, a small village which fell within the Kaprada taluka (sub-district), of Dharampur. In total, I conducted 20 interviews with women who lived in various villages that were provided services by ARCH health workers.

The findings from my work will be divided into two themes. The first theme considers the changes brought into the participants’ lives after ARCH health workers had started operating
in their village. This theme compares and contrasts the participants’ access to primary healthcare services prior to and after the arrival of ARCH health workers, and the shift in primary healthcare services providers, from untrained to trained healthcare service providers. The second theme considers the changes ARCH health workers brought into the community, particularly in terms of participants’ access to maternal healthcare services. Both of these themes illustrate the way ARCH (and its health workers) have improved access to primary maternal healthcare services in rural and remote areas of Dharampur. As indicated in Chapter 3, both of these themes show the similarities ARCH health workers share with their government counterpart, ASHA and AWW workers, such as providing identical maternal healthcare services like pre-natal check-up and education on the importance of a healthy diet. Lastly, these themes illustrate the growth of the semi-private sector, by showing how this sector has increased the number of trained health care providers in rural and remote areas, thereby increasing the number of people who seek healthcare services from a trained provider.

**Shift in Primary Healthcare Service Providers**

Overall, the participants in the study indicated that their villages had experienced and witnessed positive results after ARCH had provided the villages with their health workers. In fact, many of the participants had witnessed and experienced a significant change in the healthcare services that were available to them in their villages. One of the most obvious changes was the increase in the total number of skilled and trained health professionals in these villages. For example, from the total of 20 interviews, 13 participants already had trained health professionals working in their villages in the form of government ASHA workers prior to the arrival of ARCH health workers. In comparison, only 6 participants had a different experience...
where they sought healthcare services from untrained and unskilled health professionals such as a *dai* (untrained traditional birth attendant) or a *bhagat* (traditional healer). Only one participant sought services from a doctor prior to the arrival of an ARCH health worker. Out of the 20 participants, 3 sought services from multiple sources. For example, from these 3 participants, 2 participants sought services from an ASHA worker and a doctor, whereas only one participant sought services from an ASHA worker and a *bhagat*. These 3 participants sought services from multiple healthcare providers for various reasons, but one of the most common reasons was related to the type of illness the woman had and/or the number of days the individual has been sick. These three women sought healthcare from an ASHA worker (first 2 participants) and/or *bhagat* (last participant) for simple, curable illnesses such as a cold or a cough. If the participant continues to be sick, with no changes then she sought services from a trained healthcare provider such as a doctor (for the first 2 participants) or an ASHA worker (last participant).

In regards to maternal healthcare services, women had more choices and an easier access. Some of the women I interviewed indicated that choices for maternal healthcare services were limited. For example, one woman age unknown told me, "Earlier when there was no one, you had to go to the doctor, there was no other option/services available. For pregnant women, the option was *dai*. Earlier when there was any kind of illness you had to go to the doctor, and if you had any questions or concerns you had to go there. Now everything is available here." Prior to the integration of ARCH health workers into the villages, some of these women had no maternal healthcare service providers; some of those who did have some access sought out services from an untrained provider such as a *dai*. This information was confirmed many times during my fieldwork, when I met women who had no maternal healthcare services available in their villages. Many of these women told me that "women would go to the *dai*” for pregnancy related
issues. Another woman aged 30 provided some understanding of why women first chose to visit a *dai*. According to her, "First the women use the *dai* and if they did not get better then they would go to Dharampur since nothing was available here back then." Therefore, women may first chose to seek maternal healthcare services of healthcare providers who were nearby them (*dai* or a trained ASHA worker), and only sought care from other healthcare providers such as a doctor, if there was no improvement in their health. In very few cases, some women had access to trained ASHA workers who belonged to the public sector under the government's NRHM, or travelled out there to seek care from medical professional such as doctors. One similarity that was shared by the women who had no access to any type of maternal healthcare services was that they never sought maternal healthcare services regularly unless it was required during an emergency. Even then women would first visit the local healthcare provider which in many villages were either *dai* (in pregnancy related matter) or *bhagat* for other illnesses. In the villages that had a trained healthcare provider such as an ASHA worker, women initially visited the ASHA worker and if the problem persisted or with the ASHA worker's advice, the woman would visit a doctor or a nearby clinic or hospital.

The findings of the study also illustrated some of the challenges women experienced in accessing healthcare services. Prior to the presence the ARCH health workers some of the physical challenges in accessing maternal services were the geographical terrain. In the villages without a trained healthcare provider the women had to walk long distance to seek maternal healthcare services (from a trained healthcare provider). This was a major challenge, especially during the monsoon when large amounts of rainfall made pathways slippery and muddy, and prevented women from travelling to nearby villages or hamlets (within their own village) if small
streams or creeks were overflowing. Summer time was also a difficult time of the year to seek care because of the extreme hot temperatures and long walking distances for pregnant women.

**Changes Brought by ARCH Health Workers**

*(Vignette from field notes)*

_Since my fieldwork took place during India’s summer months I got to witness and experience these challenges. During my third trip into the villages to meet my participants for our scheduled interview, I got to experience and witness the physical challenges faced by participants. The village I was going to travel to was very scattered, with large distances between houses and hamlets, making travelling within the village difficult. Keeping this challenge in mind, I decided to conduct my interview in a central location, which would be easier for the participants. I chose the village’s balwadi (pre-school) to meet the participants, so that women would not have to travel too far._

_While approaching the village, I experienced the challenge._

_During the car ride to the village, I had a rather scary experience. We were driving on a bumpy road for a long time, until we approached a very high, steep hill. Right before the hill, there was an uncompleted bridge, which the car had to cross carefully. After we crossed the bridge we were at the bottom of the hill, and questioned if the car would be able to climb this hill without sliding backwards or flipping over. The driver put the car into the first gear and pushed the accelerator. We made it up the steep hill, but that was only the easiest part of this journey._

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3 In retrospect, visiting each of the participant’s home would have been an ideal choice to conduct interviews to avoid having the participants to walk long distances. The reason the women were asked to meet at the balwadi for the interview, instead of their homes, was because of the geographical terrain of the village, which would make travelling by car to each of the participant's home difficult. Secondly, visiting each of the participants’ home separately for an interview would be have been difficult, because all of the interviews would not have been completed in a timely manner, due to the time constraint of the research.
The real challenge was up ahead. The pathway had a steep, upward turn only then the car would have conquered the hill. The driver told me to sit back and once again put the car into the last gear, and accelerated the gas pedal. This time the car made it halfway, but for a second the car got stuck and slid downward, but just as quickly the driver pushed the accelerator and conquered the hill, both of us breathed a sigh of relief.

As the car continued on the bumpy road for a few kilometers I noticed how dry the landscape was. There was no sight of any greenery, only a few dry bushes scattered around the vast, dusty landscape. It was mid-afternoon and it was hot. I had finally reached my meeting place a few minutes early. I wondered how the women would get here, I had not noticed many vehicles roaming around in this area, plus it was extremely hot. A few minutes later I noticed a woman walking across the hill towards me, with her head covered to protect herself from the harsh sun and get some form of shade.

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Despite being in a car, the experience above made me better realize and experience some of the challenges these women faced in accessing maternal healthcare services. In fact, the women I interviewed on this day did mention the long travelling they had to endure to seek maternal healthcare services from an ASHA worker in the village, who lives in a different hamlet. The challenge became even more difficult for the women during the monsoon because sometimes there would be small floods and/or long down pour which prevented them from accessing maternal healthcare services. As illustrated in Chapter 3, one of the responsibilities of ASHA workers is to visit pregnant mothers and follow-up on their health, but in this village poor weather and travelling conditions make this challenging for the ASHA worker. Thus, such
challenges are faced by both those who are seeking healthcare services and by those who are the healthcare service providers.

Fortunately, after ARCH had their health workers working in their home villages, these villages experienced positive changes. One of the most prominent changes was the improvement in access to maternal healthcare services that included pre-natal and post-natal care. In the villages with no trained healthcare service providers, ARCH health workers were the only trained healthcare providers. These villages experienced the most positive changes in their villages because there was a decrease in the number of women who sought services from an untrained healthcare provider (dai or bhagat). Furthermore, a woman aged 19 stated that, "...now you don't have to travel far distances, which makes it a lot easier. Right now things are much easier than before, which is a major change in health." Women were pleased that they did not have to travel long distances and endure expenses to have monthly check-ups. Earlier these women never sought regular or any kind of check-ups because the services were too far away and unaffordable. Now with the presence of an ARCH health worker in their village, a woman, aged 42 said women can "get regular medication .... weighed and get our hemoglobin checked. The ARCH health worker invited everyone, meets them and educates them. During the meeting they examine the pregnant women, and if there is a new woman they educated her about a healthy pregnancy." Hence, women were easily able to get monthly pre-natal check-ups, and education on healthy pregnancy and the importance of institutional delivery.

The purpose of the education on a healthy pregnancy was to encourage healthy development of the fetus and decrease the birth of underweight babies. Secondly, it was also a way to deter women from having home deliveries by untrained personnel. The education also encouraged women to have a healthy diet filled with adequate amounts of fruits and vegetables,
and milk to ensure their child has the nutrients necessary for growth and development. As one woman, aged 22 stated, education consisted of "Taking my medication, and getting vaccinated. During pregnancy, it is good to go to the doctor, what kinds of foods to eat ... after delivery how you should take proper care of the newborn such as feeding the child well, not bathing a newborn right away. You should eat everything during pregnancy." A reason for education was also to encourage and educate women regarding cultural taboos during pregnancy, for example one participant aged 30 indicated that "... earlier we were not allow to eat peanuts, bananas, milk and yogurt during pregnancy because it was believed they would stick to the baby. So the health worker (during the meeting) told us to eat these foods ..." Hence, traditionally, women are prevented from consuming certain foods (such as milk and yogurt) due to cultural beliefs that it would lead to a difficult delivery and/or negatively impact the growth development of the fetus. The education on the importance of a proper diet was also to prevent and treat anemia during pregnancy, which is a major issue for the women in the field site (and women in rural areas of India, in general).

My data indicate that women who utilized the services of ARCH health workers were satisfied with the health workers. This indicated that they were also satisfied by the services ARCH provided indirectly. One of the biggest changes in maternal healthcare services is that they have become easier to access, in the words of one participant aged 22, "Before when you needed immediate medication, you could not get it. You had to go far and it used to be more expensive. Now you get the medication quickly and you save more money since its available nearby. Services are nearby now." In other words it was easier for women to seek advice for maternal health related matters. From the perception of these beneficiaries, ARCH was making a positive impact in the region, and it has been successful in making maternal healthcare services
satisfying for the beneficiaries. The women in this research were generally pleased with ARCH and the services ARCH health workers provided. As one participant, aged 31 said, "the things they have taught us, [health workers] we should learn and practice it. It feels good, because the doctor is too far and you can get information sitting at home from them."

**Community-based Health Workers**

At all levels of the healthcare system, India is not the only country with a shortage of medical staff, as many other countries also face the same problem; Bangladesh is one such country. As Standing, Chowdhury, and Mushtaque (2008) point out, Bangladesh shares many similarities with India. First, Bangladesh also has a three-tier health system; primary, secondary, and tertiary, along with a long history of community health workers providing healthcare services in rural and remote areas of the country (Standing et al, 2008). Second, Bangladesh also has mixed sectors of healthcare providers, which includes the public sector, private sector and a semi-private sector (services provided by an NGO) (Standing et al, 2008), which exist together, just the way they do in India. The third similarity shared by both of these two countries is the shortage of staff and resources especially at the primary level, in rural areas. To deal with these issues, both countries adopted WHO's community health worker programme (Standing et al, 2008).

The community health worker programme was created by WHO in 1979 post the Alma-Ata Declaration to use as a framework so that healthcare services could reach the poor in rural settings (Standing et al, 2008; Basilico et al, 2013). The programme was developed and introduced during the second half of the century in developing countries to improve and increase access to healthcare services (Standing et al, 2008). The idea behind this program, as Standing et al (2008) indicate, was to increase the network of basic health facilities and provide training to
many health workers. This program created a shift in primary healthcare, where focus moved away from doctors (who provided much of the healthcare services) in order to create and invest in other types of health personnel who would provide basic primary healthcare services at a lower cost, and have a shorter training period (Standing et al 2008; Basilico et al 2013). The idea was that these workers would be able to fill in the gap that existed in many countries at the primary level. Secondly, these workers would also make healthcare services more accessible to vulnerable populations, such as poor women living in rural or remote areas of a country. Thirdly, community health workers would provide basic healthcare services at a lower cost, making basic healthcare service affordable for the vulnerable population.

Standing et al (2008) shared Basilico et al's (2013) perspective on primary healthcare by outlining two main goals of the primary healthcare initiative. The first goal was to provide a low cost alternative of healthcare services, compared to the urban health system while also addressing the problem of shortage of health professionals (Standing et al, 2008; Basilico et al, 2013; Shidhaye, Nagaonkar, and Shidhaye, 2014). The second goal was to mobilize community health workers to reduce the shortage of human resources (Mavalankar et al 2009), by incorporating community health workers into health programs (Standing et al, 2008). Incorporating community health workers into health programs is beneficial because they have the potential to become political agents within the community and create awareness about community health (Standing et al, 2008). Furthermore, as Drobac, Basilico, Messac, Walton, and Farmer (2013) point out, this role would also create employment opportunities within the community, gradually improving the economic and health conditions of the community in the long term.
In the next section I will discuss the work of an international organization, Partners in Health (PIH), which operates in many countries around the world. I focus on the work this organization does in Haiti, because it is where the organization first began its work. This example illustrates how the organization improved access to healthcare services through the incorporation of community-level health workers within their healthcare delivery model. The inclusion of the community-level health workers has made healthcare services more accessible to the vulnerable population of Haiti. Furthermore, this example demonstrates the impact the community-level health workers have had on Haitians and their overall health.

**Partners in Health - Haiti: An Example**

Partners in Health (PIH), is an organization which was founded in 1987 by five individuals, Jim Kim, Ophelia Dahl, Paul Farmer, Todd McCormack and Thomas White. When the organization was first established, it started operating in the Central Plateau region of Haiti, which lacked access to and was geographically further away from any type of healthcare services. Following its success in Haiti, PIH, gradually started expanding its work globally, and currently operates in ten countries in delivering healthcare services. The mission of the organization is to work collaboratively with local government officials, and academic institutions in building and strengthening the healthcare system of the communities the organization works within (Partners in Health, 2009).

The organization's main challenge was improving access to healthcare services such as accessibility, shortage of staff and resources, financial barriers, and also addressing structural violence factors such as poverty, which leads to poor health. These issues are the most prevalent

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4 Apart from Haiti, other countries include Rwanda, Lesotho, Malawi, Mexico, Russia, Peru, United States (Navajo Nation), Liberia and Sierra Leone (PIH, 2009).
in rural and remote parts of Haiti (and India) where a majority of the population lives in poverty and are geographically farther away from resources. Historically, Haiti is the poorest country in the western hemisphere, and after the 2010 earthquake and hurricane Matthew, the country has been devastated with communicable diseases, such as cholera. The economic conditions of the country, and the devastating aftermath of the earthquake and hurricane Matthew, further weakened the already fragile healthcare system of Haiti.

The main objective of PIH in Haiti was to create interventions that would address the structural violence issues many Haitians faced, by introducing "programs to diagnose and treat patients with tuberculosis and sufficient food" (Drobac et al, 2013, p. 147). In order to do so, the organization opted to design programs which would address the structural violence issues such as social and economic rights to improve medical and educational services in Haiti, rather than providing cost-effective services (Drobac et al, 2013). With this approach, PIH targeted the "real" causes of many diseases in Haiti such as poverty and its impact on tuberculosis and HIV/AIDS. For example, when PIH introduced its TB-control program it conducted a study in two sectors (Drobac et al, 2013). As Drobac et al (2013) pointed out, the first sector had one trained *accompagnateur* (community health worker) and was also served by PIH's sister organization, Zanmi Lasante. On the contrary, the second sector did not have an *accompagnateur* and did not receive any services from Zanmi Lasante (Drobac et al, 2013). From this study Drobac et al (2013) found that the patients from sector one benefited from the presence of an *accompagnateur* in the community, because it reduced some of the "structural barriers to care" by making healthcare more accessible. *Accompagnateurs* were also able to better monitor diseases such as TB, by ensuring infected patients took their medicines, and better care of their health by consuming nutritious food. As the findings of Drobac et al's (2013) study suggests,
having a community health worker had a positive impact in access to health services because the study found health services were much closer of the community, and they were more affordable. The positive results of the study made "community-based care...a standard of care for PIH/Zanme Lasate tuberculosis programs, which also strengthen the national programs so that they could achieve similar results" (Drobac et al, 2013, p. 156). Seeing the positive impact of an accompagnateur in the community, PIH developed a delivery model for tuberculosis (and other diseases such as HIV/AIDS) to revolve around reducing structural barriers to care by providing social support, such as covering the cost of transportation and food and having a community health worker monitor a patient's therapy (Drobac et al, 2013).

**India's Village-Level Health Workers**

The story of village-level health workers (or community-based health workers) is slightly different in India. India's first group of health workers, Angandwadi workers (AWW), were first created in 1975, as part of the country's Integrated Child Development Scheme (ICDS) (Desai, Pandit, and Sharma, 2012). They play a major role in the ICDS, because they focused on the health of children under the age of 6, and on pregnant and nursing women, by addressing hunger and malnutrition in the country (Desai et al, 2012). Some of their responsibilities included providing supplementary nutrition, such as cooked hot food, ready to eat packaged food, or a take-home ration, for children and pregnant and nursing women from low-income families, to increase their caloric intake (Desai et al, 2012). Secondly, they provided immunizations for children (Desai et al, 2012). Thirdly, for pregnant women, tetanus immunization and basic health checkups were provided, which included antenatal and post-natal care (Desai et al, 2012). AWW also provided nutrition and health education, for women between 15 to 45 years of age (Desai et
al, 2012). If the AWW came across any serious cases, such as pregnancy related complications, the cases were reported to the higher level of care such as a community health center (CHC), or a district level hospital (Desai et al, 2012).

However, the proportion of the population these workers served was far greater than the number of workers in a given community were able to manage. Thus, many of the workers were overworked, and therefore unable to provide the full care that was assigned to them under their job description. Adding to this problem, the government also gradually increased their workload overtime. Rather than just focusing on basic ICDS programme duties, the AWW also had to take up other national health programmer duties such as a Directly Observed Therapy (DOT) treatment provider for tuberculosis patients (Desai et al, 2012). As the duties of the AWW increased overtime, it had a direct impact of the role of the AWW. Hence, Desai et al (2012) decided to study how AWW's role changed over time from 1975 to present day in Vadodara, a district located in eastern, Gujarat (Desai et al, 2012).

During the course of the research, Desai et al (2012) found the AWW to be over worked, which impacted the quality of services they provided. For example, an overworked AWW may only be able to perform antenatal and post-natal care for women, and therefore be unable to provide immunization services, or nutrition supplements to children in the community. In response to this situation, the government decided to create a second generation of AWW, called Accredited Social Health Activist (ASHA), who would work under the National Rural Health Mission (NRHM) (Desai et al, 2012; Scott and Shanker, 2010; Das, 2012; and Vora et al, 2009). The purpose for creating ASHA workers was to reduce the workload of the AWWs, by having the ASHA workers share some of the responsibilities of AWWs, such as providing basic primary maternal healthcare services like antenatal care. Through shared responsibilities, each group of
health workers would not be overworked, and be able to provide consistent healthcare services to a larger population size. Instead, Desai et al (2012) found that the government did not utilize two generations of health workers (AWW and ASHA) adequately. Desai et al (2012) argued, that since AWWs and ASHAs had similar roles, many of the duties overlapped, and therefore there was no difference in the type of services provided by each group of health workers. The only change Desai et al (2012) found was in the duties of AWWs, where there was the shift from focusing on ICDS programme initiatives, to becoming an important part of the national health programme, where AWWs also provided government-led services such as family planning, and polio immunizations. These additional duties for AWWs changed their roles in the community, because rather than solely focusing on hunger and malnutrition of children under the age of 6 and pregnant and nursing women, they also had to focus on broader community health issues (Desai et al, 2012). The shift in the AWW's role diverted AWWs responsibilities more towards government led health programmes, and it became difficult for AWWs to manage their original responsibilities under the ICDS (Desai et al, 2012).

This question that arose from Desai et al's (2012) study, was how did the presence of village-level health workers affect access of healthcare services in rural parts of the country? Did the access to healthcare services improve? As the PIH example illustrated, did the village-level health workers (AWW and ASHA) in India have a positive impact on the rural communities, especially in receiving primary maternal healthcare services? To answer these questions, the remainder of this section will provide three cases studies, where researchers studied the impact of village-level health workers on local communities in three different regions of India.
Case Studies:

Jamnagar, Gujarat

The first case study is presented by Lodhiya, Jogia, and Yadav (2014), who assessed the quality of services provided by the health workers in the western part of Gujarat, Jamnagar (see map, Figure 6). The aim of this study was to examine how the health worker's services impacted the awareness of beneficiaries regarding healthcare services and their utilization of those services (Lodhiya et al., 2014). One of the main problems in Jamnagar was common in many parts of India, where a large portion population lived in rural and remote areas, which lacked access adequate healthcare services due to staff shortages and geographical location of the community ((Lodhiya et al., 2014; Bhat el al 2009; Mavalankar et al, 2009; Scott and Shanker, 2010; and De Costa et al, 2014). To address these issues, the government created auxiliary health workers (AHWs) and ASHAs, who had basic healthcare skills to address the healthcare needs of the rural population in Jamnagar (Lodhiya et al, 2014). In Jamnagar, these health workers became the primary contact for healthcare services, providing basic curative and preventive healthcare services, along with promoting and creating awareness on health management services (Lodhiya et al, 2014).

When Lodhiya et al (2014) assessed the quality of services provided by the health workers in Jamnagar, they found mixed results. The types of services provided by health workers depended on the gender of the health worker, and their patient. For example, men health workers mainly conducted only household visits for only fever or malaria related cases, whereas women health workers provided services related to women's and children's health such as antenatal and post-natal care, and children's vaccination (Lodhiya et al, 2014). The reason for this difference is the socio-cultural norms around women's health where it is not culturally appropriate to discuss
women’s health issue with men. Lodhiya et al (2014) also found that many of the health workers in Jamnagar were also unaware of some government schemes such as the Chiranjeevi Yojana and Janani Suraksha Yojana and as a result, many of the eligible women were uninformed and unable to take advantage of government services. A health worker’s lack of awareness had a profound impact on the quality of services provided by them because it directly impacted the beneficiaries who were also uninformed about government schemes, which affected the utilization of services and schemes funded by the government (Lodhiya et al, 2014).

As Lodhiya et al (2014) argued, the quality of services is as vital as accessibility and affordability of healthcare services, because it has a profound impact on whether the community accepts the health workers and their services. For instance if the health worker was always available and provided good healthcare services community members were more likely to accept and utilize the health worker's services. Lodhiya et al's (2014) study indicated that people living in the district of Jamnagar were satisfied with the health workers because there was an increase in hospital deliveries. This was because community members were better informed about government schemes which reduced costs associated with hospital deliveries such as transportation. Yet, it appears that the health workers were not completely accepted by the community because less than half of the women received a minimum of one home visit during the post-natal period, which is the result of the poor quality of services provided by the health workers (Lodhiya et al, 2014). This meant that the health workers were unable to fulfill and complete all of their duties.

**Maharashtra**

The second case study comes from Peterson, Deonandan, Arole, and Premkumar (2014), who examined the knowledge and experience of health workers in rural Maharashtra, a state
located in western India. In this study, health workers were trained by the "Comprehensive Rural Health Project" on post-partum hemorrhage and other labour and delivery related complications (Peterson et al, 2014). The objective of the study was to evaluate existing teaching methods that were used to train village health workers and recommend strategies for improvement (Peterson et al, 2014). Unlike, Lodhiya et al's (2014) study, this study had positive results. Peterson et al (2014) found that village health workers in this study had a high degree of knowledge and the community had seen positive results (such as the decrease in post-partum hemorrhage) after the health workers had started working in the community. The positive results were attributed to the training the health workers received, where they were equipped with satisfactory clinical knowledge and skills related to post-partum hemorrhage (Peterson et al, 2014). Furthermore, some of the socio-cultural barriers such as caste issues between a health worker and patient were also eliminated after the community realized the services the health worker provided were improving the overall health of the community members (Peterson et al, 2014). The health workers were also able to work in collaboration with the community to educate them about identifying delivery related complications and the importance of seeking immediate medical care (Peterson et al, 2014). Furthermore, in contrast to Lodhiya et al's (2014) study, Peterson et al (2014) found the positive impact of village health workers on maternal health in rural areas. The presence of the health workers in the village made maternal healthcare services affordable and easily accessible in rural parts.

**Karimganj, Assam**

The third study by Das (2012) examined the healthcare services provided by ASHA workers in Karimganj district of Assam, in eastern India. Das (2012) studied the effectiveness of the services provided by ASHA workers by studying the changes in the health status of the rural
women who utilize the services of the ASHA workers. Some of the issues rural women experienced were in relation to the cycle of poverty, which became a major contributing factor in malnutrition, high infant and maternal mortality, and a low life expectancy (Das, 2012). The solution to this was the introduction of the NRHM, of which ASHA workers were a crucial component of (Das, 2012; Desai et al, 2012; Scott and Shanker, 2010; Standing et al, 2008; Vora et al, 2009). Das (2012) found that the presence of the ASHA workers in the community increased the number of institutional delivery and community members were also educated about living a healthy lifestyle. Hence, similar to Peterson et al (2014) work, Das's (2012) study also illustrated the positive impact of rural women's health status, because the ASHA workers created awareness about eating healthy (especially during pregnancy), having an institutional delivery, and the importance of antenatal and post-natal care.

All three of the case studies discussed in this section showed the positive aspect of village-level health workers. As Standing et al's (2008) pointed out, community health workers were more likely to be successful if they were provided with proper training, and had good supervision. The success of the community health worker program is largely due to the physical and cultural proximity of the health worker who resides and interacts with the community they provide healthcare services in (Standing et al, 2008). This is a vital because by selecting a health worker from the community, it gives an advantage to the health worker and enables them to understand the needs and concerns of the community better than an outsider. Furthermore, it also gives the community better access to healthcare services, because the health worker is someone from the community, who has already established trust in the community.
CHAPTER 5: NGO Provided Healthcare: Perception of the Beneficiaries

Introduction

"... we live in an era in which simply seeking to provide high-quality medical care to the world's poorest is considered innovative and entrepreneurial. This diagnosis comes with both honor and shame. Shouldn't we have long ago offered such services to those who need them most? Shouldn't we have designed systems to solve the health problems faced by the world's bottom billion?" (Farmer, 2013, p. 33).

The answer to Farmer's question was the creation and introduction of community health workers, who bridged the gap between healthcare services and the poor (as illustrated in Chapter 4). This was only a partial answer, because it takes more than community health workers to provide a high-quality medical care, this was only part of the solution. In the case of India, they became the focal point of India's healthcare system, especially under the country's National Rural Health Mission (NRHM). As Das (2012) pointed out, the health workers under the NRHM (ASHAs), strengthen the country's health infrastructure and improved its healthcare delivery system because these workers reduced the gap between rural people and healthcare, particularly for women and children. The presence of these workers improved accessibility to healthcare services for those who lived in rural and remote regions of the country, but it also made healthcare services for both, the service users and the central government funding the scheme to make healthcare more affordable.

As I discussed in Chapter 3, India's healthcare system is very complex. As Chauhan (2011) pointed out, improvements have been made within the healthcare system but the growth of the healthcare system has been minimal, especially within the public sector. In Chapter 3, I attributed the cause of a poor public sector to a combination of inaccessibility, poor quality, poor management, and inability to afford travel and medical expenses of the healthcare services offered both the public and private sector. This has negatively affected maternal health. As
Chapter 3 pointed out, access to maternal healthcare services in rural India was crucial, since these regions did not have the adequate infrastructure and resources to make these services available. In these areas, two strategies were utilized to improve maternal health conditions for women. The first was education, to increase awareness of good maternal health practices and obstetric services, to prevent women from seeking healthcare services from an untrained birth attendant or other related person (Peterson et al, 2014). The second was training village level health workers to provide basic healthcare services and education with an aim to improve and increase access to healthcare services in rural areas (Peterson et al, 2014).

In rural areas of India, including the field site for my research, village level health workers were the first and often the only available contact for many people living in rural and remote parts of the country. These workers are a cost effective alternative and solution for the government to provide preventative and curative interventions at a community level (Standing et al, 2008). This has two benefits, the first is that the presence of these workers would ideally replace and deter the community from utilizing the services of an untrained traditional healer (Standing et al, 2008). Secondly, it would also reduce the pressure and workload from secondary and tertiary levels, since curable and preventative primary illnesses would be treated at primary level by village health workers. Thus, village level health workers are a vital component on India’s healthcare system. They are "filling the gap" for the rural population particularly for women seeking primary maternal healthcare services by making healthcare services available. In this chapter, I analyze and discuss the findings of this study and the perspective of the beneficiaries (or the participants from this study) who have utilized the services of ARCH health workers.

**Analysis**
My study illustrated Farmer's framework of structural violence and here I discuss how this framework tie into the findings of my research. In Chapter 1, I discussed how structural violence create barriers for individuals in accessing healthcare services because it becomes "social machinery of oppression" (Farmer, 2004, p.307). To reiterate, structural violence are factors or barriers which hinder or make accessing healthcare services challenging. In regards to maternal healthcare services in rural areas, these areas have poor services in comparison to urban areas. Scholars such as Griffiths and Stephensen (2001), Shidhaye, Nagaronkar and Shidhaye (2014), and Lodhiya, Jogia and Yadav (2014) have illustrated the lack of services available in rural areas, which had a direct impact on the health of women in rural areas. One of the most common consequences is due to the lack of maternal healthcare services, as a result of which many women forego regular monthly antenatal check-ups. This is problematic because as pointed out earlier, many women are anemic, and if complications arise a woman would have difficulty in monitoring their health (as well as their unborn child), which could potentially endanger her life. Griffiths and Stephensen's (2001) study in Maharashtra and Lodhiya et al's (2014) study in Jamnagar, Gujarat present the perspective of service users. Participants from both of these studies pointed out the shortage of staff, equipment, and services in rural areas (Griffiths and Stephensen, 2001; Lodhiya et al, 2014). Griffiths and Stephensen's (2001) study found that participants living in urban areas utilized more antenatal care services because services were more available in urban areas, in comparison to participants in rural areas. Furthermore, Griffiths and Stephensen (2001) also found that participants in urban areas had a choice in terms of which type of facility they sought care from (such as a government facility or a private facility). In comparison, women in rural areas did not have this choice, rather they were visited by village health workers who would provide them maternal healthcare services such as
antenatal care (Griffiths and Stephensen, 2011). This difference had a change in the women's perception of how they utilized services. For instance, women in urban areas were informed of antenatal services and utilized these services because they viewed it to be beneficial to their health (Griffiths and Stephensen, 2001). The poor on the other hand, had different a utilization pattern because of financial constraints (Griffiths and Stephensen, 2001).

The findings from this research also shared similarities with the cases studies from Chapter 4. For instance, similar to the findings of Griffiths and Stephensen's (2001) and Lodhiya et al's (2014), many of the participants in my project did not have access to trained healthcare workers prior to the arrival of ARCH health workers. Their first contact of any healthcare provider was an untrained dai for maternal/pregnancy related health issues, and/or a bhaghat for any other illnesses. One of the participants indicated that prior to the arrival of ARCH health workers, "There was no care. If they get sick they get traditional medication (herbs) from bhaghat." This highlights the lack of services. Moreover, many of the participants in this study did not have choice in terms of who would be their healthcare provider, such as a doctor from the private sector, or the public sector. Only a few of the participants had a choice, but their primary maternal healthcare provider was always a village-level health worker, who either worked as an ASHA worker, for the government (public sector), or as an ARCH health worker (semi-private sector). For the participants who did not have this choice, their primary healthcare provider (who was trained) was always an ARCH health worker. Similar to the results of Lodhiya et al's (2014) and Das's (2012) study, many of the participants from my research (who had delivered their infant or had multiple deliveries) had institutional deliveries, thereby indicating an increase in institutional deliveries, and decrease in traditional home-births. Many of the participants also attributed this choice to the introduction and utilization of government schemes such as the
Chiranjeevi Yojana, which made (and decreased financial barriers to) institutional delivery possible.

In regards to Peterson et al's (2014) study, the participants from my project pointed out that ARCH health workers were knowledgeable, and were able to educate the participants of this study on having a healthy pregnancy. The focus of this education was on informing women on the importance of a proper, healthy and balanced diet, mostly importantly consuming nutritious foods during pregnancy such as milk and fruits and vegetables.

Griffiths and Stephensen's (2001) findings also connect with the results of my work in two ways. First, in comparison to the women who lived in urban areas in Griffiths and Stephensen's (2001) study, the women from rural villages in Dharampur had limited choice when it came to seeking maternal healthcare services. Second, women in Dharampur also had financial constraints where seeking care from a private facility was farfetched. Hence women in rural villages of Dharampur lacked the agency to seek maternal healthcare services outside of their villages (especially those who lived further away) because of financial reasons and the lack of infrastructure (such as transportation). Though the Government of Gujarat has improved infrastructure in the state, it has only done so in selected areas such as urban centers and villages which are geographically closer to these urban centers. As I witnessed during my fieldwork, remote villages in Dharampur did not undergo any change in their own infrastructure. As the participants in the study indicated, they had better access to maternal health services from ARCH health worker and ASHA workers, but they still had to travel far distances to seek secondary care at a clinic or a hospital. Thus, though there was an improvement in accessing maternal healthcare services there, were still some issues that remained unresolved.
The unsolved issues such as barriers to accessing secondary care were exacerbated further by structural violence which rural women faced daily. As Chapter 1 discussed, structural violence is violence that is indirect and is exerted by the social circumstances an individual is born into. It is the consequences of an individual's social circumstances such as poverty which are beyond the control of the women in Dharampur. These circumstances become barriers. In regards to my research, some of the barriers women faced in accessing maternal healthcare services were poverty, lack of infrastructure and resources (such as staff shortage). These hindered women's access to maternal healthcare services because prior to the integration of ARCH health workers, women in villages of Dharampur had difficulty in accessing maternal healthcare services. As mentioned earlier, poverty and lack of infrastructure and resources were a key for structural violence.

Many of the participants in this research were born in a rural village, and for much of their lives they did not have access to adequate maternal healthcare services. For example, some of the participants in this study were married into the villages I had visited, and they had never encountered a trained healthcare provider in their maternal villages; their only access to a health professional had been an untrained dai or bhagat. Therefore, when these women arrived into their new homes as brides, they were surprised to see the services that were available in their new homes, especially the presence of a trained healthcare provider such as an ARCH health workers and/or an ASHA worker. As a woman aged 23 stated, "... in my maternal home there were not services, it was difficult to go to the doctor, whereas here, we are able to get everything, so the services here are good."

From an anthropological perspective, women in the study area were already in a vulnerable position. First, due to their gender they are already in a subordinate position, hence
they always have to seek approval from their parents prior to marriage and then their husband and mother-in-law after their marriage. This hinders their access to maternal healthcare services because the woman's mother-in-law dictates how the woman should take care of herself. For example, as mentioned earlier, the kinds of foods the woman could consume and should avoid as per the mothers-in-law suggestions. As a result, women were prevented from consuming necessary nutrients, which affected their own health as well as the health of their unborn child.

ARCH realized this issue and the health workers would ensure the woman is not severely deficient in vitamins such as iron and B12, by supplying women with iron and B12 medications. In addition to this, ARCH also addressed the issue of infrastructure by choosing to hire local women as health workers so that women seeking maternal healthcare services would not have to travel far. This was advantageous for the women because they did not have to travel long distances and since the health worker was from the village they were able to have monthly check-ups. Furthermore, in most of the villages I visited, the health workers were women, hence it made women comfortable to discuss some of the most sensitive issues, which are deemed to be culturally inappropriate to discuss with a male.

ARCH was therefore also culturally sensitive towards local beliefs and practices. One important point that I noticed during my initial days at ARCH (first three weeks of my fieldwork) was that prior to beginning any new projects, the NGO always tried to understand the rural cultural beliefs prior to implementing a project. For instance, prior to educating women in the importance of a healthy diet, ARCH first tried to find out the reasons why women avoided certain foods during pregnancy. After their initial research, ARCH would educate women on how food is digested. I was able to witness this education during my second day at ARCH, when I was trying to understand how the NGO operated. I had travelled to with Dr. Daxa to a remote
village to see some of the services the health workers provided in the field. During this visit I got an opportunity to observe a health worker educate women on how food is digested, without having a negative impact on the fetus. I saw two different, colourful posters taped onto a wall. Both posters had a large diagram of the digestive tract system, but in one poster the body was of a non-pregnant woman, and the other was a pregnant woman. Using these two posters the health worker helped the women understand how food is digested, and that it does not negatively impact the fetus or the mother during pregnancy and delivery.

Thus, ARCH and its health workers worked collaboratively with the community to end address structural violence issues. As the results from this study indicated, women were satisfied with the services ARCH provided because ARCH had made maternal healthcare services more accessible and affordable. Most importantly ARCH health workers were successful in increasing their efficiency and bringing positive results in the area ARCH operates in, because many women revealed that their interaction with ARCH health workers increased, they decreased using services from untrained health professionals and have had institutional delivers.

**Analysis of ARCH**

In this section I analyze ARCH’s opportunities for improvements and challenges to the organization and its work in the region. I focus on the work of the organization’s health workers, the perception of the beneficiaries (which was examined through interviews), and my own participant observation.

ARCH has four core areas that I used to describe their influence and success rate in the region. The first is that they have adopted a similar approach as India's NRHM. Similar to NRHM's ASHA workers, ARCH health workers are also residents of the villages they provide
services in. This is advantageous for ARCH because the health workers are familiar with their surroundings and environment, and they have already established some form of trust in their village. Secondly, service users are also familiar with the health worker, and therefore they are easily able to seek care from the health worker because they feel comfortable discussing personal health issues with a familiar face instead of a stranger. The women I met and talked to never mentioned any discomfort, disappointment, or any issues is having a village resident working as health worker in their own village. On the contrary, many women were pleased to know that one of their own was providing healthcare services in their own village. Furthermore, prior to becoming an employee of the NGO as a health worker, the potential candidate has to go through a rigorous training session where they are tested on their theoretical knowledge and practical skills. This is vital because it ensures that ARCH is able to provide rural villages with the finest health workers who have the essential knowledge and skills. This would also provide good quality and consistency of service, which is vital in the semi-private sector especially for an NGO to maintain its reputation. Third, health workers are also advised to refer complicated cases to ARCH dispensary or a nearby tertiary facility such as a hospital. The purpose of this is to put the health of an individual first, and the health worker is advised to follow-up on such cases to ensure the patient had followed up on the advice that was given to them. This is ARCH's strength because it symbolizes that they are genuinely concerned about the health of their beneficiaries and the organization is interested in improving the services in the region. Lastly, as illustrated in Figure 9, health workers are regularly monitored by supervisors who would report their findings to the NGO. Since the work of the health workers is closely monitored, the health workers ensure that they provide adequate services. This is beneficial for ARCH because the NGO is able to monitor their employees and ensure good quality of services is provided.
ARCH also has some challenges. The first is that villages that have more than one health worker (one ARCH health worker and one ASHA worker) may be unable to determine whose services they are utilizing, because both provide identical maternal healthcare services. Without any visual association (such as a uniform) the beneficiaries are unaware of whose services they are utilizing. This is an issue because if the beneficiaries are interested in seeking healthcare services from the NGO specifically, they are unaware whom to visit. Furthermore, by having no visual association in the field, the work of the NGO would not be known in the community.

Second, if a health worker is away from a village (especially during the wedding season) the beneficiaries have no healthcare provider, since ARCH does not substitute the health worker's absence with another health worker. This is an issue because in emergencies women would have no access to healthcare personnel. Lastly, the lack of funds is also an issue because it affects the quality of services. For example, currently supervisors are able to conduct a few cost-effective Figure 9 - Hierarchical Structure of ARCH

tests in the field such as sonography via a portable sonography machine, but the supervisor only visits the field every month or every other month (depending on where the village is located). This is problematic because sometimes beneficiaries have waited for a long time for the

supervisor to conduct some basic tests. This is an issue because, due to limited resources, the supervisor and the health worker have to share and this can negatively impact the beneficiaries.

In these and several other ways ARCH has external opportunities to improve their services in the area. Many of the participants were satisfied with the services provided by ARCH, but indicated that they would like to have a doctor visit their village on a regular basis (such as monthly or bi-monthly) so that they would not have to travel long distances to access services from a doctor. This does not mean the beneficiaries were dissatisfied with ARCH’s services, but instead that they want to further improve their healthcare services in rural areas. To make this possible ARCH could work in collaboration with the government to make this request a reality. Second, ARCH could also incorporate *dais* into their service provider list. ARCH already provides training to *dais* to conduct safe deliveries in villages. Similar to the government program, ARCH could also incorporate *dais* into their healthcare system so that the NGO could expand their services in emergency obstetric care and ensure villages with no trained health personnel have at least a trained *dai* to conduct a safe delivery. Last, ARCH could expand their area by encouraging educated women in villages without trained health personals to become an ARCH health worker so that services could be expanded.

ARCH has two major challenges. The first is the presence of other health workers who are working for other NGOs or the government (such as ASHA worker). Having multiple health workers in a village hinders ARCH’s objective due to the lack of communication between health workers about patients. More importantly, most of the health workers provide similar services, putting all knowledge resources in one health care focus, and leaving other health issues without as much (or any) support. This also creates competition and it may be difficult for ARCH to convince potential beneficiaries to utilize their services. Third, in many cases since majority of
the beneficiaries are poor, they seek care from anyone who is able to provide services for free. Therefore, sometimes women are seeking care from multiple healthcare providers and taking their advice. This can be dangerous because if a pregnant woman is prescribed the same medication by two different health workers (such as an ASHA worker and an ARCH health worker) the woman would overdose and harm herself and/or her unborn child. The second threat is that since the health workers are mainly women, if a health worker gets married outside of her village, then the village would lose their healthcare provider especially if this woman is the only trained healthcare provider. Thus, ARCH has its strengths and weaknesses that makes the NGO unique in its own way. The result of this study indicated that the beneficiaries are satisfied with ARCH's maternal healthcare services and they shared good experiences with ARCH health workers.

In conclusion, ARCH as an organization had a positive impact on the lives of the beneficiaries (the research participants). The organization adopted WHO's community-based health worker programme, and created village-level health workers within their own organization. ARCH's approach was similar to the PIH's healthcare delivery model, where both organizations were attempting to eliminate (or at least reduce) some of the structural violence related issues to improve the health of the population. For example, through its work in Haiti (and many other countries) PIH found that community health workers were not only cost-effective, but they also improved services (Drobac et al, 2013). Drobac et al (2013) also indicated that having a community health worker created jobs for the poor, which benefited the worker's family, community, and the local economy. This resulted in improving the conditions of the community as a whole, because if one person is employed in the rural and/or poor community it creates many other opportunities for the community to grow positively, and
gradually escape the cycle of poverty (See Figure 10). As Figure 10 indicates, investing in community health workers can create an equitable care system which would break the poverty cycle and diseases associated with it (Drobac et al, 2013) thereby addressing the structural violence issues, and having a positive long-term impact on the community.

This example illustrates the positive impact community health workers have had in Haiti, and in Dharampur. It shows that involving a trained health worker at the primary level is not only cost-effective, but it is beneficial for the community, who had many structural barriers in accessing healthcare services. This study demonstrates that community health workers are mediators of low-cost healthcare services at the primary level. It illustrates that primary healthcare services could be provided efficiently in rural and remote areas of the world (such as

**Figure 10 - Positive Impact of a Health Worker in the Community**

1) **Health worker:** who earns is employed and earns an income.

2) **Family:** from the income the health worker earns, he/she is able to provide for the family, and is gradually stepping out of the poverty cycle.

3) **Community:** in order to provide for the family the health worker will spend his/her income in the community, buy purchasing goods and services which are available in the community (ie: food). Through this act the worker in becoming a consumer in the local community, therefore creating employment opportunities (ie: grocery store) for other members of the community, by reducing the cycle of poverty and making a positive change in the community.
Haiti and India) to the vulnerable population. Community health workers address the issues of structural violence by becoming part of the solution because their presence in the community reduce the economic costs of accessing healthcare services since they are able to provide basic low-cost healthcare services. Workers also educate the community on health living so that the causes of poor health could be addressed, taking a preventative approach to health care.

Hence, similar to PIH, ARCH also utilized their health workers to educate and encourage women to maintain a healthy diet during pregnancy to avoid complications at later stages during the pregnancy and delivery. Most importantly, incorporating health workers reduced structural barriers involved in accessing primary healthcare services such as financial constraints, geographical location, and social and economic conditions of an individual. As mentioned in Chapter 2, the inclusion of health workers strengthens the healthcare system within rural and remote areas, because there is an improvement in the availability of services, which did not exist before. By understanding the circumstances and the needs of the population the NGO serves, ARCH made an attempt to repair some of the structural violence the population faced. Rather than making the population dependent on the organization, ARCH has made an attempt to make the population independent, through education, and encouraging the population to seek care from a trained healthcare provider. Similar to PIH's work, ARCH is making this possible by first understanding the community it operates in, listening to their concerns and needs, and always looking for opportunities to improving services in the region. This characteristic of the NGO makes the organization unique because it illustrates the NGO's desire to make healthcare services equitable.
CHAPTER 6: Concluding Remarks and Suggestions

My research suggests that the beneficiaries of ARCH are pleased with maternal healthcare services the NGO provides at the community level through its healthcare workers. For these beneficiaries, ARCH had made maternal healthcare services available in a resource-poor setting of Dharampur, Gujarat. As many of the beneficiaries indicated, many of the villages that ARCH currently operates within previously had no trained healthcare professionals. ARCH provides villages with their own health workers, who offer the same services as ASHA workers. When the healthcare delivery model of ARCH is compared to the government's NRHM healthcare delivery model and PIH's delivery, it is clear that they share many similarities. One is that ARCH has adopted the government's NRHM delivery model where the NGO has recruited health workers from the villages they reside, and once these health workers have been trained, they provide services in the same villages they reside in. Second, when analyzing global health, there are four key principles that make delivering healthcare services effective (Kim, Porter, Rhatigan, Weintraub, Basiloco, Holstein and Farmer, 2013). These principles include; (1) the ability to adapt to the local context, (2) creating a value chain delivery model, (3) improving the economic development of a region by improving healthcare services, and (4) creating or sharing a health care delivery infrastructure to save time and resources (Kim et al, 2013). Kim et al (2013) analyzed PIH's delivery model and found that PIH and ARCH met all four of the key principles of the healthcare delivery model.

The first principle is the ability of an organization to adapt to the local context, which was accomplished by ARCH because the NGO had examined and researched the structural barriers the beneficiaries faced in accessing healthcare services. This is important because as Kim et al (2013) pointed out, understanding the local causes of poverty and inequality that has an
adverse effect on the health of the poor becomes the starting point for delivering healthcare services that can lead to positive results. Anthropologists are ideal for work in these kinds of roles because as Feierman, Kleinman, Stewart, Farmer and Das (2010) pointed out, anthropologists believe in analyzing local culture (which can be complex) as part of understanding the core experiences of the individual. Anthropologists can become experts at understanding local cultures because they spend the majority of their time living in, observing, and experiencing the local culture. Unlike policy makers (who are higher up the hierarchal ladder), anthropologists can be in local community, and are therefore in an advantageous position in understanding the local issues. More importantly, as Fierman et al (2010) illustrated anthropologists are cultural mediators communicating the concerns and knowledge of the locals to those in power because locals find "... that their knowledge ... is difficult to communicate to those above them ..." (p. 123).

The second principle met by ARCH was creating a value chain delivery model, which "optimizes value for patients across the myriad steps in the delivery of care" (Kim et al., 2013, p. 189). A value chain intervention creates a program which prevents a health concern from increasing, as well as creating ways of treating and screening people who are already affected (Kim et al., 2013). ARCH's value chain is primarily focused on education. As discussed in Chapter 5, ARCH puts a strong emphasis on educating their beneficiaries on healthy pregnancy, with a strong emphasis on nutrition education, regular check-ups, and benefits to hospital deliveries. Through the value chain approach, ARCH (through its health workers) optimizes beneficiaries' experiences by preventing common illnesses and complications related to pregnancy such as anemia from impacting the health the beneficiaries. Third, ARCH is making a positive contribution (and improvement) to the economic development of region by improving
access to healthcare services in the region. This is done in two ways. First, and similar to PIH's and NRHM's approaches, ARCH hires local staff as their health workers, which reduces unemployment rates in the area, and improves the local economy, while also improving the healthcare delivery system (Kim et al., 2013). Furthermore, by hiring women healthcare workers ARCH is empowering the women in rural areas who often do not have a source of income outside of their home. In addition, by hiring local women healthcare workers ARCH is acknowledging the sensitivity to the culture of gender and health issues, hence reducing the socio-cultural barriers for women in accessing maternal healthcare services.

Lastly, similar to PIH, ARCH also provides some secondary health care services such as sonography, laboratory services and access to a doctor at its dispensary clinic in Dharampur. This strengthens ARCH's delivery of healthcare services, because by referring beneficiaries to utilize health care services of the NGO (such as sonography) in Dharampur, the NGO is able to provide better quality of care, since all of the information is easily accessible and shared between ARCH health workers, and other NGO staff at the dispensary clinic. As a result of this, beneficiaries also receive better quality of care because they save their time and services are less expensive. Furthermore, by sharing information and resources, the NGO increases its efficiency and therefore easing some of the challenges the beneficiaries face in accessing health care services, such as sonography, and laboratory.

Hence, ARCH has itself become an anthropologist – or at least taken up anthropological principles - because the NGO has taken the time to understand the issues of the locals, which led to the ability to comprehend the experiences of the locals (Feierman et al., 2010) and create interventions that would be accepted positively by the community. ARCH and its health workers have also become mediators between family members (such as mother-in-law and daughter-in-
law) because they understand the power dynamics within a household and its impact of maternal healthcare access. Finally, as Chapter 5 illustrated, ARCH has several bases in various parts of the state which as Feierman et al (2010) pointed out given ARCH an opportunity to study the social systems at the local level.

My research aim was to provide an ethnographic perspective of the beneficiaries (or the participants of this study) and analyze how they evaluated the ARCH. The focus of this study was on the beneficiaries’ perception because they may be overlooked when organizations are assessed and studied. Even when a development project or an organization's work is evaluated by academic experts, its evaluation may be based on the external measures of success rates of a particular project, rather than the perspectives of users. Considering the experiences and perspectives of service users switches the power dynamics by giving power to the beneficiaries to be critical about the maternal healthcare services provided by ARCH. These beneficiaries indicated that ARCH has made maternal healthcare more accessible because they had chosen and placed the health workers in their own residential villages, thereby reducing their barriers to healthcare services such as travelling distance, and affordability. As Paul Farmer (2013) stated in his book, full of various commencement speeches he gave about his experiences in Haiti, in order to the world safer it is necessary "... to bridge the gap between public health and medicine and between the have and have-nots ..." (p. 137), which ARCH has been successful in doing. By working in rural areas that were neglected by the government, ARCH filled in the void gap by making healthcare services available. This has had a positive impact on the rural communities in this region because it makes healthcare services available and also created job opportunities for young educated women. Most importantly, as many participants from this study indicated, after ARCH health workers were integrated into their villages there was an increase in suvidhaas
(facilities) for the villages such as pre-natal care, education on a healthy pregnancy, and post-natal care. This had positive results because from the perception of the beneficiaries ARCH was the provider of these *suvidhaas* and therefore the bearer of maternal healthcare services. Hence, from the women's perception ARCH had successfully filled in the void gap in healthcare services in rural areas, but still has a long road ahead.
ABBREVIATIONS

AHM - Auxiliary Health Worker
ANM - Auxiliary Nurse Midwife
ARCH - Action Research in Community Health and Development
ASHA - Accredited Social Health Activist
AWW - Angandwadi Worker
BPL - Below Poverty Line
CHC - Community Health Center
CHW - Community Health Worker
DOT - Directly Observed Therapy
GOBI - Growth monitoring, Oral rehydration therapy, Breastfeeding, Immunization
ICDS - Integrated Child Development Scheme
IMF - International Monetary Fund
MMR - Maternal Mortality Ratio
MDG - Millennium Development Goal
NGO - Non-governmental organization
NRHM - National Rural Health Mission
PHC - Primary Health Center
PIH - Partners in Health
PPP - Public-Private Partnership
SC - Sub-Center
SEWA-Rural - Society for Education Welfare and Action - Rural
SRS - Sample Registration System
TBA - Traditional Birth Attendant
WHO - World Health Organization
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