Utilization of Rural Maternity Delivery Services in Six Districts of Nepal: A Qualitative Study

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The ACCESS Program is the U.S. Agency for International Development's global program to improve maternal and newborn health. The ACCESS program works to expand coverage, access and use of key maternal and newborn health services across a continuum of care from the household to the hospital with the aim or making quality health services accessible as close to the home as possible. JHPIEGO implements the program in partnership with Save the Children, Constella Futures Group, the Academy for Educational Development, the American College of Nurse-Midwives and Interchurch Medical Assistance.

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List of Acronyms

ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
BEOC	Basic Essential Obstetric Care
BEmOC	Basic Emergency Obstetric Care
CEOC	Comprehensive Emergency Obstetric Care
DRC	Development and Research Corporation
DHS	Demographic and Health Services
DDC	District Development Committee
DHO	District Health Office
FGD	Focus Group Discussion
FCHV	Female Community Health Volunteer
FPAN	Family Planning Association of Nepal
GoN	Government of Nepal
HFMC	Health Facility Management Committee
MNH	Maternal and Neonatal Health
MDG	Millennium Development Goal
NGO	Non Government Organization
NHEICC	National Health Education, Information and Communication Center
PHCC	Primary Health Care Center
TBA	Traditional Birth Attendant
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Introduction

Increasing the proportion of births attended by skilled health providers is likely the key factor in reducing maternal and perinatal morbidity and mortality. However, the proportion of women in Nepal who have trained birth attendants during their delivery is low – approximately 20 percent. The ACCESS Program, in collaboration with GoN, conducted a qualitative study of the utilization of trained birth attendants in six purposely selected districts in rural Nepal to gain insights about how birth attendance by trained staff can be improved.

Methodology

The study utilized focus group discussions and in-depth interviews with a diversity of community members (especially *dalit* women) and health facility staff to gain insights about the factors influencing use of trained attendants. Field researchers from DRCC were trained to use FGD guides and interview schedules, and then gathered information on the perspectives of the women and their families, other members of the community, and health staff. Additionally, the six facilities were compared on factors affecting the volume of delivery services.

Findings

Perceptions of Women and Other Family Members Influencing Demand for Trained Attendant Services: The vast majority of women planned to have a home delivery attended by relatives and/or a TBA and to reserve attendance at a health facility as a back-up plan in case of prolonged labor and complications. This plan was influenced greatly by the perceived high cost of transport and the fees at health facilities. Economic issues were especially important to dalit women, as was concern about possible caste discrimination. Birth preparation was found to be mainly an economic activity conducted by husbands and fathers-in-law. Birth preparation activities for the mother and other female relatives include acquiring and preparing special nutritious food, cleaning the location selected in the home for delivery, and sometimes obtaining a birthing kit. ANC care is becoming an accepted norm. Awareness raising programs, along with ANC, have created widespread knowledge of the importance of ANC and delivery in a clean environment.

The respondents perceived many benefits of home delivery. It is seen as much less expensive and easier. All the family can assist. The mother can be fed the appropriate foods. Relatives, neighbors, and the TBA can provide oil massage, women can use the desired birthing position, and no one will shout at them if they complain of pain. Attitudes toward health facility staff behavior among non-users

were predominantly negative. Users (15 - 20 percent of the female population) had more positive views. Bringing trained workers to the home was considered desirable but not affordable. Attitudes toward TBAs managing normal deliveries were positive.

Ritual pollution considerations interfere with a decision to seek delivery in a facility, especially in the Western Hills. The cost recovery scheme ("incentives") deals with a major factor inhibiting use of health facilities. However, the potential positive impact is hindered by weak planning and implementation, lack of knowledge, delays in payments, and the potential for corruption. TBAs can encourage clients to deliver in health facilities. However, many TBAs report several instances of insults from staff that effectively keep them away.

Staff Perceptions: Staff feel that the large number of vacant positions inhibits availability of services and requires strenuous efforts on their part to cover for vacancies. They also feel constrained in the provision of services by lack of adequate training, equipment and drugs, lack of a decent residence which includes safety and security, lack of professional advancement opportunities and appropriate educational opportunities for their children.

Facility Factors Influencing the Volume of Services: While the small sample size of facilities in this mostly qualitative study does not allow definitive answers to factors affecting utilization of health facilities, the following factors may be associated with a large volume of delivery services at facilities: "24/7" services and availability of Basic Emergency Obstetric Care; easy access; three or more trained staff available in PHCCs; a referral system and/or ambulance on site; dynamic leadership of the health facility, energetic community and HFMC collaboration; and employment of local personnel from the district.

Next steps

Stakeholders recommended potential applications of study findings for strengthening behavior change communication programs and approaches, improving the management of ANC and delivery services, identifying further research needed, and addressing implications for health policies. ACCESS Program will follow-up with these stakeholders to determine if it can collaborate or provide technical assistance with the implementation of the recommendations.

Utilization of Rural Maternity Delivery Services in Six Districts of Nepal: A Qualitative Study

I. INTRODUCTION

Increasing the proportion of births attended by trained health providers is likely the key factor in reducing maternal and perinatal morbidity and mortality.[1] In Nepal, the provision of skilled assistance is starting from a relatively low level since the vast majority of women deliver at home without trained attendants. In 2001, a Demographic and Health Services (DHS) study found: "Nearly 90 percent of women deliver at home and 55 percent deliver with the assistance of a friend or relative. In only 9 percent of home births are clean delivery kits used."[2,3,4] The 2006 DHS Preliminary Results suggest that substantial progress is being made in a variety of reproductive health measures, including the proportion of mothers delivering with trained attendants and in health facilities: "...19 percent of babies are delivered by a doctor or nurse/midwife, and 14 percent are delivered at a health facility."[5] This represents an improvement over the 2001 DHS figures.

However, despite renewed attention and the recent progress in increasing the coverage by trained attendants, there is an enormous challenge to be overcome in providing services to the 80 percent of women still in need. This challenge is especially apparent with regard to the removal of institutional barriers faced by *dalit* (poor, marginalized, low caste) women who were found in a recent survey to account for only about 15 percent of the population but 30 percent of the maternal deaths.[6] The institutional barriers cited for dalit women not receiving trained birth attendance included: lack of awareness about maternal and neonatal health (MNH) issues and available services; low status of women and lack of decision-making power; expensive services/treatment; lack of birth preparedness, and especially, lack of transport to a health facility in an emergency.[7]

Nepal is committed to achieving the Millennium Development (MDG) Goal 5 of reducing the maternal mortality ratio by three-quarters via increasing the

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[1] Bell, J, et al. 2003. "Improving skilled attendance at delivery: A preliminary report on the SAFE strategy development tool," in *Birth Issues in Perinatal Care*, 30:4, Dec.
[2] MOH, Nepal, 2004. *National Neonatal Health Strategy*. January.
[3] Save the Children Federation, 2002. State of the World's Newborns: Nepal. Saving Newborn Lives, Kathmandu.
[4] MacroInternational and MOH, 2001. Nepal, Nepal Demographic and Health Survey.
[5] MOH, New ERA, and MacroInternational, 2006. Nepal Demographic and Health Survey: Preliminary Report, Kathmandu, p. 13.
[6] *FHD/DHS, 1998. Community survey of maternal deaths – Maternal Mortality and Morbidity Study*, pp. 22-43.
[7] SSMP, 2006. "Addressing Social Inclusion in Health Sector," PowerPoint Presentation, 05-07-06.

proportion of births attended by skilled health personnel to 60 percent by 2015.[8] To this effect, the MoH, GoN has developed and endorsed the National Policy on Skilled Birth Attendants[9], and the strategy/plan for appropriate human resource development outlined in the Long Term Plan (2006-2017)[10]. According to World Bank estimates, the provision of skilled care in the case of delivery complications would reduce maternal deaths by 74 percent.[11]

Several Safe Motherhood efforts in Nepal are addressing the issue of increasing the supply of trained providers.[12] However, in addition to the supply of appropriate personnel, two other important factors have received less attention: (1) the organization of services in which delivery care is provided by trained attendants; and, (2) the social and economic factors influencing *the demand* for delivery care by trained attendants. Attention to economic issues as a barrier to the utilization of trained providers is important because, according to the World Bank:

> "Disparities between highest and lowest wealth quintiles in access to health care are usually enormous, with skilled attendants at delivery being the most inequitably distributed of major maternal and child health interventions for which data are available."[13]

Recognizing the importance of economic issues as a determinate of use of trained providers The Government of Nepal has created an incentive scheme to promote the use of trained providers for a woman's first two births.[14]

Rosenfield, Maine, and Freedman have stressed the importance of developing "bold efforts to overcome the steep systemic barriers to equitable access that have been created during decades of harmful economic policies and political neglect."[15] Since Nepal is extremely diverse geographically, culturally, economically and demographically, a variety of efforts to support the utilization of trained providers from both the supply and demand perspectives are needed. It is proposed that a direction for these efforts may be obtained from a review of the relative success of various approaches that have been tried to date combined with a field-based investigation of the perceptions and needs of both local

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[8] Freedman, IP, RJ Widman, H de Pinho et al., 2005. "Transforming health systems to improve the lives of women and children, www.thelancet.com, Vol 365 March 12, p.997.

[9] National Policy on Skilled Birth Attendants, Supplementary to Safe Motherhood Policy 1994, MoHP/GoN, 2006

[10] Nepal Safe Motherhood and Neonatal Long Term Health Plan (2006-2017), MoHP/GoN

[11] Ibid, p. 997.

[12] Carlough M, McCall M. 2005. Skilled birth attendance: what does it mean and how can it be measured? A clinical skills assessment of maternal and child health workers in Nepal. International Journal of Gynecology and Obstetrics;89:200-08.

[13] *Ibid*, p. 998.

[14] Safe Motherhood, undated. "Incentives for Motivating Delivery by Skilled Attendant," PowerPoint Presentation.

[15] Rosenfield, A, and D Maine, and L Freedman, 2006. "Meeting MDG-5: an impossible dream?" The Lancet, September, p.6.

communities and families *and* of the service providers and the environment in which they practice. The factors that will be identified are expected to contribute to the future planning for increasing and sustaining trained birth provider coverage.

II. GOALS AND OBJECTIVES

Goal:

To contribute to the Government of Nepal's MDG goal to increase skilled birth attendance at delivery to 60% by 2015.

Study Objectives:

1. Describe a range of approaches to providing delivery services in different districts;
2. Describe stakeholders' perceptions (including both community and health professionals) about these services and their use;
3. Identify key factors influencing the utilization of health facilities for deliveries; and
4. Recommend possible approaches to strengthening policies and programs to increase deliveries with trained providers.

III. METHODOLOGY

Fifteen service sites were reviewed for possible inclusion in the study. From these 15, six were selected for study as indicated in Figure 1 and Table 1. These sites were selected without information on the background and training of the staff serving in these facilities. It was not intended to determine whether or not these staff should be classified as *skilled birth attendants*. Thus, the paper discusses facility deliveries and deliveries by *trained staff*, but we specifically wish to avoid the problems of terminology related to *skilled birth attendants* which has proven to be a contentious issue in South Asia because of concern about subjective judgments on skill levels.[16]

Four of the sites selected were government Primary Health Care Centers (PHCCs) with two to five staff. One was a NGO sponsored birthing unit, and one a government Health Post, a lower level facility with only one Auxiliary Nurse Midwife (ANM) staff assigned. The sites receive varying levels of support from a variety of international agencies and represent different regions and ecological zones, and serve clients of varying ethnic groups. Researchers concluded that four of these sites had provided a relatively large number of deliveries, with three of the PHCCs having 97- 289 deliveries in the previous six months. This

[16] UNFPA, WHO, and UNICEF, 2004. Concerns and Consensus: Regional Workshop on Skilled Birth Attendants in South and West Asia, Islamabad, 18-21 April.

contrasts with the two PHCCs which had provided a relatively smaller number of deliveries (7-37) in the same period. The Health Post had a relatively large number of deliveries for its type with 20 in that period. The districts with sites selected are indicated in a map of Nepal presented in Figure 1.

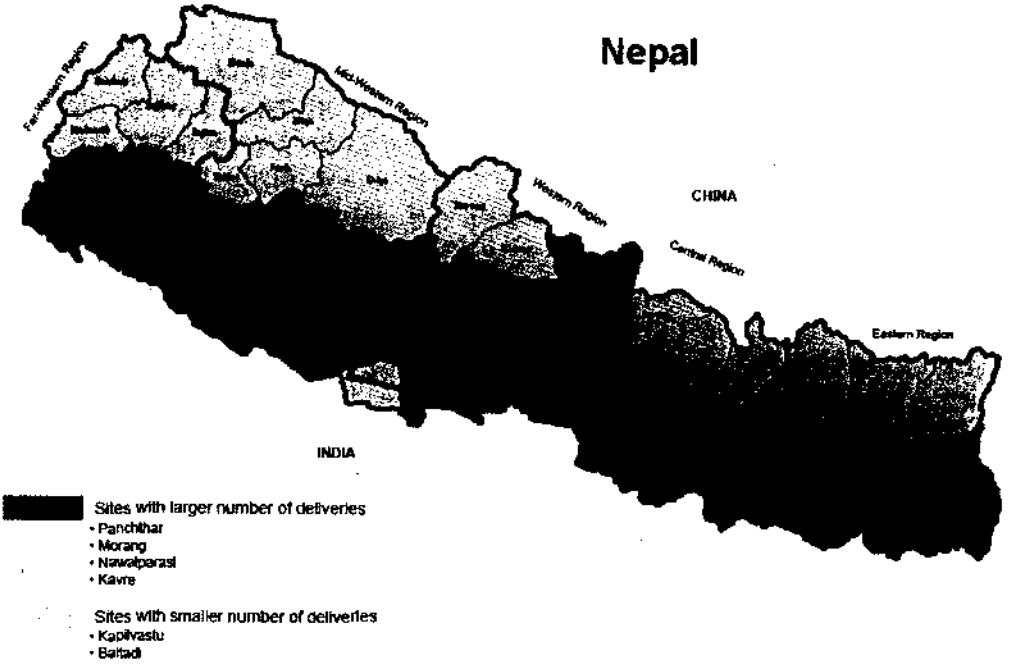
A team of approximately 25 field researchers from Development and Research Corporation (DRC) were trained for five days on the use of interview schedules, focus group discussion guides, and guidelines for the organization of field work. One team visited each site and its community. Using more than 25 tools and guides that had been prepared and pre-tested, the teams collected clinic information and conducted a large number of interviews and focus group discussions (FGDs) in each of the districts. Included in the respondents were health staff, Health Facility Management (HFMC) Committee members, District Development Committee (DDC) members, traditional birth attendants (TBAs), husbands, mothers-in-law, fathers-in-law, and women who had used the health facility for their last delivery (users), and women and other family members who had not used the facility for the delivery of their last child (nonusers). A special focus on dalit women was included in the study, including homogeneous focus group discussions, and in-depth interviews.

A substantial amount of discussion and interview material was collected and transcribed in Nepali. Extensive summaries were prepared in English containing a large number of translated direct quotes. Field researchers were extensively debriefed about their learning experiences. Two senior consultants – one Nepalese and one American – collaborated on reviewing all of the material, extracting and summarizing important issues, and selecting various quotes to illustrate the points in the respondents' own words. A preliminary stakeholders meeting was held on 17 November 2006 in Kathmandu to review tentative findings and to provide feedback and further guidance to complete the analysis. The recommendations were contributed by a large group of stakeholders working in four small groups at a workshop on 22 December 2006.

Limitations of the Study: This study has several limitations affecting the generalizability of the findings. First, it is primarily a qualitative study meant to uncover and describe relevant knowledge and attitudes of community members toward use of trained attendants that can be used to suggest avenues for further study, testing and trial. A small quantitative component on factors influencing the volume of services provided at study sites uses a very small sample of six purposely chosen sites. This small number does not allow statistical tests of differences in the factors influencing quantity of service. Furthermore, the study frequently relies on field judgments on issues such as "*dynamic leadership*" and "*availability of service,*" without knowing whether the clear definitions and criteria discussed in training were used to guide probes in the field. Despite these limitations, the qualitative data collected are rich and extensive and provide many insights into community and program issues surrounding the provision of trained birth providers at deliveries. While these qualitative findings require further

investigation and the quantitative component replication with a larger sample size, the findings may still provide some guidance for strengthening policies and programs.

Figure 1. Location of Study Sites



IV. RESULTS

A. Family and Community Perspectives

Birth Preparation: Birth preparation is advocated by a variety of community and health programs and is a specific feature of ANC counseling in Nepal.[17] Indeed, most mothers reported that they and their families engaged in substantial preparations for their delivery. First and foremost of these preparations involve making economic arrangements. Both the FGDs and in-depth interviews indicted that the economics of delivery may be the most powerful factor determining use or non-use of health facilities or their staff. Delivery is seen as a costly event which must be planned if a healthy outcome for mother and baby is to be obtained as well as an economically viable outcome for the family.

The majority of families indicated that they did not have enough savings to pay the delivery costs and transport associated with a delivery at a health facility. Although they often recognize that the birthing experience would be safer and less frightening with trained staff in attendance and generally they would like to have such attendance (especially at their homes), many know that they can not afford it. Unfortunately, risk taking and tradeoffs appear to be inevitable for the very poor. Husbands and/or fathers-in-law normally take steps to arrange loans from other relatives in advance to manage the expenses of delivery and in case an emergency arises.

> *"Money is everything. If you have money then you can hire vehicle, and get health care service on time."*
>
> Mother-in-law, user, Kavre

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[17] USAID includes in birth planning: appropriate behavior change communications programs to encourage good self care including hygiene, sanitation, nutrition, condom and bed net use, and avoidance of toxins (alcohol, nicotine, etc.) that can be harmful to the developing fetus, preparing families for emergencies that happen away from a health center or hospital, including teaching families and entire communities how to recognize birth complications and where to bring a mother for emergency care. USAID also notes that birth preparation activities may include pre-identifying transportation to a hospital, identifying a blood donor for the mother, and a savings plan for health care costs. In addition, USAID supports other evidence-based interventions including, feeding the mother and supplementation with essential micronutrients, infection prevention and control including, tetanus toxoid immunization, HIV/AIDS prevention services for mother during and after pregnancy, prevention of mother-to-child-transmission of HIV, intermittent treatment for malaria, detection and treatment of syphilis, and treatment for helminths. (From http://www.usaid.gov/our_work/global_health/mch/mh/techareas/prep.html) In Nepal emphasis has been placed on encouraging women to seek ANC, tetanus toxoid immunization, planning transportation to a facility, saving money, deciding on a trained birth attendant, or if a home delivery, planning on a clean environment, with clean clothes for the baby, and a sterile instrument to be used in cutting the cord.

"At the time of delivery we managed money about Rs. 2,000 -- 3000. We don't have money for emergencies. We borrow from our relatives."
Several fathers-in-law, FGD, Nawalparasi

"We decided that until and unless there is a problem, we don't want to go to a health facility for delivery. We can manage everything (all other expenses) *with the money which we would have to pay the health facility."*
Woman, nonuser, Morang

In addition to financial arrangements which are usually conducted by the males, many preparations are reported for special food to be consumed by the new mother.[18] Arrangements for nutritious and other valued foods, including meat, milk, hot drinks, and large quantities of *ghee* (clarified butter) are mentioned frequently as part of the planning for delivery by the mothers-in-law and other female relatives. This additional food is believed necessary for the frequently undernourished mother to recover her strength.

"(after delivery) *She should be fed with hot nutritious food to make her strong."*
Mother, nonuser, Kavre

"The money that would be paid to the hospital will go a long way toward providing good food for the recently delivered mother."
FCHV, Mangalbare

Additional preparations mentioned by respondents include: cleaning the location for the delivery (also the responsibility of women); obtaining birthing kits or thread for tying the umbilical cord and blades as recommended by ANC workers (or a special bamboo tool as prescribed in Baitadi); investigating or arranging the possibility of transportation in case assistance is required; and adjusting the pregnant woman's work schedule to eliminate or reduce strenuous tasks. An additional part of the preparation for childbirth which received widespread discussion from our respondents is antenatal care (ANC) visits.

Dalit Women: However, not all respondents report that they or their families engage in preparation for delivery. Very poor dalit women in Kapilvastu and Kavre who received a special focus in the study, report that they engaged in less preparation for delivery. This lack of preparation has a strong economic basis.

[18] Substantial importance is given to certain hot and freshly prepared food containing special spices believed to improve lactation and the strength of the mother. Indeed, such importance is given to these practices that they are not limited to humans. A large container of flour, oil, broth is prepared for a cow or buffalo that delivers a calf.

"We poor people work as farmers and have no concern about maternity preparation."

Dalit woman, Kavre

"We do not do any kind of preparation before delivery. It's not in our culture. Even the workload is similar to other times. We have to carry heavy loads on our back, and we get no time for adequate rest. I was given dried ginger to eat to minimize bleeding."

Dalit woman, Kapilvastu

Many respondents explicitly mentioned that widespread poverty among the dalits was the main barrier to their utilization of delivery services. However, a 28 year old uneducated dalit nonuser reported that shyness and fear of the possibility of mistreatment kept dalits away from the facilities in addition to financial considerations. It was encouraging to note, however, that none of the actual facility users reported experiencing any caste based discrimination from the service providers at any of the facilities included in this study.

I have been to the facility many times and have never experienced discrimination by the staff. It is however, difficult for us to go there due to financial reasons, poverty is our main barrier."

Dalit woman, nonuser, Morang

A 26 year old dalit woman reported that she appreciated the delivery care that she had received at the health post. Her husband and family were allowed to be present during labor, and she was permitted to eat and drink the hot foods that she valued.

"Neither the nurse nor other health staff discriminated against us merely because of our caste."

Dalit woman, user, Tharpu (Panchthar)

Nonusers, however, reported they had either heard of episodes of discrimination or presumed that discrimination takes place.

"I am apprehensive to visit health post because of my caste. People do not even like to touch us how would they help us deliver?"

Dalit woman, *nonuser*, Morang

It was interesting to note that dalits themselves reported engaging in the practice of untouchability. In Kapilvastu, the mother-in-law of a dalit woman had helped with the delivery, but the family asked a lower caste dalit, a *chamar*, to cut the umbilical cord.

"It is believed in our society that a chamar must cut the chord. Our family must not perform this activity. And if they did, no one would drink water from them." (meaning that they would themselves become the lowest among the dalits).

Dalit mother-in-law, nonuser, Kapilvastu

Seeking ANC Care: The National Neonatal Health Strategy (2004) indicates that: "Only a half of Nepalese women receive any antenatal care from a trained health worker and only 14% attend four or more times."[19] Yet there are substantial indications in our data that ANC, including birth preparation and planning, is becoming an accepted norm among the Nepalese families in the districts included in this study. We do not discuss the number of ANC visits that the population believes are necessary, nor how many were actually made, but some visits are frequently reported by family members as an appropriate part of preparation for delivery. Informants reported the advice they were given:

"Nowadays everyone says we need to go to hospital for checkups during pregnancy and for vaccination."

Mother-in-law, nonuser, Nawalparasi

"In my first delivery, a TBA was invited and the umbilical cord was cut by the old method. But this time, they managed safe delivery kit and soap to bathe the baby. It is because last time we didn't know about safe delivery but now we are informed about it by the ANC clinic and the media."

Woman, nonuser, Morang

"*Delivery occurred on the ground floor. Before it was done in the cowshed* (because of ritual pollution considerations) *but now it was done in a clean room."*

Women, nonusers, FGD, Baitadi

ANC workers in Kavre report advising women to come for check-ups, eat vegetables and legumes, not carry heavy loads, clean the house, wash clothes and keep them clean for mother and baby, collect money for delivery, and deliver in health facilities. It appears that much of this information is heard, understood, and acted upon, *except for planning for the delivery at the health facility.* Respondents also report specific behaviors recommended in ANC as a part of their preparations for delivery.

Many informants report wide use and the popularity of ANC checkups and vaccinations for pregnant women. Facilities report that they are sometimes overwhelmed by the large numbers of women seeking ANC services. Respondents also report hearing supportive messages about safe delivery

[19] *Op. cit.* 2.

services on the radio, TV and from various community health workers. There appears to be considerable evidence of change even in areas served by facilities with a low volume of deliveries and with uneducated families.

The Benefits of Home Delivery: Most Nepalese respondents (especially nonusers, or about 80+ percent of women) report that home delivery is best for many reasons, especially economic reasons. To the extent that planning takes place, families plan to have a home delivery with the assistance of female family members and sometimes TBAs and neighbors. However, they reserve the possibility of seeking facility services if complications like prolonged labor develop.

> *"At the time of the last delivery, everyone at home including our daughter-in-law was against going to deliver at the hospital, but we were thinking of taking her to hospital if some complication arises."*
>
> Mother-in-law, nonuser, Nawalparasi

> *"I had mentally prepared to deliver my baby at home, but what to do? When the baby was not born even after a long time of labor pain and I got some complications also, then I decided to go to hospital."*
>
> Woman, user, Nawalparasi

The vast majority of respondents reported many advantages to having a home birth compared to a health facility delivery, in addition to the cost savings. All the family can assist in the delivery as needed. The mother can be fed the appropriate foods after delivery. Relatives, neighbors, and the TBA can provide oil massage to the woman in labor. Women can use their desired birthing position and deliver according to their wishes and customs. No one will shout at them if they complain of the agony of childbirth. With all these advantages in mind one respondent summarized the views of many women: *"So why should we deliver away from home?"* Reinforcing the overall view among many of the respondents that health facility delivery is only needed for complications, a 20 year old dalit woman in Kapilvastu, when asked about her perspectives on a healthy delivery, reasoned that: *"If a delivery necessitated the use of a health facility, then how could it be healthy?"*

Who Decides Where Delivery Takes Place? And when Is this Decision Made?: Most husbands in FGDs indicated that their mothers are more active than they are in making decisions about where to deliver the baby. However, the majority of fathers-in-law at Nawalparasi reported that no planning had taken place, though a home delivery had been assumed. In most cases, there may be no actual considered decision. Rather, they just prepare to deliver at home as they traditionally have done.

"There was no prior planning about where and with whom delivery is to be done, but we believed we would deliver our daughter at home, and if any complications arise, only then we will take her to the hospital."

Fathers-in-law, users, FGD, Nawalparasi

One father-in-law reported that there were previous complications with his daughter-in- law's last delivery and therefore an advanced decision was made for a facility delivery.

"We were told during ANC checkup that complications may arise this time also. Therefore we had made up our mind one month before the delivery to take our daughter to Bharatpur (hospital)."

Father-in-law, user, FGD, Nawalparasi

Negative Attitudes toward Health Facilities Among Nonusers: Also, widespread perceived negative perceptions of health facilities influence the decision whether or not to use health facilities, especially among nonusers. Indeed, women and their family members have a vast array of negative views on the health facilities -- the cost, associated gender issues that arise, lack of staff experience, shortage of medicines, and perhaps most importantly, the behavior of the staff -- imposed restrictions on family presence in the delivery room, criticism of food provided to the mother, perceived lack of sympathy, and more.

"We don't want to go to the health facility for delivery because health workers' attitudes towards poor people like us are absolutely not good.

They shout at us. They don't answer our questions. They are always angry and irritated with us. Besides this, it is expensive as well."

All women of FGD, nonusers, Morang

"All staff are new or inexperienced or there to learn."

Mother-in-law, nonusers, FGD, Nawalparasi

"Most of the women feel uneasy when men (in the health facility) handle deliveries."

Mother-in-law, nonusers, FGD, Nawalparasi

"Often we have heard that medicine is in short supply most of the time at the hospital."

Dalit woman, Kapilvastu

Positive Attitudes Among Users: However, there are also many positive comments made about health facilities and staff, especially by the minority of women who are users, and even by women who are non-users. This suggests that there is a wide range of community views on health staff, a diversity of personalities, attitudes and behaviors of different staff and also varying socio-

economic conditions of different families influencing their decisions. Two themes that frequently arose in discussions about delivery in health facilities are: (1) safety and security, and (2) cleanliness.

> *"Most of them want to be delivered by nurses, and they think hospital will be safe and the patient is taken care with all kinds of cleanliness."*
>
> Mother-in-law, nonuser, FGD, Nawalparasi

> *"Women would be helped to choose to deliver in a facility if the transportation, ambulance service, the roadways and the operation service are good enough, they will feel very secure."*
>
> Mother-in-law, nonuser, FGD, Nawalparasi

Several fathers-in-law reported positive attitudes and behavior among the PHCC staff. They also reported that the costs were reasonable and affordable. When asked what kinds of things would help them to use health services, men reported that they would like well equipped and well-trained assistance in the closest facilities to their home.

> *"If the government can arrange for doing delivery at local SHP then it would be a great relief for us. The local SHP should be equipped with skillful health workers and required instruments."*
>
> Husband, non user, FGD, Nawalparasi

In summary, at present most women plan to deliver at home and cite economic and many other advantages for doing so. However, some people also want a health facility for delivery or, more usually, as a back-up in case of emergency. The ideal facility would be accessible, affordable (with provision of free services for the poor), and with well trained and experienced staff who behave in a friendly, respectful and non-discriminating manner.

Bringing Health Facility Workers to Assist with Home Delivery: Many women and families, especially perhaps those with more education, would like to have a well trained person to assist with their delivery either at a health facility or at their home. In Mangalbare, a Community Health Volunteer responded to the question, "Who will use trained staff at a facility?" by noting that education and economic status were important in influencing whether trained attendance would be sought and the venue of such assistance. It would appear that the provision of trained assistance at their homes would be highly desired by many, especially if the trained assistant worked collaboratively with the local TBA and behaved sensitively and respectfully toward the family.

Many respondents saw the value of calling trained staff to their home but noted the economic difficulties of doing so:

"It is very good to make delivery at home by calling skilled doctors and nurses but it is expensive for us. It would be better if skilled doctors and nurses come home to provide free service for delivery because it will make us tension free and will be easy."

Women, nonusers, FGD, Baitadi

All of the women participating in a FGD in Morang, despite being nonusers of health facilities, liked the idea of being attended by a trained provider in their own home, where perhaps the locus of control remains more with the family:

"It will be better if we call health worker at home because we can be confident under him or her, family members can know why and how to do safe delivery, and how to care for baby well."

All women, nonusers, FGD, Morang

A woman in Kavre, a long distance from the road in the hills, simply recognized the near impossibility of health workers coming to her home:

"To get maternity services in our village is like wanting fruit in the sky."

Woman, nonuser, Kavre

Attitudes toward Use of Local TBAs: Orsin, et al., reported that only five percent of a large cross-sectional sample of women indicated that their last birth was attended by a TBA in Makwanpur, a largely Tamang district south of Kathmandu[20] However, field researchers in this study found widespread appreciation and support for local TBAs, especially those who have served the community for many years and are viewed as quite experienced, sensitive, respectful, and inexpensive. Many families reported that they were comfortable with their services under most conditions and believed that they will handle their birth adequately. At the same time, families reported knowing that health facility staff may be needed if complications develop beyond the ability of their family members or the TBA to manage.

"An experienced TBA is available. She can check whether the fetus is in the right position. She can help the mother bathe afterwards and see that she gets proper rest. She will remind us to take vaccinations."

Mother-in-law, nonuser, FGD, Nawalparasi

"Delivery usually takes place at night. An experienced TBA is close by. We would only need the hospital if complications develop."

Husband, nonuser, FGD, Nawalparasi

"TBAs provide quality care cheaper and have friendly and helpful behavior."

[20] Osrin, D., et al., 2002. Cross sectional, community based study of care of newborn infants in Nepal, BMJ, November 9; 325(7372): 1063.

Husband, nonuser, FGD Nawalparasi

Many nonusers of health facility services reported being very happy with their local TBAs. In a FGD in Nawalparasi all women agreed that their local TBA is very kind and cooperative.

> *"She helps us in every possible way. She is mature and skillful. Everyone in the village is indebted to her for her services. There is nothing wrong with her behavior. She doesn't know much about childhood diseases so we have to be careful. But otherwise she provides very good and reliable care to us."*
>
> Woman, nonuser, FGD, Nawalparasi

Views of TBAs toward Collaborating with the Health Facility Staff: International agencies have recommended that the training of TBAs should shift away from trying to make them more skillful providers and towards their collaboration with health facilities, which encourages them to refer and accompany women for delivery at the facility.[21] Discussions with TBAs were held in only a few of the communities. Several examples of generally positive relationships were reported by TBAs, but the comments also included some reservations.

> *"In the PHC the staff are very cooperative. We used to take care there, and they allow us to go inside the labor room with the cases. This is an opportunity for us to see what is happening inside. But sometimes PHC staff forget to cooperate. It seems like they are a bit moody too."*
>
> TBA, FGD, Nawalparasi

In another District, little progress was being made in establishing such collaborative relationships. In fact, collaboration may be less now than in the past:

> *"The relationship with the health posts solely depends upon the attitude of those in-charge. In the past we were often called by them and had to report about the work we did in the field every three months. But they do not call us these days. They do not care about our work."*
>
> TBA, interview, Kavre

Worse still, in one of the districts, a TBA reported being treated rudely and insulted by health facility staff, and others feel that health workers hate them.

[21] Goodburn, EA, et al., 2000. Training traditional birth attendants in clean delivery does not prevent postpartum infection, *Health Policy and Planning*; 15(4): 394-399

"Even though I accompanied a woman for delivery at the health facility, I was not allowed in the delivery room. They said: 'Go away you old hag. Your ideas have been eaten by the mice!'"

TBA, FGD, Morang

Choosing Trained Staff: As is the case in many other countries, there is little or no evidence that Nepalese women or other family decision-makers are familiar with who *is* and *is not* classified as trained staff. Nepalese family decision-makers think about going to a facility (usually a hospital or a PHCC) for assistance if complications arise in a delivery. They appear to know that the sub-health post (SHP) does not have trained staff available. When they arrive at a facility, they report that they receive service from whoever is on duty. In response to the question, "Who attended the delivery?" All fathers-in-law of women delivered in health facilities in Nawalparasi reported that they had not selected a person in advance of arrival for delivery, nor did they make any choice about who would serve them once they arrived at a health facility. They did not appear to know the background or training of the person on duty who would assist with their daughter-in-laws' birth.

"The person who is on duty at that time, they perform the delivery."

Fathers-in-law, users, FGD, Nawalparasi

Ritual Pollution Considerations (especially in Baitadi): Although research instruments were not designed to collect information on this topic, debriefings with field workers suggested that ritual pollution considerations might be important in influencing the use of health facilities. In Nepal there is widespread concern that childbirth is a ritually polluting event. The pregnant woman's blood from the delivery, the cord, her placenta, and the baby are considered ritually polluting to varying degrees and lengths of time. Even being in the presence of a pregnant woman after her water breaks is sometimes considered polluting. The amount of time required for the pollution to dissipate varies from 3-11 days in different ethnic groups. In some communities this ritual pollution issue may be an important consideration influencing the decision about whether transport to a facility should even be attempted while the pregnant woman is in labor. A family may be reluctant to attempt travel to the facility because no one may be willing to carry her. And if she delivers along the way, no one may be willing to help her or even touch her. This may contribute to the fact that 11.4 percent of maternal deaths in Nepal were found to occur on the way to a hospital.[22] In Baitadi, field researchers reported that a recently delivered mother herself had to gather her bloodied clothes and placenta for disposal. No one else would touch these ritually polluting things. It is believed that:

"The gods will be offended if anyone touches these things. Men should not even look!"

Women, nonusers, FGD, Baitadi,

[22] *Op. cit*. 6.

With these pollution considerations in mind, sometimes the health service staff will conduct the delivery but nothing else. Cutting the cord is especially polluting and is done by the lowest cast women available. On the other hand, TBAs sometimes advise against going to a health facility because they want to receive the fee from cutting the cord. One researcher reported that the ritual pollution considerations were important even in middle and upper class urban families, especially in the Brahmin and Chettri communities. The Western Hill districts were reported to be the most rigid about ritual pollution considerations.

> *"After delivery no one will carry women mainly because they have the bad tradition of not touching women after delivery. It is also the fact that they have no knowledge of delivery by skilled nurses and doctors."*
>
> Facility Staff, Group Discussion, Baitadi

It is unclear whether the respondent's comments about ritual pollution are consonant with their actual behavior, especially at the critical time that a woman is experiencing prolonged labor and the family realizes she needs assistance of a trained provider.

Comments on Awareness Raising Programs: In a FGD in Baitadi, men report that they are aware that there are trained ANMs in the village who have finished their study recently "*but didn't have practical experience like the old local TBA.*" Also they felt that SHP help may be useful *"unless there occurs some complications."* Participants reported awareness of several programs in their communities run by different organizations. Men reported that these programs have made them aware about the need and responsibilities involved in managing such health related issues. Also men reported the availability of micro credit programs that can assist them. They also reported that mass media like television and radio as well as field workers have helped raise awareness in the community.

Comments on Maternity Incentive Scheme :
Because economic factors appear to play the most important role in influencing who delivers with trained staff, an incentive scheme developed by the Government of Nepal (GoN) has the potential of being extremely important.[23] Women who seek a facility delivery for their first or second child receive an incentive of 500 – 1500 Rs., depending on whether they reside in the Terai (500 Rs.), the Hills (1000 Rs), or the Mountainous Regions of the country (1500 Rs.). This incentive program would appear to have the potential of influencing many poor women to deliver with trained staff. However, the researchers gathered much information on difficulties in implementation leading to delays in payment

[23] Safe Motherhood, undated. "Incentives for Motivating Delivery by Skilled Attendant," PowerPoint Presentation.

that may be inhibiting the full benefits of this program. Men in an FGD in Nawalparasi reported that the allowances were too small:

> *"We know that there is provision of delivery allowances for the first two births. But usually people tend to spend more while they give birth to a child and the allowances given by government are a very small amount."*
> Husband, nonuser, FGD, Nawalparasi

In Kapilvastu, female community health volunteers (FCHVs) did not know of the incentive scheme. In addition, there were numerous reports that families had to wait long periods to receive the payments, and therefore needed to borrow cash for the delivery anyway. Researchers also found some evidence of possible corruption in the implementation of the program. In one district, community women who were followed-up supposedly had been paid the incentive recently. However, it was found that the children of the women were much older than they would have been if they had actually delivered as recently as was reported.

Private Practice and Possible Corruption of the Incentive Scheme: Researchers came across an interesting case of the incentive scheme appearing to be corrupted by an ANM. A mature and somewhat intimidating woman who worked at one of the PHCCs had been very active in this district for a number of years and was well known in the community. Over the years she developed a sizable private practice, and mostly delivered babies at women's homes for a fee. She had also converted one room in her own house to use for deliveries. Her work was acknowledged by her colleagues at the PHCC. When researchers inquired about the reasons for the reluctance of the mothers to come to the PHCC for delivery -- which also entitled them to receive the transportation incentive -- the ANM told the researchers that "*women only trust me*" for delivery care; and that they were wary of being delivered by other less skilled birth attendants available at the facility.

It appeared that for her attended home births, she was remunerated twice as she received money both from the family (the private practice), as well as the system (delivery incentive). It seemed also that the ANM did not encourage women to deliver at the facility. When a mother delivered at the facility, the family would pay only Rs 300 (the charge fixed for normal delivery). In addition, the birth attendant would have to share the delivery incentive with the other providers at the facility as mentioned in the guidelines *(damasahi le badne)*. Thus, there appeared to be very little personal motivation for her to advocate for mothers to deliver at the facility.

Summary:
Most Nepalese families continue to plan to have a home delivery. The decision to deliver at home, or a decision to have a facility delivery, is often reported as a group decision, with husbands, fathers-in-law and mothers-in-law all having input to varying degrees. The plan for a home delivery appears to be primarily based

on economic considerations, i.e. to avoid high expenses at the health facility and for transport. However, the families report many additional important benefits to delivering at home. Moreover, they are generally comfortable with the help of locally experienced TBAs who are available to them easily in the night, and other women in the family. Additionally, their decision to deliver at home is influenced by their concerns about the behavior of health facility staff who reportedly criticize them for arriving late, complaining of pain, and do not seem to respect local customs regarding massage, allowing family members in the delivery room, positions for delivery, and food.

Nepalese families believe that deliveries in health facilities are necessary only if complications interfere with home delivery. Thus women with complications arrive at health facilities only after considerable delays caused first by their attempting a home delivery, and then by transport delays, which in the Nepalese environment can be considerable. Dalit women engage in less preparation for delivery as a result of their depressed economic circumstances. Although dalit women users report no cases of caste discrimination in this study, nonuser dalits reported concerns that they would be discriminated against in the health facilities.

Ritual pollution considerations appear to be an overlay to decisions about where to deliver. The pregnant woman, especially after her water breaks, and all of the products of birth, are widely considered polluting, especially in the Western Hills. This belief probably interferes with decisions to seek care at health facilities and whether even to attempt travel to such facilities during labor.

ANC is becoming increasingly popular and even a prescribed norm. Women and families report following many of the recommendations of ANC staff except planning to have a facility delivery. The many programs being implemented through ANC services, community workers and the media appear to be having positive impacts on planning to obtain ANC care and in planning to have a clean place to deliver. Despite the many criticisms of staff behavior (which may not always be based on personal experience), women who use facilities for their deliveries generally report positive experiences. The incentive scheme providing direct financial incentives for delivering at health facilities could have substantial influence. However, lack of knowledge about the scheme, delays in payments, and possible corruption appears to limit the scheme's impact.

B. Views of Facility Staff and District Development Committee (DDC) Members

Factors Promoting a High Volume of Delivery Service: Staff and DDCs suggested several factors that they feel have promoted delivery service utilization. They pointed to progress in developing infrastructure such as rooms, equipment, and trained providers as well as the provision of drugs. They also are clearly aware of the importance of transportation and the proximity of services to roads. They point to increasing community awareness, the value of

trained attendants at deliveries and community innovations such as savings funds created by mothers' groups to provide economic resources for emergencies. Other factors mentioned as important by staff include regular supervision and monitoring, regularity of service, punctuality of staff, and 24/7 availability of services for delivery. Staff also cited congenial relations between health staff and the Health Facility Management Committee (HFMC), and activities to raise awareness in the community about the risks of delivery at home and the benefit of a delivery by health workers or in health facilities.

> *"I feel people prefer coming here because we provide quality service for a very nominal charge, behave well with the clients, and provide appropriate counseling. Our location is accessible and transportation (ambulance) service is also provided at low cost. The information on services that are available has spread by word of mouth and has impacted positively on service utilization."*
>
> Medical Officer, FPAN Clinic, Kavre

Factors Inhibiting Delivery Service: Many barriers to utilization were also presented in interviews held with DDCs, facility in-charges and other staff. Facility staff feel that the large number of vacant positions inhibits availability of services and requires strenuous efforts on their part to provide needed services. Many also feel constrained in service provision by a lack of adequate incentives, training, equipment and drugs. They also reported concerns about not being supplied a decent residence which is safe and secure, and inadequate professional advancement opportunities and appropriate educational opportunities for their children.

> *"Till now, there is no provision for professional development. But it would be better if it is managed."*
>
> ANM, Baitadi

Personnel issues also seemed important. For example, if posted to an isolated community, some staff call upon their government contacts (*afno manchhe*) with requests for them to use their personal influence to help them to avoid reporting for duty, or to change their posting. Further, many of those who do report for a position do not stay in their positions long. On the other hand, staff who work hard reported that they feel that they do not receive any encouragement, recognition or incentives and that their morale deteriorates. Staff problems can seriously impact the ability of the facilities to improve the environment for delivery services.

> *"We have not been able to make staff nurses and ANMs available at all the facilities. As this is a remote district, they do not want to come or if they do, would not want to stay here long enough to provide services."*
>
> DHO, Baitadi

"In this place awareness building is not happening (and) the staff positions are never filled. Staff are changed frequently and those who are available are unable to be in the people's hearts. There is social discrimination by caste."

Staff, group discussion, Baitadi

Staff also recognized that the quality of services was affected by the negative behavior of some of the staff; this would also discourage use of the health facility for delivery:

"People do not get immediate care as soon as they reach a health facility because of large number of patients there, which creates a situation of war between the staff and the caretaker. Lack of availability of medicine and the custom of indirectly asking for money in the name of sweets put people in trouble."

FCHV, group discussion, Mangalbare

"People do not like the practice of giving excessive injection, making large incisions and unnecessarily demand of money by the health facility staff."

FCHV, group discussion, Morang

Some staff also mentioned the poor quality of pre-service and in-service training.

"Even during meetings we do not get to know anything."

ANM, Maharajgunj

Staff also mentioned a number of facility, organizational and management issues. They were particularly concerned about the scarcity of skilled and knowledgeable health workers being available because so many are on deputation to more accessible areas like district headquarters. This reportedly adds greatly to the workload of those present who have to cover for those who are away. This reduces staff morale in many areas. Staff also mentioned other issues such as lack of privacy in the clinics with people coming in and out of the delivery room, especially at sub-health posts (which usually have only one room), the inexperience inexperience and lack of skills of staff, poor infrastructure particularly at the sub-health post and health post levels, lack of equipment such as vacuum and suction machines and forceps which limit the staff's options for the management of complications, and lack of an ambulance.

Other issues cited by staff included the lack of inter-sectoral coordination, poor coordination among Government Organizations, Non-Government Organizations (NGOs) and international NGOs, poor commitment of service providers, resentment among women against being cared for alone by staff in training, and lack of availability of complete services. Staff also indicated that generally in-charges and doctors have irregular attendance and are busy in training and orientation, and if present in the facility, it is only during office hours.

"The in-charge is away for training or other benefits for more than nine months a year!

ANM, Maharajgunj

Finally, staff indicated that most of the service providers come from other districts and are often away on deputation or leave.

Environmental and Cultural Factors Among Clients: Staff reported numerous environmental and cultural factors that they believe account in part for a low volume of facility deliveries. These included the poor location of some facilities meant to serve populations in remote areas, and lack of transportation. Staff reported a host of other factors including poverty, the lack of education among certain ethnic groups, gender issues related to women's status, such as the inability of women to travel alone, or shyness about women receiving treatment from men, preference for TBAs, traditional practices of childbearing, lack of awareness about the risks and the danger signs of pregnancy, and negligence and fatalistic attitudes.

Summary:

Facility staff indicate that there are many factors promoting utilization of health facilities. Improvements in infrastructure, training of personnel, and creation of greater community awareness of the importance of trained attendance at delivery are viewed as important supports for facility utilization. Also cited from some facilities are good management and supervision resulting in punctuality of staff and availability of 7/24 services, and positive relations between staff and the HFMC. However, staff tend to cite a larger number of barriers inhibiting service delivery than supports strengthening it. The shortage of staff, equipment, and ambulances were frequently mentioned, as were the general absence of factors that could promote and support motivation among staff, such as incentives, improved residences, recognition for good work, and professional training and advancement opportunities. Staffs also recognize a number of cultural and environmental factors inhibiting clients.

C. Features of SBA Services which Distinguish Sites with a Larger and a Smaller Number of Deliveries

The health facilities providing trained delivery services investigated in this study were found to differ in a number of ways. These differences represent both planned and unplanned variations. Researchers anticipated that these differences would be associated with the quantity of deliveries performed at each site. Differences were noted on factors such as:

- Accessibility of the facility
- Provision of "24/7" delivery services
- Degree of involvement of the community in the facility's operation
- Receipt of additional support from bilateral or multi-lateral agencies
- Dynamic leadership
- The number of trained staff
- Availability of BEOC/CEOC on site
- An energetic and involved health facility management committee (HFMC)
- Availability of an established referral system and/or ambulance service
- The sponsoring organization (Government or NGO).

Table 1 (below) provides an overview of how each of the sites were judged on these factors. The discussion of each factor follows Table 1. The reader is reminded that the qualitative research methods used, the relatively loose definition of terms, and most importantly, the small number of sites can not be expected to provide definitive guidance on these factors. Nevertheless the information may provide some insights that could serve as a basis for exploring possible program adjustments in service features and suggestions for further research.

Table 1. Facility Name and Type by Number of Deliveries: Potential Factors Influencing Number of Deliveries

acility Name , Type,)istrict	No. of Del./6 Mo.	Addit. Support from Bilat, Multilat, or NGO Y N	Available Delivery Service Schedule 24/7 Y N	Active Comm-unity Collab. Y N	Dynamic Leader-ship Y N	Numb. Trained Staff	BEOC/ CEOC Avail. On Site Y N	Access Easy Y N	Active HFMC Y N	Referral System Estab. and/or Ambulance on Site Y N
Facilities with a Relatively Higher Number of Deliveries										
Tharpu HP, Panchthar	20	Y	Y	Y	Y	1	some BEOC	no	Y	no amb, dirt road + good communication +
Mangalbare PHCC, Morang	289	Y	Y	?	Y	3	BEOC	Y	Y	Y
Family Health Centre (FPAN) Kavre	97	Y	Y	N	?	4	some BEOC	Y	N (Diff. Model)	Y
Dumkauli PHCC, Nawalparasi	215	N	Y	Y	Y	5	BEOC	Y	Y	Y
Facilities with a Relatively Fewer Number of Deliveries										
Maharganj PHCC, Kapilvastu	7	Y	Y (not utilized)	N	N	2	N	N	N	N
Patan PHCC, Baitadi	37	N	Y (not utilized)	N	N	2	N	N	N	N

Access: Skilled attendance at delivery and provision of emergency obstetric care for the management of complications are the most critical interventions to save women's lives.[24] Access to services has been found in other studies to be the most important factor influencing health facility use in Nepal. In 1999, rural access to safe motherhood services was scored very low (13/100) on the Maternal and Neonatal Program Effort Index.[25] This finding is reinforced by data in Table 1. Limited access prevents women from even planning to travel to a health facility thereby causing delays (stage 1 in the three-stage delay model)[26] in seeking trained staff if a complication develops. Furthermore, once the decision has been made to seek such assistance, the arduous travel necessary to reach trained staff at less accessible facilities ensures further (stage 2) delays in receiving emergency obstetric care.

Three of the four sites with a larger number of deliveries had relatively easy access to clients. The two PHCC sites with a smaller number of deliveries did not have easy access (and one, Baitadi, had few services available).The fourth site with a larger number of deliveries, Tharpu Health Post, is a smaller facility in the hills with only one staff and with a road connection for referrals. Researchers found a special element of community initiation and external support (described elsewhere in the paper), which seemed to be responsible for its relative success (in comparison to other Health Posts, not shown). Our interviews contain elaborate explanations of the difficulties many families have of obtaining transport and conveying a woman in labor to the health facility reinforcing the importance of facility access.

Availability of Service: Availability of basic emergency obstetric care (BEOC) on a 24 hour a day basis, seven days per week ("24/7") is believed necessary since it would not be worthwhile for women to travel to services restricted to government office hours, especially since many believe that labor and delivery most often occurs at night. However, there was insufficient variation on the availability of 24/7 service in our data, and, since the study focused on lower level facilities and the community, none of the sites were selected to include Comprehensive Emergency Obstetric Care (CEOC, including caesarian delivery and blood transfusion). However, all of the sites with a larger number of deliveries had at least some BEOC available, and none of the sites with fewer deliveries seem to have this service utilized.

In one of the districts with a site with fewer deliveries (Baitadi), a remote hill district with poor geographic access, the major problem appeared to be the lack of services due to the inability to fill sanctioned positions. Sanctioned posts in the district hospital as well as the peripheral facilities are not filled and retention of staff is poor. For example, out of five posts sanctioned for doctors in the district, only one is filled; all sixteen posts for staff nurses are vacant, and only four out of

[24] IAG, 1998. Tech Consultation on Safe Motherhood, in *Op. cit.* 15.
[25] MNPI was carried out by The Futures Group MEASURE Evaluation Project, funded by USAID.
[26] *Op. cit.* 15.

sixteen positions for ANMs are filled. The providers at the facility were working in virtual isolation and offering limited services to the few mothers who lived near the facility and bothered to come. Staff reported that: *"Women with complications prefer to go to Jhulaghat in India, across the border for availing services."* The FPAN clinic in Kavre suggests that a clinic can serve the community well even with limited service if staff interact well with the community and the facility has referral and transport available:

> *"The staff of FPAN treats us well and provides encouragement. They don't have all services, but provide well what they have ....If they are unable to help, they send us to Dhulikhel in their vehicle... They are skilled, it is a clean place."*
>
> Husband, user, Kavre

Number of Service Providers: The number of staff posted influences the possibility of providing 24/7 services. With three or more staff available at a PHCC, it would appear to be much easier to provide 24/7 service. Three staff allows continuation of services when one or two take leave, go for in-service training, or are away for some other reason. Such continuity of services may increase community confidence that women will receive delivery services if they come to the facility. At present, GON policies call for a minimum of two trained staff at PHCCs. However, all of the PHCCs which have a larger number of deliveries have three or more trained staff while the two PHCCs with fewer deliveries have only two trained staff. The suggestion here that three trained staff may be necessary deserves further investigation with a larger sample size.

External Support: Some of the facilities and/or community programs reviewed in this paper received support from UNICEF, USAID, and an NGO like Family Planning Association of Nepal (FPAN). There is ample evidence in the data as a whole that external support can initiate and sustain a high volume of service with substantial additional resources. However, as is suggested by Kapilvastu, a low volume facility with external support (and decades of other experiences), external support is no guarantee of success. That Dumkauli GON facility provided a high volume of deliveries without external support "(but with substantial community support)" also reinforces the view that external support is not necessarily required for success. In fact as a whole, the data suggests that while external support probably contributes to high volume, it is neither necessary nor sufficient to achieve it.

Referral System Established and/or Ambulance On-Site: Referral systems and ambulance services are required to move women who need BEOC or CEOC from a lower level facility to a higher level facility where the needed services are available. All but one of the facilities with a higher volume of deliveries had this feature, while neither of the clinics with fewer deliveries had this service available. In the one exception, Panchthar, a referral system exists but not an ambulance. However, in Panchthar good roads and communications were

available reducing the problems associated with transportation of referrals using public facilities.

Responsive Facility Leadership: Responsive facility leadership is demonstrated by taking responsibility for the clinic operation, being interested in and working toward ensuring quality of care, being supportive of staff, and not allowing private practice to interfere with the operation of the Government facility. A variety of programs in Nepal attempt to strengthen facility leadership, especially for working collaboratively with the community. Data in Table 1 suggests that responsive facility leadership contributes to a higher volume of deliveries. All the facilities with a higher volume of deliveries were judged to have responsive leadership. In contrast, neither of the two sites with fewer deliveries were described by field researchers as having such leadership. Researchers were not sure of the leadership of the FPAN clinic, which nevertheless has other factors contributing to high volume of deliveries (described elsewhere in the paper).

Active Community Collaboration and an Energetic HFMC: The Government Guidelines[27] for HFMC operations recommend up to thirteen members be appointed to HFMCs for PHCCs located in rural areas. Membership is stipulated to include a wide array of personnel including the Chairperson of the DCC (as the chair), and the in-charge of the PHCC as the member secretary. Others members may include membership from DDC, an elected woman representative of the village development committee, representatives from among teachers/principal from local schools, one FCHV, two members (including at least one woman representative) from disadvantaged/dalit communities, a social worker nominated by the DDC, District Public Health Officer, and the VDC Chairperson.

The HFMCs were assigned the responsibilities of annual planning, arranging logistics, organizing services for family planning, safe motherhood, immunization, and nutrition and being responsible for general administration, supervision and monitoring of the health facilities. One of the strongest indications in the data is that a very active and committed HFMC, which reflects wide community involvement with the management of the health facility, can make a substantial contribution to the volume of deliveries at the facility (see the case study, below). Both active community collaboration and an energetic HFMC were found to be important components of all government facilities with a higher volume of deliveries and absent from the two government facilities with fewer deliveries.

Active HFMCs arrange residences for staff, provide furniture, collect funds to build or expand the facility, and help create community awareness. However, most of the health facilities visited had less than the stipulated number of members in the HFMC. This was more marked at Maharajgunj PHCC where the HFMC actually had never been formed. A working group was created that was

[27] Local Health Facilities Handing Over and Operations Guideline, DoHS, HMG, 2006

comprised of the in-charge of the facility, the VDC chairperson and the DHO. However, the latter two remained at the district capital and were unavailable for the functioning of the HFMC.

A very high level of community support is reported in both Nawalparasi and Panchthar. In Nawalparasi a ten bed maternity ward was constructed with Rs.10 lakhs (1,000,000) collected from the community. The HFMC also hired and supported two staff assistants. The HFMC established a fund of Rs 22,000 to help the poor. Three persons this year have been supported by this fund.

> *"Community support has been very crucial in activating the HFMC and to bring this facility to its present state. Government gives only the salary to the staff, what else? Rest of backup and support is all done by management committee, isn't that a great thing? Purchase of land, construction of building and its maintenance, procurement of drugs and equipments, fund raising, etc. all have been done at the initiative of this committee with full support of community people."*
>
> Member HFMC, Nawalparasi

> *"It is not that, we have come to the present status easily. We have had to struggle a lot. What is needed is participatory planning and transparent way of working. Ensure we have the support of the community leaders' and the confidence of the community by addressing their interests. Emergency services, quality of care by ensuring the availability of necessary drugs and equipment, good relationship among staff, community insurance scheme, community drug program and effective management, have all strongly contributed."*
>
> Member HFMC, Nawalparasi

Recruiting and Placement of Local Staff at the Health Facility: Many health system and community informants mentioned the value of recruiting and placing local people within the health facility staff. The health personnel working at the facility who come from the local area, reside in the same community, and are familiar with the local customs, are thought to be better able to provide 24/7 services, deal with clients in a more sympathetic manner, and be more responsible to the community. This may be especially important in areas where transportation and communications are difficult, and where staff from outside the district who have contacts are likely to resist accepting postings, or not remain in the posting long.

> *"It generally helps if staff are local; they reside in the area and are thus available even after office hour. Otherwise they are not available when needed as the time of delivery is not confined within the office hours!"*
>
> RHCC member, Nawalparasi district

"Health workers who come from the same district or community are more accountable. A local health worker who provides poor quality of care or conducts fraud can easily be caught. "

ANM, Nawalparasi district

Summary:

A comparison of the volume of deliveries performed in six facilities, and a review of the factors distinguishing high and low volume facilities provided many insights into factors that may promote service utilization. Some of these factors are relatively well known in the literature. These included facility access, 24/7 service availability and a referral system with ambulance. Some of the factors may have received less attention in the literature, including the responsiveness of facility leadership, active community collaboration and an energetic HFMC, all of which seemed highly related to facility productivity. Although the hypothesis was not tested in the data, perhaps the most surprising factor to arise in this analysis was the importance of recruiting and placement of local staff which was reported to reduce absences, and to promote accountability to the health system and the community.

D. A Case Study of the Integration of Factors Leading to Success: The Panchthar Story

The details of one district suggests that it is the integration of many mutually supportive factors that is responsible for a high volume of deliveries. The case study presented herein describes a well designed system of care led by a dynamic leader, designed and implemented with intensive community collaboration, and with sensitivity to the needs of both patients and staff.

The rural maternity delivery services in Panchthar district are provided from one Sub-Health Post (which is unusual as delivery services are not usually provided at this level), eight Health-Posts, and two PHCCs. These facilities are supported by the district hospital–the referral site which provides comprehensive emergency obstetric care (CEOC). This system of care was created and sustained by a dynamic District Health Officer (DHO- physician) working in close cooperation with an energized community. The DHO provides emergency care for referrals to the district hospital, as well as the management, supervisory, and training support for the entire system.

The creation of this system was initiated by an external development partner (UNICEF) which introduced and implemented a variety of community organization and safe motherhood tools in various district locations.[28] This community organization activity helped to develop a positive attitude and a sense of collective responsibility among all stakeholders. As a result, the HFMCs were

[28] UNICEF, undated. "Decentralized Action for Children and Women (DACAW): Putting it all Together for Survival, Growth, Development and Protection. PowerPoint Presentation.

activated, empowered and became committed to using community resources to build birthing centers attached to each health post. Additional resources were made available for this purpose by District Development Committee (DDC).

> *"A wave of community enthusiasm and participation began with involvement of women's groups, youth groups and other active groups, wanting to do good for their communities. As the political environment in those days was not conducive for the youth to take political issues forwards, involvement in the safe motherhood activities gave an outlet that they were looking for. This gave tremendous impetus and took forth the cause of saving mothers and babies as a movement, and ground was set for all stakeholders to be involved with the feeling of ownership and commitment that they must improve MNH in Panchthar."*
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> DHO, Panchthar

An active HFMC played a leading role in the development of birthing centers by purchasing minor equipment, such as beds for labor and post natal rooms, blankets, kettles and heaters for patients, etc., working with the DHO to ensure availability of skilled providers, and hiring local ANMs when needed. The HFMC also contributed by providing accommodation or rent (and safety) for the birth attendants, providing incentives for the service providers from delivery charges levied on the patients. They also established a system of providing free services for very poor, and creating community awareness about the importance of facility delivery.

The DHO in Panchthar played a catalytic role, by supporting the community initiatives. When community participation was apparent in the development and utilization of the birthing unit, the DHO reciprocated by making the skilled provider available at that facility. He also worked closely with the HFMC to ensure that accommodation, safety, security and additional incentives were provided in order to retain skilled staff.

> *"One of the strategies I adopted for continuity of service was to ensure that at least one skilled provider was always available at those facilities where the infrastructure was built and the HFMC was prepared to initiate delivery services. I often rotate staff between less utilized and highly utilized facilities and the district hospital to ensure that they retain their skills. I personally train the staff working in the peripheral facilities during supervisory visits."*
>
> DHO, Panchthar

Referral played an important role in this system (though it still requires strengthening). Patients referred by the peripheral facilities with complications are provided specialist care at the district hospital. Training, supervision, regular reporting and logistics were also reported to be important to the functioning system. Some problems, such as lack of coordination between agencies is a

continuing problem. The DHO also reported working successfully to mobilize all factions to support facility deliveries and against home deliveries during the recent conflict situation, thus "*...converting a challenge into a strength.*"

Summary:

The Panchthar Program demonstrates the mutually reinforcing nature of numerous factors that contributed to a successful program. It appears that the involvement and commitment of all stakeholders was important. Their participation in the situation analysis, review and planning process led to a sense of ownership and commitment to the program. The program sought to improve the quality of care by ensuring the adequacy of infrastructure, equipment and supplies, staff training, and motivation and retention of staff. Also emphasized was improving access to services, particularly for the hard to reach, poor, disempowered, and disadvantaged groups. This was accomplished by reducing the barriers between the communities and the facility/providers, taking the services as close to the women as possible, and making the services friendly and affordable.

V. IMPLICATIONS OF FINDINGS AND RECOMMENDATIONS

The researchers sought wide input into determining the implications of the findings and establishing study recommendations. A dissemination seminar was held on 22 December 2006 in which 42 stakeholders were asked to assist in determining implications and recommendations from the study on the following cross-cutting topics (see Annex 1 for the Workshop Schedule and Annex 2 for a List of Workshop Participants):

- Strengthening behavior change communication programs and approaches,
- Improving the management of ANC and delivery services,
- Identifying further research needed, and
- Addressing implications for health policies.

The participants were divided into four discussion groups. Below are the recommendations from each discussion group.

Group 1: Community Perceptions and Demand for Delivery Services

Strengthening behavior change communication programs:

- Discourage traditional practices which have an adverse effect on health
- Raise awareness that delivery services are available for all groups/castes
- Help communities to understand their role in provision of quality services
- Encourage health workers to understand the importance on non-discriminatory behavior

Improving the management of ANC and delivery services:

- Make 24 hour delivery services available at the health post level and above where the population distribution is appropriate to such services."
- Provide ANC services 6 days/week at every health facility
- Provide user friendly and complete quality services
- Encourage active ownership management by HFMCs

Identifying further research needed:

- Increase qualitative and quantitative research on the utilization of ANC and delivery services

Addressing implications of health policies:

- Include behavior change communication and counseling skills in pre-service and in-service training programs
- Place authority for hiring and firing health staff with local management committee
- Expand public/private partnerships with a special focus on rural-urban balance, e.g. incentives for health workers who serve at remote and rural areas, medical insurance, proper utilization of existing human resources

Group 2: Staff Perceptions and Behavior

Strengthening behavior change communications:

- Involve local management committee, mass media and local channels to communicate on stereotyping regarding the perceived role of health personnel and the actual roles performed
- NHEICC activities should not be limited with regard to availability and utilization
- Provide regular updates on the functioning of the health services
- Regularly direct communications to vulnerable groups
- Strengthen staff communication skills

Improving the management of ANC and delivery services:

- Update staff regularly on the latest evidence based knowledge on ANC and delivery
- Update job descriptions in terms of required skills and actual roles needed to be performed
- Provide increased incentives of various types including knowledge and skill updates, financial allowances, and career development opportunities

Identifying further research needed:

- Study factors influencing staff performance and retention

Addressing implications of health policies:

- Provide opportunities for medical staff to enhance their knowledge and skills
- Provide legal protection for staff
- Strengthen acknowledgement of staff efforts with a reward system
- Replace and rotate staff through a reserve pool

Group 3: Factors Influencing Facility Volume of Services: Role of Community Stakeholders

Building capacity of the local health facility management committees:

- Strengthen the enabling environment through local recruitment in order to obtain committed workers who will be responsive to the community and be happy to stay with their family
- Strengthen retention by providing increased security, education for children, and adequate quarters
- Provide special incentives for community-based health workers

Establishing and managing a health financing scheme at the VCD level:

- Establish fund for emergencies and provide special subsidies for marginalized community members
- Provide emergency fund support for transportation and services

Identifying further research needed:

- Conduct operations research to better understand the role of community stakeholders in the context of decentralization
- Study the problems and barriers faced by various community stakeholders and their solutions

Addressing implications of health policies:

- Increase coordination between stakeholders including district level line agencies in order to solve collective problems
- Promote active participation by health staff and the community in regular meetings of mother's groups, HFMC, etc.
- Establish improved referral linkages between lower level facilities and hospitals for B/CEOC services

Group 4: Factors Influencing Facility Volume of Services: Role of District Health System

Strengthening behavior change communications:

- Develop training to include training skills, and communication skills to improve behavior of providers

Improving the management of ANC and delivery services:

- Increase leadership skills of district health officers and district managers through pre-service and in-service training
- Improve the system of rewards for excellent performance by staff

Identifying further research needed:

- Study the effectiveness of BCC interventions and appreciative inquiry training in changing behavior of providers
- Study the effectiveness of appreciative inquiry in influencing staff motivation
- Conduct a comparative study on the volume of deliveries attended by skilled providers in provider led (where no HFMC exists) and community led health facilities (led my HFMCs)

Addressing implications of health policies:

- Establish partnerships between district Health service system and the local community to manage services.

Annex 1. Workshop Schedule

Stakeholder Meeting To Suggest Implications and Uses of Utilization of Rural Maternity Delivery Services in Six Districts of Nepal: A Qualitative Study

Time : 8:30 – 2:00
Date: 22 December 2006
Venue: Radisson Hotel

Objective:
Involve experienced and interested colleagues in reviewing study results and determining how they can be utilized to increase delivery services by trained providers through:

- Strengthening behavior change communication programs and approaches,
- Improving the management of ANC and delivery services,
- Identifying further research needed, and
- Addressing implications for health policies.

Workshop Schedule

Time	Activity	Facilitators & Session Chair
8:30 – 9.00	Registration and breakfast	ACCESS Program staff
9:00 – 9:15	- Welcome - Objectives	Dr. Bal Krishna Suvedi, Director, Family Health Division
9:15 – 9:25	Review agenda and procedures	Ms. Chandra Rai, ACCESS Program
9:25 – 10:00	Sharing study findings	Dr. Madhu Dixit Devkota, Tribhuvan University & Dr. Robert Miller, Population Council, and Public Health Institute
10:00 – 10:30	Questions and Answers	Dr. Bal Krishna Suvedi (Chair)
10:30 – 11: 45	Group Discussions to determine key priority recommendations (please limit to two) related to each of the areas identified in the objective (bulleted items). Group 1: Community Perceptions and Demand for Delivery Services Group 2: Staff Perceptions and Behavior Group 3: Factors Influencing Facility Volume of Services: Role of community stakeholders Group 4: Factors Influencing Facility Volume of Services: Role of District Health System	Group formation. Group to identify facilitator and reporter for plenary presentation.
11:45 – 12:00	Coffee/Tea Break	
12:00 – 12: 15	Brief review of study findings for additional policy makers and managers joining for the final sessions	Dr. Madhu Dixit Devkota Dr. Robert A. Miller
12:15 – 1:15	Group presentations and discussion	Group reporters
1:15 – 1:30	Reactions to recommendations and closing remarks	USAID representative MoHP representative Director General, DoHS
1: 30 – 2: 00	Lunch	ACCESS Program hosting

Annex 2. List of Workshop Participants:

S.no	Name and organisation
1	Dr. B.K. Suvedi, Family Health Division
2	Dr. M.K. Chhetri, Logistic Division
3	Mr. Amir Khati, National Health Training Center
4	Dr. Mahesh Maskey, MoHP
5	Dr. Naresh Pratap K.C., Family Health Division
6	Mr. B.R. Dotel, Family Health Division
7	Dr. Shilu Aryal, Family Health Division
8	Mr. Laxmi Raman Ban, National Health Training Center
9	Ms. Sharada Pandey, Child Health Division
10	Mr. Krishna Raj Giri, NHEICC
11	Ms. Hemkala Lama, Management Division, Department of Health Service
12	Mr. John Quinley, USAID
13	Mr. D P Raman, USAID
14	Mr. Sitaram Devkota, USAID
15	Ms. Daya Laxmi Joshi, Nepal Nursing Council
16	Ms. Ishwori Khanal, Nepal Nursing Council
17	Dr. Sarala Shrestha, Nursing Campus, Maharajgunj
18	Dr. Bekha Laxmi Manandhar, Tribhwan University Teaching Hospital
19	Ms. Radha Paudel, CEDPA
20	Mr. Ram Chandra Silwal, Nepal Family Health Program
21	Ms. Deepa Pokharel, SSMP
22	Ms. Bindu Bajracharya, SSMP
23	Mr. Devi Prasai, SSMP
24	Mr. Netra Bhatta, ADRA Nepal
25	Mr. Laxman Adhikari
26	Dr. Aruna Uprety
27	Prof. M. Huq, WHO
28	Dr. Rita Thapa, PESON
29	Dr. Kulesh Thapa, SC/US
30	Ms. Tory Clawson, SC/US
31	Dr. Neena Khadka, SC/US
32	Robert Miller, Consultant
33	Dr. Madhu Devkota, Consultant
34	Dr. Rajendra Bhadra, ACCESS/NFHP
35	Ms. Geeta Sharma, ACCESS/JHPIEGO
36	Ms. Chandra Rai, ACCESS/ SC
37	Ms. Meena Sharma, ACCESS/SC