

Master of Public Health

Master international de Santé Publique

"Do You Hear What I Have To Say?" Participatory Community Assessment as a Tool to Explore Low Usage of Reproductive Health Services in Rural Laos: A Qualitative Study

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ACRONYMS

- Lao P.D.R. Lao People's Democratic Republic
- MDG Millennium Development Goals
- PCA Participatory Community Assessment
- TBA Traditional Birth Attendant
- WHO World Health Organisation

INTRODUCTION

According to UNFPA (1) approximately one thousand pregnant women die every day in the world, with the majority of them dying from severe bleeding, infections, eclampsia, obstructed labor and the consequences of unsafe abortions. Moreover, WHO estimates that 99% of these deaths occur in the developing countries (2). In addition, more than half of all maternal deaths occur during child birth and immediately afterwards (2). Maternal mortality is both a risk factor for infant mortality (3) and a reflection of poverty (4) and inequality (5).

Lao P.D.R. (Laos) has a high maternal mortality ratio of 580 per 100,000 live births. It ranks among the seven countries with the highest maternal mortality ratios outside of sub-Saharan Africa which have the highest maternal mortality rates in the world (6). The district of Hinheup (Figure 1) located 80 KMs north of the capital of Laos has a population of 29, 428 people (14, 637 females), the average monthly income in the district is US \$ 66 and the communities are dependent on subsistence farming of rice and vegetables (7).

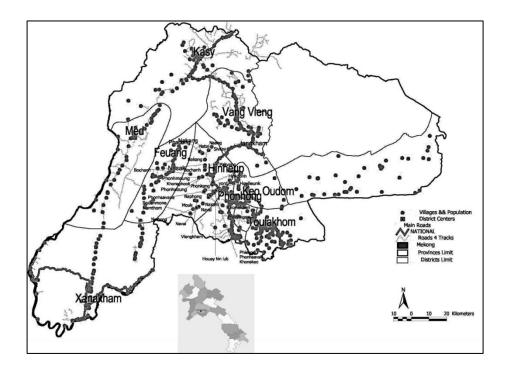


Figure 1: Map of Vientiane Province, Lao P.D.R. (Source: French Red Cross)

Detailed statistics for the district are not available and the district does not publish maternal mortality ratios, but the Vientiane Provincial Health Office estimates that maternal mortality resembles that of national estimates.

Most maternal deaths in the developing countries occur at home because of delays in reaching biomedical care (8). What this means is that maternal deaths cannot be pinned to a single event. Kerber et al (8) proposed the concept of Continuum of Care, focusing on reproductive health and incorporates dimensions of coverage of care. This concept seeks to explain both the causes and solutions to maternal mortality by emphasizing the importance of continuous care for women from prior to pregnancy through the neonatal period of their children. It emphasizes that no single intervention can resolve the problem of maternal mortality, but rather a broad set of strategies to prevent maternal morbidity and mortality must address the entire cycle of home, preventive and curative services. The continuum of care focuses on both the timing and location of maternity care. Timing refers to when women receive care-before, during and after pregnancy, including phases of pre-conception, pregnancy, postnatal and childhood. Timing also focuses on the availability of care. The second dimension is location, addressing the availability of care where women need it. Care can take place at home, the health center and the hospital. The services provided for this continuum of care by the biomedical professionals are reproductive health service for adolescents, family planning, antenatal care, skilled attendance at birth, postnatal care, and immunization (4,8-10).

Strengthening of service delivery at one point in this cycle increases the use of biomedical care at a later part of the cycle. For instance, in the Vientiane Province, 48% of the women who attended antenatal care delivered at a health facility; this proportion increased to 52% who had ≥ 2 antenatal visits, while as only 5% of the women who never attended antenatal care delivered at a health facility (11). Antenatal care is the first contact of a pregnant woman with the health system. Women who initiate their medical visits early are more likely to have institutional delivery, use skilled attendants, make use of available reproductive health services and adopt healthy behaviors including birth-preparedness (4,12-14). Family planning services have the potential to reduce 13% of maternal deaths; globally 41% of the pregnancies are unwanted and about 22% of these results in induced abortion (15).

In District Hinheup, Vientiane Province of Laos, available statistics indicate that there are several dimensions in the continuum of care that may contribute to maternal mortality.

Use of biomedical reproductive health services, the availability of skilled birth attendants, high fertility and low contraception use, low use of antenatal and postnatal care services all suggest interruptions in this continuum of care (Figure 2). One of the factors contributing to maternal mortality is access to and use of skilled birth attendants during labor, which along with essential obstetric care is the key strategy for reducing maternal and newborn mortality and morbidity globally (16). In District Hinheup, only 6% of the births take place in a health facility, which is far low than the 37% of women from the province who deliver at a health facility (7).

Estimates indicate that globally 90% of the abortion-related and 20% of obstetric-related maternal morbidity and mortality could have been avoided in the year 2000 by contraception use (17). Contraception does not depend on skilled providers and is considered the most cost-effective Safe-Motherhood initiative. However, in District Hinheup, only 13% of the women use contraceptives (7). The fertility rate for the district is not available, but the province has a fertility rate of 4.5% (7) and the unmet need of family planning in Laos is 27.3% (18)⁻

The uses of postnatal services in the district are low as well, with only 2% of the women having postnatal care and 6% receiving Iron and Vitamin A after giving birth. In the Vientiane Province overall, 29% of women had a postnatal visit within 6 weeks after delivery, and 37% received Vitamin A. Nevertheless, routine childhood immunization in the district is high, with 55% of the women immunizing their children against measles, 71% of children received immunizations for DTP & Hepatitis B, rates that exceed the provincial coverage of 68% (7,11)⁻.

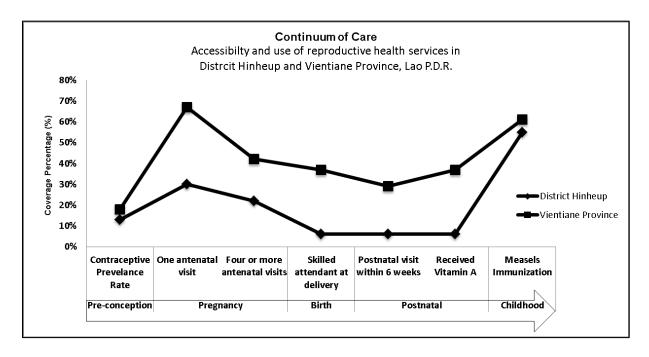


Figure 2: Continuum of Care (Data source: Provincial Health Office, Vientiane)

Maternal mortality has received attention from institutions engaged in promoting global health. In the year 2000, the United Nations set out eight health and development goals to be achieved by the year 2015, and called them the Millennium Development Goals (MDGs) (19). The reduction in the maternal mortality by 75 percent from 1990 and 2015 is one of these goals. The indicators for this goal are maternal mortality ratio and proportion of births attended by skilled health personnel. MDG 5 may strongly affect newborn mortality (MDG 4) and also aims to combat HIV/AIDS and malaria (MDG 6), an indirect cause of maternal death.

Nevertheless, according to the United Nations Development Program, Laos is 'unlikely' (20) to achieve the target of reducing maternal deaths to 185 deaths per 100,000 live births by the year 2015. The low utilization of biomedical reproductive health services in Vientiane Province, and specifically in District Hinheup must be understood in greater detail, particularly from the perspectives of the communities themselves. It has been established that in the low and middle income countries the availability of cost-effective interventions has not increased the utilization of reproductive health services in poorer groups of populations (21). Improving the quality of services on the supply side is not sufficient, as social, cultural and economic barriers on the demand side prevent people from obtaining biomedical care These barriers affect the poor and vulnerable disproportionately, and a greater understanding of these barriers is required (22).

This study employs the three delay model (23) as a framework with which to gain insight into the social, cultural, and economic factors (24) as perceived by the communities themselves that contribute to their low use of reproductive health services in District Hinheup. These factors translate into increased morbidity and mortality of mothers and newborns. This model has been previously used successfully to analyze maternal morbidity and mortality (25,26), newborn mortality (27), and emergency obstetric care services (28).

The Government of Laos, in seeking to achieve its national objective of reducing maternal, neonatal and child mortality, has committed to working with Laotian communities and has adapted the WHOs Working with Individuals, Families and Communities (IFC) (29) in order to do so. Participatory Community Assessment (PCA) is a tool recommended by the WHO for Working with Individuals, Families and Communities. This strategy uses a participatory approach and incorporates perspectives of local communities in investigating the causes and possible solutions to the problems of mother and child health.

In light of this priority, I conducted a Participatory Community Assessment study designed to identify the problems from the perspectives of these communities, to prioritize them, and to identify some potential solutions. This research was implemented by Vientiane Provincial Health Office, UNFPA, and the French Red Cross in District Hinheup, Vientiane Province, Laos.

RESEARCH QUESTION

What are the social, cultural and economic factors identified by community members and health authorities that contribute to the delays in women seeking reproductive health care in the District Hinheup of rural Laos?

OBJECTIVES

1. To investigate how people living in the district Hinheup of the Vientiane Province define the central problems associated with reproductive health services in their communities and their knowledge of and access to formal medical infrastructures and resources in their communities.

2. To facilitate and involve the community members (women, men, community leaders and health service providers) of District Hinheup of Vientiane province in identifying the problems associated with reproductive health and prioritize them.

3. To involve the representatives of the communities, the district administration (health, education, information and cultural departments), Lao Red Cross and the Lao Women Union in identifying priority problems among those identified by the community members.

4. To analyze how successfully participatory community assessment involves individuals and communities in problem identification, intervention design and implementation.

2. METHODOLOGY

This study was conducted during the months of April and May 2011 in District Hinheup. The district was selected because it met the following criteria: all villages had road access; all contained multi-ethnic population; and Basic Emergency Obstetric Care services in a public sector health facility were available. The focus group discussions were held in four villages located in the areas of Phabong and Naxam in the north and south of district Hinheup. The Vientiane Provincial Health Office, Vientiane Province, selected the areas and villages keeping in view the logistics. The research team consisted of 19 people and was led by the National Program Officer of UNFPA and Head of IEC Material Production Division, Center of Information, Education and Health (CIEH) both of who had previous experience in training and conducting focus group discussions; and two representatives from the Mother and Child Health Center (MCHC), Vientiane. The personnel from the Vientiane provincial and included six persons from the provincial and seven from the district health, education, and information and culture departments and from the Lao Women Union and the Lao Red Cross.

These personnel had no previous experience in the focus group discussions or in participatory research. The research team also included graduate research intern from the French School of Public Health / French Red Cross and two translators from the French Red Cross, Vientiane.

The research team was introduced to the concepts of mother and child health and given an overview of the provincial and district reproductive health indicators. The research team was trained on site for four days on facilitation skills, micro-skills, group management, and note taking and concluded with mock focus group discussions.

The research included the following steps:

Five focus group discussions and identification of priority problems.

Summarization of the identified problems.

Institutional roundtable meeting and identification of actions.

Roundtable discussion with the provincial and district research team to identify interventions.

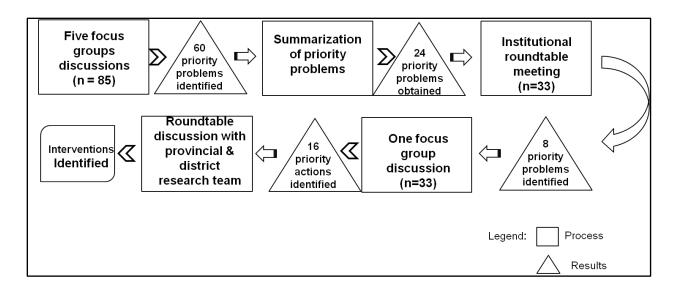


Figure 3: Schematic of the methodology

2.1 Focus group discussions with the communities and identification of problems

Focus group discussions were held with the following participants:

- (1) Women of reproductive age (18-37 years, n = 18).
- (2) Grandmothers and mothers of women of reproductive age (45-60 years, n = 24).
- (3) Male partners of women of reproductive age (20-39 years, n = 18).
- (4) Community leaders (n = 13).
- (5) Health service providers (n = 12).

Detailed participant profiles can be seen at Annex 1.

Laos has a strong administrative structure with the villages under the control of the state appointed Village Head. The Vientiane Provincial Health Office in an effort to reduce the selection bias for group 1 (women) obtained a list of eligible women from the health centers and selected the participants through a random draw of lots. The random selection could not be repeated for groups 2 (grandmothers) and 3 (men) since data to determine eligibility was not available. The recruitment for these groups was done by the village head himself who was provided with the eligibility profiles for the participants (Annex 1). The community participants represented Hmong, Khmu and Laolum ethnicities. The participants for group 4 (community leaders) included 5 Lao Women Union members, 5 village heads and 3 village health volunteers. The group 5 (health service providers) had representatives from the health centers and the district hospital. The discussions for the community members were held in the villages

of Phabong, Nakang, Mouk, Namthom while as for the health service providers they were held in the district education office.

The village heads also assisted us in arranging the locations where we conducted the discussions groups. The discussions took place in a school, temple or other site appropriate for a day-long discussion, and designated by the village head or the district research team. The group 2 (grandmothers) had more than the required number of participants, but since they had travelled to site of discussion and were vocal that their opinions should also be heard, and because ethically we did not feel comfortable denying their participation, we included all of them in the discussions. The participants were provided with refreshments, lunch and a gift (two packets of salt) at the end of the discussions.

The roundtable discussions began with an introduction about the purpose of the study and they were briefed that during the course of the discussions they would be required to identify the problems that affect mother and child health in their community and at the end of the discussions identify the most important problems among those. The participants were also asked to identify the existing opportunities within their communities to solve the problems. The participants were then divided into three sub-groups: group one discussed care of the pregnant women in the home, group two discussed awareness in the community of the rights of pregnant women and linkages between the health services and the community, and group three discussed quality of care at the health facility.

The focus group discussions guide:

Group one (Annex 7) explored how women care for themselves during pregnancy, the beliefs and traditions in the community on pregnancy care and the preparations made for birth, care of the newborn, knowledge of the danger signs, and family support to the women. This discussion corresponded to level one of care of the mother and child health or care in the home.

Group two (Annex 8) explored awareness in the community about rights of women, perceptions and support of mother and child health in the community. Availability of transport and access to the health facilities. This discussion corresponded to the levels two and three of the mother and child health, awareness in the community and linkages between the community and health services. Group three (Annex 9) explored the quality and the cost of care at the health facilities, availability of mobile health services, referral system, and attitude of the health care providers. This corresponded to level four of the mother and child health or quality of services.

The sub-groups were assisted by one facilitator, one co-facilitator and one note-taker. The discussions lasted three-quarters of a day.

Mobilizing active discussions among all participants proved to be a considerable change both among participants and facilitators. Initially, discussions were not particularly lively, and some participants preferred to observe rather than to participate. Very few participants actively offered their opinions, and they tended to be those with more contact with the health services.

2.2 Identifying and prioritizing problems

After the completion of the discussions, the sub-groups got together for a combined group voting and were asked to identify the three most important problems among the problems they had identified during the discussions; each participant was given a paper with the list of the problems identified and requested to circle their three top choices. For group 2 (grandmothers) participants voted by a show of hands, since most were unable to read.

After the identification of priority problems, the participants were asked to think of possible interventions that could resolve these problems. The participants were also asked to nominate two people from among them to attend a later institutional roundtable meeting. The criterion was that one of the nominees should be able to read. Two focus group discussions were held each day in two villages. The next day the research team analyzed the findings and compiled a table with problems, prioritized problems, and the opportunities and actions identified during the discussions.

2.3 Summarization of the identified problems

After the completion of the five focus group discussions, the research team met for two days at the district education office to analyze and combine the priority problems from each of the focus group discussions and group together similar problems for each level of care.

2.4 Institutional roundtable meeting and focus group discussion to identify actions

The institutional roundtable meeting and focus group discussions were held for two days in the district headquarters. The participants included nominees of the five focus group discussions,

representatives from the district health, education, information and culture departments and the governor's office. They were introduced to the four levels of care for mother and child health and received a summary of the priority problems identified by the community members, leaders and health care providers. They were then asked to vote for two priority problems in each level of care. After the completion of the voting and identification of the two priority problems the participants were divided into four groups for each level of care. They were then asked to identify actions to solve the two priority problems.

After the completion of the discussions, the groups were asked to score for the actions based on feasibility scoring to identify two priority actions. Feasibility scoring was based on a scale of 1 to 3 for four variables: 1) Feasibility of implementing the intervention, 2) Avoiding negative impact, 3) Benefiting the poorest and 4) Replicability (potential for scaling up).

The institutional roundtable meeting participants also had to identify interventions for the actions, however they were unable to identify proper actions and therefore interventions were not determined during this roundtable meeting.

2.5 Roundtable discussion with the provincial and district research team to identify interventions

The research team was originally scheduled to meet for two days and set up indicators for evaluation of the interventions; however since the participants of the institutional roundtable meeting could not recommend interventions, the Vientiane Provincial Health Office with input from the district research team designed the interventions. The indicators for the evaluation were not identified during this period.

3. DATA ANALYSIS

Written notes were taken by the research team during the focus group discussions. The focus group discussions with the communities were translated to English by a Lao representative of the French Red Cross with a five year experience of focus group discussions and qualitative research. The data for the roundtable meetings was translated by another member of the French Red Cross over ten years experience in community health programmes but without experience in focus group discussions.

The permissions for this study were obtained from the Provincial Health Office, Vientiane Province, the District Health Office, and the Provincial and District Governor's offices. The participants gave verbal informed consent for participation in the focus group discussions.

4. RESULTS

The results of the five focus group discussions are produced below. These results were later analyzed using the three delay model.

4.1 Focus group discussion with women of reproductive age

The discussions were held in village Phabong, located 23 KMs from the district with majority Hmong ethnicity and minority Laolum.

The themes that emerged from the discussions were lack of awareness about mother and child health, absence of community support, traditional knowledge, access and quality of services.

The women showed a lack of interest in attending antenatal care and did not consider it important.

It is not necessary to go for antenatal care and giving birth at the hospital is not necessary, we never had a difficult birth

They pointed out that they were only aware of immunization, since that is the only community health service provided in the villages that did not require inhabitants to travel.

There is only immunization team coming in the village.

Immunization team come for a short duration and most women are working on the fields. They are back in the village in the evening and don't have the chance to bring the children for immunization.

The women during the individual sub-group discussion identified the absence of village community meetings informing the people about mother and child health care as a problem; however during the combined group voting, it was not identified as a problem.

In our village we never received any invitation for mother-child-health meeting

There were conflicting statements regarding the rights of the women to choose their partner. During the individual sub-group discussion the women said that they have to marry as per their parent's wishes, but when the groups got together for combined voting, they said that they don't have to so. If the parents do not select the couple for marriage then we will be in trouble when the husband is away as the parent-in-law's force us to work hard and cook for them otherwise they give no food to us.

Women rely on the knowledge of their mothers and grandmothers to learn about infant care and are open to advice from elders. Traditional beliefs were identified as a problem during the individual sub-group discussion but most of the participants did not consider it a problem at all during the combined group voting.

Women learn from their grandmothers to learn about feeding.

The elders tell us that when you are pregnant you should not sleep during the daytime because that will cause a difficult birth. And after delivery we should not eat the chicken with yellow feet because the elders fear that the mother and the child will not be healthy and easily fall sick.

Distance, cost and transport are the major deterrents to accessing reproductive health services.

Women would like to go to health facility for antenatal care and delivery but no money.

Most participants were not aware of the quality of services, since they had never been to a health facility, and would do so only if they have a prolonged or complicated labour. They learn about the availability and quality of services through other women who had contact with the health services.

One of the village women visited the hospital for ultra sound when she was pregnant but the health worker did not provide good services.

The women identified poverty, absence of family planning, lack of awareness, community support, and village health fund as priority problems. They identified health education, the creation of a village health fund, and support from external organizations for the village on mother and child health as possible actions to resolve the problems.

4.2 Focus group discussion with grandmothers, mothers and mothers-in-law of women of reproductive age

The discussions were held in village Nakang located 23 KMs from the district with majority Kamou ethnicity.

The themes from the discussions were cost and difficulty of access to health facilities, traditional practices, absence of community support and awareness regarding mother and child health.

Cost of accessing health facilities was recognized as a major deterrent. The women of poor families have to work immediately after giving birth as no one can compensate for their absence on the field and to work on field is essential for the family's survival. Village health funds are seen as important link between the need and the ability to access services.

We have no money to go to the hospital, I have many children but I never go to hospital.

In some families there is lack of manpower and women have to help the husband at the field and she has to work hard at the field.

In our village when the families get wealthier they have a greater opportunity to go to the hospital. In my family when there is money I am able to go to the hospital, when there is no money I cannot and the village authority does not support anything.

The women give birth at home with the support of their mother's.

Majority of the women in the village do it the same way (give birth at home) and the mother supports during delivery and use sharp bamboo to cut the cord, but the sharp bamboo has been cleaned with soap before and we prepare the cotton to tie the cord.

The traditional belief of tying a thread around the wrist, that is supposed to ease delivery, was identified as a problem during the sub-group discussion, however when it was put up for voting, none of the women voted it as a priority problem.

I have done this (tying a thread around the wrist) in the past and do it now also; it helps the women to give birth easily. Our elders have trained us to do this way, so I do with my daughter also to help her to give easily birth. The mothers and grandmothers due to increased contacts with the health system were able to explain the problems of the health system in greater detail. They complained about insufficient staff, ill-equipped health centres and non-availability of medicine at the health centres when they need it. They also explained that women who want to use contraceptives don't know the proper way to use them. The lack of quality in the public sector has created a vacuum which is filled by the private sector and the women were satisfied with the services provided at a private pharmacy or by a private practitioner.

The majority of the people don't go to health centre because when they go there the health worker is not present and they wait for the health worker but the he never comes.

I used to buy medicine from the store at home and when the medicine is finished, I would go to the health centre to buy the medicine but sometimes at the health centre they do not have the medicine available and then the health worker asks to go to his home to buy the medicine over there.

Women think that buying contraceptives from the seller is the same as the contraceptive at the hospital but they cannot read anything written anything on the contraceptive tablet.

The majority of the villager used to buy the medicine from the pharmacy in another village because it is near than the health centre and the price of the medicine is the same as that in the health centre, but the pharmacy also provides good services and more caring.

We don't visit the health centre because there is no medicine available, so we use to visit Mr. S. who is the military health worker to treat us. We feel that the service is same at the hospital. If treatment with him does not work then we will go to the hospital.

When I took my daughter to the district hospital, the doctor says that they have no treatment. I will not visit the district hospital again. Also the health worker comes to work very late and it is far. When we request for checking, they refuse and do not check us and since then I never been there again.

The belief in traditional practices is strong, and if biomedical care does not improve the condition, they will perform their traditional healing practice. The women recounted the death of an infant, who refused to feed. He was taken treated at the provincial hospital, where his condition did not improve and the parents brought him back to the village to perform the traditional healing prayer. The infant did not survive.

In our village when the children get sick we take them to the hospital and if they do not get better we do our traditional prayer. (The mother prays that if the baby was related to her in a past life, the baby will stay with her (survive) and if the baby was not related he/she will not stay with her (will die)).

The women identified access to health facilities, cost and quality of health services, and lack of village health fund as the priority problems. They recommended awareness programmes on mother and child care, skill building for the health workers, employing midwives at the health centres, and availability of drug-kit in the village.

4.3 Focus group discussion with male partners of women of reproductive age

The discussions were held in village Mouk, 26 KMs from the district with majority Kamou ethnicity and minority Laolum. The villagers in addition to subsistence rice farming, rear animals, and sell firewood.

The themes that emerged from the discussions were difficult access to health facilities and cost, lack of biomedical knowledge on reproductive health, and quality of services.

The men narrated that women deliver at home as they follow the practice of their mothers and grandmothers and no one advises them against doing so. The women also do not consider it important to go to a health facility for antenatal care. The men believe that there is no need for antenatal care if the woman is not sick.

I think the women practice the long term tradition as their parents or grandparents who tell them to do so almost all the women in the village follow the same thing.

When the wife has good health during pregnancy so we don't take them to the hospital (for antenatal care) because they aren't sick.

Men complained that women are not aware of sexually transmitted diseases or of the danger signs of pregnancy. The lack of knowledge on danger signs was identified by group 1 (women) as well, but only 2 women voted for it, while as in this group 12 men voted for it and it was identified as a priority problem. They also recounted an infant death in the village, contending that the reason for the child's death was that the mother did not attend antenatal care or go to a health facility when the child was sick.

Costs and access to the health facility also remain major barriers to seeking health services. The village has established small grant money (~ US \$ 75) which is loaned at a high interest rate of 15%.

In our village there is no fund, there is only small grant money from the village with an interest of 15% per month. But people when they get sick they used to borrow it, even if the interest is quite high, but they care of their health.

Many women in our village give birth at home with the support of the mother because they have no money to go to hospital.

Because the hospital and the health centre are far from the village, and during the rainy season the road is difficult, and the transportation costs a lot of money and another addition fee would come and local transport is only once a day. In case we need to access to the hospital quickly we have to hire transport and costs between 300,000 and 400,000 Lao Kip (US \$ 26-35) during the night time.

The quality of health services, and long waiting times at the facilities figured in the discussions. The men complained that the health workers at the health centre do not provide any advice for care during pregnancy. This situation is not uncommon in local health care systems. A study in Papua New Guinea, for instance, found that family planning advice was rarely given at the health center (10).

Whenever we go to the hospital for health services they care less because we have no money and we didn't pay under the table so the service is not really good.

Sometimes we visit health centre but we didn't meet health worker over there, and we have to go back, the majority meet new health worker with no experience have no skills to diagnose the issue and have equipment which is not enough. Some of equipment is old and rusted.

Some women who go to hospital don't receive advice about care during pregnancy.

In conclusion, access, quality of services, lack of awareness about danger signs and sexually transmitted diseases and village health fund were identified as priority problems. Community support, drug-kit availability in the village, improved health services were identified as possible solutions for these problems.

4.4 Focus group discussion with community leaders

The discussions were held with community leaders from the four villages neighbouring village Namthom where the discussions were held, located 21 KMs from the district.

The themes that emerged were cost and access, breastfeeding, traditional practices, quality of services and awareness of the people. People who can't afford to pay for the services avoid taking a loan, because they are required to reimburse the lender with the following year's crop, which the lender will value at only one-third of the harvest's market price. This lending practice pushes families into a debt trap. Therefore, many families simply hope that mothers and infants will withstand any challenges to their health to avoid long-term debt.

The women of the poor family don't attend antenatal visit or go to a hospital when they give birth or are sick because they have no money. (Village Health Volunteer)

The women are not able to exclusively breastfeed as they have to work on the farm, so the infant is usually left in the grandmother's care.

The women in the village like to stop breast feeding when the child is one year old and give them rice because they have to work outside of home. (Lao Women Union)

Traditional practices figured as problems in the discussions, but during the combined group voting they were not identified as priority problems. The lack of support from a husband to his wife, which they referred to as a traditional practice, was seen as a priority problem.

The elder people ask the women to taboo food after birth because they are fearful of wrong food. (Village Head)

Some men still let the wife to work hard because of their long term practice of allowing women do what they have always been and the women work right up to the time of giving birth. Some women don't have any rest before delivery and give birth on the farm. (Village Head and Village Health Volunteer) The health facilities are not overloaded but there still are long waiting times for patients. Finally, health workers at these official facilities reportedly sell medicine in private, for their own personal gain, during work hours. All of these problems only add to the communities' distrust of the health system, the health care centres, and their personnel.

Many women didn't have their ultrasonography (Village Health Volunteer)

Many of villagers saw the health centre staff travelling to sell his medicine during the working hours. (Village Head)

The community leaders identified access, cost, quality of services, and unfriendly attitude of health workers as priority problems.

Improved quality of services, establishing of village health fund, educating villagers and men were identified as actions to solve these problems.

4.5 Focus group discussion with health service providers

The discussions with the health service providers were held at the district education office and the participants were from the health centres and the district hospital.

Two themes emerged from the discussions the reasons the community does not access health services and their professional problems. The health service providers mostly identified such reasons that in their opinion prevent the population for accessing health care services and included costs and transport, early marriages, and no community support.

Many pregnant women work hard because they do not have enough money.

Women do not go to the hospital because the hospital is far from the village, poor roads, transportation is expensive and elders say it is not necessary for antenatal consultation.

Women have to work hard as it is considered to make labour easy, women's diet depends on her economic condition, and there are certain food taboos – and are unable to breast feed as they do not eat enough to produce enough milk.

Women are married very young, from 15 to 16 years, and the parents don't say anything, they don't go to school and work in the farm.

Local authorities do not support for mothers and children, only the family and relatives support.

The health service providers discussed about lack of job satisfaction, multiple responsibilities, and insufficient staff to deal with the patient and work load at the health centres and health worker attitude as the main problems at the service delivery end.

Health workers have to work late; there is not sufficient equipment and no delivery room.

No doctors at the health centre, only health workers and no midwife.

If the villager goes to the health centre during non-working hours, the health worker does not receive them well.

Cost of transport and health care, difficult access to biomedical care, the long term practice of allowing pregnant woman to work hard, exclusive breast feeding, lack of awareness and community support, job satisfaction and inexperienced staff were identified as priority problems.

The health service providers identified establishing a mobile health team, educating the villagers, strengthening of the village health committee, and improving road access and capacity building of health centres as actions to solve the problems.

The tables for summaries of the five focus group discussions according are attached at Annex 2, Annex 3, Annex 4, and Annex 5 for levels 1, 2, 3 and 4 of reproductive health care respectively. The problems prioritized during the institutional roundtable meeting and the priority actions identified in the focus group discussion are at Annex 6.

5. ANALYSIS

"Distance, cost and quality cannot alone explain the decision making process in the developing countries for mother and child health," according to Thaddeus and Maine. They have proposed a three delay model as a framework within which to investigate the reasons that contribute to maternal mortality. These delays are: 1) delay the decision to seek care; 2) delay arrival at a health facility; and 3) delay the provision of adequate care (23).

5.1 First Delay: Decision to seek care

Biomedical awareness

This is the most complex delay and involves multiple socio-cultural factors (25) as expressed by the participants. It has been established that a women's education plays an important role in deciding to seek professional health service (25). In our focus group discussions, women, men and community leaders pointed to their lack of biomedical knowledge about mother and child health. In a study in Laos, 83.8% of the women who did not receive antenatal care said it was 'not necessary' (30). The only awareness women and men in the selected villages of the Hinheup district have about biomedical care is immunization, suggesting that they are not averse to biomedical care, and the opportunities to provide health services at the community level might improve the utilization of reproductive health services. All the focus groups reported considerable awareness about immunization, since the Expanded Programme on Immunization (EPI) is efficiently carried out in all the villages on a regular basis. But for most people, this activity is the sole engagement that they have with the formal health system.

In the absence of formal biomedical knowledge, traditional beliefs and long term community practices play a significant role in the women's health. Women do not consider pregnancy as a condition requiring special attention. There were conflicting statements during the discussion with the women about birth-preparedness; some women claimed they prepared cotton, clothes and saved money, while other women contended that they made no special preparations for antenatal care, delivery or family planning. These claims are open to interpretation, though, since we did not have the opportunity to observe over the longer term whether women actually engaged in special preparations for the birth of their children.

Women indicated that they were not aware of the possibilities of biomedical care before, during and after pregnancy. Women and men did not appear to recognize what biomedical specialists would identify as the danger signs of pregnancy. The research team did not probe further about what they consider to be danger signs, which could have provided further insight into what they do consider danger signs. Knowledge of biomedical danger signs of pregnancy can reduce maternal mortality (31).

Births take place in the home with or without family support. Since most women claim that they easily give birth, many maintained that going to the formal health facility is a waste of time, which has been found in a study in Laos where 93.4% of the women who did not received antenatal care said they had no time (30). Women and men contended that women do not have the authority to make decisions in the family, and therefore needed the permission of their husbands to travel to a health facility.

In case of delay in giving birth, women said that they would consult the village health volunteer, who has limited knowledge about pregnancy and delivery. When a pregnancy does not advance proceed or there are complications, a family may consider bringing the mother in labour to the district hospital Hinheup. Illness severity is one of the major deciding factors for seeking care (25).

Community support

Villages in Laos have regular political and community meetings and are a form of informing the population, and a health and hygiene programme is carried out in this method. The community member pointed out to the absence of such meetings on mother and child health care and the lack of support by external organizations towards this goal leading to a dearth of information concerning appropriate biomedical care of women and children before, during and after pregnancy, or information on when, how and where to seek care.

Gender relations

Gender relations are important for decision making about the kinds of care that women require (32) and the utilization of reproductive health services is closely related to a woman's status within a household (33). Women and men contended that women avoid visiting formal health centers because these centers are predominantly staffed by men. Women are, however, willing to seek the care of a traditional healer, and reported that they will borrow money to do so (costing US \$ 25- 65) to compensate the healer for the services provided.

Participants reported that women are encouraged to work hard during and after their pregnancies, because it appears that women should not be constrained from doing so during this period. Indeed, some report that hard work during pregnancy ensures an easy labor. Participants also reported that women eat and sleep less during this time, so that babies are not too big and thus too difficult to deliver. They may also undertake other practices to render their labor easier, such as tying a threat around their wrists. The amount of work a woman does during pregnancy is a critical indicator of women's status in the family and associated with prenatal and obstetric care utilization (34).

After pregnancy, participants reported that women are only allowed to consume rice and water for the first few days. There exist food taboos (such as prohibitions on eating eel or catfish) to prevent cough and dizziness in the mother. Post-partum food restrictions may have important health consequences in reducing the nutritional content of breast milk, and in Laos, 5% (35) of the children are never breastfed. The Lao Reproductive Health Survey of 2005 found that 22.8% of the women who did not breastfeed their child did so because they are working, and about 90% of the infants in Laos received food supplementation (water, mushy food, tinned/fresh milk) (36).

The problems that contribute to this delay are 1) biomedical awareness, 2) community support, and 3) gender relations.

5.2 Second Delay: Delayed arrival at a health facility

The decision to seek biomedical services alone cannot ensure that a labouring woman will arrive at a formal health facility. The cost of travel, distance to the closes facility, and available transport are the three main deterrents that prevent women from acquiring care on a regular basis at a health facility.

Cost

Cost is a major factor that prevents women seeking health care before, during, and after birth. Subsistence farming is the main source of income in rural Laos. With an average monthly income of US \$ 66 in this district, the additional expense of hiring transport can be prohibitive; a single trip can cost between US \$ 37-50. Other costs that discourage women from using health services are the expenses of the health care itself, of accommodations, food and the loss of work days. The average cost of an out-patient prescription is US \$ 1.86, and an inpatient treatment costs between US \$ 12-37. In the event of a difficult labour, a medical intervention

can cost as much as US \$ 50 (37). Studies have shown that women's access to revenue puts them in a better position to seek biomedical care (38).

Women and their families who cannot afford transportation and biomedical care must borrow the money to do so. If a village does not have a revolving or emergency fund, these people must borrow from their relatives or neighbours. A poor family will avoid borrowing money, because such loans can create a long-term debt that is exceedingly difficult to repay. The family will have to reimburse the lender with their crop in the following if they cannot repay them in cash; the lender reportedly will value the rice harvest at one-third the cost in the market. This would lead the family without sufficient rice to eat – and they would have to again borrow money to buy rice, with mounting debts.

Distance and Transport

The average distance to the district hospital that provides Basic Emergency Obstetric Care services is 20 KMs. The trip can take up to 2 hours during the rainy season by a truck or a hand tractor (farming tractors converted to passenger vehicles). If the patient is referred to the Vientiane Provincial Hospital for Comprehensive Emergency Obstetric Care services, the patient will be obliged to travel an additional 25 KMs. In the absence of local transport, women do not travel to the nearest health centre because going on foot or bicycle is too long and difficult. Transport costs impede the decision to go to a health facility, and can cost between US \$ 26-35 for a single trip.

The problems that contribute to this delay are 1) cost, and 2) distance and transport.

5.3 Third Delay: Delay in provision of adequate care

The third delay is at the facility itself. Once a woman arrives at the facility, she may not receive the care she needs or of the quality it should be.

Quality of service

According to participants of group 2 (grandmothers) and group 3 (men) the health center workers are not regularly present at the health centers and often not available when needed by the community. Participants further maintained that the health center staff was also not sufficiently knowledgeable about the health of pregnant women – the health centers even the ones which are equipped with a separate delivery room do not perform any deliveries. The health centers are staffed by health workers and there are no medical doctors or midwives.

The absence of qualified medical staff restricts the ability of the health worker to deal with maternal health complications.

They also indicated that health centers were not fully equipped (this was not fully elaborated as to what equipment they meant) or stocked with medicine. Health centers usually stock basic drugs and contraceptives. Improved availability of medicine at health centers has been found to be associated with increased service utilization (39). Participants in the study were not satisfied with the quality of care at any level of the health services system, from the local health center to the provincial hospital. A study in neighboring Vietnam found that reproductive health services at community health centers fall short of patients expectations (40).

The district hospital Hinheup had 5,074 consultations in 2010, i.e. about 13 visits per day. For a staff of 19 (including 4 doctors and 6 nurses), the work load does not appear to be huge, but still participants complained about long waiting time and unfriendly attitude. In a study in Papua New Guinea 71% of the interactions at a health facility took less than 2 minutes and family planning advice was rarely given (41). Moreover, they said that the district hospital staff was unable to diagnose their illnesses. Some pparticipants expressed similar complaints about the provincial hospital. The lack of comprehensive care adds to the distrust of the quality of the health facilities. This creates a vacuum in health care offerings, which frequently tends to be filled by pharmacies and "traditional" healing practitioners. Many participants indicated both pharmacists and traditional healers were more helpful and effective, similar practices have been found in Bangladesh, where mistrust of trained medical staff translates into heavy use of local pharmacies, traditional healers, traditional birth attendants, nurses and drug sellers and traditional practitioners (42). The referral system between the health center, the district and the provincial hospital which provides comprehensive emergency obstetric care is non-existent. The health worker may refer the patient to the district hospital, which in turn may refer them to the provincial hospital.

Patient-provider relationship

In addition to criticisms about their knowledge of specific problems of pregnant women, new mothers, and their children, participants also found that health care centre personnel were unable to contend with the specific patient population that would frequent the center. Many women expressed discomfort about going to the center because it was staffed exclusively by men. A study in China found that female patients were not comfortable with seeking reproductive health services from male professionals (43).

Some participants reported that staff members in some cases could not communicate effectively with patients because they did not speak local languages.

The problems that contribute to this delay are 1) quality of services and 2) patient-provider relationship.

6. DISCUSSION

Community participation in health is based on the Declaration of Alma-Ata (44) which asserted that "not only is health a fundamental human right, but that people, both individually and collectively, have the right and the duty to participate in their health care" (45). "Participatory research affirms that people's knowledge is valuable and that they are capable of understanding and analyzing their problems and designing their own interventions" (46).

Evidence has shown that community participatory activities have the potential of reducing maternal mortality and morbidity and increase utilization of reproductive health services. A study in Nepal (47) found a reduction in maternal mortality using participatory interventions; another study in India found out that participatory women's meetings lead to a reduction in moderate maternal depression and neonatal mortality rate (48). There is a debate on whether Community mobilization (49) can be a feature of large scale primary health programmes, however a review of 18 trails found that scaling up of community health interventions have the potential to reduce maternal mortality (50).

The purpose of this study was to investigate the central problems associated with reproductive health services through the perspectives of the communities and to facilitate their involvement in identifying their priority problems.

Some biases relating to the methodology and to participation may have shaped the results of this approach and could have undermined the participatory nature of this study.

The recruitment of men and grandmothers by the village head could have a potential selection bias, because he may have wanted to select people who would reflect most favorably on the village and raise issues that may have to do more with the village development than with mother and child health. However, since the participants expressed highly varied opinions, they do not appear to have been selected for particular characteristics influenced by the village head.

This study is based on English translations of qualitative data collected in Lao language. The quality of translation could have potentially affected the results and analysis. No back translations were done due to time restrictions.

The participatory study was conducted for the first time in District Hinheup, neither the district nor provincial authorities had previous experience with participatory methodologies. Moreover, facilitators were unaccustomed to this kind of participatory qualitative research, and thus their success in eliciting responses from all participants varied. Some of them actively tried to involve all the participants equally, and they thus succeeded in leading semi-structured discussions. Others were less enthusiastic about conducting this more egalitarian approach to group discussions. In these cases, the discussion guide resembled a questionnaire, rather than a semi-structured discussion.

The discussions were conducted by district and provincial authority figures. Their conduct of the discussions may have rendered participants less comfortable about expressing opinions that might be construed as critical of or hostile to the government. It is clear that the presence of the village head during the combined group discussion did influence the participants. The women during the sub-group discussions said that they did not have the right to choose their partner, but in the combined group voting, where the village head was present, the same women said otherwise.

The research teams, being a part of the government, may have been influenced by their own priorities, which could have shaped what they would designate as significant or unimportant, which would potentially favor the official positions. The women's and grandmother's group identified family planning as a priority problem but the research team omitted these problems from the research and did not put them forth for voting in the institutional roundtable meeting. The probable reason for this could be remnants of the government's pro-natalist (51) stand in the past. The research team also omitted the problem identified by men that women are not aware of sexually transmitted diseases.

The strength of this participatory research lay in that it brought together for the first time in District Hinheup, the communities and the district and provincial authorities. It is argued that if poor communities can gain a modicum of power they will be better-positioned to address the social determinants of health and break the "cycle of poverty" (46). The research team became aware that it is important to understand the perspectives of communities (52) and since the research team had members from education, information and cultural departments, and Lao

Women Union, they were more open to accept community perspectives that diverged from the biomedical understanding of reproductive health, which a health professional would not be open to (53).

The Participatory Assessment goes through a cycle of identifying problems, designing implementing, and evaluating interventions. Seven focus group discussions and two roundtable meetings with a selected group of participants from the district, which is not representative of the entire district, is not participatory in that it involved participants from 4 villages of a district with 43 villages. And even with the participants were involved only in identifying priority problems. The interventions were recommended by the provincial health authority, moving far from the community approach based on community 'wants' rather than policy maker's 'needs' (54). A brief look at the interventions suggests the didactic and non-participatory nature of the interventions.

The interventions can be divided into individual, community and system level.

Individual level

The focus was on educating women, men and elders through one-way communication system of daily loudspeaker broadcasts on mother and child health in the villages (each village has a system of loud-speakers for disseminating information), weekly radio programmes, and monthly meetings in the villages. The participatory approach in Nepal (55) that reduced maternal mortality involved nine monthly meetings.

The interventions also included distributing educational books to women, though the literacy rate for females in the district is 6.54% (7), showing a disregard for the ground situation. Difficulty of accessing health centers was the most common problem identified by all the focus group discussions, yet one of the interventions identified was news dissemination through display panels at the health centers.

Community Level

At the community level the interventions recommended were establishing village health funds. Other interventions were meetings of the village health committees to exchange experiences, meetings with the health centers, and meeting in the village to arrange transport for women needing immediate health care.

System level

The major intervention identified was that the immunization teams that visit each village every three months should also provide mother and child health care, increasing the burden on the personnel and potentially reducing their focus on immunization. The other interventions identified were training and capacity building of professionals at all the levels of health care, greater collaboration between health service providers and village health committees through meetings every three months, and improvement of the health facilities. The Immunization is implemented only in pilot areas with external funding and adding another dimension to it may not be logistically feasible.

The interventions that were identified were a scaling up of existing opportunities that are semifunctional, or dysfunctional. Apparently nobody from provincial or district health office was aware of the new mother and child health package of services formulated by the Ministry of Health, Laos. This illustrates the fact that everything is top down, not only from communities' perspective but also within the health system itself. From central to peripheral structure, decentralization is a major issue when it comes to innovation and communication of reform.

Participatory approach requires more time, dedication and energy to design, along with the communities, interventions and not merely look on residents, families, and caregivers as 'non-experts' and unqualified to contribute anything meaningful (56) other than defining what their problems are. The communities have to be involved in designing of interventions, and implementation and evaluation processes as well to be truly participatory.

7. CONCLUSION

Women need regular biomedical care from pre-pregnancy through the first years after the birth of their children, and from their homes to the hospital. The literature on maternal-child mortality demonstrates that gaps in the provision of this care lead to adverse maternal outcomes (8). To understand women's low utilization of reproductive health services in District Hinheup, Vientiane Province, this study conducted focus group discussions and roundtable meetings to assist the communities and district authorities in identifying barriers to seeking biomedical care. Through this process, they identified the priority reproductive health problems facing their communities. These priorities included: lack of biomedical awareness of reproductive healthcare, difficulty in accessing the health facility due to long distance and high costs, no village health fund to support medical emergencies, quality of services and, inexperienced health personnel at the health facilities.

In the Hinheup District, health authorities are not well connected politically, economically, or socially to the communities and may not fully understand the community priorities. Therefore translating the problems that communities identified into the priority problems selected at the end of the research process posed considerable challenges. During the course of this study, some problems that these communities identified were simply bypassed when district and provincial authorities summarized the most significant problems and sought to identify interventions to them.

Making certain that the communities are actively involved throughout the process of identifying problems and developing meaningful solutions is essential for a genuinely participatory process. Broadly shared awareness of reproductive health and of biomedical care is a foundation for women seeking professional healthcare before, during and after pregnancy and birth. Only when communities share this awareness, and only when the significant transportation and health infrastructural problems are resolved, will women seek care before, during, and after their pregnancies and births.

In this district and perhaps in the Lao P.D.R. making the participatory approach a genuinely participatory process has a long way to go. Communities will not likely participate in interventions that they did not help to design and implement.

BIBLIOGRAPHY

1. UNFPA - Safe Motherhood [Internet]. [cited 2011 Jun 4];Available from: http://www.unfpa.org/public/home/mothers

2. WHO | Maternal mortality [Internet]. [cited 2011 Jun 2];Available from: http://www.who.int/mediacentre/factsheets/fs348/en/index.html

3. Bhutta ZA, Lassi ZS, Blanc A, Donnay F. Linkages among reproductive health, maternal health, and perinatal outcomes. Semin. Perinatol. 2010 Dec;34(6):434-445.

4. Tinker A, ten Hoope-Bender P, Azfar S, Bustreo F, Bell R. A continuum of care to save newborn lives. The Lancet. 2005 Mar 5;365(9462):822-825.

 WHO | Millennium Development Goals: progress towards the health-related Millennium Development Goals [Internet]. [cited 2011 Jun 2];Available from: http://www.who.int/mediacentre/factsheets/fs290/en/

6. Acuin CS, Khor GL, Liabsuetrakul T, Achadi EL, Htay TT, Firestone R, et al. Maternal, neonatal, and child health in southeast Asia: towards greater regional collaboration. The Lancet. 2011 Feb 5;377(9764):516-525.

7. Provincial Health Office, Vientiane Provine. Reproductive Health Statistics. Ministry of Health, Lao P.D.R. 2010.

8. Kerber KJ, de Graft-Johnson JE, Bhutta ZA, Okong P, Starrs A, Lawn JE. Continuum of care for maternal, newborn, and child health: from slogan to service delivery. The Lancet. 2007 Oct 13;370(9595):1358-1369.

9. Lawn JE, Tinker A, Munjanja SP, Cousens S. Where is maternal and child health now? The Lancet. 2006 Oct 28;368(9546):1474-1477.

10. The Maternal-Newborn-Child Health Continuum of Care: A Collective Effort to Save
Lives - Population Reference Bureau [Internet]. [cited 2011 May 24];Available from:
http://www.prb.org/Publications/PolicyBriefs/TheMaternalNewbornChildHealthContinuumofCare.
aspx

11. Project LAO/017. Lao-Luxembourg Health Sector Support Programme. Baseline assessment 2010: preliminary results per province. 2011;

30

12. Kerber KJ, de Graft-Johnson JE, Bhutta ZA, Okong P, Starrs A, Lawn JE. Continuum of care for maternal, newborn, and child health: from slogan to service delivery. The Lancet. 2007 Oct 13;370(9595):1358-1369.

 Ochako R, Fotso J-C, Ikamari L, Khasakhala A. Utilization of maternal health services among young women in Kenya: Insights from the Kenya Demographic and Health Survey, 2003. BMC Pregnancy Childbirth. 11:1-1.

14. Turan JM, Say L. Community-based antenatal education in •Istanbul, Turkey: effects on health behaviours. Health Policy and Planning. 2003 Dec 1;18(4):391 -398.

15. Campbell OM, Graham WJ. Strategies for reducing maternal mortality: getting on with what works. The Lancet. 2006 Oct 7;368(9543):1284-1299.

16. Grady K, Ameh C, Adegoke A, Kongnyuy E, Dornan J, Falconer T, et al. Improving essential obstetric and newborn care in resource-poor countries. J Obstet Gynaecol. 2011 Jan;31(1):18-23.

17. Dickens BM, Cook RJ. Reproductive health and public health ethics. International Journal of Gynecology & Obstetrics. 2007 Oct;99(1):75-79.

18. WHO | Lao People's Democratic Republic [Internet]. [cited 2011 Jun 3];Available from: http://www.who.int/countries/lao/en/

19. Millennium Development Goals [Internet]. [cited 2011 May 24];Available from: http://www.un.int/lao/mdglaosprogressreport.htm

20. MDGs - UNDP Lao PDR [Internet]. [cited 2011 May 24];Available from: http://www.undplao.org/mdgs/

21. McNamee P, Ternent L, Hussein J. Barriers in accessing maternal healthcare: evidence from low-and middle-income countries. Expert Rev Pharmacoecon Outcomes Res. 2009 Feb;9(1):41-48.

22. Ensor T, Cooper S. Overcoming barriers to health service access: influencing the demand side. Health Policy and Planning. 2004 Mar 1;19(2):69 -79.

23. Thaddeus S, Maine D. Too far to walk: maternal mortality in context. Soc Sci Med. 1994 Apr;38(8):1091-1110. 24. Barkat A, Rahman M, Bose ML, Com M, Akhter S. Modelling the first two delays of the "three-delays model" for emergency obstetric care in Bangladesh: a choice model approach. J Health Popul Dev Ctries. 1997;1(1):57-67.

25. Lori JR, Starke AE. A critical analysis of maternal morbidity and mortality in Liberia, West Africa. Midwifery [Internet]. [cited 2011 Jun 3];In Press, Corrected Proof. Available from: http://www.sciencedirect.com/science/article/pii/S0266613810001920

26. Barnes-Josiah D, Myntti C, Augustin A. The "three delays" as a framework for examining maternal mortality in Haiti. Soc Sci Med. 1998 Apr;46(8):981-993.

27. Waiswa P, Kallander K, Peterson S, Tomson G, Pariyo GW. Using the three delays model to understand why newborn babies die in eastern Uganda. Trop. Med. Int. Health. 2010 Aug;15(8):964-972.

28. Ziraba AK, Mills S, Madise N, Saliku T, Fotso J-C. The state of emergency obstetric care services in Nairobi informal settlements and environs: Results from a maternity health facility survey. BMC Health Serv Res. 9:46-46.

29. WHO | Working with individuals, families and communities to improve maternal and newborn health [Internet]. [cited 2011 May 19];Available from: http://www.who.int/making_pregnancy_safer/documents/who_fch_rhr_0311/en/index.html

30. Ye Y, Yoshida Y, Harun-Or-Rashid M, Sakamoto J. Factors affecting the utilization of antenatal care services among women in Kham District, Xiengkhouang province, Lao PDR. Nagoya J Med Sci. 2010 Feb;72(1-2):23-33.

31. Rosenstein MG, Romero M, Ramos S. Maternal mortality in Argentina: a closer look at women who die outside of the health system. Matern Child Health J. 2008 Jul;12(4):519-524.

32. Nahar S, Banu M, Nasreen HE. Women-focused development intervention reduces delays in accessing emergency obstetric care in urban slums in Bangladesh: a cross-sectional study. BMC Pregnancy Childbirth. 11:11-11.

33. Kamiya Y. Women's autonomy and reproductive health care utilisation: Empirical evidence from Tajikistan. Health Policy [Internet]. [cited 2011 Jun 2];In Press, Corrected Proof. Available from: http://www.sciencedirect.com/science/article/pii/S0168851011000637

34. Li J. Gender inequality, family planning, and maternal and child care in a rural Chinese county. Social Science & Medicine. 2004 Aug;59(4):695-708.

35. Barennes H, Simmala C, Odermatt P, Thaybouavone T, Vallee J, Martinez-Ussel B, et al. Postpartum traditions and nutrition practices among urban Lao women and their infants in Vientiane, Lao PDR. Eur J Clin Nutr. 2007 Nov 14;63(3):323-331.

36. UNFPA Lao PDR -- REPORTS [Internet]. [cited 2011 Jun 5];Available from: http://countryoffice.unfpa.org/lao/?reports=2228

37. District Health Office. District Hospital Statistics. Ministry of Health, Lao P.D.R. 2010.

38. Nikièma B, Haddad S, Potvin L. Women Bargaining to Seek Healthcare: Norms, Domestic Practices, and Implications in Rural Burkina Faso. World Development. 2008 Apr;36(4):608-624.

39. Anand S, Sinha RK. Quality differentials and reproductive health service utilisation determinants in India. Int J Health Care Qual Assur. 2010;23(8):718-729.

40. Ngo AD, Hill PS. Quality of reproductive health services at commune health stations in Viet Nam: implications for national reproductive health care strategy. Reproductive Health Matters. 2011 May;19(37):52-61.

41. Reid J. The role of maternal and child health clinics in education and prevention: A case study from Papua New Guinea. Social Science & Medicine. 1984;19(3):291-303.

42. Rashid SF, Akram O, Standing H. The sexual and reproductive health care market in Bangladesh: where do poor women go? Reproductive Health Matters. 2011 May;19(37):21-31.

43. Tian L, Li J, Zhang K, Guest P. Women's status, institutional barriers and reproductive health care: A case study in Yunnan, China. Health Policy. 2007 Dec;84(2-3):284-297.

44. World Health Organisation. Declaration of Alma-Ata [Internet]. Alma-Ata, USSR: 1978. Available from: http://whqlibdoc.who.int/publications/9241800011.pdf

45. Sawyer LM. Community participation: lip service? Nurs Outlook. 1995 Feb;43(1):17-22.

46. Blumenthal DS. Is Community-Based Participatory Research Possible? American Journal of Preventive Medicine. 2011 Mar;40(3):386-389.

47. Manandhar DS, Osrin D, Shrestha BP, Mesko N, Morrison J, Tumbahangphe KM, et al. Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial. Lancet. 2004 Sep 11;364(9438):970-979.

48. Tripathy P, Nair N, Barnett S, Mahapatra R, Borghi J, Rath S, et al. Effect of a participatory intervention with women's groups on birth outcomes and maternal depression in Jharkhand and Orissa, India: a cluster-randomised controlled trial. The Lancet. 2010 Apr 3;375(9721):1182-1192.

49. Rosato M, Laverack G, Grabman LH, Tripathy P, Nair N, Mwansambo C, et al. Community participation: lessons for maternal, newborn, and child health. The Lancet. 2008 Sep 13;372(9642):962-971.

50. Lassi ZS, Haider BA, Bhutta ZA. Community-based intervention packages for reducing maternal and neonatal morbidity and mortality and improving neonatal outcomes. Cochrane Database Syst Rev. 2010;(11):CD007754.

51. Chia LS. Southeast Asia transformed: a geography of change. Institute of Southeast Asian Studies; 2003.

52. Mathole T, Lindmark G, Majoko F, Ahlberg BM. A qualitative study of women's perspectives of antenatal care in a rural area of Zimbabwe. Midwifery. 2004 Jun;20(2):122-132.

53. Arps S. Threats to safe motherhood in Honduran Miskito communities: local perceptions of factors that contribute to maternal mortality. Soc Sci Med. 2009 Aug;69(4):579-586.

54. Tatar M. Community participation in health care: The Turkish case. Social Science & Medicine. 1996 Jun;42(11):1493-1500.

55. Manandhar DS, Osrin D, Shrestha BP, Mesko N, Morrison J, Tumbahangphe KM, et al. Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial. Lancet. 2004 Sep 11;364(9438):970-979.

56. Love K. Little known but powerful approach to applied research: community-based participatory research. Geriatr Nurs. 2011 Feb;32(1):52-54.

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Participant profiles for the five focus group discussions

Group 1: Women of reproductive age (Women):

Pregnant women with at least one child younger than 4 years old. Women who have newborn babies and/or children below 5 years. Women who had birth at home assisted by a Traditional Birth Attendant (TBA). Women who had births in a health facility. Women who had obstetric emergencies. Women whose newborn or children had some type of emergency.

Group 2: Mothers, mothers-in-law, grandmothers of women of reproductive age (Grandmothers)

Group 3: Husbands and male partners of women of reproductive age (Men).

Group 4: Community leaders:

Representative of Traditional Birth Assistants Representative of health volunteers Representative of traditional healers or doctors Representatives of community/village leaders Representative of women's groups Representative of religious groups Representative of political groups Representatives of indigenous groups

Group 5: Health-care providers:

Nurses Medical doctors Health Workers Health educators Village Health Volunteers

* None of the participants should be awaiting their first birth.

Summarized priority problems identified by individual groups for level 1 of care

Level 1: Care of the pregnant woman, mother, newborn and child at home. (n=32)

1. Women don't consider antenatal care important, neither are they aware of its significance. Those who wish to deliver at a health facility cannot because of difficult access and costs. Poor families avoid borrowing money as that puts them in a viscous cycle of debt. [21] (W, G, L, M, P)

2. Women deliver at home with the support of their family. Women make no plans for family planning, antenatal care or health facility delivery. In case of difficult labor they seek help from the village health volunteer. [13] (W, G, M, L)

3. Women do not immunize their children as they are scared that it will hurt them. Some women are on the field when the immunization team is in the villages and some parents do not complete immunization as they are worried they would have to spend money for treatment of post-vaccination fever. [11] (W, L, P)

4. Most women are not aware about the danger signs of pregnancy. [9] (M)

5. Women have to work hard and sometimes give birth on the field and continue to work within days after delivery. Food taboos. [6] (G, P)

6. Women are unable to exclusively breastfeed for six months as they do not eat enough to produce enough milk. Breast milk is also not considered sufficient for the baby [4] (P)

7. Women buy contraceptives from illegal sellers and do not know the proper of using them leading to unwanted pregnancies. (G)*

8. Women are not aware about sexually transmitted diseases. (M)*

*Problems 7 and 8 were not voted in the institutional roundtable meeting as they were omitted by the research team during the summarization of the problems (see discussion).

Summarized priority problems identified by individual groups for level 2 of care

Level 2: Awareness in the community of the rights needs problems of the pregnant woman, mother, newborn and child. (n=33)

1. No existing village health or fund for mother and child care. Some villages have a small fund (US \$62-74) loaned at an interest of 15%. [23] (W, G, M, P)

2. Women are only aware of the importance of immunization and do not know about any other health issues. [18] (W, L, P)

3. Husband's don't support their wives' and lets her work hard during and after pregnancy. Some women need to work hard as their families do not have enough members in the family to compensate for her absence. [15] (L, P)

4. Village authorities do not organize any educational meeting on mother and child care. [11] (W, L, P)

5. Two children aged less than 3 months died recently. One had fever and the family took the child to the field where he died. The other child refused to eat and was taken to the provincial hospital where the child's condition did not improve and the parents brought the child back and performed the traditional healing prayer, *Mor Yo.* [6] (G)

6. Women do not want to have many children as they cannot take care of all of them (W)*

*Problem 6 was not voted in the institutional roundtable meeting as it was omitted by the research team during the summarization of the problems (see discussion).

Summarized priority problems identified by individual groups for level 3 of care

Level 3: linkages between services and the community. (n=34)

1. Women do not seek health care at a health facility due to difficult access (bad roads, long distances, absence of public transport, no personal motorbike for travelling), inability to pay (cost of transport, services, unofficial payments for better quality) and due to loss of days on the field. Pregnant women receive no support from their husband's. [22] (W, G, M, L, P)

2. Health worker do not attend their duties regularly. Health centers are not well equipped or stocked with sufficient medicine. This pushes people to go to pharmacies that provide better quality services. [19] (G)

3. No non-governmental organization supports mother and child care in the villages. [9] (W, G, M, L, P)

4. No non-governmental organizations work in the villages to promote health. [9] (W)

5. Village authorities provide no support for mother and child care, the only support available is from family and close relatives. [4] (P)

Summarized priority problems identified by individual groups for level 4 of care

Level 4: quality of care received from the health services for pregnant women, mothers, newborn and children. (n=33).

1. The services are slow at the district hospital, long waiting times at the provincial hospital. [17] (M, L)

2. Health workers are not experienced, unfriendly, and are not present at the health center regularly. Health centers are not well equipped. No job satisfaction for health workers. No midwives or separate delivery rooms at the health centers. [16] (M, L, P)

3. The health center is far and takes up to two hours to reach during the rainy season. [15] (G, L)

4. No community support or education for mother and child care, only immunization programmes being undertaken. [6] (W, M)

5. Women do not visit a health facility because of the high costs involved [5] (P)

6. Most women are not aware of the services provided at the health facilities as they have never been to one. They are only aware of the pharmacy and will only seek health care at a health facility only if they are serious. [3] (W)

7. Women attending antenatal care are not provided any advice on pregnancy care. [2] (G)

8. Health workers at the health center do not provide good care and are unfriendly. [1] (W)

List of 2 priority actions identified for the 2 priority problems

Level 1: Care of the pregnant woman, mother, newborn and child at home

Problem 1: Difficult road access, costs involved in transportation, treatment and lodging and boarding costs are a major deterrent for the population. Money lent on high interest rates. Lack of awareness about mother and child health care.

Action 1: Support local authorities to help women in the community.

Action 2: Health education and awareness in the villages in cooperation various partners.

Problem 2: Tradition of delivering at home with the support of the families, no awareness on family planning or safe delivery at home. Lack of skilled birth attendants. The population will seek professional care only in case of biomedical emergency or serious conditions.

Action 1: Health education and awareness by cooperation with different partners.

Action 2: Improve capacity of village health committees and midwives.

Level 2: Awareness in the community of the rights needs problems of the pregnant woman, mother, newborn and child

Problem 1: No existing village health fund.

Action 1: Improve capacity of the village health authorities to understand significance of mother and child health care.

Action 2: Establish village health fund, and improve where already existing, to finance mother and child health care.

Problem 2: Women lack awareness on health issues other than immunization.

Action 1: Improve mother and child health care services and these services should be provided by the mobile health team.

Action 2: Support and improve cooperation between village authorities and the health facility staff.

Level 3. Linkages between services and the community

Problem 1: Women do not seek professional health care due to difficult access and costs. Women receive no support from their male partners for seeking biomedical health care.

Action 1 Health education and awareness programmes to be arranged for the communities.

Action 2: There is no community education on mother and child health care and husband's don't support their wives or take them for antenatal care or delivery at the health facility.

Problem 2: Health centers are not well equipped, lack medicine, and the staff is regular in their attendance forcing people to seek care from private pharmacies that provide better services.

Action 1: Notify the working hours of the health staff to the village authorities to improve coordination and reduce waiting time.

Action 2: Improve the working schedule of the health staff; their working hours and conduct regular activities with the villagers.

Level 4: Quality of care: Care received from the health services for pregnant women, mothers, newborns and children

Problem 1: The slow services at the hospital and long waiting times make it tough for the patients to seek care when they need it. All patients are not treated equally and some are given preferential treatment and quality of services.

Action 1: Improve the quality of the mother and child health care at health facilities.

Action 2: Improve the skills and capacity of the health staff dealing with mother and child health care at the health center and the hospital.

Problem 2: Health facilities lack regular staff, sufficient equipment, separate delivery rooms and midwives. The health center staff does not have job satisfaction, limited capacity and training on mother and child health care.

Action 1: Provide medical equipment and medicines necessary to support mother and child care at the health facilities.

Action 2: Improve the standard of the biomedical reproductive health services for the villages.

Annex 7

Focus group discussion guide for group one: care of the pregnant woman, mother, newborn and child at home

How does a woman care for herself during her pregnancy? (think about diet/nutrition, alcohol and other drugs, workload/activities, hygiene, going to prenatal checkups, etc.)

Are there any special beliefs or traditions in the community about care during pregnancy?

How is the newborn cared for in the home? (think about breastfeeding practices, keeping the baby warm, hygiene, etc.)

How does a woman look after herself after birth? (think about diet/nutrition, workload/activities, family planning, attending antenatal and postnatal care etc.)

What happens when there are complications or problems with the woman or newborn? How is the decision made to seek care?

Are there any special beliefs or traditions in the community about care after birth?

Are women and their families prepared for birth and/or emergencies? (think about saving money for expenses, care of children, identifying a health care facility, identifying transport, a skilled attendant, a companion during birth, having adequate supplies)

Do women and their families know the danger signs during pregnancy?

Do women in this community often give birth at home? If so, who is with her and helps her during the birth? (think about who attends her, where she gives birth)

What influences the decision to seek skilled care? (think about costs of services, quality of services, transport availability and cost, cultural factors that affect care-seeking, gender relations between men and women)

Who in the family helps to care for the mother and her newborn? What do they do?

Are husbands/male partners supportive in caring for the woman and newborn? Do men and women discuss these types of things?

Is violence in the home common during pregnancy?

Annex 8

Focus group discussion guide for group two: support in the community for the pregnant woman, mother, newborn and child

Awareness in the community of mother and child health rights, needs and problems

Is anything done here to ensure this right is respected? If yes, what is done to help to fulfill this right? If not, what happens? Are people in the community aware of this right? Do you think men are supportive of this right?

Are women in this community free to decide when to marry, to decide when to start a family, or to decide how many children they would like? If not, why do you think these rights are not being respected?

Do people think that maternal and newborn health is a priority?

Do people know when and why a mother or baby dies in the community?

Are there community meetings about health or maternal and newborn health specifically?

Links between services and the community

Do women have problems reaching care? What are some of the problems they have? What is done to help resolve these problems? (think about distance to care, transport costs, state of the roads, availability of public transport, ambulances, partner permission to seek care)

Who in the community supports the health of pregnant women, mothers and newborn? What do they do? (think about community health workers, Traditional Birth Attendants, support groups, any other people or groups?)

Are there any individuals or groups in the community who work with the health services? What do they do? (think about collaboration with education, transport, local authorities, churches or other religious groups)

Are there any people or groups in the community who are particularly vulnerable or who are not reached by the health services? If so, what sources of support could be used to help them? (think about social support from the state, community funds)

Annex 9

Focus group discussion guide for group three: the care received from the health services

How do people in the community feel about the quality of care pregnant women, mothers and newborns receive from the health services? (think about costs, waiting times, how providers treat women and families, availability of medicines and supplies, numbers of midwives, doctors and nurses, cultural differences between the community and the services, etc.)

Do people have to pay for maternal and newborn health services? How do people feel about these costs? Do these costs stop people from using the services?

What information do the health services give to women and their families about pregnancy, childbirth and the newborn? Is this information useful? Does it reach everybody? If not, why not?

Do doctors, nurses, health promoters or community health workers visit pregnant women, new mothers and babies in their homes? How often? What do they do? Are there any groups who don't receive care or who need additional support?

If women give birth in the health center or hospital, how are they treated?

How are people referred from one health service to another?

Is the community involved in evaluating the quality of services or in suggesting how to improve the quality of services?

ABSTRACT

Objective: Using a participatory approach, the study sought to determine the social, cultural and economic factors that contribute to delays in women seeking prenatal, pregnancy, childbirth, and postnatal biomedical care, and to involve the community members and district authorities in identifying their priority problems and recommending solutions to maternal mortality.

Design: Qualitative data was obtained from focus group discussions and roundtable meetings. 85 community members and 25 representatives of district authorities participated in the study.

Setting: Four villages in a rural district in Lao P.D.R.

Findings: This study discovered that communities lacked awareness on biomedical reproductive health. Biomedical reproductive health care was not deemed important in some cases, or participants identified multiple barriers existed for those who wished to obtain it. Contraception was recognized by women and men as important for controlling the number of births; however pre-pregnancy and pregnancy did not emerge as a condition requiring special attention and pregnant women continue to work on the fields through this period. Women's decision to go to a health facility depended on the illness severity. Participants indicated that travel to these facilities was difficult and costly. Women who wanted to or needed to go to a health facility had to negotiate multiple barriers to reach it: they needed permission from their husbands, money, and health facilities often lacked sufficient capacity and personnel to deal with pregnancy, birth, or postnatal complications. These factors contributed to make reproductive health care a low priority for women and local communities. The only community health services available were the unpaid village health volunteers, who have no formal training but continue to be the first point of contact with the health system. There is little or no support from the community to women during an emergency, and it is up to the family and close relative to support them. The absence of good quality care in the health facilities has created a vacuum, most frequently filled by private pharmacies and traditional healers. The communities' themselves identified a lack of biomedical awareness concerning mother and child health, difficult access to health facilities, low quality services, and unfriendly attitude of the health professionals as the major barriers to women seeking reproductive health services.

Conclusions: One conclusion is that communities did identify important problems related to maternal mortality, but in order for them to act on these problems, they should also participate actively in designing and implementing interventions.

RESUME

Objectif: Utilisant une approche participative, l'étude visait à déterminer les facteurs sociaux, culturels et économiques qui freinent le recours aux services de santé, et d'impliquer les membres de la communauté et les autorités de district afin d'identifier leurs problèmes prioritaires et de recommander des solutions à la mortalité maternelle.

Résultats: Cette étude a montré que les communautés n'étaient pas sensibilisées aux questions de santé génésique. Dans certain cas les soins de santé reproductive n'étaient pas jugé importants. Dans d'autres les participants ont identifié l'existence de multiples obstacles pour ceux qui souhaitaient y recourir. La grossesse n'est pas apparue comme un état exigeant une attention particulière (soins préconception els ou prénataux) et les femmes enceintes continuaient de travailler dans les champs pendant cette période. La décision de la femme d'aller dans un établissement de santé dépendait de la gravité de la maladie. Les participants ont indiqué que le trajet vers ces installations était difficile et coûteux. Les femmes qui voulaient ou qui nécessitait de se rendre dans un établissement de santé devaient franchir de multiples obstacles pour y parvenir: il leur fallait obtenir l'autorisation de leur mari et de l'argent. En outre, les établissements de santé manquaient souvent des ressources suffisantes pour prendre correctement en charge le suivi des grossesses, les accouchements ou les complications postnatales.

Ces facteurs contribuent à rendre les soins de santé de la reproduction comme peux prioritaires aux yeux des femmes et des communautés locales. Les seuls services de santé communautaires disponibles sont les bénévoles de santé du village. Il n'y a que peu voire aucun soutien de la communauté pour les femmes en situation d'urgence, et il appartient à la famille et proche de les soutenir. L'absence de soins de bonne qualité dans les établissements de santé a créé un besoin, le plus souvent pris en charge par des pharmacies privées et les guérisseurs traditionnels. Les communautés ont elles-mêmes identifié le manque de sensibilisation à la santé maternelle et infantile, les difficultés d'accès aux services de santé, la faible qualité des services, et l'attitude hostile des professionnels de santé comme les principaux obstacles rencontrés par les femmes qui cherchent des services de santé reproductive. Une conclusion de ce travail est que les membres des communautés ont su identifier les principaux problèmes liés à la mortalité maternelle, mais pour qu'ils puissent agir efficacement sur ces problèmes, ils devraient également être activement impliqués dans la conception et la mise en œuvre des interventions.