An assessment of quality of antenatal care services: A study in two communes in Vietnam

Abstract

In Vietnam, antennal care is viewed as an important way to ensure healthy pregnancy and safe motherhood and is delivered down to grass-root levels. However, its quality still does not meet high expectation. This study is carried out in two coastal communes. Quality of ANC has been assessed in the aspects of interpersonal relation, information exchange, routine performance, mechanism for continuity of service utilization and acceptability and accessibility of services. In-depth interviews of service providers and clients as well as observation in health stations have been made. Research findings suggest that despite favorable conditions given in the two communes, some aspects of antenatal services still need to be improved. Antenatal services seem not to have clear contribution to maternal and child health. The reasons of poor services are not on capability of midwives but their lack of proper attitude and perception. Women's awareness of quality services needs to be raised.

Introduction

Pregnancy and childbirth are natural functions of women but they always conceal implicit threats to women health. Abnormal symptoms and complications which are not diagnosed and given full care can lead to serious impact on health of women and fetus or even death. And pregnancy-related complications are among main reasons leading to death of women in developing countries. Around the world, there is about half of a million women to die due to pregnancy-related reasons every year, 99% of them are in developing countries. The situation is worst in sub-Sahara Africa, where one of every 13 women dies of pregnancy-related causes compared with only one in 4,085 women in industrialized countries (WHO, 2001). There are many causes leading to death of mothers. However, five direct causes are identified and grouped including hemorrhage (34%), infections (21%), unsafe abortion (18%), hypertensive disorders (16%) and obstructed labor (11%) (WHO, 1999). The causes of maternal mortality vary from country to country. For example, the main causes in rural India in 1993 were mentioned including abortion-related deaths (12%), eclampsia and toxaemia (13%), bleeding in pregnancy and puerperium (23%), puerperal sepsis (13%) and aneamia (20%) (S Ramarao et al, Health Policy and Planning; 16(3): 256-263). Many of these deaths could be prevented if women received appropriate care at critical time of pregnancy and delivery. That is also one rationale for implementing antenatal care, which can screen for signs or risk factors leading to potential obstetric complications and then provide appropriate intervention. However, how important antenatal care is for maternal and child health is still in debate. Findings from a study of Jejeebhoy (1997) in India found that women who had at least one antenatal visit have higher chance of survival in comparison to those had no visit (S Ramarao et al.). Antenatal care with detection of high risk pregnancies has been thought to be effective way to reduce maternal mortality in developing countries (A Prual et al.). In other study by Vanneste et al. also revealed that screening for blood pressure and twin pregnancies in antenatal care may be worthwhile, but not for some specific conditions such as dystocia or haemorrhage. In practice, procedure of antenatal care is easy to be carried out by doctors and midwives. A study in Niger showed that 91% of risk factors which may cause obstetric complications can be detected during consultation with pregnant women or through general physical and obstetric examinations which require little and unsophisticated equipment (A

Prual et al.). But, conclusion drawn from the above study was that in Niger the quality of screening for risk factors during antenatal consultation is poor. This fact is attributed to lack of time (not equipment and professional qualification) by health personnel. In addition, lack of motivation of health service providers is also one important reason. Other study in rural Bangladesh also had similar conclusion that antenatal screening in one single visit by trained midwives fails to adequately distinguish pregnant women who need to receive special care during pregnancy and delivery and women who do not need (A M Vanneste et al.). However, the study emphasized that women who had at least one antenatal visit were four time likely to give birth with assistance of a midwife than those women who had no antenatal visit. Discussion in these studies came to similar suggestion that antenatal care alone may play a limit role, but it would be more effective to go along with other interventions such as improvement of quality of services, better management of obstetric complications, better training for midwives and health personnel, ensuring access to effective obstetric care for all women, etc. (A Prual et al., S RamaRai et al., A M Vanneste et al.). Antenatal visit can be considered as an important point of contact between health services and pregnant women. Good quality of antenatal care is not a substitution for emergency obstetric care but it promotes women seeking care during delivery and when facing problems. Positive outcomes of a good antenatal contact include familiarity with a health service place, awareness of signs of potential dangers, promotion of clean and hygienic delivery practices, information on nutrition, source of care, etc. (A RamaRao et al.). So, not as good as many people have expected, antenatal care can not solve all problems concerning pregnancy. However, good quality of antenatal care will have a certain contribution to improvement of health pregnancy and childbirth as well as reduction of maternal and newborn mortality.

In Vietnam, women and child health care has been given high attention of the government. In spite of poor economic situation, Vietnam still achieves important progress in health and reproductive health. Provision of maternal and child health care, antenatal, delivery and post-delivery care, contraceptive services, etc. is more and more diversified and with higher quality. Antenatal care is considered as a primary health care activity and is paid a lot of attention by health sector. Antenatal services are provided down to all commune health stations with the aim of reducing five major maternal complications and reducing antenatal cost for pregnant women. Recommendation given by Ministry of Health is that pregnant women should come to health facilities for examination and check-up the earlier the better, desirably in the first 3 months of pregnancy and they should have at least 3 visits during pregnancy. In fact, more than 8% of mothers have come to health facilities for the first time when being pregnant 6 months and over, but only 34.5% of mothers received 3 times of antenatal care. According to MOH 1999 report, only 68% of mothers have come for antenatal check-up, while 48% of them receiving 3 times or more. Only about 60% of mothers have received two vaccinations of tetanus. Up to 50-60% of mothers are in status of anemia and malnutrition, especially in rural area. Delivery at home is considerably high to 38.2% in general, and 43.4% in rural areas and much higher (70.2%) in remote/minority ethnic areas. Only 57.8% of deliveries have been assisted by trained health workers. Traditional birth attendants play an important role in minority ethnic areas, Central coastal areas and High lands (providing assistance for about 25% of delivery cases).

The latest data in 2002 DHS reveals that the utilization of antenatal services has increased quite dramatically in the last 5 years (comparing with data in 1997 DHS) with almost 9 out of

10 pregnant women receiving antenatal care from doctors (46%) and trained nurses or midwife (40%). In more detail, 10.1%, 47.4% and 29.3% has one, 2-3 and 4 or more antenatal care visits respectively. The percentage of women who receive antenatal services from doctors, nurses or midwives has increased from 71% in 1995-1997 to 86% in 2000-2002. The percentage receiving no antenatal care also decreases over the same period from 28% to 13%. The data also show that 85% of birth is delivered with assistance of trained health personnel (50% by doctors and 35% by nurses or midwives). Women who receive antenatal care services are more likely to delivery at health facility. While the majority of births among women with no antenatal visit were delivered at home (53%), this percentage among women with 1-3 visits was 22.4% and only 4.7% among women with 4 or more visits. In general, it can be seen that women are more likely to utilize antenatal care services, eventhough there are still differences among different groups of women. Health system seems to be able to meet that demand. However, there is lack of evidence on how good the service or how much the satisfaction of clients is.

Regarding service providers, according to MOH 1998 record, 79.3% of commune health stations, mainly in rural areas, have no doctors, only assistant doctors. This fact is also mentioned in DHS 1997 data that 30.8% of mothers have been checked up by assistant doctors, following by doctors (24.5%) and nurses and midwives (15.3%). Research on quality of antenatal care is not paid much attention so far in Vietnam. The use of model on supply and demand on reproductive health care services (Payne, 1987) for DHS 1997 data shows that antenatal care provided in commune health stations can cover 70.4% of mother, while there is still 26.5% not receiving or not using the services. Findings are similar for antenatal services provided in nearest commune health stations with the percentages of 71.3% and 25.9% respectively. Other research shows a low number of using services per person per year in Vietnam in comparison to other country in the same region. At commune level, there is a fact that 2 or 3 trained health workers stay and wait in commune health stations and usually see not more than 5 to 10 patients a day (Pham Manh Hung, 1999). This finding shows that though health network has been expanded to all communes of the country, utilization of health care services for women is still limited. Conclusion from a study in Tienhai district, Thaibinh province (Toan NV et al, 1996) also support for this fact that there was an under utilization of antenatal and delivery care and there was no equal opportunity for different groups of mothers to use this services. One of the findings is that mothers who were Buddhist or of no religion had utilized antenatal services more frequently than others. Reasons are from both sides: clients and service providers. Women attitude and behavior in accessing health care services are still limited. For service providers, besides objective reasons such as bad infrastructure, backward equipment, under-trained skills, a situation analysis of public sector reproductive health services in 7 provinces conducted by MOH and UNFPA (2000) reveals some issues related to quality of health care. For example, providers did not explain fully and clearly to clients about health issues and exam procedures; did not encourage clients to ask questions; and though most providers of antenatal care services perform many of the basic steps of antenatal care, the majority of them did not check for anemia and edema and did not counsel clients about warning signs of pregnancy complications and the need for taking iron tablets. Health professionals hope that good antenatal care can help to reduce maternal and child mortality and they are promoting for that idea. Utilization of antenatal care services has been increasing over time, but it is shown in

quantity only, not much in quality. So, is antenatal care service worth to be done to improve women and child health? This is still not fully explained.

Research site

The study is carried out in two communes of Quynh Bang and Quynh Xuan, Quynh Luu district, Nghe An province. In those two communes, in 2002 the "Strengthening Reproductive Health Research in Vietnam" conducted a comprehensive study on reproductive health issues. Gathered information includes general socio-economic and cultural information as well as information on particular reproductive health issues such as pregnancy and childbirth. It is known from the collected data that there is a commune health station in each commune, and one poly-clinic situated in Quynh Bang providing health care services for people in six near-by communes. Quantitative data has given overall picture of antenatal care services' utilization of women in the two communes as follows: the majority of women had check-up during their last pregnancy (only 8% did not have); 51% had three check-ups and 16% had four or more; 58% took iron tablets and 75% had a tetanus immunization. The figures also reveal that there is a big different in using antenatal care services between Catholic and non-Catholic women. While there is only 5% of non-Catholics not receiving antenatal care at all, it is almost four times higher among Catholics (23%). Catholics were also less likely to take iron tablets and have tetanus immunization. However, despite above-mentioned high figures of antenatal care check-up, tetanus immunization and iron tablet taking, research findings still see that up to 20% of mothers gave birth to the first child at home, and about 25% for subsequent deliveries.

Research objective

This research aims at assessing quality of antenatal care services available at the two communes from the sides of service providers and clients by making observation and interviewing midwives, pregnant women and women with small children of less than 1 year.

To gather required information, apart from conducting observation of provision of antenatal services at health facilities, 28 interviews were conducted with:

- Five midwives at two commune health stations and two traditional birth attendants.
- Twenty one women – 8 Catholics and 13 non-Catholics:
  + six giving birth at health facility
  + four giving birth at home
  + six being pregnant under 6 months
  + five being pregnant over 6 months

Service providers were interviewed at commune health stations and the women were interviewed at home. At the beginning, more service providers are expected to be interviewed but the only midwife working in the poly-clinic has refused to take part in the interview. The women were randomly selected for interview with their voluntary consent. Different types of interviewees were selected including women with small child under 1 year and pregnant women. Eight out of 21 women are Catholics so that the research can assess whether there is systematic difference between the two groups: Catholics and non-Catholics.

Research findings

Interpersonal relations

Interpersonal relation between midwives and clients/women is an important issue of quality of ANC. Good interpersonal relation can have better impact on satisfaction of women and encourage them to use more ANC service. Training midwives in counseling and interpersonal skills plays an important role here. Interpersonal relations between midwives and women during ANC visits are described as a good one despite some complain were still made. Many women had good impression in interactions with midwives and the midwives themselves also mentioned some aspects of women-midwives interaction like a warm greeting with smile. It is understandable because midwives and women are living in the same communes. Apart from works, they can be relatives, friends or neighbors of each other. During an ANC visit, findings revealed that midwife only performed examination and informed results to women but without explanation of the exam procedure. Clients/women are in passive action i.e. only receiving information. Midwives rarely mentioned about encouraging pregnant women to ask questions relating to pregnancy and care. The passiveness of women also shows in the fact that only few of them did ask questions and receive answers. Privacy for discussion and exam is maintained during ANC visit.

Information exchange

Exchange of information between health workers and women did happen during ANC visits. With use of ANC register book, midwife must fill in all required information from the background ones such as age, marital status, medical history and current pregnancy to counseling and advice to ensure healthy pregnancy. In practice, necessary counseling and advice that are suitable with everyday life have been given to women, though some are not regularly mentioned such as use of family planning methods after delivery, personal hygiene, need to select good maternity house, preparations for birth and sexual activity during pregnancy. As primary intention, ANC register book should be kept by women for their use at home, but in fact this book is mainly kept in health stations for use of midwives.

Symptoms and warning signs of possible pregnancy complications are mentioned during ANC service interactions. This kind of information is also given to fewer women. Many women said that midwives did tell them to go to doctors if any warning signs appear. Beside, some women complained that they did not receive any information regarding possible pregnancy complications because of time limitation of ANC visit. Though mention of possible complication is only for the sake of precaution, while clients do not fully aware of the potential dangers to their health, midwives seem not to take it very seriously.

Technical competence of ANC service provision

Health workers in both health stations have received basic training on their professions and are capable and experienced in delivering such services. Both health stations have secondary midwives in charge of providing ANC services for pregnant women. Those midwives have also received refreshment short training on various issues such as maternal care, childcare, pregnancy and complication management, etc. It is sufficient in number of midwife as well (3 to 4 midwives in each health station). Basic procedures/activities of ANC visit have been performed by midwives with assistance of new equipment/exam tools, but full procedures are not applied to all women. Midwives only perform the steps they think to be important and relevant. For women, they do not know the full procedures and remember what the midwives

have done only. In addition, women are not able and in position to ask midwives to do mote than that.

Apart from exam procedures, taking iron tablets and tetanus vaccinations are also important to pregnant women. Basing on assessment of anemia, necessity of taking iron tablets has been mentioned by midwives during information exchange. However, in fact only some women said they fully receive this information. It led to the situation that many women had not used iron tablets or used in a wrong way. Tetanus vaccination shots have been given separately to pregnant women in the 1st day every month but women did not consider it as a part of ANC procedure. It could be partly due to unclear explanation by midwives as well. In addition, time spent to perform the procedures is quite short.

Referral to higher care was made to only one case. The woman would deliver with surgical intervention, so that she has been referred to district hospital. Her feeling is that infrastructure of district hospital is much better than commune health stations regarding equipment and skills of health workers, but behavior of health workers is less kindly than in health station. Health workers in district hospital are easy to get angry with clients there. It is also quite expensive for delivery in district hospital in comparison to in health station.

Mechanism to encourage continuity of ANC services

Continuity of care plays an important role in maintaining good quality of services. This aspect is followed quite well in both health stations thorough support from and way set by JICA project. With use of register book of maternal and child health, necessary information and advice are noted and used for follow-up. This book can be used from the beginning of pregnancy until postpartum period, from good care for pregnancy to safe delivery and child health, etc. All the information that is gathered and kept in a place like health station will be very useful for midwives and women toward the same goal: healthy maternal and child health. Continuation of ANC services are supported by reminder of midwife about follow-up visit. This reminder is very important to give women a feeling of kindness and necessity of coming back to receive more care until delivery. Most women did mention about reminder from midwives and many of them in fact had 2 or more visits to health stations as well as gave birth there. Only few of them have turned down this reminder.

Acceptability and accessibility of ANC services

Average waiting time of about 10 minutes during weekdays is acceptable to most women, while average exam time of about 10 minutes seems not to cover all necessary activities. When observing cases of ANC check-up in the two health stations, it was seen that actual time for examination was even less than the time mentioned about. The visits lasted for 6-7 minutes only. Reason can be those women neither not to be 1st pregnant or 1st time coming for check-up. Waiting time is different among different women and different time of ANC visit. Pregnant women can visit health stations for ANC during working days (from Monday to Friday). However, from the fact that both stations organize a vaccination day monthly in the 1st day of month to give tetanus vaccination shots, many women go to health stations in that day. In the vaccination day, waiting time is longer and exam time is shorter. Some women complained that they had to wait up to 1 hour or more while time for vaccination shot and exam was only 5 minutes. It was especially not convenient for women who did not go there on their own but with their husbands. Number of women coming to health station can

be more than 40 persons in vaccination day. At least 3 health workers are needed for this day: one doing examination, one doing vaccination and one filling in ANC book. It can be expected that women would not get much from ANC exam and counseling in this day except tetanus vaccination shot. Vice versa, during other weekdays there are few pregnant women coming, waiting time is not long, just up to 10 minutes.

Travel time to health stations reported by different women ranges from just 5 minutes up to 30 minutes. Only some women who live near health stations can walk there, the others used bicycle or motorbike. It is important to note that the Catholic hamlet is on the edge of the communes, so that it is quite far from the health stations. Though road system is convenient, it still takes time for women to get to health stations. Despite this distance, Catholic women still go to health stations for ANC services. It reflects change in their thinking of importance and quality of ANC services provided in the health stations.

When asking about reasons for choosing health station for delivery, main reasons includes *near their houses, convenience, good equipment/tools, cleanness, experienced and skilled midwives, kind and enthusiastic health workers, safer delivery, etc.* But in fact, each commune has only one health station, so that those women who want to receive ANC services also have no other choice of health facility to go. No pregnant woman when interviewed said to give birth at home, but at health station. The decision was made after discussing with their husbands and parents.

There is no mention of cost for ANC service. ANC examination and vaccination shots are free of charge. Those women giving birth in health stations also said the cost was low and acceptable to them.

Discussion

Findings from this research reveal that commune health stations are capable of delivering antenatal care services for women under its coverage. In this study site, there is no other choice for women to receive antenatal care except in the health stations because the only poly-clinic does not provide such services. With financial assistance from state budget and JICA project, the health stations functions well in protecting and promoting health for the population. Provision of antenatal services is a part of their responsibility. With good infrastructure (buildings and equipment) and sufficient health personnel, antenatal services are routinely provided for pregnant women. However, there is a fact that both health stations are under-utilization of health services. Observation made during research showed that there are few people going to health stations for services in general and for ANC services in particular. It was only mentioned that health stations are crowded in the first day every month – the day for tetanus vaccination shots for pregnant women. Thus, how to make network of commune health stations functioning more effectively in serving people's health is still a question mark. An issue of cost-effectiveness analysis can be placed here.

From the analysis of different elements of quality of antenatal services, it can be seen that the services have been delivered to clients at a certain level and cover all the mentioned elements. Apart from objective elements such as infrastructure and accessibility to services, the other elements of interpersonal relations, information exchange, technical competence and encouragement of using services are very much upon health workers/midwives.

Knowledge and skills on ANC procedures are not problem to midwives, but to fully and effectively perform the procedures and make women to believe in them, it requires proper attitude and perception of midwives towards their works. Theoretically, the midwives themselves realize the importance of antenatal care but they need to take it more seriously in practice by not seeing it as routine or normal work only. The purpose of antenatal care as preventive method is more important in such places as in this study where there is no clear evidence that ANC services have direct positive impact on health of mothers and children i.e. there is no health problem or complication reported among women who going to or not going to health stations, giving birth at health stations or at home. Primarily, pregnant women still express their expectation to receive antenatal services but it had an impression that women did not highly appreciate usefulness of antenatal visits to health stations. Many women said they satisfied with behavior of midwives with description of kindness and enthusiastic while what they received from antenatal visit was less than expectation. It may reflect an easy satisfaction of women to performance of health workers. The situation may be partly attributed to insufficient awareness of women about quality of ANC services, so that they could not ask for good care as primary purpose of antenatal service provision.

Women's negative perception of usefulness of antenatal care also shows on the fact that there is quite number of women giving birth at home instead of health stations. Reasons for this action include:

- Experience of safe pregnancy and delivery in the past
- Lack of knowledge on importance of pregnancy care and possible complication
- Influence of family members such as parents, sisters and husbands on attitude, behavior and practice of receiving ANC services
- Ability of some family members in giving assistance during delivery at home
- Giving birth too fast or their houses far from health stations
- Do not want to get complain about their unwanted pregnancy

Many above-mentioned reasons can be partly attributed to the unsatisfactory work of midwives at the health stations. In this study, religion has certain impact on utilization of antenatal services. The Catholic women were less likely to use ANC services than non-Catholics showing in a higher number of Catholics giving birth at home in comparison to non-Catholics: three out of four who gave birth at home are Catholic. Catholic women usually have many children and if the 1st child came out safely so that they think everything will be normal and they are likely to do the same thing for next deliveries. In addition, in some families there are persons (usually the old ones) who receive no training but able to assist during delivery or their sisters and relatives have similar experience of pregnancy and delivery at home. All those things jeopardize use of ANC service and delivery in health station of some women. However, this kind of behavior has changed a lot among younger Catholics. Young Catholic women are now more willing to seek for and use ANC services than the older ones. They are more concerned about their health and the fetus health during pregnancy and more likely to go to health stations for check-up and delivery. Their husbands and parents-in-law also support them and play an important role in some cases to encouraging them in seeking ANC services.

Though there is no clear supportive evidence of directly positive impact of antenatal care on pregnancy and delivery. It is still worthy to carry out provision of such care services to

pregnant women as a preventive way to contribute to status of healthier pregnancy and safe delivery. Women should be raised awareness and encouraged to follow practice of using antenatal services available at nearest health facilities. This process should be supported by improvement of health network in general as well as quality of services in particular.

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