Journal of Community Health, Vol. 31, No. 2, April 2006 (© 2006)
DOI: 10.1007/s10900-005-9003-3

USE OF POSTPARTUM HEALTH SERVICES IN RURAL UGANDA: KNOWLEDGE, ATTITUDES, AND BARRIERS

Sarah K. Nabukera, MD, MPH; Kim Witte, PhD; Charles Muchunguzi, MSc; Francis Bajunirwe, MD, MSc; Vincent K. Batwala, DDS, MPH; Edgar M. Mulogo, DDS, MPH; Celeste Farr, PhD; Souleymane Barry, MD; Hamisu M. Salihu, MD, PhD

ABSTRACT: The purpose of this study was to explore the knowledge, attitudes and barriers to use of postpartum care service among rural communities in Uganda. Study was a part of a larger reproductive health evaluation project, and was cross-sectional in nature utilizing qualitative research methods using the narrative inquiry. Two matched rural communities were used in this study; Semuto in Luwero district, and Lwamaggwa in Rakai district. Fifty key informants who were purposefully selected from each study site were interviewed. They included community leaders, political leaders, health care providers, women leaders and community members. One-on-one interviews were conducted with key community informants using an interview guide. The purpose of the interview was explained to each participant, and written informed consent was obtained before the start of the interview. Respondents were allowed to express their views, opinions and observations on several health issues including postpartum health care services. There was a low level of knowledge about postpartum care services among the respondents of the two communities. There was lack of awareness about postpartum care and it's benefits. The main barriers to use of services were; misconceptions regarding the importance of postpartum care, distance to health facilities, poverty, and health system factors notably; poor facilities, lack of essential drugs, and poor attitudes of health workers. In the effort to improve reproductive health care services, there is an urgent need to improve postpartum services, and make them more accessible and user friendly.

Sarah K. Nabukera is Senior Lecturer Community Health, (currently on study leave at the University of Alabama at Birmingham); Charles Muchunguzi, Lecturer Development Studies; Francis Bajunirwe; Vincent K. Batwala; and Edgar M. Mulogo, Lecturers Community Health, all at Mbarara University of Science and Technology, Mbarara, Uganda. Souleymane Barry was Chief of Party DISH II Project, Kampala, Uganda; Kim Witte is Senior Program Evaluation Officer, Center for Communication Programs, Johns Hopkins University, Baltimore, Maryland; Celeste Farr, Assistant Professor Department of Communications, North Carolina State University, Raleigh, North Carolina; and Hamisu M Salihu Associate Professor Maternal and Child Health, University of Alabama at Birmingham, USA.

Requests for reprints should be addressed to Sarah K. Nabukera, MD, MPH, Department of Maternal & Child Health, University of Alabama at Birmingham, Ryals Buliding, 1665 University Blvd, Suite 440, Birmingham, AL 35205, USA; e-mail: nabukera@uab.edu

This project was funded by USAID # 617-A-00-00-00-0000-00.

The training of providers at all levels is essential, in addition to educating families on the importance of postpartum care services.

KEY WORDS: barriers; postpartum care; rural areas; Uganda; utilization.

INTRODUCTION

Women's health and their involvement in health care are essential keys to health for all. This is particularly so in developing countries were maternal morbidity and mortality are unacceptably high. In Africa for example, the lifetime risk of a mother dying as a result of pregnancy and birth-related complications is almost 200 times higher compared to mothers from the developed world,[1] making maternal mortality one of the most important health issues for women in many developing countries.

Maternal mortality is seen at every stage during pregnancy, and after delivery. However, the highest risk for mortality is during the postpartum period (from birth to 42 days post delivery), making this period a critical time for mothers and their newborns.[1–4] Various studies have shown increased risk of morbidity and mortality, particularly in the first week after delivery.[2–5] Almost 40% of women develop serious illness after birth, and close to 50% of maternal deaths occur after delivery.[1,4,5] Other problems encountered during the postpartum period include anemia, nutritional deficiencies, infection, family violence and emotional problems.[6] One intervention suggested for addressing the problem of maternal mortality and morbidity, is the provision and use of postpartum care (PPC) services as part of the safe motherhood initiative.[1,6] The World Health Organization (WHO) has been a strong advocate for improving maternal health services as part of the safe motherhood initiative. It has specified that new mothers receive postpartum care services as early as possible after delivery.[6,7]

Postpartum care includes prevention, early detection and treatment of complications and disease and provision of advice regarding contraception, nutrition, and immunizations. Newborn screenings can be initiated during PPC visits, and in countries with high prevalence of HIV, postpartum care provides an important link in perinatal HIV prevention programs.[8] Thus the postpartum visit provides health care workers with an opportunity to identify health problems in both mothers and infants early enough to intervene successfully. As a result, there is increasing effort to promote PPC utilization across the world, particularly in countries with high maternal and infant mortality rates.

Utilization of PPC services varies around the world; while the majority of women in developed countries receive or use postpartum care

services,[9] PPC rates in other parts of the world vary substantially. The extent of PPC use especially in developing countries is unclear, as limited research on postpartum care has been undertaken.[1] While service utilization is relatively high in some developing countries, it is notably low in other countries. For example, studies in Saudi Arabia show PPC use close to 88%, [10] while in Zimbabwe PPC rates range from 48–61%.[3,11]

Non-use of PPC services is influenced by several factors, including availability of services, quality of services, costs, health beliefs and values as well as personal characteristics of the mothers.[12] Other factors that have been noted to affect use of PPC services include site of delivery; mothers who deliver at home are less likely to attend PPC compared to mothers who deliver at hospital.[5,8–12] Mothers in rural areas are less likely to attend PPC compared to those in urban areas.[8–12] In addition, mothers with high parity are less likely to attend PPC services.[3,5,11] Lack of awareness is another factor that has been cited as a barrier to service utilization.[4,7–11] In studies that have explored barriers to PPC use, mothers have reported that health workers did not tell them that they needed to return for check up at a given time, so they did not attend.[4,10]

Addressing reproductive health issues is an important element of Uganda's health strategic plan. Uganda has a high maternal mortality rate of approximately 500/100,000 live births,[13] and has been trying to address the problem through safe motherhood initiatives, and improvements in the health care services in general. The government policy regarding PPC is for mothers to receive PPC when they bring their infants for immunization.[13,14] However, it is not clear how this policy has been implemented and adhered too. Although immunization use has continued to rise, it is noted that many mothers do not receive any PPC services even when they do bring their children for immunization.[14] Why this is so is unclear as there has been limited research done on postpartum care use in Uganda. As such, there is a paucity of information on the rate of PPC use. The recent Demographic and Health Survey (DHS 2001) showed that only 8% of mothers who deliver outside a health facility use postpartum care services.[13] In another study conducted in a rural community in Southwestern Uganda, it was noted that only 22% of women use postpartum services.[15] It is apparent that less than 50% of new mothers use postpartum care services. Clearly there is a missed opportunity for improving maternal health services; indeed this has been noted in one study that looked at management of anemia in the postpartum period. This study revealed that many women are not getting the recommended treatment during their post partum visit.[14] Another area of concern currently is the follow up for HIV positive

mothers who have received anti-retroviral treatment. Postpartum care is crucial for these mothers since it is their link to continued care and treatment.[16]

Because of the limited research on postpartum care, there is limited information to inform policy makers and health care providers as to how best to improve services to meet the needs of the mothers. This paper attempts to identify areas for possible intervention by providing an insight to knowledge, attitudes and barriers to PPC use in rural Ugandan communities. The findings presented in this paper were part of a larger reproductive health evaluation project that evaluated the Delivery of Improved Services Health II (DISH II) and was funded by the United States Agency for International Development (USAID).

METHODS

The DISH II project was setup in 2000 with major objectives including the promotion of contraceptive services, particularly long acting contraceptives (injectables and implants) and surgical methods of contraception. Other goals included provision of youth friendly reproductive health services together with safe motherhood initiatives to improve prenatal (antenatal) care use, postpartum care use and birth planning. In 2002, an evaluation was conducted to assess the impact of this project.[17]

The evaluation study had a cross-sectional design where qualitative and quantitative data were collected from two rural communities in Uganda.[17] This paper focuses on the qualitative part of the evaluation, which utilized narrative inquiry method to obtain data.

The participants for the narratives were purposively selected, and included local political leaders, opinion leaders, women representatives, health care providers, religious leaders, in school and out of school youth, peer educators, traditional birth attendants, teachers, and ordinary persons from the community (users and non users of family planning services). Five people were selected from each category for a total of 50 persons per community.

An open-ended interview guide was used to conduct the narratives. The interview guide focused on three main areas; family planning use, safe motherhood programs in the study regions particularly antenatal care use, hospital delivery and postpartum care. The third area looked at was adolescent reproductive health services. One-on-one interviews were conducted with the selected informants, with each interview lasting 45 minutes to 1 hour. A signed informed consent was obtained before the interview

was conducted. The interviews were conducted in private places to ensure confidentiality. Two persons conducted the interviews; one person asked the questions while the other recorded both verbal and non-verbal communication behaviors. Notes were taken and proceedings were tape recorded. Although the guide was used, follow up questions were asked to enable respondents to express their views or ideas exhaustively.[18]

The analysis was done in two phases; initially, all the tapes and field notes from the observers were transcribed. Two members of the research team read the transcripts, and then reread them to generate common themes. After these first two reviews of the transcripts, each researcher then independently analyzed the transcripts by question and by population (e.g., health care workers, family planning users, political leaders, etc). Finally, the two researchers met to compare their theme analyses and discuss discrepancies (for which there were less than 5%).

RESULTS

From the analysis, five major themes emerged (a) lack of awareness, (b) monetary costs, (c) facility-related barriers, (d) cultural barriers, and (e) pre-existing PPC perceptions. Each theme will be looked at separately below.

Awareness

From the narratives, most of the respondents reported that most mothers were unaware that they had to return to the hospital after delivery. They remarked that the health workers never told them to return when discharged; they were only told about immunizations.

> "After delivery, mothers come to the health unit only when they have a problem. This is because they are not told to go back."(17-year-old male, in school, head boy, who is also a peer educator in Semuto)

> "We don't usually go back to the hospital after delivery unless one has a problem (health), this is because the health workers don't tell us to do so." (33-year-old female cultivator and user of family planning in Semuto)

> "Not told that it was necessary to return since I had had a normal delivery." (Non family planning user Semuto)

> "The health workers do not tell us to return after we deliver so most of us do not return." (33-year-old female cultivator and user of family planning Lwamaggwa)

"We are not aware that it is necessary, we lack the necessary information." (Female teacher Lwamaggwa)

Monetary Costs

Lack of money for transport was mentioned as key reason for why women fail to return for PPC visits. This finding was particularly true for mothers living far from the health facility.

"Only those with money normally attend PPC visits." (Youth leader Semuto)

"Lack of money may prevent one from attending unless it is really necessary." (Male family planning user Semuto)

"Lack of transport stops many of us from attending since we do not have the money." (Female family planning user Semuto and women leader from Lwamaggwa)

"One of the reasons given by most women in this area is lack of money for transport." (Health worker Lwamaggwa)

Facility-related Barriers

The negative attitude of staff and lack of drugs in the health facilities discourage mothers from coming to the health facility after delivery. In some cases, the health workers expressed the opinion that they even lack the necessary skills and equipment to facilitate them in their work.

"Some times the hospital has expired drugs, I don't go because I don't want to get those drugs." (20-year-old female non family planning user Semuto)

"The staff at the clinic are rude, especially if the mother delivered from home. This may discourage many from coming for checkup after delivery."(Women leader Lwamaggwa)

"Postpartum care needs medical examination and we (health workers) lack skills and equipment." (Health worker Lwamaggwa)

"No drugs are available, hence it is a waste of time to go the clinic." (Female family planning user Lwamaggwa)

Cultural Barriers

Several cultural and/or normative standards were pointed out as some key factors that may prohibit mothers from attending postpartum visits.

"Our mothers never went for these hospital check ups, I don't see why I have to go either." (20-year-old female non family planning user)

> "Many mothers in this community have their own traditional practices which they adhere to. For example, using herbs for the baby ('Ekyogero'). They will only come here if the child is unwell." (Health worker Lwamaggwa)

Pre-existing PPC Perceptions

Pre-existing perceptions about postpartum were the most frequently given reasons for not attending PPC visits. Eighty-six percent of the respondents thought that postpartum care was used only to immunize babies. Without a complication after birth, most mothers do not see the need to seek postpartum care.

> "The only times women return to the clinic is when they have taken the children for immunization. But to inquire about the health of the child, they do not usually do that." (19-year-old non-user of family planning in Kibuka parish in Lwamaggwa)

> "After delivery if there is a problem or complication the mother will go to the health unit; if not, they don't go. But, there is also a lot of influence by the husbands. They usually stop their wives from going to the hospital or health unit until there is a problem." (28-year-old female family planning user Semuto)

> "We tell the mothers to go and have their children immunized."(Traditional birth attendant Semuto)

DISCUSSION

As a key strategy of the safe motherhood initiative, postpartum care has the potential to contribute in addressing maternal and child health problems.[6] However, utilization of PPC services is evidently low particularly in developing countries, which need the services more as they have many issues related to maternal and infant morbidity and mortality. The study revealed that in the two rural communities, knowledge on postpartum services was low. While the attitudes were not negative, one gets the feeling that PPC is not a major priority in these communities.

The communities have their own beliefs regarding pregnancy and postpartum care; PPC is only for situations where complications arise or just for the immunization the child. While some of these beliefs may have no bearing on general wellbeing, given the high levels of morbidity and mortality in Uganda, there is need to try and improve knowledge on postpartum care, and its importance. Information given to mothers needs to be consistent and broad in nature. Because much of the emphasis has been on immunizations, many mothers believed that it was the most

important aspect. Since immunizations can be given at any time, most mothers felt that they can immunize their children at anytime; meaning that there is a potential for many mothers to miss coming at 6 weeks, which is the recommended time for PPC visit.[13,14] The belief that postpartum care is only for the 'sick' may explain why mothers with normal deliveries are not inclined to attend postpartum services. Lack of reinforcement from the health worker is seen as a justification to the mothers that PPC is not necessary. As a result, there is a missed opportunity here to identify mothers who may have complications such as anemia.

Several barriers were identified, and are in line with findings from other studies.[5,11,12] The problem of lack of awareness of the importance of PPC visits is compounded by other intervening factors such as poorly trained staff, and the poor rapport between health providers and patients, which is an important barrier to service utilization. Other notable factors that hinder effective PPC use in rural Uganda include transport costs; because most of the facilities are in far in terms of distance.[19] Transportation becomes an issue for mothers in the rural areas because the road networks are poor, and availability of cars inconsistent. This is particularly important as women in the rural areas are the ones most likely to deliver from home without the skilled personnel in attendance and are the ones likely to get problems. If they are unable to attend PPC services, then we miss the opportunity to address their specific health needs.

The poor attitude of staff and poorly equipped health facilities also contribute to poor service utilization. Since most providers only focus on immunization, this becomes a cause of concern as more attention is given to immunization and the mother is neglected. Given that mothers may have other alternatives within their local communities, (local practices) they may resort to using them rather than coming to the health center. It is important to note that most of these barriers do not occur in isolation, tend to be interrelated. There are potential opportunities for interventions through training of providers and communities. As noted, the barriers are multifaceted thus a multisectoral approach is needed when trying to address PPC service use.

CONCLUSION

The data indicate that there is a missed opportunity for mothers to receive family planning and nutritional counseling, early immunization, and screening for serious health conditions. Considering that maternal mortality (MM) for Uganda is unacceptably high, postpartum care services

have an important role to play in efforts geared at reducing MM. The study highlighted areas for future intervention and research.

Because this is one of the few studies looking specifically at rural communities in Uganda, and used qualitative techniques, it enabled us gain a better understanding of communities' views and perception regarding postpartum care services. However, because since it was part of a larger evaluation exercise, we were limited in directly assessing women in the postpartum period; as such some information related to PPC use was collected from surrogates thus there is a risk for information bias. Nevertheless, the findings help us gain an insight to communities approach to PPC services. Furthermore, because some of the respondents included community leaders, they can potentially be used to educate others on the benefits of PPC.

ACKNOWLEDGMENTS

The authors would like to acknowledge the help of all the study participants from the two districts. The exercise would not have been possible without the dedication of all the interviewers and research assistants. Lastly, we would like to thank Dr Jerome Kabakyenga Chair, Department of Community Health for his support, and Dr John Ehiri, Assistant Professor Maternal and Child Health at the School of Public Health University of Alabama at Birmingham for agreeing to review the manuscript, and for his comments. This article was a part of a larger reproductive health evaluation project sponsored by the United States Agency for International Development (USAID), # 617-A-00-00-00-0000-00.

REFERENCES

1. Li XF, Fortney JA, Kotelchuck M, Glover LH. The postpartum period: the key to maternal mortality. *Int J Gynaecol Obstet* 1996; 54:1–10.
2. Ahmad K. Women suffer first from lack of health care services. *Lancet* 2000; 356:1085.
3. Zishiri C, Shodu LK, Tshimanga M, Nyirongo L. Postnatal maternal morbidity patterns in mothers delivering in Gweru City (Midlands Province). *Cent Afr J Med* 1999; 45:234–239.
4. Thaddeus S, Maine D. Too far to walk: maternal mortality in context. *Soc Sci Med* 1994; 38:1091–1110.
5. Goodbarn EA, Gazi R, Chowdhury M. Beliefs and practices regarding delivery and post partum maternal morbidity in rural Bangladesh. *Stud Fam Plann* 1995; 26:22–32.
6. Finger WR. Better postpartum care saves lives. *Network* 1997; 17:18–21.

7. Report on maternal and newborn health. Available from URL http://www.who.int/reproductive-health/MNBH/index.htm.
8. Prevention of mother-to-child transmission of HIV (PMTCT): checklist for developing a supply management strategy. Available from URL http://www.unaids.org.
9. Bick DE, MacArthur C. Attendance, content and relevance of the six-week postnatal examination. *Midwifery* 1995; 11(2): 53–54.
10. Baldo MH, Al-Mazrou YY, Aziz KM, Farag MK, Al-Shehri SN. Coverage and quality of natal and postnatal care: women's perception, Saudi Arabia. *J Trop Pediatr* 1995; 41(S1): 30–37.
11. Sibanda JQ, Saungweme I, Nleya C, Mutyambizi MP, Rutgers RA. Postnatal care in Bubi district deserves more attention. *Cent Afr J Med* 2001; 47:103–108.
12. Chakraborty N, Islam MA, Chowdhury RS, Bari W. Utilization of postnatal care in Bangledesh: evidence from a longitudinal study. *Health Soc Care Community* 2002; 10:492–502.
13. Uganda Demographic and Health Survey 2000–2001, pp. 120–121.
14. Sserunjogi L, Scheutz F, Whyte SR. Postnatal anemia: neglected problems and missed opportunities in Uganda. *Health Policy Plan* 2003; 18:225–231.
15. Gennaro S, Dugyi E, Doud JM, Kershbaumer R. Health promotion for childbearing women in Rubanda, Uganda. *J Perinat Neonat Nurs* 2002; 16:39–50.
16. Uganda Ministry of Health. Policy for the reduction of mother to child HIV transmission in Uganda. July 2001.
17. Nabukera S, Witte K, Bajunirwe F, et al. Evaluation of DISH II Special Interventions. Uganda; 2002. Final Report.
18. Schensul S, Schensul JJ, Lecompte MD. *Essential ethnographic methods; ethnographers toolkit.* Vol.2 Walnut Creek: Altamira Press, 1999.
19. Stock R. Distance and utilization of health facilities in rural Nigeria. *Soc Sci Med* 1983; 24:563–570.