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# FACTORS INFLUENCING UTILISATION OF POSTNATAL SERVICES IN KAMPALA, UGANDA

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**ABSTRACT**

**Background:**

Maternal, child-health and health education are three major concerns of public health organizations and researchers throughout the world. Over half a million women encounter complications due to childbirth annually and many even die. Health education for mothers is thus a strategy many countries have adopted to improve maternal and child-health.

**Objectives:**

This study investigated possible factors influencing the use of postnatal services at two hospitals in Kampala-Uganda.

**Study Design:**

A cross-sectional survey was completed by a convenient sample of women.

**Methods:**

A structured questionnaire was administered to three hundred and thirty (330) women six to eight weeks after delivery. The participants were selected from a list of all women who delivered in two hospitals in Kampala, Uganda.

**Results:**

The main barriers to utilisation of postnatal services identified were lack of awareness about postnatal services, distance from hospitals and lack of somebody to take care of the children at home.

**Conclusions:**

The results from this study reinforce the need for education of women and the communities about the importance of postnatal care.

**Key Words:**

Postnatal care, Barriers, Healthcare, Mothers, Uganda

## Introduction

About 30 million women encounter complications due to pregnancy and childbirth annually of which 1.7% are fatal (Ashford, 2004; de Bernis, Sherrat, AbouZhar & Lerberge, 2003). In addition, approximately 4 million infants do not survive childbirth or the immediate postnatal period. More than 99% of maternal deaths occur in poor countries, and the risk of dying from a pregnancy related complication is about 250-fold higher for these women than those in developed countries (de Bernis, et al., 2003). According to Warren, Daly, Toure and Mongi (2007), in Africa, at least 125,000 women and 870,000 newborns die in the first week after birth. Health education for mothers is thus a strategy many countries have adopted to improve maternal and child-health (Soltani, Sakouhi, Belguith, Salem, Gacem & Bchir, 1999).

According to de Bernis et al. (2003) the increased recognition that women should be assisted by professional health carers during and following childbirth, is evidence of the importance of postnatal care. The Safe Motherhood Report (2002) however confirms that the majority of women in developing countries receive almost no postpartum care after delivery. In very poor countries, such as those in Sub-Saharan Africa, as little as 5% of women could be receiving postnatal care. Warren (2005) however pointed out that the period following birth in Africa is often marked by cultural practices. Some of these practices include keeping mothers and babies indoors for the first month after birth. This therefore leads to a delay in seeking formal health care if the mother or baby should or do become ill.

The maternal mortality ratio of Uganda was 550/100,000 live births in 2005. This ratio is high given that the field of maternal health has received

significant attention from government (Ministry of Health, Uganda, 2001). The immediate cause of maternal deaths is the absence, inadequacy or under utilization of the healthcare system (WHO, 2004). The vast majority of maternal deaths can be prevented if women have access to, or use maternal health services during pregnancy, childbirth and the first month after delivery (WHO, 2004; Policy Project, 1999). Warren et al. (2007) reported that many women and their newborns in Africa do not have access to health care during the early postnatal period. The Safe Motherhood Report (2002) pointed out that certain factors prevent women from accessing postnatal services. An understanding of the factors that lead to the under utilization of essential postnatal services in developing countries are thus needed to assist in the development of strategies for action.

Studies have not been conducted in Uganda to ascertain why women do not utilise these essential healthcare services. This study aimed at investigating mothers' knowledge about postnatal services and identification of the barriers to utilisation of postnatal care.

## Methodology

A cross-sectional survey was conducted in two hospitals in the Kampala district, Uganda. The first hospital is the largest tertiary hospital in Uganda and has a bed capacity of about 1500 beds. The second hospital is a "private non-profit making" hospital and has a bed capacity of 300 beds. These hospitals were chosen because the majority of people within the Kampala district receive their hospital care of these hospitals. Further more the study investigated postnatal care and services in both private and government hospitals.

The WHO definition of the postpartum period (from delivery until 6 weeks after delivery) was used for

the purpose of the study (WHO, 1998). The study population thus consisted of all women who delivered in the calendar month, approximately 6 weeks prior to the study. According to the hospital registries, each of the study hospitals had approximately 1000 deliveries in a calendar month. Yamane's formula  $n = \frac{N}{1 + N(e^2)}$  was used to calculate the sample size as recommended by Israel (1992), where n stands for sample; N for study population and e is equal to 0.05. Based on the aforementioned formula, a sample size of 333 patients was calculated to be appropriate for the study. A list of all the names of mothers who delivered 6 weeks prior the study along with their contact addresses were obtained from the birth registers of each hospital. Out of these lists a convenient sample of 350 women was drawn.

Permission and ethical clearance were first requested and obtained from the Senate Research Grant and Study Leave Committee at the University of the Western Cape. Further permission was requested and obtained from the relevant hospitals' authorities, the heads of Obstetrics and Gynaecology departments. The study was explained to the participants and written consent was sought from participants prior to the administration of the questionnaire. Participants were also assured of anonymity and confidentiality.

A validated structured interview questionnaire was adopted for use in the study. This questionnaire was used successfully in Lusaka, Zambia in the Lusaka women-friendly services project (Mackeith, Murray, Standing, Kumwenda & Ahmed, 2001). The questionnaire consisted of 25 questions in four sections. The first two sections requested for demographic and socio-economic information. It also requested for information on socio-economic factors related to postnatal care. The third section

assessed the care seeking behaviour of participants during their pregnancy/ delivery/ postpartum period. Obstacles to seeking care were assessed in the last section of the questionnaire.

Content validity of the instrument was ensured through constructive criticism from two senior physiotherapists, a midwife and a nurse at the National Tertiary Hospital in Uganda and lecturers at the University of the Western Cape (UWC). The staff at UWC had extensive experience in questionnaire construction and the staff from the National Tertiary Hospital in Uganda checked for the perceived authenticity of the questions. Items were revised and improved according to suggestions made. A pilot study was conducted to check for clarity and appropriateness of the questions.

The Statistical Package for Social Sciences (SPSS) was used for the analysis of the data. Descriptive statistics were employed to summarize the demographic data of the study sample. The relationships between awareness, utilization of postnatal services and socio-demographic factors was also investigated and tested for significance using chi-square tests. Alpha levels was set at  $p < 0.05$ .

## Results

Of the 350 questionnaires that were distributed, 330 were returned generating a response rate of 94%. The majority of the participants (65%) delivered in the National Tertiary hospital, while 35% of the respondents delivered in the "Private non-profit making" hospital as illustrated in Table 1. Most participants were aged between 25-34 years of age (54.3%) while 6.4% were above the age of thirty-five. Half of the participants (50.3%) had completed secondary school while 30.6% completed primary school.

Overall almost one-third (30%) of the participants were not aware of postnatal services and 42% did not attend these services. Of those that attended postnatal services did so for immunisation (66.7%), for physical examination (17.7%) and family planning (7.9%). More than half of the participants (56.2%) indicated that the services received at both hospitals were good.

Overall 53.9% of the participants in the present study did not attend postnatal services. Reasons for non-attendance of postnatal services included lack of awareness, attending to family matters, and services being too expensive (Fig.1).

Grievances about the service providers included insufficient provision of education on part of service

providers, slow and rude midwives and rough examinations as illustrated in Figure 2.

Factors associated with utilisation of postnatal services are illustrated in table 2. A slightly higher percentage of participants (58.4%) attending antenatal services than those that did not attend antenatal services (45.8%) also attended postnatal services. This difference was not statistically significant ( $p>0.05$ ). Significantly more participants aware of postnatal services (81.9%) than those unaware of the services (1.02%) attended postnatal services ( $p<0.05$ ). Furthermore distance from hospital, educational level of participants, employment of self and husband was all significantly associated with attendance of postnatal services ( $p<0.05$ ).

Table 1: Selected socio-demographic characteristics of the study sample (n=330)

Variable	Frequency (n)	%
<b>Hospital</b>		
National Tertiary	213	65
Private "not for profit"	117	35
<b>Distance from hospital</b>		
< 5 kilometres	221	67
> 5 kilometres	109	33
<b>Religion</b>		
Protestant	119	36.1
Roman Catholic	102	30.9
Moslem	58	17.6
Born again Christians	46	13.9
Seventh Day Adventist	5	1.5
<b>Age categories</b>		
15-24 years	130	39.4
25-34 years	179	54.3
> 35 years	21	6.4
<b>Marital Status</b>		
Married	184	56
Cohabiting	112	34
Never Married	23	7
Separated/Divorced	11	3
<b>Live Births</b>		
1-2	221	67
3-4	89	27
> 5	20	6
<b>Level of Education</b>		
None	11	3.3
Primary	101	30.6
Secondary	166	50.3
Tertiary	50	15.2
Missing	2	0.6
<b>Employment</b>		
Yes	149	45.1
No	179	54.3
Missing	2	0.6

Figure 1: Reasons for non-attendance

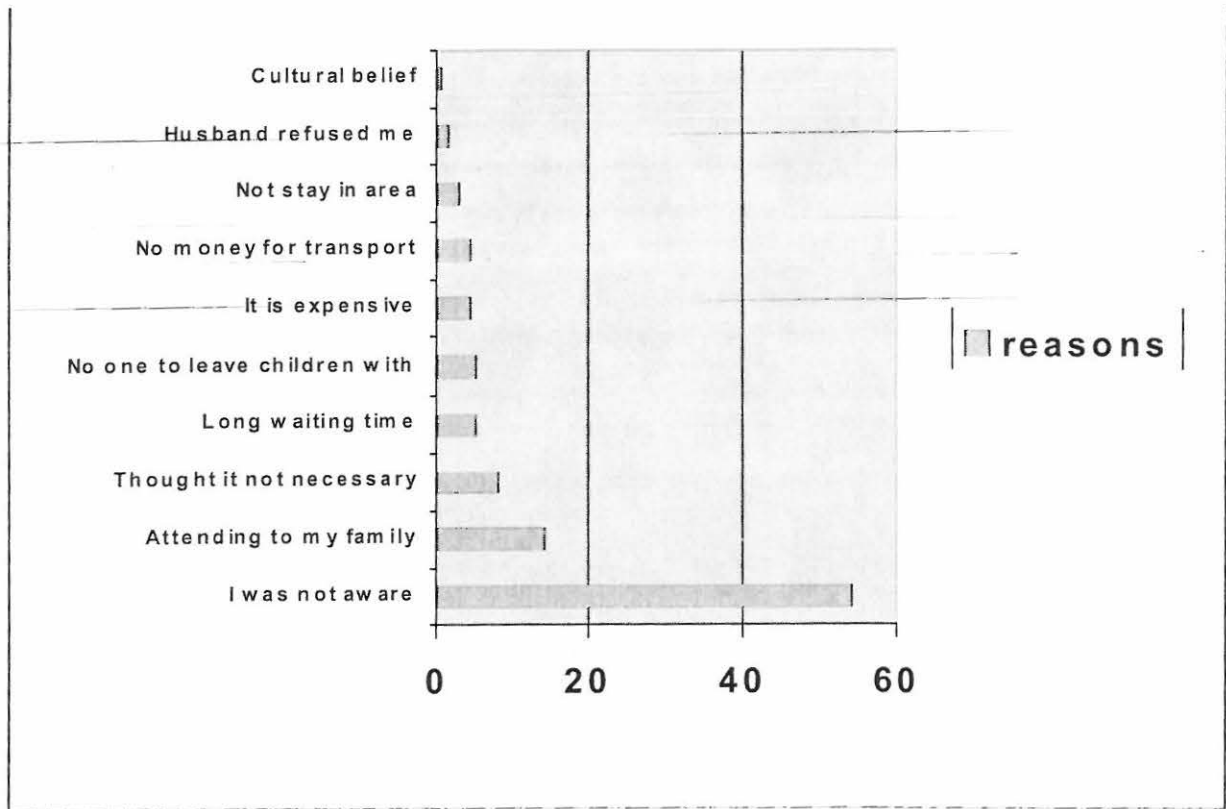
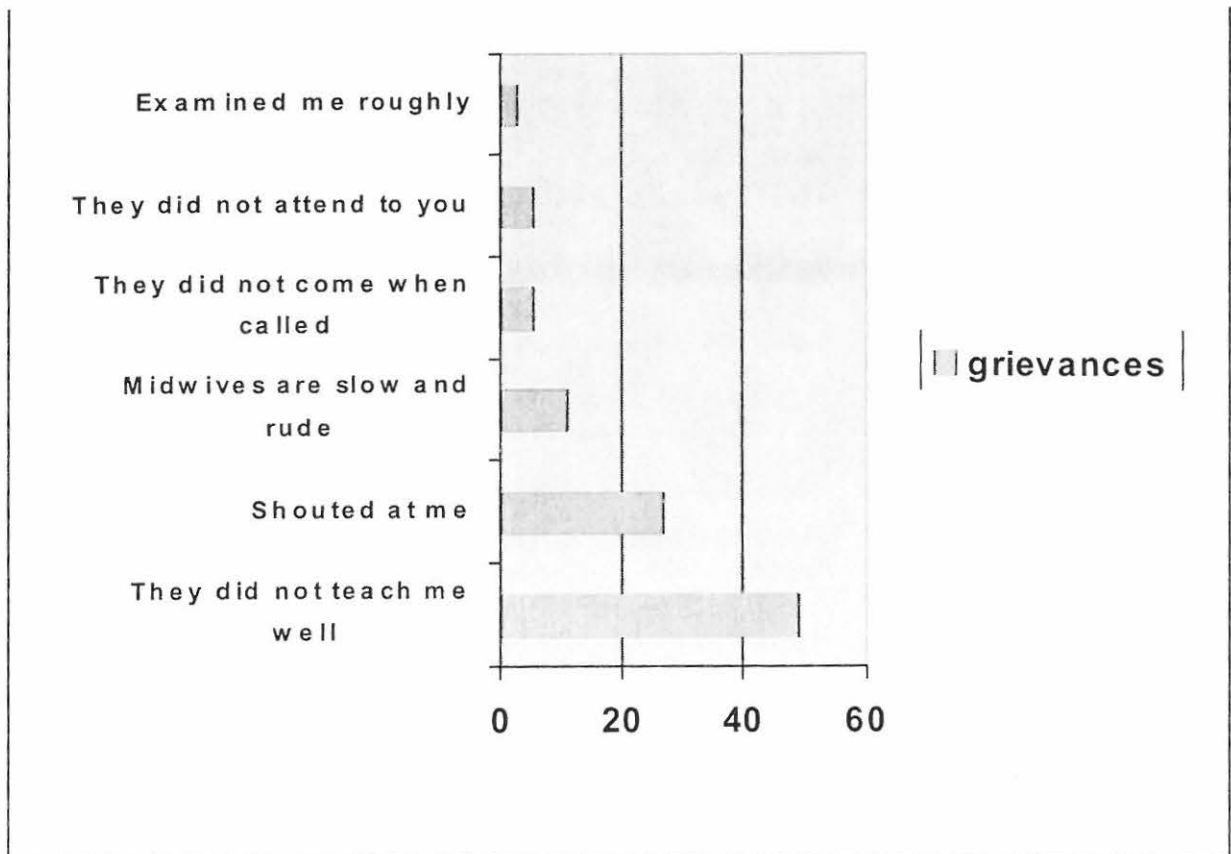


Figure 2: Grievances about service providers



**Table 2: Factors associated with utilisation of postnatal services**

Variable	Postnatal attendance	n	p
<b>Antenatal attendance</b>		327	0.230
Yes	54.0		
No	38.0		
<b>Awareness of services*</b>		330	0.001
Aware	81.9		
Not aware	1.02		
<b>Distance*</b>		330	0.002
1-5 km	63.8		
> 5 km	45.9		
<b>Educational level*</b>		327	0.003
None or primary	45.5		
Secondary or more	63.8		
<b>Employment*</b>		328	0.001
Yes	72.5		
No	45.3		
<b>Husband's employment*</b>		329	0.003
Yes	62.0		
No	31.1		

\* Significant at  $p < 0.05$

## Discussion

"The postnatal period is a neglected period" (Li, Fortney, Kotelchuck & Glover, 1996). Evidence suggests that most maternal and newborn deaths occur during the first week of the postnatal period (Warren et al., 2007). The fact that almost half (42%) of the participants in the present study did not attend postnatal services after birth, is of real concern. The heavy price for not attending postnatal services could be maternal mortality ratio rates of more than 500 per 100 000 births and the struggle to reach the Millennium Development Goal targets (Bhutta et al., 2008; de Bernis et al., 2003).

Several researchers are of the opinion that the use of antenatal services result in return to postnatal services (Stanton, Blanc, Croft, Choi, 2006; WHO, UNICEF, 2003). The large percentage (42%) of

participants not attending postnatal services while the majority (92%) attended antenatal services in the present study, is thus surprising. An investigation into factors leading to non-attendance are thus of vital importance.

Although literature has highlighted the cultural practice of a period of seclusion after childbirth in Africa (Warren, 2005; WHO, 2005) the majority (53.9%) of the participants in the present study however indicated that they were not aware of postnatal services in Uganda. It thus seems that opportunities to educate mothers regarding the importance and benefits of postnatal services were not utilized during the antenatal period. According to Bulut and Turan (1995), women perceive childbirth as a major event but they perceive the postnatal period as less important. With adequate

counselling and education during antenatal visits, mothers may become aware of the possible complications and sources of quality health services for treatment of these complications (Chakraborty, Ataharul, Chowdhury, & Wasimul, 2002). Other researchers have also noted that antenatal visits give health workers the chance to educate women about diet and healthy behaviours (Ashford, 2004; Echevarria & Frisbie, 2001). In the Ugandan context however, the availability of adequately trained personnel to provide education during the antenatal period could be an obstacle. Bhutta et al. (2008) reported that the density for nurses and midwives per 1000 population was 0.61 and 0.116 respectively in Uganda.

Quality of services is a vital determinant of all women who seek medical treatment. Quality is defined in terms of what happens once one arrives at a health care facility. One expects that poor care would affect women's willingness to visit a health care facility but if demand for the services is high, it is possible that quality may not turn out to be a crucial factor influencing utilisation. Timyan, Brechin, Measham and Ogunleye (1993) indicated that inadequate quality is a primary cause of women's under utilisation of health services.

The findings of the present study highlight some of the factors that influence the utilisation of postnatal services. Among these factors that were of

particular concern were the quality of care received by participants and the behaviour of health workers. Tiebere et al. (2007) confirmed that these factors are consistent with those reported by Petterson, Christensson, Gomes de Freitas and Johansson (2004) in a study done in Angola. The lack of high standards of care of postnatal services offered has been recognised by the World Health Organisation as an international problem and they have recommended improvements in interpersonal and intercultural competence of health care providers (WHO, 2003).

### **Conclusion**

The results from this study reinforce the need for education of women and the communities about the importance of postnatal care. This needs to be done while they attend the antenatal clinics in order to increase their awareness of postnatal services.

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