

**FACTORS INFLUENCING UTILISATION OF POSTNATAL
SERVICES IN MULAGO AND MENGO HOSPITALS
KAMPALA, UGANDA.**

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**A minithesis submitted in partial fulfilment of the requirements for the
degree of Master of Science Physiotherapy in the Department of
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KEY WORDS

Postnatal care

Mothers

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ABSTRACT

Maternal and child-health and health education are three major concerns of public health organisations and researchers throughout the world. Health education for mothers is a strategy many countries have adopted to improve maternal and child-health. The present study was carried out in Uganda with the objective of exploring the factors influencing the utilisation of postnatal services at Mulago and Mengo hospitals, a government and private hospital. Both hospitals are located in Kampala district in Uganda. The survey, was completed by 330 women who responded to a structured questionnaire that was given to them six to eight weeks after delivery. Questions that were asked generated demographic information about the mothers; mothers' knowledge about postnatal services; mothers' socio-economic status and barriers to utilisation of the postnatal services. The participants included all women who delivered in Mulago and Mengo hospitals in November 2003 except for those who had had a neonatal death. The data was analysed using descriptive and inferential statistics. Some of the key findings of the study were that most women lacked awareness about postnatal services and those who knew about these services only knew about immunisation and family planning services. The majority of the mothers did not know about other services, such as physiotherapy, counselling, growth monitoring, and physical examination. Lack of money for transport or service costs, distance from the health care facility, not being aware of the services, lack of somebody to take care of the child at home were some of the main barriers to utilisation of postnatal services. Others included, lack of education, lack of employment, lack of decision-making powers, and lack of time to go back for the service. The ministry of health should educate women and communities about the importance of postnatal care, its availability, and the importance of women having decision-making power over their own health. The health service organization should improve on the quality of care by ensuring that services are provided at convenient hours with privacy, confidentiality and respect and it should evaluate the services periodically from the users perspective to maintain the quality of service.

DECLARATION

I declare that “*The factors influencing utilisation of postnatal services in Mulago and Mengo hospitals in Kampala, Uganda*” is my own piece of work, that it has not been submitted before for any degree or examination in any other University or college, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Nankwanga Annet

September 2004

Signed:.....



DEDICATION

This thesis is dedicated to my two lovely daughters who painfully missed my love while I was away for my master's studies and to my sweetie, jolly late mum Nabatanzi Ever (Enrolled Nurse). "Life is not the same without you."

Judith Asekenye (5 years) and Patience Kooto (7years)



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LIST OF ABBREVIATIONS

MOH	MINISTRY OF HEALTH
WHO	WORLD HEALTH ORGANISATION
UNICEF	UNITED NATIONS CHILDREN'S FUND
UNFPA	UNITED NATIONS POPULATION FUND
DISH	DELIVERY OF IMPROVED SERVICES FOR HEALTH
UNDP	UNITED NATIONS DEVELOPMENT PROGRAM
RC48	REGIONAL COMMITTEE 48
IDS	INTERGRATED DISEASE SURVEILANCE
HMIS	HEALTH MANAGEMENT INFORMATION SYSTEM
MDG	MILLENNIUM DEVELOPMENT GOAL
UNAIDS	UNITED NATIONS PROGRAMME ON HIV/AIDS
TBA	TRADITIONAL BIRTH ATTENDANTS
HSSP	HEALTH SECTOR STRATEGIC PLAN

CHAPTER ONE

1.1 BACKGROUND

Maternal health, child-health and health education are three major concerns of public health organisations and researchers throughout the world. Health education for mothers is a strategy many countries have adopted to improve maternal and child-health (Soltani et al., 1999). Over half a million women encounter complications due to childbirth annually and many die (Policy project, 1999; Ashford, 2004). The report states that almost 40% of women experience complications after delivery and an estimated 15% of these women develop potentially life-threatening problems.

Uganda is one of the few countries that account for most of the maternal deaths; others include Nigeria, Bangladesh, Ethiopia, and India (Danguilan, 1997). According to this author, the maternal mortality rate of Uganda is 505/100,000 live births. This ratio is startlingly high given that the field of maternal health has received significant attention from the government (Ministry of Health, 2001). However, the World Health Organization (WHO) contends that the immediate cause of maternal deaths is the absence, inadequacy or underutilization of the healthcare system (WHO, 2004 b). Women should not die in childbirth because the vast majority of maternal deaths can be prevented or reduced if women had access to, or visited maternal health services during pregnancy, childbirth and the first month after delivery (Policy Project, 1999; WHO, 2004 b).

Complications following childbirth are more common and aggravated in developing countries. The long-term maternal complications in the postnatal period include chronic pain, impaired mobility, damage to the reproductive system and infertility (Safe Motherhood, 2002). Some women suffer genital prolapses after bearing several

children. This condition is extremely uncomfortable and can lead to other complications in future pregnancies if not properly addressed in the postnatal period (Ashford, 2004). These complications could be eliminated through preventive maternal healthcare services such as physiotherapy, family planning, health education, and screening (Policy project, 1999). All women, whether their pregnancies are complicated or not, need good quality maternal health services during pregnancy, delivery and in the postpartum period to ensure their health and that of their infants. Therefore, high quality maternal health services must be accessible, affordable, effective, appropriate for, convenient and acceptable to the women who need them (WHO, 2001; Frost, 2001).

According to the World Programme of Action, postnatal care is regarded as one of the most important maternal healthcare services for the prevention of impairments and disabilities resulting from childbirth (United Nations, 2002). Postnatal care refers to the assistance given to a mother and the baby for a period of six weeks from the time of delivery. Postnatal services are primarily comprised of physiotherapy, physical examination, immunisation, health education and family planning services. Many women do not receive these essential healthcare services, yet they need these services following delivery.

According to a report from Safe Motherhood (2002), the majority of women in developing countries receive almost no postpartum care after delivery. For example, in very poor countries and regions, such as those in the Sub-Saharan Africa only 5% of women receive postnatal care (Safe Motherhood, 2002). The recent findings by the WHO, UNICEF and UNFPA, show that a woman living in Sub-Saharan Africa has 1

out of 16 chances of dying in pregnancy, childbirth and after childbirth (WHO, 2004 b). Safe Motherhood (1998 a) reported that the factors which prevent women in developing countries from getting postnatal care include: distance from health services; cost including direct fees and the cost of transportation, drugs and supplies; multiple demands on women's time; women's lack of power in decision-making within the family; and poor quality of services including poor handling by health providers.

Physiotherapists have a critical role to play as part of the postnatal care team. Livingstone (1990) reported some of the objectives of physiotherapy in the postnatal period as including: assisting the new mother's physical recovery following pregnancy and the child birth process, with a safe, effective and enjoyable exercise and relaxation program; addressing any specific individual needs relating to the physical changes in the postpartum period. In addition, postnatal physiotherapy helps the mother to adjust emotionally to her new role and to prevent after birth complications such as muscle imbalances, incontinence and lower back problems.

Postnatal services are also among the strategies aimed at preventing the onset of physical and mental impairments among women who have delivered. The infants too need to be routinely examined for impairments and closely monitored for normal growth, and should be immunised against the six killer diseases that could stop them from growing. Therefore, both the mother and the baby need postnatal care. Furthermore, mothers need to understand the changes that occurred in their bodies and how to prevent and manage postnatal complications such as back pain, muscle imbalances and instability of the spine, pelvic pain, postnatal depression, and

incontinence, which they often go through after delivery (Copeland, 1999). Mothers need to know why they should attend postnatal services in order for them to appreciate these services. Hoddinott, Simpson and Pill (2002) pointed out, however, that very little is known about postnatal services [and their] use following childbirth and its determinants. The use of postnatal services and the barriers to utilisation of these services need to be investigated.

Mothers need to periodically undergo examination, attend family planning clinics and also have physiotherapy to enable them to regain their original pre-pregnant state as soon as possible after childbirth. According to Bick and MacArthur (1995), the six week examination is the last routine medical assessment after giving birth, marking the end of the postnatal period and the woman's discharge from maternal services. This examination focuses on the following potential symptoms: anaemia, urinary tract infection, emotional depression, urinary stress incontinence, muscle strength and whether there are any abnormalities in the breasts. Furthermore the abdomen and pelvis are also examined to ensure that involution of the uterus is complete and any traumas sustained during delivery are fully healed in the postnatal period. The mother's contraceptive needs, methods, nutrition and the immunisations of the baby are also among the issues that are discussed with the mother during the postnatal period (Hove et al., 1999). In the same study, Hove et al. (1999) showed that there is an increase in utilisation of postnatal visits at six weeks by women in the developed countries. This uptake has of recent increased from 32% in the 1940s to the current nearly 90%. But according to the same authors, in developing countries like Zimbabwe, postnatal coverage was only 48% in 1997. These statistics indicate that postnatal services are still being under-utilised in developing countries.

The Delivery of Improved Services for Health (DISH) a project under the Ministry of Health (MOH), in 2001 reported the efforts made to improve on the quality of postnatal services in Uganda in the past five years. The services addressed were: physical examination of the mother and baby, immunisation, growth monitoring of the baby and counselling mothers suffering from postnatal depression. Other services included family planning services to avoid early reoccurrence of pregnancies, breast feeding education, and early screening of babies for disabilities like clubfoot, cerebral palsy and Erb's palsy. Screening and treatment of mothers for urinary incontinence have also been undertaken. But according to the indicators for monitoring the health sector plan of Uganda, utilisation of postnatal services is only by 25.2% of the mothers whose deliveries took place in health facilities (MOH, 2003). Through its sentinel scrutiny system, the DISH II project observed declining trends in the use of maternal services, particularly beginning from the end of 1998 (Katende et al., 2001). The authors attributed this trend to the clients shifting from public to private sector sources of maternal and child health services. However, the utilisation of health services is a complex phenomenon. Rower and Garcia's (2003) investigation showed that the use of health services is related to the availability, the quality and cost of the services. In addition, the social structure, health beliefs and personal characteristics of the users are also considered.

Despite the efforts made through DISH to improve the quality of postnatal services in Uganda, the use of these services still remains very low (MOH, 2001). It is a governmental health policy to provide postnatal services to all women six weeks after delivery. But according to the MOH report, postnatal services are essentially restricted to immunisation of infants at birth and on a monthly basis after. The

comprehensive treatment (physiotherapy, counselling, physical examinations among others) is rarely utilised by mothers after delivery. Studies have not been conducted in Uganda to ascertain why women do not utilise these services. It is within this context that this study was carried out to explore reasons why postnatal services are not utilised.

1.2 STATEMENT OF THE PROBLEM

Whereas postnatal services are available in most of the hospitals in Uganda, each hospital operates according to its own regulations, rules and conditions of services depending on the available resources. Mothers who are expected to go for postnatal services at any hospital of their choice after delivery vary by age, socio-economic backgrounds and educational levels. However, there is great concern about the small number of women who turn up for postnatal services. Therefore, the factors that cause under-utilisation of postnatal services should be investigated.

1.3 THE AIMS OF THE STUDY

The aims of this study were threefold: (1) to determine the utilisation of postnatal services in Mulago and Mengo hospitals (2) to explore mothers' awareness about postnatal services; (3) to identify the barriers to utilisation of postnatal care.

1.4 RESEARCH QUESTIONS

1. Are mothers informed about postnatal services?
2. What barriers hinder mothers from attending postnatal services?

3. Are there differences between mothers who attend and those who do not attend postnatal services?

1.5 SIGNIFICANCE OF THE STUDY

Physiotherapists play a vital role in health promotion through the provision of preventive services like health education, counselling, and the screening of disabilities. In the course of their duties, physiotherapists attend to a lot of patients with postnatal complications that include among others, urinary incontinence, muscle weakness, backache and postnatal depression. The findings of this study might provide physiotherapists with information that could enhance their role as health promoters in the area of postnatal services. Furthermore, the findings might be disseminated to mothers who might get educated on the use of postnatal services. Such information could minimise the mothers' physical and possible psychological disorders, and create awareness to mothers about the importance of postnatal services. The recommendations of the study made to the healthcare providers about how to improve their postnatal care services might improve on the postnatal services. The MOH might accept some of the recommendations and implement changes in the health care delivery for postnatal mothers. Finally, researchers could be availed new information on public healthcare so that they can extend, replicate, and modify the study to other health services.

1.6 DEFINITIONS OF TERMS

Maternal health

Maternal health refers to the well being of a mother during pregnancy and after pregnancy.

Postnatal care

Postnatal care is the assistance given to a mother for a period of six weeks from the time of delivery.

Postnatal services

Postnatal services comprise of physiotherapy, physical examination, immunizations, family planning, and healthcare education on childcare, breast-feeding, treatment and counselling services.

Knowledge

In this study knowledge refers to a state of awareness of postnatal services.

Utilisation of services

Utilisation refers to use of postnatal services by women following delivery of their babies.

Barriers to utilisation of services

In the case of this study barriers refer to what prevents the women from utilising postnatal services.

1.7 OUTLINE OF CHAPTERS

Chapter one includes an outline of the chapters that follow in the thesis. It has stated the background of the study, the statement of the problem, aims of the study, the research questions and the significance of the study.

Chapter two presents the conceptual framework and a review of literature. The literature focuses on the barriers that hinder women from utilising maternal health services in both developed and developing countries.

Chapter three describes the methodology used in establishing the factors that influence the utilisation of postnatal services by women. The chapter explains the research setting, the study design, the sample size, the research instrument, the procedure followed in obtaining the information, the analysis used to interpret the information and the ethical issues.

Chapter four presents the analysis of the data in form of frequencies, percentages and chi-square tests.

Chapter five discusses the findings of the study. The discussion compares the findings of the current study with similar previous studies and also attempts to draw comparisons and differences.

Chapter six provides the limitations to the study, the conclusions drawn and the suggested recommendations.

CHAPTER TWO

LITERATURE REVIEW/CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

In this chapter, the conceptual framework and literature on the topic of study is reviewed. The conceptual framework provided is based on the initial behavioural model developed in the 1960s and reported by Anderson (1995). The model looks at the predisposing characteristics, enabling resources and the need for the care as the major factors that facilitate or impede the utilisation of health services. The literature shows the role of physiotherapists as health promoters and outlines some of the factors found to influence utilisation of maternal health services in the various studies carried out in the different countries.

2.2 CONCEPTUAL FRAMEWORKS

The behavioural model adopted is depicted in figure 1 on page 11. The model provides a framework for understanding the potential influences on an individual's decision to make use of the available health services. The model suggests that the use of health services is a function of the predisposition to use the services, factors that enable or impede use and need for the service. The purpose of the model is to discover the conditions that either facilitate or impede utilisation of a service.

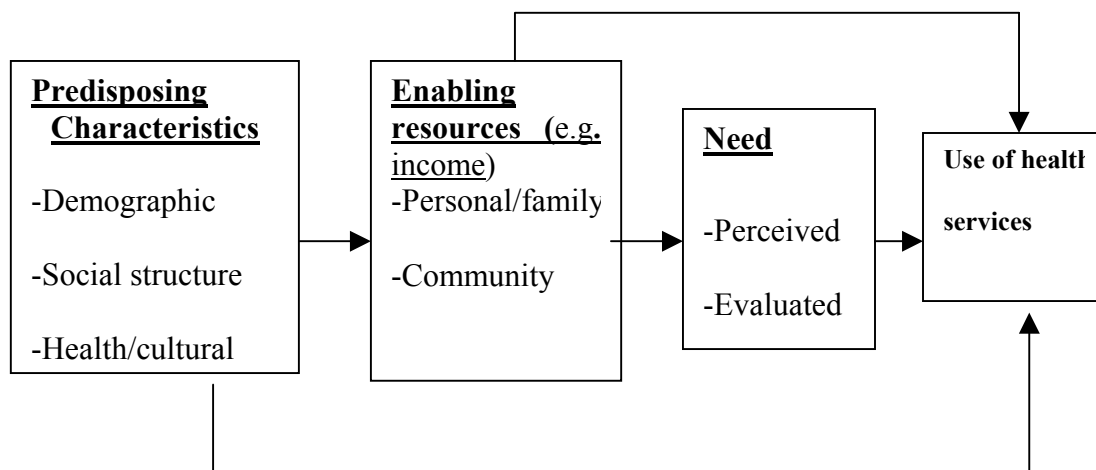


Figure 1: The Initial Behavioural Model (1960s).

Source: Anderson, R.M (1995)

The model is also meant to predict and explain use of health services. The model represents the factors to consider when studying the use of health services. Each component is conceived as making an independent contribution to predicting use of a service. The model suggests an explanatory process or causal ordering where the predisposing factors might be exogenous (especially the demographic and social structures). Some enabling resources are necessary but not sufficient conditions for use and some need to be defined for use to actually take place.

Among the predisposing characteristics, demographic factors such as age represent biological imperatives suggesting the likelihood for the need of health services. For instance younger women may have more modern attitudes towards health care than old women (Stephenson & Tsui, 2002). Social structure is measured by a broad array of factors that determine the status of women in the community, their ability to cope with presenting problems, commanding resources to deal with these problems and

how healthy or unhealthy the physical environment is likely to be. The traditional measures used to assess social structure include education, employment and family size. The social structure also relates to the level of social position (socio-economic status (SES)). Increased educational attainment influences service use in several ways, including increasing women's power in decision-making, awareness of health services, changing marriage patterns and creating shifts in household dynamics (Stephenson & Tsui, 2002).

Clients vary according to their SES in so far as social status, finances and education is concerned. Finance relates to monetary resources of an individual. The availability of money to meet both direct and indirect costs of accessing a service may be a barrier to the utilisation of a service. Cost has frequently been shown to be a barrier to service use (Stephenson & Tsui, 2002). Cost influences the choice of source from which care is sought. However, due to the limited resources and poverty, cultural traditions and national laws restrict women's access to financial resources and inheritance in the developing world. Without money, women cannot make independent choices about their health or seek necessary services (Safe Motherhood, 2002).

In the model, health beliefs conceptualise the decision to seek health care as a rational balance between perceived susceptibility, barriers, and benefits. Health beliefs also refer to attitudes such as values and knowledge that women have about health and health services that might influence their subsequent perceptions of need and use of the services. Health beliefs provide one means of explaining how social structure might influence the ability to meet the costs i.e. enabling resources, perceived needs, and subsequent use of the health service. While cultural influences refer to the health beliefs and attitudes of the mothers in relation to child bearing (Timyan et al., 1993).

Women and their families are sometimes reluctant to use health services or seek care from a skilled attendant, even where these services exist, because their own traditions are ignored. For example, Pataya et al. (2003) carried out a survey in Thailand to understand traditional practices that Thai women follow in relation to postpartum care. Their findings indicated that the younger women, the less educated and the primiparous women reported traditional practices such as avoiding wind after delivery, not exposing the body after delivery, lying on fire and food restrictions, which were mainly recommended by their elders (mothers and mothers-in-law). Health professionals usually ignore or scorn such practices, creating a barrier to utilisation of postnatal services.

Indigenous women, impoverished women, and others from ethnic minorities sometimes face discrimination from health workers. In some cases, patient and health workers do not even speak the same language, and some medical practices directly conflict with the local cultural beliefs (Timyan et al., 1993). Pataya et al. (2003) argued that traditional postpartum practices are still dominant in culture and are perpetuated by close female family relatives. The authors reason that health professionals need to be aware of the clients' culture and consider the extent to which professional care complements the mothers' traditional beliefs. Furthermore health professionals need to educate women about the benefits of contemporary postpartum care and to provide strategies to help them to integrate their beliefs and the modern postnatal care. By accommodating non-harmful traditions, service providers can build the foundation for greater trust and co-operation (Timyan et al., 1993). There are cultures where it is a taboo for a mother to use hospital services but rely on traditional herbs. Such cultural practices could hinder mothers from seeking

postnatal services even when there is a serious problem.

In the model above, both community and personal enabling resources must be available in order to use the services. Health personnel and facilities must be available where people live and work. Then people must have the means and knowledge of getting to those services and make use of them. Income, a regular source of care, travel and waiting times are some of the measures that can also be important. For example accessing a service may be facilitated or hindered by the location and physical distance of the service from the client. Distance may impede or enhance utilisation of a health service. For instance, some clients live near and others far from a health facility. The farther a client is away from a service, the less the utilisation of the service. Even at the service location, the bureaucracy of the process may encourage or discourage a client to use a service. Lack of efficient transport may impede the utilisation of postnatal services, the mothers resorting to walking or bicycle rides where possible (Kaufmann, 2002).

The need for the services is an important prime determinant of use of a health service. Any comprehensive effort to model health service use must consider how women view their own general health and functional state and how they experience symptoms of illness, pain and worries about their health. And whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help. The perceived needs in the model represent primarily some measure of pathology or disease that may cause someone to seek and use a health service. In this case it could be urinary incontinence, infection, disability, or after-birth aches and pains that may influence women to seek postnatal services.

Evaluated need represents professional judgement about women's health status and their need for medical care after delivery. According to Anderson (1995), the evaluated needs vary with the changing state of art and science of medicine and by the training and competency of the professional expert doing the assessment. For instance a woman's previous exposure to healthcare services has been shown to be a strong predictor of her susceptibility to make use of available reproductive health services (Stephenson & Tsui, 2002). The authors further reported that in a study which was conducted in rural Mexico, Potter and his colleagues showed that contact with healthcare professionals during pregnancy leads to an increased likelihood of postnatal service use. The authors continue to report Bloom et al. study, which revealed that women in urban Varanasi who received higher levels of antenatal care were more likely to turn up for postnatal care than those who did not deliver in a medical institutions. These studies provide evidence of the relationship between antenatal care and utilisation of postnatal services. In addition, a woman's positive previous experience with healthcare professionals can create confidence in and acquaintance with healthcare services, so that she may be more likely to use maternal health services.

The logical expectations of the model are that the perceived need will help us to better understand care-seeking and adherence to a medical regimen, while evaluated need will be more closely related to the kind and amount of treatment that will be provided after a patient has presented to a medical care provider. The scope of this study included awareness of the clients, socio-economic status, access, transport, finance and cultural influences to utilisation of postnatal care.

2.3 ELEMENTS OF MATERNAL HEALTH CARE SERVICES

According to a report by Safe Motherhood (1998 b), the elements of maternal healthcare services include antenatal care, delivery care, and postpartum care. Antenatal care includes all care given to pregnant women. The WHO recommends that pregnant women should have four antenatal visits for:

- a) **Health promotion:** advice on nutrition and healthcare, as well as counselling to alert women to signs of danger and give them a help plan for the birth;
- b) **Assessment:** history taking, physical examination, and screening tests such as HIV, STDs, chronic, and hereditary diseases;
- c) **Prevention:** early detection and management of complications, and where needed, prevention of malaria, hookworm and tetanus; and
- d) **Treatment:** management of sexually transmitted diseases, anaemia, or other conditions.

Delivery care is the care given to a woman during the delivery/labor period. WHO recommends a skilled attendant at every birth in order to:

- a) Provide good quality care on an ongoing basis and the care should be hygienic, safe and sympathetic;
- b) Recognize and manage complications, including life-saving measures for the mother and baby; and
- c) Refer the mother promptly and safely when care at higher-level is needed.

Postnatal care refers to the care given to a woman six weeks after delivery. WHO recommends integrated postnatal care that includes:

- a) Identification and management of problems in the mother and the newborn

- b) Counselling, information and services for family planning
- c) Health promotion for the newborn and mother, including immunizations, advice on breastfeeding, and safe sex (Safe Motherhood, 1998 b).

2.4 POSTNATAL VISIT

According to Kogan et al. (1990), a postnatal visit is generally considered an essential component of maternal and child-health care. Postnatal services ensure that women are not experiencing complications following delivery, and provides an important opportunity to assess the infant's development, the family's capability to cope and whether pediatric care and other services are being received by both the mother and the infant. Postnatal care may also have an effect on family planning and contraceptive use. It was noted by Kogan et al. (1990) that 50 percent of women have intercourse, often unprotected, by the end of the second month following delivery. Postnatal contraceptive counselling has been effective in preventing repeat pregnancies within a short period after delivery. The same authors also reported that there is a positive correlation between a postnatal visit and increased contraceptive use a year after delivery. They continue to report that epidemiological studies have shown that increased risks of intra-uterine growth retardation, low-birth weight and infant mortality are associated with a short interval between births. Although these are significant reasons for promoting postnatal care, factors associated with whether a woman returns for a postnatal visit have not yet been examined (Kogan et al., 1990).

2.5 HEALTH PROMOTING HOSPITALS AND FOCUS OF HEALTH PROMOTION

Hospitals should be encouraged to provide health promotional services in the community in order to empower women with knowledge so that they can put more value on the use of postnatal services to improve on their health. According to the WHO (1991), the health-promoting hospital is a concept that was developed in 1988. Since then, an international network has developed to promote the wider adoption of this concept in hospitals and other healthcare settings (WHO, 1991). According to the same report by the WHO, the Budapest declaration on health promoting hospitals states that a health promoting hospital does not only provide high quality comprehensive medical services, but also develops a corporate identity that embraces the aims of health promotion. The hospital also develops a health promoting organizational structure and culture including active participatory roles for patients and all members of staff; develops itself into a health promotional physical environment; and actively co-operates with its community. The same authors further contend that health promoting hospitals should take action to promote the health of their patients, their staff and the population in the community in which they are located.

In the same milieu, the Ottawa Charter (1986) posed a challenge to health workers by highlighting the fact that health promotion action does not only encompass provision of curative services but goes beyond the clinical health care system. According to WHO (1991), the aim of health promotion is to foster the attainment of the highest achievable levels of health. The authors argue that healthy people are productive,

capable of living lives that are not only long in years but also rich in quality. Thus the focus of health promotion is a social action for health.

2.6 THE ROLE OF PHYSIOTHERAPISTS AS HEALTH PROMOTERS

The importance of physiotherapists in promoting women's health has been recognised internationally. Physiotherapy practice for women's health that has traditionally been limited to the areas of prenatal and postnatal care was broadened to encompass social, cultural, economic and other issues. McComas and Harris (1996) point out that women's health involves women's emotional, social, cultural, spiritual and physical well being, and it is determined by the social, political and economic context of women's lives as well as a woman's biology. Every woman should be provided with opportunity to achieve, sustain and maintain health, as defined by that woman herself, to her full potential.

This implies that women's health issues are wider than prenatal and postnatal care. But the services women would receive and their ability to attend to prenatal and postnatal services are influenced by the social, economic and political variables as well. Every woman has the right to her well being and would like to make a choice if availed the opportunity. But these variables point to inadequacies among women to better their health. McComas and Harris (1996) argue that excellence in the provision of physiotherapy services to women means that, physiotherapists must be aware of these present inadequacies. Studies ought to be conducted to establish prevalent barriers within the identified inadequacies.

In an editorial on what physiotherapists can contribute to women's health research and practice, McComas and Harris (1996) pointed out that physiotherapists could contribute to women's health through health promotion strategies. Among the strategies, physiotherapists are recommended to play the role of educating young women about the potential health benefits, especially postnatal services to prevent afterbirth complications.

The forum on women's health held in Ottawa partly addressed the role that physiotherapists could play towards knowledge in women's health, which could influence policies and practice in women's health (McComas & Harris, 1996). One of the strategies that the Ottawa health promotional conference in 1986 advocated was the re-orientation of health services from clinical and curative services to a health promotional approach that included the prevention of health problems (Dennill et al., 1999). Therefore, physiotherapists are clearly placed to play a vital role in health promotion. By accepting the challenge identified by the Ottawa charter to extend beyond the physiotherapist/patient partnership and in turn to address issues pertinent to groups, communities and societies (Copeland, 1999). Women's utilisation of health services depends on the knowledge they have about those services, their socio-economic status, and their cultural beliefs. It is important for physiotherapists to have knowledge about these barriers so that they enable mothers to make healthy choices easy choices (Dennill, et al., 1999).

According to Pauls (1995), taking a multidisciplinary approach to enhance women's health boosts the chance of success and benefits the women as postnatal service consumers. Physiotherapy is a discipline that plays a significant role in the

prevention and rehabilitation of some of the postnatal complications encountered by women after delivery and hence complements the midwifery services. McComas & Harris (1996) asserted that physiotherapy research would only be improved by working collaboratively with professionals from other disciplines and by making use of appropriate community resources. Physiotherapists manage postnatal complications such as back pain, incontinence, diastasis recti, pubic symphysis pain and joint pains, which women might develop after delivery. Pauls (1995) recommended that physiotherapists should work with other disciplines to develop excellent programs for women with the aim of promoting their health. He further argued that establishing the credibility of physiotherapy for the obstetrics patients, caesarean rehabilitation and neuromuscular training could facilitate expansion of physiotherapy into other areas of obstetrics and gynaecological services.

McComas & Harris (1996) suggested that physiotherapists should have a major and important contribution to research and also practice in women's health. They also noted that there is a need to alter our approach to these tasks by moving beyond our traditional biomedical perspective to embrace a model that includes the social, political, and economic contexts of women's lives.

2.7 AWARENESS ON UTILIZATION OF MATERNAL HEALTH SERVICES

Lack of awareness is an important factor underlying maternal healthcare utilization. This is because women and their families lack understanding of the danger signs or gravity of the condition, or because they do not know where to go to seek help. Lack of information affects women's capabilities to make their own decisions about seeking

healthcare and constrains their ability to exercise their reproductive rights as well. Ladfors et al. (2001) argued that informed consent (i.e. the process by which a fully informed woman can participate in decisions about her healthcare) is mandatory. The authors further contended that the procedure requires women to have knowledge and that the healthcare provider should inform the women in an appropriate way so that the women can understand why they need to use the services. This denotes that it is imperative for women to be knowledgeable of postnatal services in order for them to utilise the services.

Several studies have investigated mothers' knowledge about antenatal and postnatal services with varying results. For instance, Soltani et al. (1999) conducted a study to evaluate mothers' knowledge about preventive care in Tunisia. The results indicated that a large number of women, (95%), knew the importance of antenatal examination but 5% did not know. The study did not report on the extent of the availability and utilisation of antenatal services. Earlier, Collinson and Cowley (1998) conducted a study to identify the reasons why women access health services. They questioned the women about their perceptions of the value of services and how they thought the services could be improved. The findings indicated that clients' knowledge was related to utilisation of the services. The extent to which the service meets expectations of clients appeared to influence the value which women placed on health visits and the subsequent use of services. But much earlier, in Pakistan, Agrawal et al. (1994) had conducted a study to assess the delivery patterns of maternal and child health services at Varanasi in Uttar Pradesh. The findings indicated that 26.2% of the beneficiaries knew about maternal and child health centres and 25% had used them. That study indicates that probably all the beneficiaries who knew about health

services used them.

Livingstone (1990) posited some objectives for carrying out postnatal physiotherapy. They include: assisting the physical recovery of the mother following pregnancy and the child birth process; addressing any specific individual needs relating to the physical changes in the postnatal period; helping the mother adjust emotionally to her new role; and preventing after birth complication such as muscle imbalances. However, the mothers need to know supporting reasons why they should attend postnatal physiotherapy services in order for them to appreciate the services.

2.8 BARRIERS TO UTILISATION OF MATERNAL HEALTH SERVICES

Several studies that investigated the common barriers to utilisation of healthcare services have shown barriers such as: lack of finance (Kalmuss & Fennely, 1990); knowledge (Soltani et al., 1999); Social-economic status (Dunlop et al., 2000); cultural influences (Sibanda et al., 2001); lack of transport (Kaufmann, 2002); lack of access to health services (Chakraborty et al., 2002) among others. Chakraborty et al. (2002) examined factors associated with the utilisation of healthcare services during the postnatal period in Bangladesh and found that the mother's age at marriage and the husband's occupation positively affect healthcare utilisation and the number of pregnancies and desired pregnancies were significantly associated with the utilisation of postnatal healthcare. Some of the results were, however, inconclusive on maternal education, antenatal visits, and access to health facilities.

Hove et al. (1999) conducted a cross-sectional survey in Zimbabwe, to determine the prevalence and associated factors for non-utilisation of postnatal services on a

convenience sample of mothers of infants aged six weeks to twenty-three. The findings indicated 10.1% prevalence of non-utilisation among the respondents. Religion and non-medical birth attendance were found to influence postnatal service utilisation. The author recommended more training of the birth attendants on the need for their clients to attend postnatal care clinics. In a cross sectional study conducted in the same country, Sibanda et al. (2001) investigated factors that determine attendance, and use of traditional or cultural practices that relate to postnatal care and found that 60% of the women attended postnatal care. Sibanda and colleagues concluded that postnatal care participation was greater than usually reported. According to Chou et al. (2002) barriers to utilisation of healthcare and social services like service accessibility, appointments schedule and continuity of care are not unique to new bearing mothers but are experienced by neurotic patients as well.

Delvaux et al. (2001) have shown that there are also similar barriers to antenatal care among European countries. Kalmuss and Fennely (1990) examined the barriers to prenatal care in the United States and found it related to attitudes. Dunlop et al. (2000) assessed the extent to which Canada's universal health care system has tried to eliminate socio-economic barriers in the use of physician services. However, in the United Kingdom, Gulliford et al. (2001) recapitulated the findings of a scooping exercise on access to health care and noted that there was little evidence for the effects of user charges on access to primary healthcare services. This means socio-economic and cost barriers may be responsible for hindering the access to health services. However this does not tally with a study by Griffiths & Stephenson (2001) on utilisation of maternal healthcare services in the rural and urban areas in

Maharashtra, India. Their study revealed controversial results, which showed that socio-economic status was not a barrier to service use if the women perceived the benefits of the service to outweigh the costs. However, there is an assumption in this UK study that the women can ultimately afford the service. This study did not consider the women who have no or very few resources.

Fatmi & Avan (2002) studied the factors affecting utilisation of antenatal care services by women from a rural area in Sindh in Pakistan. Their findings pointed out that SES of women was a major determinant of utilisation of services. The authors recommended the increase and improvement of SES of women for the utilisation of prenatal services to be realised. Kaufmann (2002) reported an analysis of transport to Benedictine hospital, Nongoma, KwaZulu-Natal in Zululand health district and emphasised its importance for access to health services. Kaufmann linked availability of transport to health service utilisation. He further argued that transport consumes a major part of personal budgetary costs. A similar report was made by Gulliford et al. (2001) who found that distance from a service is inversely associated with its utilisation.

Kogan & Leary (1990) carried out a study to determine the variables that were associated with returning for postnatal services on a sample of 13,921 registered women. The study identified SES, level of education, parity, age, language, marital status and adequacy of prenatal services as the variables associated with postnatal service utilisation. The study found that the more number of children a woman had, the less likely that she returned for postnatal services. Eighty-two percent of the women with first births returned, 77 percent of those with second or third births and

only 70 percent of those with fourth or subsequent births did return for postnatal services. This is probably explained by the experience, knowledge and confidence gained as one produces more and more children. The study also found that the higher the level of education of a mother, the greater the likelihood of returning for postnatal services after delivery. Strategies such as reaching the women as early as possible in their pregnancies, ensuring continuous care and elimination of financial barriers were recommended to increase the chances of women to return for postnatal services. Among other strategies, education of women, follow-up to ensure comprehension, media use and outreach campaigns through religious leaders, business and broad based groups were recommended to help women to access healthcare.

In the study carried out by Hulsey et al. (2000), the relationship of feelings about the pregnancy and utilisation of prenatal and postnatal services was examined on a convenience sample of women who had delivered. The findings showed that women who liked the pregnancy used postnatal services, while those who did not like the pregnancy did not use the services after delivery. This means that attitude towards the pregnancy has a great influence on utilisation of postnatal services.

Elo (1992); Nwakoby (1994); Toan et al., (1996); and Navaneetham & Dharmalingam (2002) carried out survey studies to determine the factors affecting utilisation of maternal health services respectively in southern India, (southeast Asian), Enugu (rural Nigeria) and Peru district. The findings from these studies agree with some of the findings from Kogan and Leary (1990) & Okafor (1991). The findings from these studies showed that maternal education, lack of access to care, parity, occupation of the mother, religion, occupation of the husband, marital status and

previous use of a physician were the most common factors that affected the utilisation of maternal health services. The results also revealed that utilisation of maternal healthcare services was not only associated with a range of factors such as SES, culture and organisational factors as has been revealed by several studies as indicated in the literature, but also included factors such as the state and the type of healthcare services delivered. The interstate differences in the utilisation were thought to have been partly due to variations in implementation of maternal health programme, as well as differences in availability and accessibility of the services in the states. In order to improve on the utilisation of the maternal health services, Okafor (1991) study recommended the introduction of a female literacy program especially in the rural areas of Nigeria to help to educate the women.

Similarly Mwaniki et al. (2002) conducted a cross sectional descriptive study on a sample of 200 mothers to determine the utilisation of antenatal and maternity services in four rural health centres in Mbeere district, Kenya. The findings of the study revealed that utilisation of health facilities was significantly influenced by the number of children a woman had and the distance to the health facilities. The more the number of children a woman had, the less likely she used the services. In addition the mothers who were living in a distance less than 5 kilometres to the healthy facilities utilised the services better than those who lived in a distance 5 kilometres away and beyond. Other reasons for not utilising the services, which were mentioned in the study include, lack of satisfaction with the quality of the services, lack of cleanliness in the health facilities, poor quality of catering services, lack of money for transport and hospital fee.

Burtz et al. (1993) and York et al. (2000) studies examined the relationship between levels of prenatal care utilization and postnatal patterns of healthcare behaviour among high-risk minority women. The findings indicated that women who sought inadequate or no prenatal care had greater infant morbidity and infant mortality in the postnatal period and had significantly lower levels of attendance at postnatal visits, well-child visits, and immunization completions. Their conclusions confirmed that the level of prenatal care indicates the level of postnatal care women seek for themselves and their children after delivery. This implies that there is a relationship between prenatal care and utilisation of postnatal services.

2.9 BARRIERS TO UTILISATION REPORTED BY SAFE

MOTHERHOOD

According to a report by Safe Motherhood (1998 a), the significant barriers that prevent women from utilising maternal health services include physical, financial, and socio-cultural as elaborated below:

- a) **Distance and lack of transport:** Nearly 80 percent of rural women live more than five kilometres from the nearest hospital, and many have no way to get to health facilities except by walking.
- b) **High costs:** Millions of women cannot afford to use postnatal services, even when fees are low or services are delivered for free. This is due to additional, often hidden costs that patients must cover, such as transport, drugs, and even food and lodging for themselves and their families.
- c) **Poor information:** Women and communities often do not know how to recognise, prevent, or treat pregnancy complications, or when and where to

seek medical care. This has a profound impact on the utilization of postnatal services.

- d) **Socio-cultural factors:** Health services often do not respect women's cultural preferences, for example, for privacy, birth position, or treatment by women providers. In addition, women's power to decide when to seek care is restricted in many parts of the world.
- e) **Low self-esteem:** The lack of knowledge and awareness results into women's lack of self-esteem especially in areas where the women's status is recognized as inferior to that of men. The low self-esteem leads to the belief that suffering is women's lot therefore discouraging them from seeking healthcare, or others taking them for care when problems arise.
- f) **Decision making dynamics:** Sometimes the decisions for women to seek medical care are made by their husbands, family members or community members except for a few of those who are educated and can make up the decision by themselves.

2.10 QUALITY OF MATERNAL HEALTH SERVICES

Efforts to improve the quality of care must find a balance and avoid over-medicalisation of maternal health, which occurs when specialised interventions and technologies are used routinely (e.g., routine episiotomies, electronic foetal monitoring, or Caesarean delivery). These procedures may be inappropriate for many women, and as a result they often create barriers between clients and providers, thus discouraging women from using formal health services (Safe Motherhood, 1998 b).

Quality of services comprises of client-provider interaction. If the relation between the provider and the client is poor then it will affect the quality of the services and the

subsequent use of the service as well. Other factors include; the range of services provided, privacy to the client, respect for the client, service hours, availability of supplies and facilities among others. Safe Motherhood (1998 b) contends that poor quality of care is one of the most common reasons why women do not seek care or seek it late. Among the major problems that serve as barriers to providing quality maternal health services are chronic shortages in health facilities of adequate staff, equipment, drugs and basic supplies and poorly trained health facility staff, lacking both lifesaving and basic clinical skills. The providers may also be rude, uncaring and do not attend to their duties.

Webster et al. (2001) conducted a survey to examine satisfaction with health care providers and to compare differences in service use in the first four weeks after birth between depressed and non-depressed women who attended bookings in Royal women's hospital. The results indicated that 16% of the women were dissatisfied with the health service providers and this probably contributed to their not utilising the services. This suggests that for some women to use health services they must be satisfied with the quality of the services and the service providers as well. Safe Motherhood (1998 b) also contends that poor quality of care is one of the most common reasons why women do not seek care or seek it late. Therefore hospitals should strive to improve on the quality of the services they provide to their clients in order to attract the consumers to utilise the services. Ensuring good quality care would also have multiple benefits, for both individuals and the health system as well. The benefits include:

- a) Cost efficiency and effectiveness: If women use services, more intensive and expensive care can often be avoided, saving funds of the health system.

- b) Improved health outcomes: When staff works with adequate equipment and supplies, they can manage health problems better, reducing deaths and the need for emergency interventions and referrals to higher-level care.
- c) Improved staff morale: Health workers are likely to have more positive attitudes towards their work when they have the resources they need to provide care and when the community values the care.

2.11 SUMMARY OF SOME OF THE REVIEWED STUDIES

This section provides a summary of some of the reviewed studies on the barriers/factors affecting utilisation of maternal health services in both Africa and European countries (see Table1).

Table 1 Summary of some of the reviewed studies on factors affecting utilisation of maternal health services (prenatal and postnatal care)

S/NO	Author/year/ Study area	Aim of study	Type of study/ Design	Sample size	Data collection method	Findings
1	Chakraborty et al. (2002) Bangladesh	To examine factors associated with utilisation of maternal health care services (MHCS)	Quantitative Survey	1020 married pregnant women	Interview	-Family size -Education -Husband's occupation -Employment -Parity -Economic status - Mother's age -Antenatal visits -Access to health care facilities
2	Delvaux (2001) (Europe)	To assess characteristics associated with inadequate prenatal care use	Quantitative Case control	1283 (case group) 1280 (control group)	Interview	-Lack of health insurance -Age -Parity -Education -Lack of child care -Did not feel like had any problem -Failure to cope with health service organisation
3	Hove et al. (1999) Zimbabwe (Africa)	To determine factors associated with non-utilisation	Quantitative Cross-sectional	Convenience sample	Interview using questionnaire	-Attending to other family matters -Religious

		of postnatal services.	survey			beliefs -Do not stay in the area -Not aware -No need of attending
4	Toan et al. (1996) South-east Asia	To describe utilisation of maternal services during a period of structural change	Survey		Review of previous surveys & records	-Utilisation varied with ethnicity -Utilisation positively related to mother's educational level
5	Nwakoby (1994) Rural Nigeria, Enugu (Africa)	To examine the patterns and determinants of maternal service utilisation in the rural Nigeria	Quantitative Survey	448 women who had child birth between may-September 1987	Interview	-Maternal education -Occupation -Religion -Occupation of husband -Maternal age -Parity -Marital status -Distance
6	Elo (1992) Peru (Africa) Rural	To test the hypothesis that formal education of women, place of residence, household social economic status and access to health care services influence the use of maternal services.	Quantitative	Not mentioned	Questionnaire	-There was a positive effect on maternal schooling on the use of maternal services. -There was lack of access to health services in the rural areas
7	Kogan & Leary (1990) Massachusetts	To determine what variables were associated with the returning of women for postnatal care	Quantitative Survey	13,921 women	Interview questionnaires & review of existing records	-Prenatal care -Parity -Education -Language -Age at delivery -Ethnicity/race -Finance -Marital status -Type of delivery -Birth outcome
Review on Knowledge factor as a barrier to utilisation of maternal health services						
8	Soltani et al. (1999) Tunisia (Africa)	To evaluate mother's knowledge on prenatal surveillance	Quantitative Cross-sectional survey	915 mothers	Self administered questionnaires	95%aware of prenatal care -5% not aware
9	Collinson and Cowley (1998) Europe	To find out reasons why clients access health services	Qualitative Study	9 mothers of pre-school children	Guided Interview	-Awareness played a role in clients' access of services.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter describes the methodology used in establishing the factors that influence the utilisation of postnatal services by women. A description of the research setting, research tools used, research procedure used and the ethical issues relating to the study are also given.

3.2 RESEARCH SETTING

The study was conducted in Mulago and Mengo hospitals, in Kampala district in Uganda (see appendix II). Uganda is a landlocked country, bordered by Sudan in the north, Democratic Republic of the Congo in the west, Rwanda and Tanzania in the south, and Kenya in the east. It lies astride the equator between latitudes 4 degrees 0 North and 1 degree 30 South of the equator, and longitudes 30 degrees 0 East and 35 degrees 0 East of Greenwich. Uganda covers an area of 242,554 square km. It has a population of approximately 24.5 million people spread out in 54 districts (Census Survey Report, 2002). In each district there is a hospital that renders comprehensive health care services including postnatal services.

Kampala district where the study was carried out is the capital city of Uganda. Kampala is the only district within Uganda, which is entirely designated as an urban municipality. It was designated in 1979 and it encompasses an area of approximately 190 square kilometres. Kampala is situated on the northern shores of lake Victoria with its centre located approximately 45 kilometres north of equator. The population

of Kampala is approximately three million of which thirty percent are women of the reproductive age.

Mulago is the largest and busiest national tertiary hospital in Uganda. The hospital was started as a venereal disease control centre in 1913 by a missionary Dr. Albert Cook. Later in the mid 1950s the mission of the hospital became clearly established as a treatment, teaching and research hospital. Since then there has been marked developments in the areas of research, clinical care and training of health personnel in the hospital. The hospital currently has a bed capacity of 1500 beds and consists of several departments, including Obstetrics and Gynaecology. The Obstetric and Gynaecology department where part of the study was conducted is a large department consisting of three admitting firms and 3 labour wards. The department has an outpatient postnatal and family planning unit, which provides after delivery care, family planning and free immunisations of the new born babies.

Mengo is a “private non-profit making” missionary hospital which is a major NGO hospital in the capital city of Kampala. Like Mulago, Mengo hospital was founded by a missionary, Dr. Albert Cook on 22nd February 1897. The hospital was started with a strategy of spreading Christianity in addition to providing medical services to the community. Currently it has a bed capacity of 300 beds, two maternity wards, an out patient antenatal and child welfare clinic which provides services such as family planning, antenatal care, after delivery care, immunisations, HIV counselling/screening and STD treatments at a cost.

The Departments of Gynaecology and Obstetrics in the two hospitals provide a great number of birth services for the district. Approximately 1000 women deliver every month in each of these hospitals (hospital medical records).

3.3 STUDY DESIGN

The study followed quantitative research methods using a cross-sectional survey design. A cross-sectional design offers information about a population at a given point in time (Bless & Higson-smith, 2000). This design was chosen as it was intended to gain immediate knowledge and information on factors influencing utilisation of postnatal services in the district of Kampala. The survey was useful in that it allowed collection of information, opinions and perceptions of mothers from a relatively large number of subjects to allow generalisations to be made. This study design is also useful for issues that may not require as much depth of analysis as other research methods (Pretorius, 1995). The research design was therefore appropriate for this study, as it explored all the necessary information in regard to the study objectives that were stated.

3.4 STUDY POPULATION

The study population comprised of all women who delivered in the month of November 2003 at Mengo and Mulago hospitals. According to the hospital registries, each of the study hospitals had 1000 deliveries in November. Therefore, the study population consisted of a total of 2000 mothers (N=2000). These hospitals were chosen because the majority of the people within Kampala district receive their hospital care at these hospitals. Therefore it was anticipated that these hospitals would provide the required sample size for the study. Furthermore, the study needed

to compare the attendance of postnatal services between a private and government hospital.

3.5 SAMPLING PROCEDURE

From each hospital birth registers, a list of all the names of mothers who delivered in November 2003 in both hospitals along with their contact addresses were obtained. Out of these lists, a convenient sample of 330 mothers was obtained. Questionnaires were distributed at the homes of only the mothers who accepted to participate in the study. The sample size was 14% of the target population. The expected total number was therefore 280 mothers from both hospitals. However, to overcome risks of non-responses or poorly answered questionnaires, 70 extra questionnaires were distributed. It was anticipated that this sample size was representative to the entire study population, since the minimum sample size that can be generalised to this population is 280 according to Stoker's sampling guidelines, cited in Fouché & Delpont (1998: 193).

3.6 RESEARCH INSTRUMENT

A validated structured questionnaire (appendix 1), similar to that used by Mackeith, et al. (2001), on the women friendly project in Lusaka, Zambia, was adapted for this study. The questionnaire was adapted for this study. The questions were modified to suit the situation that might be prevailing in Uganda. For example a question such as “ what is your marital status?” was changed to “What is your present marital status?” because there are those who could have got married but have now separated. The questionnaire included both close-ended questions and multiple response open-ended questions. The questionnaire was structured consisting of 25 questions in four

sections. Section 1 included questions on demographic information (7 questions), section 2 was on knowledge (8 questions), section 3 was on socio-economic factors (5 questions) and section 4 was on barriers to utilisation of postnatal services (5 questions).

3.7 TRANSLATION OF THE QUESTIONNAIRE

The questionnaire was translated into Luganda, which is one of the main languages used in Kampala district. In order to ascertain if the translated versions into Luganda relay the intended meaning in the English version, two physiotherapists who have a good understanding of English and Luganda assisted in back translation of these questionnaires to the English. More corrections on the questions were done after the pilot studies.

3.8 PILOT STUDY

Prior to the main data collection, a pilot study was conducted with subjects at Kamuli hospital, an upcountry town hospital. The purpose of piloting the instrument was to obtain clarity, find out its appropriateness and obtain direction to the main study. The pilot study provided the researcher with orientation/experience in conducting the research procedure; and determining the length of time needed to complete the questionnaire. The necessary changes to the instrument were made after piloting. For example the question requesting comments on maternity services of the hospitals was dichotomised into “Yes” and “No” options. After the pilot study women who were eight weeks into their postnatal period were also included in the main study because they were in position to remember what was done during the postnatal period. The women were asked to give comments on the clarity of the instrument, its

appropriateness and any other general comments. The pilot study therefore helped to address the reliability and validity of the instrument.

3.9 ETHICAL CONSIDERATIONS

Permission to carry out the study was sought from the University of the Western Cape's Research Committee, relevant hospitals' authorities, the heads of Obstetrics and Gynaecology departments, and from the participants who participated in the study. The participants were assured of anonymity; confidentiality and they were assured of their ability to withdraw from the study at any time. No names or person identification numbers were reflected on the questionnaires except the numbering for questionnaires, which was done for purposes of identification of data during data editing. The results of the study were availed to the directors of both hospitals, the heads of the departments of Obstetrics and Gynaecology and to those participants who were interested in knowing the results.

3.10 DATA COLLECTION

Permission to carry out the study was sought from the University of the Western Cape research committee, and in Uganda from the relevant hospital authorities, the Heads of Obstetrics and Gynaecology departments, and from the participants who participated in the study (i.e. ethical research standards). The researcher personally distributed the questionnaires to the women at their residential addresses with the help of a trained research assistant in January 2004. The purpose of the study was concisely explained to the participants during the process of distribution of the questionnaires. Help was given to some of the mothers in the interpretation of the questionnaires. This included both conceptual and written help especially to those

who could not write. If the mother was not at home and the neighbours confirmed that there was a mother to a six to eight weeks baby in the household, a follow up was done to get the mother at home later. Some of the mothers had shifted from where they used to stay therefore it became difficult to follow them up. Collection of the completed questionnaires started within a fortnight. A thank you note was written to the participants after receiving the completed questionnaires.

3.11 DATA PROCESSING AND ANALYSIS

The questionnaires were checked for completeness and consistency of information at the end of every field data collection day and before storage. Data capturing was done using Excel software. The data from the completed questionnaires was cleaned, re-coded and entered into the computer using the statistical package for social sciences (SPSS) version 11.0 for Windows for analysis. Data analysis was done and the findings are reported in chapter four. Descriptive statistics (i.e. frequency analysis) was computed. The percentages of the demographic characteristics, knowledge issues and those concerning socio-economic factors and barriers to utilisation were computed to compare the responses of the mothers who attended and those who did not attend postnatal services. Percentages were estimated to compare the responses of the two groups of women between the two hospitals. This included comparisons of utilisation of postnatal services among those mothers who turned up for postnatal services for the two hospitals. The relationship between knowledge, demographic information, socio-economic factors and utilisation of postnatal services was investigated and tested for significance using Chi-square tests. The Chi-square test is normally used to test for the dependency of one variable on another. For example, if knowledge was measured by a “Yes” or “No” response as the dependent

variable, and education level was measured in terms of years at school, then a contingency table could be formed. Mothers falling in each cell of the table were counted and the Chi-square value was calculated and tested for significance at a significance level of 5%. P-values determined, using Pearson Chi-square test or Fisher's exact test, where appropriate, were considered statically significant when less than 0.05.

3.12 VALIDITY AND RELIABILITY

Content validity is based on the adequacy with which the items in an instrument measure the attributes of the study (Nunnally, 1978). Content validity of the instrument was ensured through constructive criticism from colleagues in the physiotherapy department who had had an extensive experience and expertise in questionnaire construction and in addition through the use of peer reviews. The items were revised and improved according to advice and suggestions made. Reliability is the extent to which any measuring procedure yields the same results on repeated trials (Carmines & Zeller, 1979). The reliability of the instrument was improved through piloting and pre-testing. Furthermore, the reliability and validity of the results were obtained through member checks to help indicate whether the findings appeared to match with perceived authenticity. This was done in order to limit the distorting effects of random errors on the findings. Two senior physiotherapists, a midwife and one nurse reviewed the results of the study to find out if the results were matching with actuality.

CHAPTER FOUR

RESULTS

4.1 INTRODUCTION

In this chapter the results of the study are described and the analyses of the data are presented. The results describe information on set up, awareness of postnatal services, socio-economic status, level of utilisation of postnatal services in the two hospitals and the barriers to utilisation among the mothers. In addition, the analysis provides the relationships between socio-demographic variables, the awareness of postnatal services and socio-economic status with utilisation of postnatal services.

4.2 RESPONSE RATE

Out of the grand total of 350 questionnaires that were distributed, 330 were returned, generating a response rate of 94%. From the grand total of participants, 65% (213) were from Mengo, while 35% (117) were from Mulago hospital.

4.3 SOCIO-DEMOGRAPHIC AND SOCIO-ECONOMIC INFORMATION

Table 2 shows that the study consisted of 330 participants who had delivered six to eight weeks before the commencement of the study. The 65% of the participants delivered in Mengo, a private missionary hospital in Kampala district, while 35% of them delivered in Mulago, a government hospital in the same district. Sixty-seven percent of the participants resided within a distance of one to five kilometres from the hospitals. Table 2 also shows that 54.3% of the participants were between 25-34 years of age while only 6.4% of them were above the age of thirty-five. The majority (82.4%) of the participants were Christians while the rest belonged to other religions.

Table 2: The socio-demographic and socio-economic information of the participants

CHARACTERISTIC	Frequency (n)	(%)	Total number of participants (n)
<u>SOCIO-DEMOGRAPHIC</u>			
Participants from each hospital			
Mengo	213	65	330
Mulago	117	35	
Residential distance from hospital			
<5kilometers	221	67	
>5kilometers	109	33	330
Age of participants			
15-24	130	39.4	
25-34	179	54.3	330
>35	21	6.4	
Religion of participants			
Protestants	119	36.1	
Roman Catholics	102	30.9	
Moslems	58	17.6	
Born again Christians	46	13.9	330
Seventh Day Adventists	5	1.5	
Marital status of participants			
Married	184	56	
Cohabiting	112	34	330
Never married	23	7	
Separated/divorced	11	3	
Live births of participants			
1-2	221	67	
3-4	89	27	330
>5	20	6	
<u>SOCIO- ECONOMIC</u>			
Educational level of participants			
None	11	3.3	
Primary	101	30.6	330
Secondary	166	50.3	
University/tertiary	50	15.2	
Missing data	2	0.6	
Occupation of the participants			
Not employed	179	54.3	330
Employed	149	45.1	
Missing data	2	0.6	
Husbands' occupation			
Employed			
Non-employed	285	86.4	
	45	13.6	330

In addition, 56% of the participants were married, while 3% of them had separated or divorced from their husbands. Regarding live births, a big number of the participants (67%) had 1-2 live births.

The socio-economic factors looked at in this study were the level of education, employment of the participants and husbands' employment. The results of the analysis of these variables are again shown in Table 2. The educational level of the participants ranged from primary to university/tertiary institutional level. Half of the participants (50.3%) had completed secondary school while 30.6% completed primary school. Table 2 also shows that the majority of the participants (54.6%) were not employed, while the rest were in government or non-government employment. In contrast, 86.4% of husbands of the participants were employed and only a few were not employed.

4.4 AWARENESS OF POSTNATAL SERVICES

Awareness in this study refers to knowledge about postnatal services and is showed in Figure 2. The results show that 30% of the participants were not aware of postnatal services.

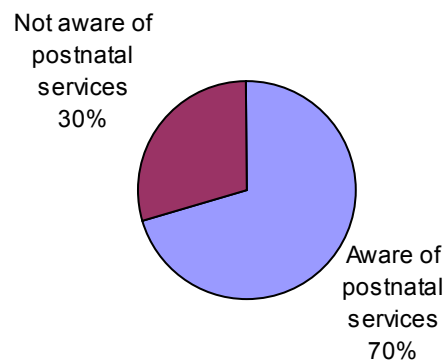


Figure 2: Awareness of postnatal services

4.5 UTILIZATION OF POSTNATAL SERVICES

This section presents information about utilisation of postnatal services and compares the utilisation of services between the two hospitals. Other variables that are addressed include mothers' attendance and non-attendance of postnatal services and the factors that influence the attendance of postnatal services.

4.5.1 Attendance Of Postnatal Services

Figure 3 shows mothers' attendance and non-attendance of postnatal services in the two hospitals. The results show that the average number of respondents who did not attend postnatal services in both hospitals was 42%, while 58% of them attended postnatal services.

Generally more women, 36% (119) who delivered in Mengo returned for postnatal care as compared with only 22% (72) for Mulago hospital. It is observed that Mengo,

a private hospital, had the highest level of attendance probably because it had a higher response rate than Mulago hospital.

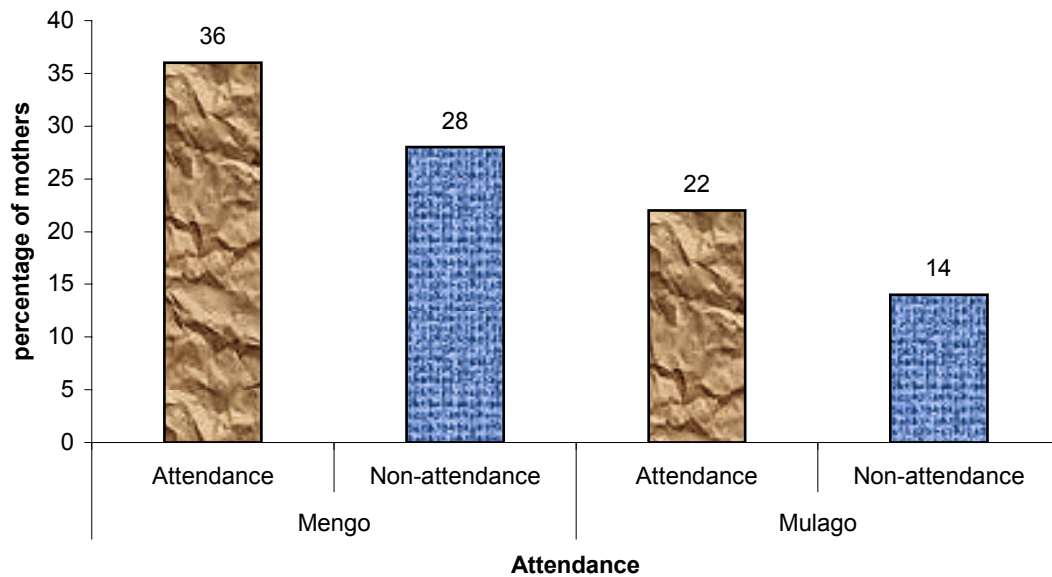


Figure 3: Attendance and non-attendance of postnatal services in Mulago and Mengo hospitals (n=330)

4.5.2 Reasons For Attendance

Mothers provided various reasons for attending postnatal services as depicted in Figure 4. Percentage distributions are presented according to the different reasons that were given by the attending mothers who constituted 58% of the grand total of 330. The missing cases were 42% of the grand total.

The results show that the majority of the mothers attended only for immunisation of babies (66.7%). It is also observed that physiotherapy was the least utilised service among the postnatal services (0.6%).

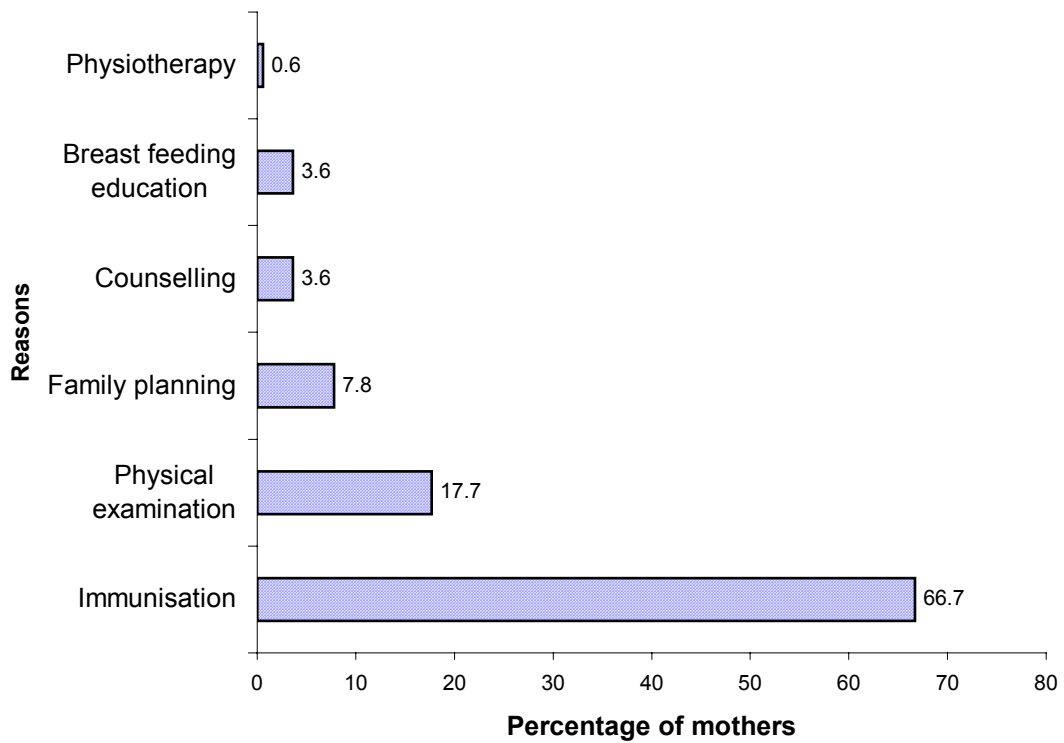


Figure 4: Reasons why mothers attended postnatal services (n=192)

4.6 BARRIERS TO UTILISATION OF POSTNATAL SERVICES

This section presents the factors that hindered mothers from utilising postnatal services. The variables include reasons for non-attendance of postnatal services, mothers' grievances and comments about service providers, quality of services, attendance of antenatal services and distance of the participants against the utilisation of postnatal services.

4.6.1 Reasons For Non- Attendance

Out of the 330 participants, 139 did not attend postnatal services and all of them gave reasons why they did not turn up for postnatal services after delivery as shown in Figure 5. The frequency distributions and percentages are given.

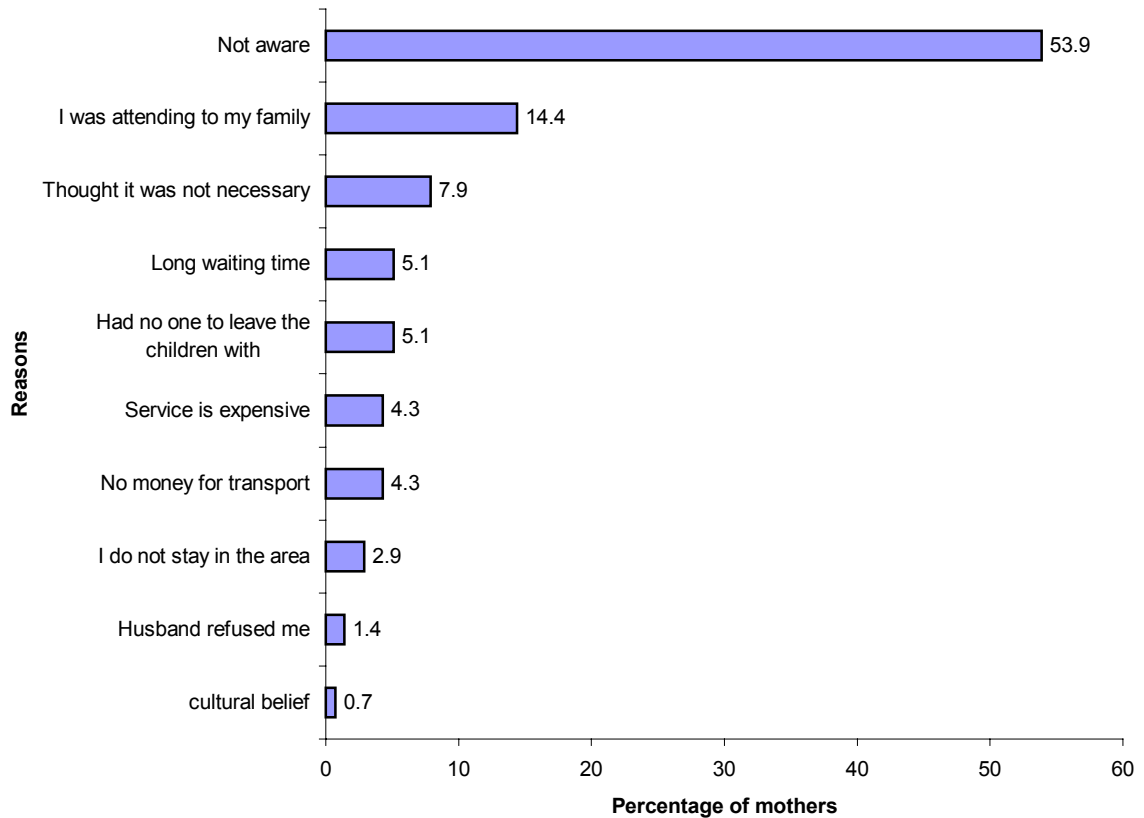


Figure 5: Reasons for not attending postnatal services (n=139)

The results indicate that over half of the participants (53.9%) were not aware of postnatal services. Fourteen percent of the participants were attending to other family matters while 7.9% thought it was not necessary to attend. About 32.8% had wide ranging reasons for not attending postnatal services.

4.6.2 Grievances On Service Providers

Out of the 330 participants, only 11% of them had grievances about the service providers. Figure 6 gives information about the dissatisfaction of participants with the service providers. The various comments that were reported by these participants are listed including the percentages of mothers who expressed such comments.

The results show that 48.6% of the participants were not educated well by the service providers. Twenty-seven percent of the participants reported that the service providers shouted at them while some reported that the service providers hesitated to attend to them unless they pay for the services. A total of 24.4% had other grievances concerning the treatment.

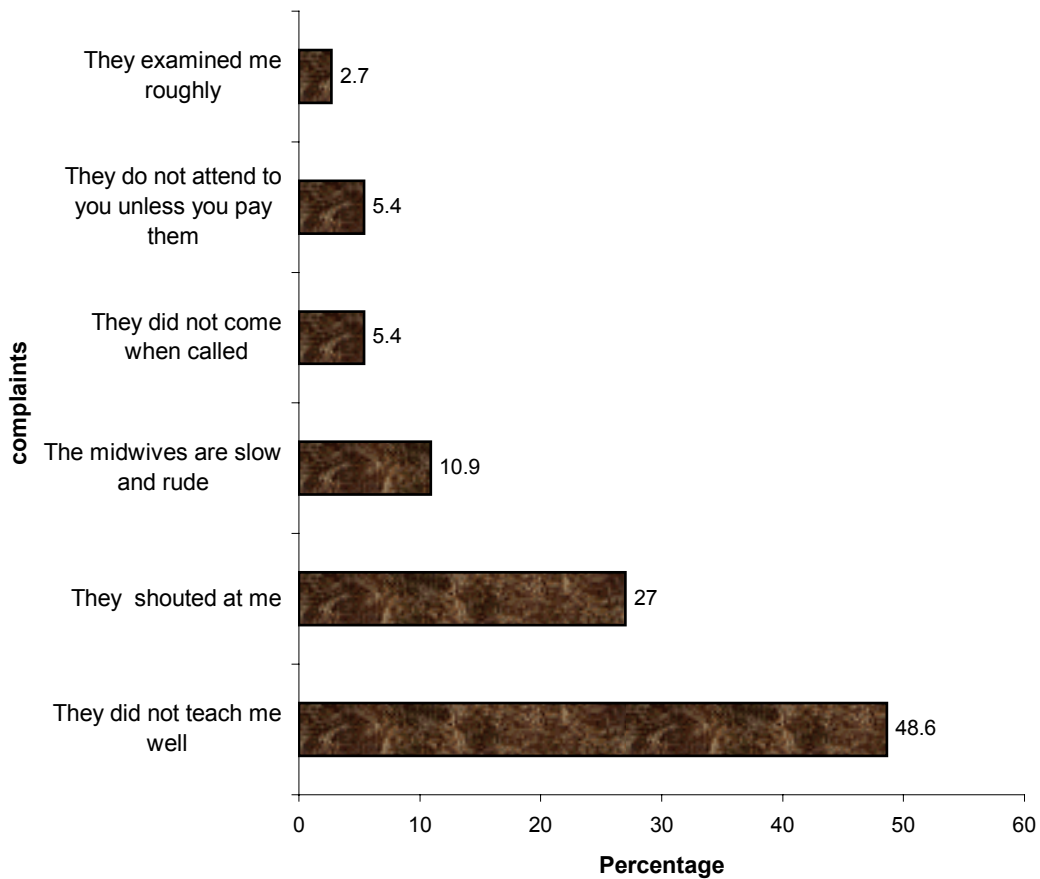


Figure 6: Respondents' grievances about the service providers (n=37)

4.6.3 Quality Of Postnatal Services

Figure 7 shows that 24% of the participants had a negative view about the quality of services that were provided at the hospital.

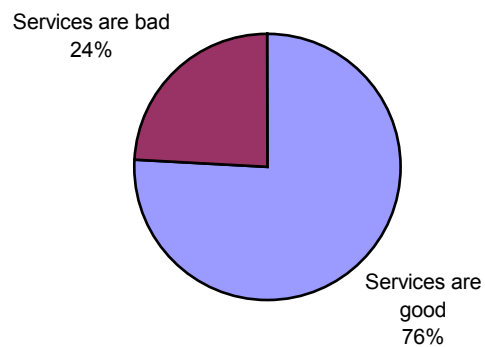


Figure 7: Participants' comments about the quality of postnatal services provided

4.6.4 Comments On The Services Provided

Figure 8 exhibits the participants' opinions about the provided services of the hospital where they delivered. Twenty percent (20%) of the participants did not make any comments on this variable. However, the rest of the participants expressed their opinions as indicated in Figure 8.

The majority of the participants (56.2%) appreciated the services that were provided to them while 17.4% reported that the staff members were few. Other comments that were given included overcrowding of wards (10.6%), lack of delivery instruments and medicine (1.5%), and high costs of the services (0.8%).

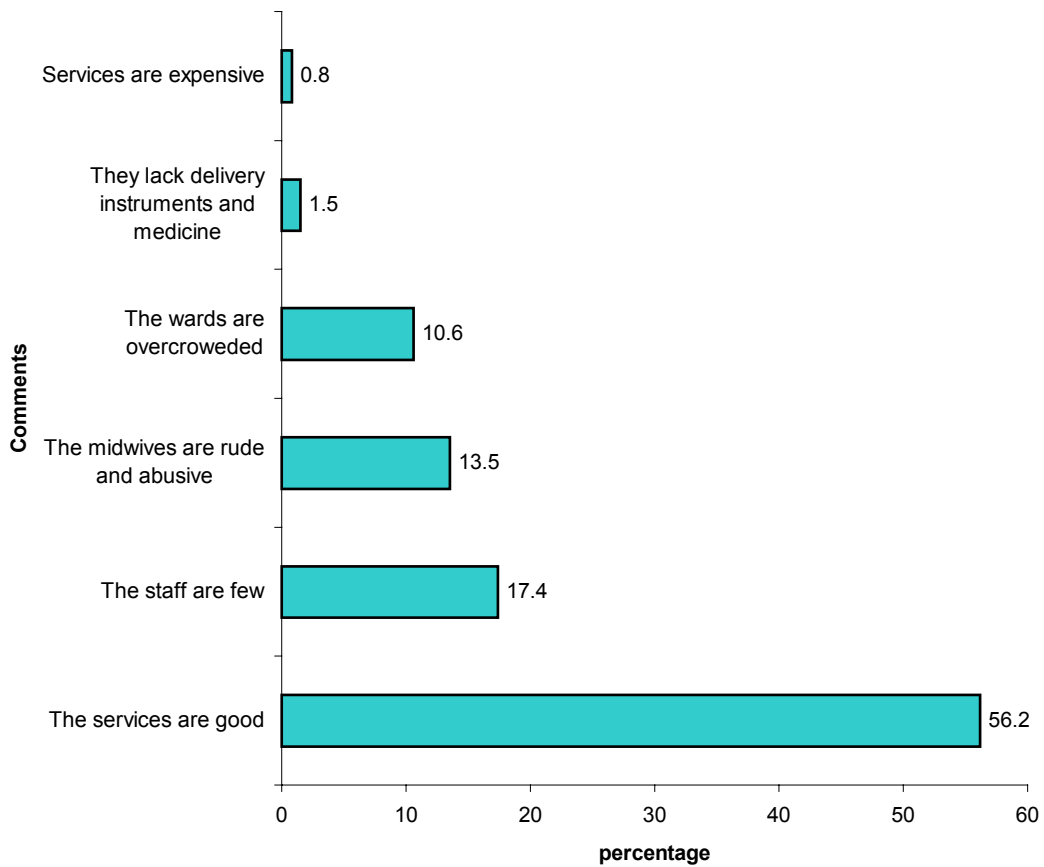


Figure 8: Respondents' comments on the services of the hospital (n=265)

4.6.5 Antenatal Attendance

Figure 9 shows the number of participants who attended and those who did not attend antenatal clinics. Only eight percent of the participants did not attend antenatal services. It is observed that most of the participants (92%) attended antenatal services and therefore had an opportunity to access health educative information from the service providers.

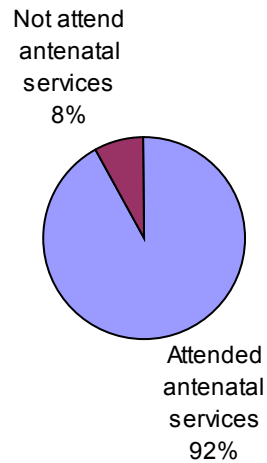


Figure 9: Attendance of antenatal services

4.7 COMPARISON OF KNOWLEDGE, SOCIO-ECONOMIC FACTORS AND DEMOGRAPHIC VARIABLES OF MOTHERS WHO ATTENDED AND THOSE WHO DID NOT ATTEND POSTNATAL SERVICES.

This section provides information on influence of the different variables on utilisation of postnatal services in the two hospitals. The variables include attendance of antenatal services, awareness of postnatal services and distance from the hospital.

4.7.1 Association Between Antenatal And Postnatal Utilisation

Table 3 shows the association between attendance of antenatal services and utilisation of postnatal services. Of the 330 participants, only three of them (0.9%) did not report on this variable (n=327).

Table 3: Relationship between the percentages of mothers attending antenatal services and postnatal services

		Antenatal Attendance		Total (%)
		Yes	No	
Postnatal Attendance	Yes	54	3.5	57.5
	No	38.5	4	42.5
	Total	92.5	7.5	100

Out of the 327 (99.1%) of the participants who responded to this variable, 177 (54%) of them attended both the antenatal services and the postnatal services. Meanwhile, 126 (38.5%) attended antenatal but not postnatal services and 11(3.5%) did not attend antenatal but attended postnatal services. Thirteen mothers (4%) attended neither antenatal nor postnatal services. In the Pearson Chi-square analysis, the attendance of antenatal and postnatal services was independent ($p=0.230$).

4.7.2 The Relationship Between Awareness And Utilisation Of Postnatal Services

Table 4 shows the relationship between mothers' awareness and utilisation of postnatal services. All the 330 (100%) participants responded to the awareness question.

Table 4: Comparison between the percentage of mothers who are aware and attendance of postnatal services

		Attendance of postnatal		Total (%)
		Yes	No	
Awareness of postnatal	Yes	57.6	12.7	70.3
	No	0.3	29.4	29.7
	Total	57.9	42.1	100

Out of the 330 (100%) of the participants who responded, 190 (57.6%) of them were aware and attended postnatal services. Only 1 (0.3%) participant attended postnatal

services despite not being aware of the services. Meanwhile 42 (12.7%) of the mothers were aware of postnatal services but did not attend the services. In contrast, 97(29.4%) of the participants were not aware of the services and did not attend the services. The mothers' awareness of postnatal services significantly ($p<0.001$) influenced the utilisation of postnatal services as shown in the Chi-square test.

4.7.3 Distance From The Hospital And Utilisation Of Postnatal Services

Table 5 shows the relationship between distance from hospital and utilisation of postnatal services. The distances from the hospitals for all the 330 (100%) participants were recorded. Participants lived within one to five kilometres from the hospitals whereas 33.1% lived more than five kilometres away.

Table 5: The relationship between distance from hospital and the percentages of mothers attending postnatal services

		Distance from hospital		Total (%)
		1-5 Km	>5Km	
Attendance of postnatal	Yes	42.7	15.3	58
	No	24.2	17.8	42
	Total	66.9	33.1	100

Note: In order to get a valid chi-square test the results of the residential distances were split into a 2x2 Table because the initial results gave a high percentage of expected cell counts of less than five.

Out of the 330 (100%) of the participants who responded to this variable, 42.7% (141) of them stayed one to five kilometers away from the hospitals and attended postnatal services. Meanwhile only 15.3% (50) of the participants stayed more than five kilometers away from hospital and attended postnatal services. Over 17% (59) of the participants stayed at a distance more than five kilometers and did not attend postnatal services. The Chi-square test indicated a statistically significant ($p=0.002$) association between distance from hospital and attendance of postnatal services.

4.8 ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC FACTORS, AWARENESS AND UTILIZATION OF POSTNATAL SERVICES

This section presents information concerning the association between some of the socio-demographic factors, awareness and utilization of postnatal services. The variables addressed are mothers' age, husbands' occupation, number of live births, level of education, employment of a mother and cultural influence. The participants' awareness was cross-tabulated against the various variables mentioned above.

4.8.1 Influence Of Age Group On Postnatal Service Utilisation

Figure 10 shows the relationship between mothers' age and utilisation/non-utilisation of postnatal services. All the 330 participants reported their age.

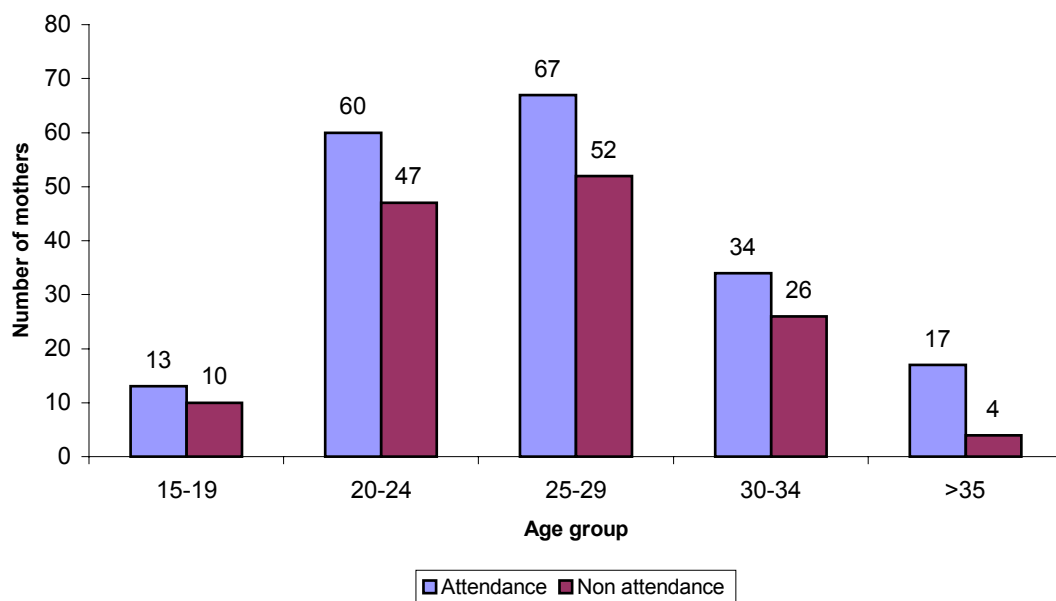


Figure 10: Attendance of postnatal services by mothers in different age groups (n =330)

This graph shows a normal distribution curve of the age groups of the mothers sampled, with the majority falling in the 20-34 years age-bracket and a few below 20 and above 34 years old. The attendance and non-attendance of postnatal services followed a similar normal distribution curve with the highest attendance and non-attendance in the age groups of 20-34 years. The younger (below 20 years) and the older (above 34 years) women had the least attendance and non-attendance of postnatal services. Mothers of age-group 25-29 years attended postnatal services most 67(20.3%) but also had the highest non-attendance, 52 (15.7%). The Chi-square test showed no relationship ($p=0.297$) between the age of a mother and attendance of postnatal services.

4.8.2 The Relationship Between Husbands' Occupation And Utilisation Of Postnatal Services

The results of this study indicate that women whose husbands are self employed, or work in government are most likely to use postnatal services in health facilities. Table 6 shows the relationship between husbands' occupation and utilisation of postnatal services. All except one of the participants answered on this variable ($n=329$).

Table 6: Percentages of mothers' attendance of postnatal services against husband's occupation

		Husband's occupation				Total (%)
		None	Self-employed	Central gov't	Local gov't	
Attendance of postnatal	Yes	4.3	34	8.5	10.9	57.7
	No	9.4	23.1	4.6	5.2	42.3
	Total	13.7	57.1	13.1	16.1	100

Out of 329 (99.7%) of participants who responded, the majority of participants 286 (86.9%) whose husbands had employment, many attended postnatal services 176 (61.5%). On the contrary, only 14 (4.3%) of the participants whose husbands had no employment attended postnatal services while 31 (9.4%) of them did not attend the services. The Chi-square test showed statistically significant ($p=0.001$) relationship between husband's employment and utilisation of postnatal services.

4.8.3 Live Births Against Utilisation

Table 7 shows the relationship between numbers of mothers' live births and attendance of postnatal services. The number of live births ranged from one to five children and all the 330 (100%) participants responded to this variable.

Table 7: Percentage of mother's attendance of postnatal services against live births

		Live births					Total (%)
		1	2	3	4	5	
Attendance of postnatal	Yes	23.9	13.9	10	5.5	4.6	57.9
	No	16.7	12.4	8.5	3.0	1.5	42.1
	Total	40.6	26.3	18.5	8.5	6.1	100

The findings showed that as the mothers' number of live births increases, the fewer the mothers who attended postnatal services. However, the Chi-square tests showed no statistical significance between number of live births and attendance of postnatal services ($p= 0.520$).

4.8.4 The Relationship Between Level Of Education And Utilisation Of Postnatal Services

Figure 11 illustrates the association between level of education and utilisation of postnatal services. The level of education ranged from those who never had school to those who had tertiary/university education. Out of the total sample of 330 mothers who participated in the study, 5 (1.5%) did not report on this variable. Generally attendance of postnatal services improved with the level of education despite having more mothers in the primary and secondary schools. The mothers who had had tertiary/university education attended postnatal services most 34 (72%) while those who had no education, only a few of them, 4 (36%) attended the services. From the mothers who had no education, many of them 7(64%) did not attend postnatal services. The Chi-square test showed a statistically significant relationship ($p=0.003$) between education of a mother and utilisation of postnatal services.

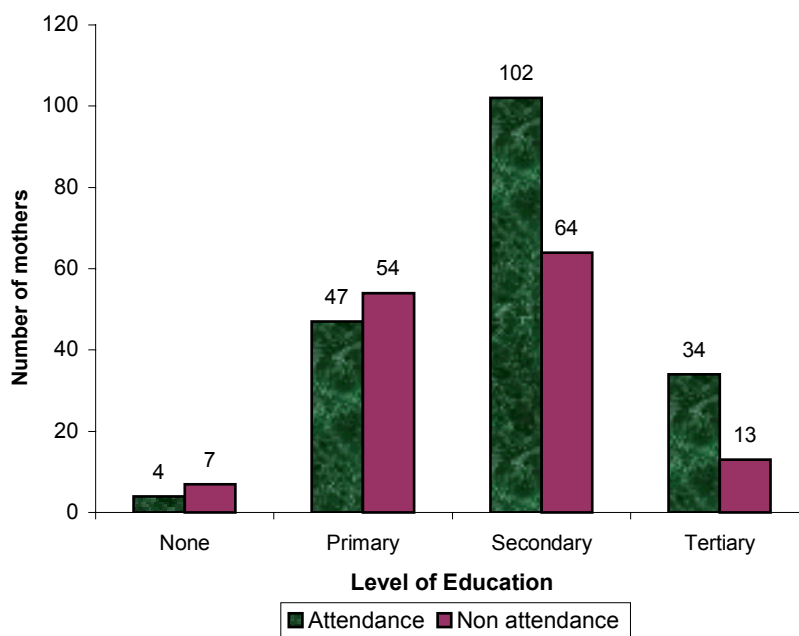


Figure 11: The association between level of education and attendance of postnatal services (n=325)

4.8.5 Occupation Of The Mothers Against Utilisation

The majority of participants responded (n=328), except two cases, which were missing among the responses. Figure 12 shows the association between mothers' employment and utilisation of postnatal services. Fifty-four percent of the participants were not employed while the rest had employment in government, non-governmental organisations or were self-employed.

Mothers who were self employed and those who had no employment attended postnatal services most. The graph also shows that 36% of the mothers employed attended postnatal services compared to 25% that attended postnatal services but not employed. The occupation of the mothers significantly correlated ($p < 0.000$) with utilisation of postnatal services.



Figure 12: The relationship between occupation of the mother and attendance of postnatal services (n=328)

4.8.6 Influence Of Culture On Utilisation Of Postnatal Services

All the participants 330 (100%) responded to this variable. Out of the 330 participants, only 12 (3.6 %) reported that they were influenced by cultural beliefs as shown in Table 8.

Table 8: Influence of culture on utilisation of postnatal services

		Cultural influence		Total (%)
		Yes	No	
Attendance of postnatal	Yes	0.6	57.3	57.9
	No	3.0	39.1	42.1
	Total	3.6	96.4	100

Among the 12 (3.6%) participants who said that culture hindered them from using the services, 10 (83%) of them did not attend postnatal services. The Chi square test showed a statistically significant relationship ($p=0.003$) between cultural beliefs and utilisation of postnatal services.

4.8.7 Awareness Of Postnatal Services In The Two Hospitals

Table 9 shows the level of awareness of postnatal services in the two hospitals. Of the 330 mothers who participated in the study 213 (64%) mothers attended from Mengo hospital while 117(36%) mothers at Mulago. Out of these participants, 70% of them were aware of postnatal services while 30% were not aware.

Table 9: Percentage of mothers aware of postnatal services in Mulago and Mengo hospitals (n=330)

		Hospitals		Total (%)
		Mengo	Mulago	
Awareness of postnatal	Yes	42	28	70
	No	22	8	30
	Total	64	36	100

The results showed that 140 (60%) of the participants aware of postnatal services came from Mengo compared to the 92(39.6%) from Mulago, a government hospital. Mengo had more mothers who were aware of postnatal services. The results suggest that there might be some association ($p=0.014$) between utilisation of postnatal services and the hospital where a mother delivers.

4.8.8 Influence Of Distance On Awareness Of Postnatal Services

Table 10 shows the relationship between distance and awareness of postnatal services. The distance variable was split into a 2x2 contingent table using distances of 1-5 km and >5 km. This was done to get more valid Chi-square tests. The invalid results were due to the high percentage of cells with expected counts that were less than five.

Table 10: Comparison between distance from hospital and of mothers' awareness of postnatal services (n=330)

		Distance from hospital		Total (%)
		1-5 Km	>5 Km	
Awareness of postnatal	Yes	52	19	71
	No	15	14	29
	Total	67	33	100

Out of 330 (100%) mothers, 170 (52%) who were aware of postnatal services stayed within a distance of one to five kilometres from the hospital. Meanwhile only 62 (19%) who stayed at a distance greater than five kilometres were aware of postnatal services. The Chi-square test showed an association ($p < 0.000$) between distance from hospitals and awareness of postnatal services.

4.8.9 Mothers' Educational Level As A Factor Of Awareness

Table 11 illustrates the relationship between mothers' level of education and the percentage of awareness of postnatal services. The education level ranged from those who did not have any education to those who stopped at tertiary/university level. All the mothers except 2 responded to this variable ($n=328$).

Table 11: Comparison between mothers' educational level and awareness of postnatal services

		Mothers' educational level				Total (%)
		None	Primary	Secondary	University/tertiary	
Awareness of postnatal	Yes	1.2	18.6	38.4	11.9	70.1
	No	2.1	12.2	12.2	3.4	29.9
	Total	3.3	30.8	50.6	15.3	100

Out of 328 mothers, 11 (3.3%) never had any formal education at all. From these mothers, only 4 (1.2%) of them were aware of postnatal services. The awareness in this group constituted only 1.2% awareness among all the participants. Out of 317 (96.7%) mothers that had primary, secondary and tertiary education, 226 (71%) were aware of postnatal services. The Chi-square test showed statistical significance ($p=0.002$) in the relationship between mothers' education and awareness of postnatal services.

4.8.10 Culture And Awareness Of Postnatal Services

Table 12 shows the relationship between culture and percentage of awareness of postnatal services. All the participants 330 (100%) responded to this variable.

Table 12: The relationship between culture and awareness of postnatal services

		Cultural beliefs		Total (%)
		Yes	No	
Awareness of postnatal	Yes	1.2	69.1	70.3
	No	2.4	27.3	29.7
	Total	3.6	96.4	100

Only 12 (3.6%) of the participants were affected by cultural beliefs. Out of those who were affected by cultural beliefs, 8(67%) of them were not aware of postnatal services, while only 4 (33%) were informed about postnatal services. The majority of the participants 228 (69.1%) who were not influenced by cultural beliefs were aware of postnatal services. Meanwhile, only a few (27.3%) of them were not aware of these services. Fisher's exact test was used to test for significance of the above results because Pearson chi-square values were not valid due to a high percentage of cells with an expected count of less than five that was greater than 20%. The Fisher's exact test showed a significant ($p=0.008$) relationship between cultural influence and awareness of postnatal services.

4.9 SUMMARY

Cross tabulations, Pearson Chi-square and Fisher's exact tests were employed to determine which factors were significant regarding the use of healthcare services during the postnatal period. In cases where the expected values were found to be more than 20% (cells with less than five), a Fisher's exact test was used to test for

significance. The variables that were found to be significantly influencing postnatal service utilisation include maternal education, residential distance from hospital, awareness, mothers' employment, husbands' occupation and cultural beliefs. The attendance of antenatal services, number of live births and mother's age did not show any statistical significant relationship with utilisation of postnatal services. Poor relationship with the service providers, attending to family matters, lack of money for transport, long waiting time, lack of decision making powers by women to seek health services and no one to stay with the children at home were also among the factors found to influence utilisation of postnatal services.

CHAPTER FIVE

DISCUSSION OF THE RESULTS

5.1 INTRODUCTION

This chapter discusses the findings of the study that was aimed at establishing mothers' awareness of postnatal services and the barriers that hindered mothers from utilising these services in Kampala district, Uganda. The study also aimed at comparing the level of mothers' utilisation of postnatal services in a government hospital (Mulago) and a private hospital (Mengo). It further endeavoured to find the association between socio-demographic information, socio-economic status and awareness with utilisation of postnatal services. A convenient sample of 330 mothers was used to generate information for the study. The mothers included in the study were those who had delivered six to eight weeks before the commencement of the study. These participants were residents of Kampala district. The findings are discussed following the order of the research questions of the study in chapter one.

5.2 RESPONSE RATE OF THE STUDY

The study demonstrated a high response rate of 94% (n=330). According to Linder & Wingenbach (2002), surveys that have high response rates provide a measure of reassurance that the findings obtained can be projected to the population from which the sample is drawn. The success of the response rate can be attributed to the fact that the completion and return of the questionnaires was well supervised.

5.3 RELEVANCE TO PHYSIOTHERAPY AND HEALTH

Maternal and child health can be a perpetual danger to women if not properly addressed. All health professionals have a responsibility to the broader society in

fighting against the high maternal mortality rate in Uganda (510/100,000 live births). Ensuring that mothers survive pregnancy, childbirth and postnatal complications is fundamentally about women's rights and about creating a just and equitable society (WHO, 2004 a). Therefore health professionals can no longer isolate themselves by concentrating on discipline specific skills and knowledge while ignoring the relationship between health, development and poverty (Pharaoh, 2003). It has also become essential for physiotherapists to combine their clinical skills and knowledge of research to meet the growing complexity of women's needs. It is therefore in this context that physiotherapists should define their role in women's health. The role of physiotherapists is not only to offer curative, but also health promotion, rehabilitation and prevention services.

5.4 AWARENESS OF POSTNATAL SERVICES

Women's lack of awareness can range from lack of understanding what postnatal services are to lack of knowledge of the location of a healthcare delivery site. In this study, most of the mothers (70%) were knowledgeable about postnatal services. Among those who were aware of the services, quite a large proportion (82%) utilised the services. These results agree with the findings of a study by Agrawal et al. (1994) in Pakistan, who found that of the 26.2% of the mothers who knew about the postnatal services, 25% utilised them. Only one of those who were not aware about postnatal services used the services. Conversely, it is concerning to note that quite a large number of mothers (42%) who did not attend postnatal services were not aware of the services. More surprising, the majority of the mothers who were aware came from Mengo, a private hospital and not Mulago, a government hospital. Perhaps this could have been as a result of organisational differences between the two hospitals. In this

study, it is observed that quite a large percentage of those who knew about the services utilised them. In a similar study that was carried out in Europe, Collinson & Cowley (1998) concluded that clients' knowledge was related to the utilisation of services. Ladfors et al. (2001) further added that for women to use health services, they must be knowledgeable about those services. This means that knowledge is an important factor in the utilisation of postnatal services. This was further shown by the statistically significant results obtained in this study.

The high rate of awareness in this study could possibly be due to the various government programs involved in the dissemination of health information to the women in the fight to reduce the high maternal mortality rate of 510/100,000 to 1000/100,000 live births (UNDP, 2003). Some of these programs include the Naguru Teenage Information and Health Centre program situated in Kampala, which helps to disseminate health education on radio programs about maternal health to the teenagers (Kigozi & Hamba, 2003). Another program is the immunisation program (MOH), which is also fighting against the low coverage of immunisation that was observed in the country with the baseline indices below 50% (WHO, 2001). This program is encouraging most mothers to take their children for back immunisation. Probably this explains why most mothers turned up for immunisation of their infants rather than for their own health.

On the other hand, awareness campaigns are in line with the resolution of the WHO Regional Committee (RC48) for Africa and regional initiatives namely, the Great Lakes Protocol of Cooperation and the East African Cooperation (WHO, 2001). The aim of this program is to achieve national disease surveillance systems in most of the Great Lakes countries. Through the implementation of the Integrated Disease

Surveillance (IDS) Plan of Action, Uganda Ministry of Health with technical assistance from the WHO, is strengthening the Health Management Information System (HMIS) so as to meet its objective as stipulated in the Health Sector Strategic Plan 200/01-2004/05. As a result, there are a number of MOH campaign programs that are ongoing to raise awareness about health issues in the country, including maternal health.

Awareness campaigns are also in line with the WHO Millennium goals that were agreed upon by the World leaders from 189 countries at the United Nations millennium summit in September 2000. The WHO is committed to achieving the Millennium Development Goal (MDG) of reducing by three-quarters the number of women dying during pregnancy and childbirth between 1990 and 2015 (WHO, 2004 b). Since the declaration, the WHO has called for intensified action among member countries in addressing the threats to maternal health. In line with meeting this goal, the WHO has assisted countries with high rates of maternal deaths such as Uganda to strengthen their health systems to build a continuum of care. This is done so that all women and their babies can go through pregnancy, childbirth and the postnatal period safely irrespective of their ability to pay for these services. This study has probably helped to find the degree at which this objective is being achieved by looking at the level of utilisation and awareness of postnatal services in one of the districts in Uganda.

Another program is the HIV/AIDS program, which encourages mothers to go for regular screening, counselling and treatment after delivery. According to the UNAIDS report (2004), on the global AIDS epidemic women are increasingly at great risk of HIV infection. In what it calls the rising female face of the epidemic, the

report states that fighting the feminisation of the epidemic is one of the leading challenges that countries and organisations need to focus on in their anti-AIDS strategies (UNAIDS, 2004). Thus these programs could have possibly had an impact on the level of awareness of postnatal services in Kampala district. Other programs that work hand in hand with maternal health issues are Reproductive Health, Quality Assurance, Maternal and Child Health and the Integrated Maternal and Child Health programs. The traditional birth attendants (TBAs) are also educating the mothers about utilisation of postnatal services. According to the WHO, the TBAs provide a solution to many expectant mothers, including those who have got health problems in the postnatal period. The TBAs have been trained by several development partners in modern methods of maternal health and childbirth to complement the existing maternal health services and improve their ability to refer. It is reported by the WHO that these trends have had serious implications on awareness, access and acceptability of maternal and newborn health services (WHO, 2001).

On the contrary, although the above-mentioned programs are in place, it is evident in the results that at distances far away from the hospital, the level of lack of awareness of postnatal services was high (43%). The number of mothers that were not aware of postnatal services and therefore did not attend the services cannot be considered insignificant. This definitely calls for more efforts to be put in place regarding dissemination of health information in the rural areas. As part of the health sector reforms, the Ugandan government has tried to take services nearer to the people in the community to improve on its accessibility. In line with the above plan and as part of the implementation of the Health Sector Strategic Plan (HSSP), the central government have supported the districts to ensure that they have a basic health centre

in every parish, a maternity unit in every sub-county and a mini-hospital capable of surgical operations in every county (Wendo & Ntabadde, 2004). Unfortunately, although these centres are available, they still lack enough infrastructures and service providers to meet the demands of the community. However, many of the newly constructed theatres and doctors' houses were below standard possibly due to errors in the organisation systems (Wendo & Ntabadde, 2004).

5.5 ANTENATAL ATTENDANCE

With adequate counselling and education during antenatal visits, mothers may become aware of possible postnatal complications and sources of quality health services for treatment of these complications (Chakraborty et al., 2002). Although a very high proportion of participants (92%) attended antenatal clinics, the use of antenatal services in this study insignificantly influenced the utilisation of postnatal services. This finding did not agree with that of Burtz et al. (1993) and Echevarria & Frisbie (2001) who found a significant relationship between attendance of antenatal services and utilisation of postnatal services. The reason for the lack of correlation between antenatal attendance and utilisation of postnatal services in this study was not well understood.

However, it is important to educate the mothers about the postnatal services while they attend the antenatal clinics in order to increase their awareness of postnatal services. Similarly Stephenson & Tsui (2002) argued that contact with healthcare professionals during pregnancy leads to an increased likelihood of postnatal service use and women who receive higher levels of antenatal care are more likely to turn up for postnatal services. The WHO recommends that women have at least four antenatal

visits, starting in the first three months of pregnancy (Safe Motherhood, 1998 a; Ashford, 2004).

According to Ashford (2004), the postnatal visits give health workers the chance to educate women about diet and healthy behaviours and to give women nutritional supplements. Antenatal care providers should use this opportunity to inform women about the importance of safe delivery with a skilled birth attendant, the warning signs of complications, how to plan for emergency care and the importance of attending postnatal services after delivery. According to Echevarria & Frisbie (2001), the education a woman receives about the pregnancy, labour and delivery, and caring for the newborn baby is very important, especially for the first-time mothers. In addition, a woman's positive previous experience with healthcare professionals can also create confidence in and acquaintance with healthcare services, so that they may be more likely to use maternal health services.

5.6 BARRIERS TO UTILISATION OF POSTNATAL SERVICES

This study found a high level of association between certain predisposing and enabling factors of utilisation of postnatal services. All the significant variables in the analysis were included in the behavioural model that was used in this study. These variables include predisposing characteristics, enabling resources and perceived needs. These refer to maternal education, residential distance from hospital, awareness of postnatal services, employment and cultural beliefs. Other variables included husbands' occupation, number of live births, relationship with the service providers, waiting time, money for transport, decision making, somebody to stay with the children at home and quality of services. Age and antenatal services showed no

statistical significance in the utilisation of postnatal services. Therefore the results of these variables were inconclusive with respect to influencing utilisation of postnatal services. Further investigations in these aspects would be of importance.

5.6.1 Husband's Occupation And Mother's Occupation

Husband's occupation showed a significant association on postnatal utilisation, indicating higher use of postnatal services by the wives of employed husbands. This implied that the education of a husband is a very important determinant of postnatal service utilisation. Women whose husbands were self employed or worked in government utilised the postnatal services most. The husbands' occupation can represent family income as well as social status. It is also anticipated that increased income has a positive effect on the utilisation of modern healthcare services (Chakraborty et al., 2002). According to these authors, differential utilisation of health services by different occupational groups depicts husband occupation as one of the predisposing factors. Besides, women's employment was also found to be a significant factor in the utilisation of postnatal services and women who were employed used postnatal services most. Women who are employed not only have better financial status and ability to use quality health services but also gain empowerment to take part in the decision making process about healthcare in the family (Kalmuss & Fennelly, 1990).

5.6.2 Maternal Education

Maternal education has a positive impact on the utilisation of healthcare services (Kogan & Leary, 1990; Elo, 1992; Nwakoby, 1994; Delvaux, 2001; Chakraborty et al., 2002). According to these authors, maternal education increases women's

perceived seriousness about maternal morbidities and enhances women's knowledge about the availability of healthcare services. Maternal education may also act as a stand-in variable for a number of background variables representing a woman's higher socio-economic status, thus enabling her to seek proper medical care whenever she finds it necessary. The results from this study showed a similar pattern of utilisation of postnatal services by the level of education. Fifty eight percent (58%) of educated mothers attended postnatal services compared to only 2% of those who were uneducated and attended. The percentage of the uneducated participants who attended the services is rather small.

5.6.3 Access To Health Facilities

Distance limits women's willingness and ability to seek healthcare, particularly when appropriate transportation is scarce, communications difficult, and terrain and climate harsh (Timyan et al., 1993). Although Pearson (2000), reported that only 49% of Uganda's population live within a distance of five kilometres from a health facility, in this study 66.9% of the participants lived within five kilometres from the two hospitals. Possibly this was because the study was carried out on an urban population in the capital city.

In a study of determinants of the utilisation of maternal and child health services in Jordan, physical accessibility was an important variable that was found to be associated with utilisation of maternal and child health services (Chakraborty et al., 2002). Similarly this study, found a statistically significant relationship between distance and utilisation of postnatal services. Coeytaux et al. (1993) reported that the WHO has identified decentralisation of healthcare as an essential element in

expanding access to safe health services. They further added that linking community, primary and other healthcare levels in an interactive network enables safe, appropriate healthcare to be delivered at the lowest, most accessible levels possible. These authors suggested that in smaller local centres, paramedical personnel could implement health services. Such healthcare can be delivered to rural women who are unable or unwilling to travel to centralised sites, and who would otherwise be deprived of potentially life saving and timely treatment.

Uganda has gone through health sector reforms and all the above suggestions to improve accessibility to healthcare services are on the ground except that the implementation is not yet successful. This is because of problems in the management systems as reported by Wendo & Ntabadde (2004). In addition human resources are not well distributed in the country (Pearson, 2000).

5.6.4 Quality Of Postnatal Healthcare

Quality of postnatal care is defined as a total of what happens to the mother once she arrives at a healthcare facility. Poor care would be expected to negatively affect women's willingness to visit a health facility. However, when the demand for the services is high, quality may not be a crucial factor influencing the utilisation of postnatal services. Timyan et al. (1993) reported inadequate quality as a primary cause of women's under utilisation of health services, though these authors recommend more field studies to be done before this variable can be concluded. Eleven percent (11%) of the participants in this study had a negative view about the quality of services that were provided at the hospitals. This included poor relationships with the service providers, long waiting hours, complaints about

overcrowding in the wards and lack of delivery instruments and drugs. According to Timyan et al. (1993), healthcare that is considered inappropriate will not be used. Although the findings in this study cannot be regarded as trivial, more attention should be paid to the quality of services provided.

According to Starfield (1992), social systems that are supported by and entrusted with public funds must be accountable for their performance. In the healthcare system, accountability takes the form of quality assurance, which takes on the format of assessing the quality of care, in-patient care and the profile of care. The author further maintains that service providers should ensure that patients are satisfied with their services before they leave the health facilities. Abramson (1990), and Webster (2001) suggested that clients' satisfaction might contribute to the use of services positively. According to Starfield (1992), patient satisfaction can be improved by more overall communication, especially by social conversation, positive feelings, partnership-building conversation and positive talks with the patients. This author also noted that conveying negative feelings or information to the patients can reduce patient satisfaction. This is because patients are more likely to accept advice and instructions when the service providers endow them with more information, more positive feedback and less negative feedback. Starfield (1992) therefore suggested the following strategies for improving patient's understanding and satisfaction of the service:

- Information should be presented early in the visits, as would be the case of introducing information about postnatal care early in the antenatal period.
- Care to a patient should be taken to be specific rather than general instructions.
- Information to be given to patients should be organised into clear blocks in

order for patients to follow and understand easily.

- The most important information should be repeated and stressed.
- Patients should be asked for feedback to check for their understanding of information.
- Information should be summarised at the close of the visit.

These strategies may help to bridge the gap between the service providers and the mothers in the hospital, thus enhancing client's satisfaction. Therefore the service providers in the two hospitals are recommended to use Starfield's strategies to improve on their quality of services pertaining to information provision. In addition, Ziyambi & Snow (2003) suggested that maintaining sound financial performance and developing the existing services might help to raise the standards of healthcare for all women. For instance, in South Africa, the department of health and non-government organisations have begun working on initiatives to improve reproductive health outcomes, including the development of expanded maternal healthcare programmes that among other components involve both men and women (Ziyambi & Snow, 2003).

5.6.5 Decision-Making Dynamics

Decisions to seek healthcare can be made by the woman herself, husband, village elders or other family members or community members (Timyan et al., 1993). In this study, some women (1.4%) reported that their husbands refused them to attend postnatal services. This is an indication of lack of education and leadership skills among women to have control over their own health as well as to challenge traditional authority structures. However, it is not so easy for these women to do what is expected of them, because cultural beliefs and related influences are hard to change (Timyan et al., 1993). In order to address this problem, the need for equal access to

education becomes immediately necessary. Women need to improve their status on parameters such as equality in education and employment in order to improve their overall health. They also need general health education and leadership training to improve the control over their own health. This will increase the women's ability to negotiate traditional authority structures. Furthermore, the education will also improve women's access to care by increasing their access to information, thereby enhancing their self-esteem, and increasing their ability to adopt new health concepts and practices and participate as equals in client-provider interactions.

5.6.6 Cultural Barriers

An important barrier to healthcare utilisation relates to the conflict between biomedical and traditional explanations for health phenomena (Timyan et al., 1993). This includes notions of disease causation, grouping of symptoms into syndromes or diseases, and perceptions of appropriate treatments and medications and appropriateness of care. These authors further reported that cultural beliefs and preferences surrounding childbirth are particularly strong and resistant to change. The results of this study showed a statistical relationship between culture and utilisation of postnatal services. However, the small percentage of people (3.6%) influenced by culture is probably explained by the timing of the study and the study area. The study was conducted in Kampala city where many people might fear to talk about cultural beliefs. The participants included a generation of mothers who have gone to school (Uganda's literacy level is 68%; UNDP reports, 2003) and therefore most mothers have awareness of modern medicine. Had it been carried out in the rural areas perhaps the number of mothers affected by cultural beliefs would be much higher. Although this number was small, it is widely recognised that making healthcare as

culturally appropriate as possible is an important component of quality care (Timyan et al., 1993). These authors recommended efforts to be made to incorporate cultural beliefs into healthcare delivery services. In doing so it will enhance the perceived quality of care.

5.7 UTILISATION OF POSTNATAL SERVICES

People may invest less in health because of lack of information, low parental education, wide spread poverty and inequality, cultural influence, low public commitment to health education and general education (Safe Motherhood, 1998 a). According to the results of this study, 58% of the participants attended postnatal services. This is very low compared with the nearly 90% uptake of postnatal services reported in developed countries (Hove et al., 1999). However, the 42% non-attendance in this study is extremely high compared with the non-attendance of 10.1% recorded in Zimbabwe by Hove et al. 1999. Utilisation of postnatal services is better in developed countries perhaps because of the high literacy levels, economic empowerment and decision-making powers (Soltani et al., 1999). In Kampala the low utilisation is possibly due to the fact that most women who participated in the study live in the rural areas of Kampala district yet these women suffer from lack of transport and communication (Census Reports, 2002). The nearest efficient maternal health services in Kampala are in Mulago and Mengo hospitals which are in the city centre away from the surrounding rural areas. As a result of the long distance to the hospitals, most mothers often die; yet their lives could have been saved if the distance to the hospital was near. This again calls for action from the government to take maternal health services near to the people in community as advocated for in the

primary healthcare strategies, which were discussed at the Alma Ata declaration in 1978 (WHO, 2004 a).

The results of this study showed that more mothers did utilise postnatal services from Mengo, a private hospital (36%), compared to 22% who attended postnatal services in Mulago, a government hospital. This indicates a shift in utilisation of services from public to private sectors. A study carried out by Katende et al. (2001) examined reasons for shifting from the public to the private sector. The findings of that study showed Push factors such as accessibility, long waiting time, poor provider behaviour and stock-outs at public facilities. These were also Pull factors such as convenient location and shorter waiting time and the good services provided at the private facilities mingled to attract clients from the government to private health services. These Push and Pull factors were noted by the author to explain the decline observed in the public sector service utilisation data and go against the concern that these declines reflected a general decline in use of services. The authors further noted that because of a denser network, private facilities are more conveniently located and the waiting time is short, therefore to attract clients. Private health services also offer good provider behaviours and better availability of drugs. These issues relate to quality of services in general and contributed to the client's satisfaction with the service at the private facilities.

5.8 PHYSIOTHERAPY

Among the postnatal services (Immunisation, family planning, health education, physiotherapy, treatment and physical examination of the baby and the mother) that were utilised by the women, physiotherapy was found to be the least utilised healthcare service (0.6%). Yet, according to Livingstone (1990), physiotherapy is a

very significant healthcare service among the postnatal services. The hospitals management and the physiotherapists themselves have to put in more effort to create awareness of physiotherapy, among the community so that this vital service could be utilised by many of the mothers who face physical health problems after delivery.

5.9 CONCLUSION

The chapter discussed some of the issues around the factors that affect utilisation of postnatal services in Mengo and Mulago hospitals Kampala, Uganda. Some of the findings that are discussed include knowledge of the mother about postnatal services, maternal education, husband and mother's employment, attendance of antenatal clinic, decision-making dynamics, cultural influence, service provider behaviour and quality of the services. The study found pertinent findings such as a shift of clients from public hospital to private hospital. The limitations, conclusions and recommendations of the study are presented in the next chapter.

CHAPTER SIX

STUDY LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter explains the study limitations, conclusions that are drawn from the study and the recommendations made to improve on the level of utilisation of postnatal services in the study area.

6.2 STUDY LIMITATIONS

The study was limited by the area of study due to lack of sufficient funds to collect data in the sub-urban areas in Kampala district. Because of this, the study was restricted to areas where transport and distance could allow. The method of data collection used in the study did not explore the unknown aspects of utilisation of postnatal services with specific reference to physiotherapy. It is recommended that in future, a qualitative research with the aid of focus group discussions to explore more of these factors that underlie the utilisation of postnatal services should be carried out.

6.3 CONCLUSIONS OF THE STUDY

The utilisation of postnatal services in Kampala was low. Only 58% of the mothers utilised postnatal services. The mothers who utilised postnatal services preferred private to government health facility. Postnatal physiotherapy ranked least among the postnatal services offered in the health facilities. The significant factors that were found to influence utilisation of postnatal services in Mulago and Mengo hospitals include: awareness of postnatal services; long distance from the health facilities;

employment; education; quality of services; cultural beliefs; waiting time; lack of somebody to look after the children at home; and decision-making powers by the women.

6.4 RECOMMENDATIONS

Based on the results of the study, the following recommendations for improving utilisation of postnatal services were made:

6.4.1 Recommendation To The Government

In order to improve access to maternal health services, government should locate health services as close as possible to the community where the people live. This could be done by training more midwives who serve as the critical link between communities, TBAs and clinical resources in Uganda, and post them to the community level. Training more TBAs and equipping them with appropriate tools and responsibilities to teach the women about the importance of postnatal services can also improve accessibility.

The ministry of health has to make a comprehensive plan to overcome informational barriers by increasing the women's understanding and awareness of the need to go for, and availability of postnatal care services. In addition, women should also be educated about the risks they face, signs of danger and their right and the need to have decision-making powers over their own health.

The ministry of health should ensure that all health facilities offer affordable and high quality services. This requires health systems to have an adequate trained staff, a regular supply of drugs, equipment, and other supplies. Functioning referral systems

and transport are also necessary to ensure that women in need of higher-level care get it quickly. Besides the ministry of health should enforce standards and protocols for service delivery, management, and supervision and use them along with feedback from clients to monitor and evaluate service quality.

6.4.2 Recommendations To The Hospital Managements

The hospital authorities can ensure that services are provided at convenient hours, in a comprehensive non-fragmented manner, with privacy and respect and responsive to women's needs, preferences, and cultural beliefs. This can be done through strengthening mechanisms to evaluate the quality of services, incorporating both the clients and the providers.

The hospitals' managements is requested to improve on physiotherapy awareness and to incorporate physiotherapy among the services provided at the postnatal clinics. This will help to improve the utilisation of physiotherapy services among postnatal services.

In order to improve utilization of postnatal services in Mulago hospital, the service providers would benefit from training in how to improve their social relationships with clients to make the services user-friendlier. This would possibly and consequently boost the use of postnatal services. The increase in awareness and understanding by mothers about postnatal services during antenatal clinics so as to improve on the use of postnatal services is necessary. Barriers such as long waiting time, lack of drugs, inadequate number of staff and overcrowding of labour wards need to be looked at by the hospital authorities so as to provide a good conducive atmosphere to the clients.

6.4.3 Recommendations To Service Providers

The service providers need to be sensitised more on the value of listening to the clients, and that they should create a supportive environment in which clients are sufficiently informed, confident and encouraged to voice their opinions as well. This will help to strengthen the client-service provider relationship, enhance client's satisfaction and therefore help to improve the use of postnatal services.

The service providers as far as possible should not undermine or ridicule women's esteem. The service providers must endeavour to gain an understanding of family decision-making dynamics prior to launching health education programs to ensure that messages reach those who actually make the decisions such as mothers-in-law, husbands, community and religious leaders.

The service providers need to acquire attitudes that enable them to overcome cultural barriers by recognising the conflict between the biomedical and traditional explanations for health phenomena, especially those related to maternal healthcare including postnatal care. Likewise, traditional beliefs and practices should be evaluated on individual basis. Beneficial and similar practices could be incorporated into formal health services. In doing so it will enhance the quality of the services from the user's perspective.

Further research is recommended in the area of postnatal service utilisation in Uganda and developing countries, because many of the studies reviewed for the purpose of building this study, were conducted in developed countries. Research should cover rural and urban areas or various social set-ups.

6.5 CONCLUSION

This chapter has provided the possible recommendations that could be used by the Ministry of Health, the hospitals' management and the service providers to improve on the use of postnatal services in the two study hospitals. It is important however for the health professionals to understand the barriers that hinder women from utilising postnatal services as this provides evidence to address women's problems using the bio psychosocial model rather than the medical model that only looks at the current disease map as the only problem of the client.

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APPENDIX 1

QUESTIONNAIRE ON UTILISATION OF POSTNATAL SERVICES

Questionnaire Number.....

Case (ID) No.....

Date of interview.....

Date checked.....

Hospital code.....

This questionnaire aims at obtaining information about the factors influencing utilisation of postnatal services. The information attained will only be used for the purpose of this study and therefore will be held confidential. (Please do not write your name)

Instruction: Tick the appropriate answer provided and where applicable write the required responses in the spaces provided.

Section 1: Basic demographic information

S/No.	Questions	Answers
1	a) Where do you live? b) How far is that from hospital?	1.Place 2..... Km
2	About how old are you?	1. 15-19yrs 2. 20-24 3. 25- 29 4. 30-34 5. > 35
3	What religion do you belong to?	0= none 1= Moslem 2=Roman catholic 3=Protestant 4=other (specify).....
4	What language do you speak?
5	What is your present marital status?	1=Married 2=Never married 3=Separated/divorced 4=Cohabiting
6	What is the present occupation of your husband?	1= None 2=Self employed

		3= Central government employee 4= Local government employee 5=others (specify).....
7a	How many pregnancies have you had in total	Number
7b	How many live births altogether?	Number
Section 2: Knowledge		
8.a	Do you know the postnatal services you are supposed to receive after delivery?	1=Yes 2=No
8.b	Name these services	1)..... 2)..... 3)..... 4)..... 5).....
9	Who gave you information about these services? (More than one could be ticked)	1= doctor 2=midwife 3=nurse 4=others (specify).....
10	Did you attend postnatal services in the six weeks after delivery?	1=Yes 2=No
11	Why did you go for postnatal services? (More than one could be marked if applicable)	1= Did not go 2= Because was ill 3=Because the baby needed it's immunisation 4=Because the midwife had told me I should 5= Because I wanted to start family planning 6=Because I wanted to make sure I am back to normal 7=Other (specify).....
12	What postnatal services did you receive when you went back to hospital after delivery? (More than one could be marked if	1=Physical examination 2=Immunisation of baby 3=Counselling 4=Family planning services 5=Breast feeding education 6=Physiotherapy 7=Other (specify).....

	applicable)	
13	If you did not go for postnatal services, tick possible reasons why you did not attend these services. (Answer only if applicable)	1=Attending to other family matters 2=Not aware 3=It is expensive 4=Beliefs 5=Do not stay in the area 6=Did not think it was necessary 7=No money for transport 8=Waiting time is too long 9=Had no one to live the children with 10=Other (specify).....
14	Did you have check-ups at a hospital when you were pregnant?	1=Yes 2=No
15	By what method did you deliver? (Only one could be marked)	1=Normal vaginal delivery 2=Caesarean section 3= Assisted vaginal delivery
Section 3: Socio-economic factors		
16	What is the highest educational level you attained?	0= None 1= Primary 2= Secondary 3= University/ tertiary institution 4=Other (specify).....
17	What is your present occupation?	0= None 1=housewife 2=Self employed 3= Central government employee 4= Local government employee 5= others (specify).....
18	How much does it cost you to get to hospital?	1=Amount 2= Don't know
19(a)	Did you have to pay any fee for the postnatal services that you were provided in the hospital?	1=Yes 2=No
19(b)	How much did you pay?	1=Amount..... 2= don't know

20	How difficult was it for you to find money to meet the cost of postnatal services?	1=Very difficult 2=Quite difficult 3=Not difficult 4=I did not try
Section 4: Barriers to Utilisation		
21	What means of transport do you use to get to the hospital?	1= walk 2=public transport (Bus, tax and motorcycle) 3= Bicycle 4= Private vehicle 5=Others (specify).....
22(a)	Since you delivered, are there problems that you are facing that prevented you from going to receive postnatal services?	1=Yes 2=No
22(b)	Can you name them?	List of problems 1..... 2.....
23(a)	Think of your own experience of the maternity services when you delivered and afterwards, how would you describe the service?	1=very good 2=good 3=bad 4=very bad
23(b)	What was done that prevented you from attending postnatal services?	1=shouted at me 2=They did not teach me well 3=Examined me roughly 4=Did not come when called 5= Other (specify).....
24	a) Do you have any comments to make about the quality of maternity services of the hospital where you delivered? b) What is your comment?	1= Yes 2=No
25	Are there any cultural factors that prevent you from attending postnatal services?	1.Yes 2. No

Thank you for your participation

TRANSLATED QUESTIONNAIRE

Questionnaire Number.....

Enaku zomwezi.....

Namba ye edwaliro.....

Eno questionnaire ya kuyamba kwekenenya ku buzibu kii ebugana abakyala okukozesa obuyambi obubawebwa ngabakamala okuzala. Byona ebinayogerebwa bya mugaso gwamusomo guno gwoka.

Etteka: Wandika tiki ku ansa eweredwa entuffu oba wandika mu banga erilekedwawo.

Ekitundu 1: Basic demographic information

S/No.	Ekibuzo	Ansa
1	c) Obeera wa? d) Mairo meka okuva wano?	1.Ekifo 2..... Km
2	Olina emyaka nga emeka?	6. 15-19yrs 7. 20-24 8. 25- 29 9. 30-34 10. > 35
3	Olimu diini ki?	0= Sirina 1= Musiramu 2=Mukatuliki 3=Muprotessant 4=Oba endala (gyogere).....
4	Oli wa gwanga ki?
5	Oli mufumbo?	1=Ndimufumbo 2=Wabusa 3=Nanoba 4=Nina mukwano
6	Omwami wo akola mulimu ki?	1= Talina 2=yekolera gyijje 3= Mugavumenti ya wakati 4= Mugavumenti ya district 5=Awalala
7a	Wakafuna embuto meka?	Omuwendo.....
7b	Wakazala abana bameka abalamu?	Omuwendo

Ekitundu 2: Knowledge of postnatal services		
8.a	Wali owulideko obuyambi abasawo bwebawa abakyala abakazala mudwaliro?	1=Ye 2=Needa
8.b	Tubulire obuyambi buno	1)..... 2)..... 3)..... 4)..... 5).....
9	Ani eyakumanyisa?	1= Musawo 2=Muzalisa 3=Nurse 4=Abalala
10	Wadayo mudwaliro nofuna obujanjabi buno nga omaze okuzala?	1=Ye 2=Needa
11	Tunyonyole Lwaki wagenda okufuna obujanjabi buno?	1= Sagenda 2= Nali ndimulwadde 3=Omwana yali yetaga okumugemesa 4=Kubanga omuzalisa yandagira 5= Nali njagala kutandika kuplanninga bya maaka 6=Kubanga nali njagala kuwona bulungi 7=ekilala (kyogere).....
12	Buyambi ki bwewafuna mudwaliro nga omaze okuzala?	1=Okukeberwa 2=Okugemesa omwana 3=Okubulirirwa 4=Okuplanninga ebyamaka 5=Okusomesebwa kukuyonsa 6=Okuyungibwa 7=ekilala (kyogere).....
13	Bwoba tewagenda kufuna obujanjabi buno tunyonyole lwaki tewadayo kubufuna?	1=Nali nfa kubamaka gange 2=Nali simanyi 3=Nali sirina busobozi 4=Tetubikiririzamu 5=Sibera mukitundu ekyo

		6=Nali simanyi nti kyetagisa 7=Nali sirina sente za ntambula 8=Obudde bwolindirira buwanvu 9=Nali sirina gwendekera bana 10=Ensonga endala (gyogere).....
14	Wagenda okukebererwa nga olilubuto?	1=Ye 2=Needa
15	Wazala otya?	1=Nazala bulungi 2=Banongosa 3= Banyamba nebasika yo omwanna
Ekitundu 3: Socio-economic factors		
16	Wasoma kukomawa?	0= Sasoma 1= Primary 2= Siniya 3= University/ tertiary institution 4=Awalala.....
17	Okola mulimu ki?	0= Sirina 1=Ndimufumbo 2=Nekolerajange 3= Nkola mugavumenti eyawakati 4= Nkola mugavumenti ya district 5= Awalala.....
18	Okozesa sente meka okutuka mudwaliro?	1=Omuwendo..... 2= Simanyi
19(a)	Wasasule kusente mudwaliro okufuna obuyambi?	1=Ye 2=Needa
19(b)	Bwoba wasasula, wasasula sente meka?	1=Omuwendo..... 2= Simanyi
20	Kyali kizibu okufuna sente zewasasulayo?	1= kizibu nyo 2=kizibu 3=Sikizibu nyo 4=sagezako

Ekitundu 4: Ebikugana okokozesa obujanjabi bwomudwaliro nga omaze okuzala		
21	Wakozesa ntambula ki okutuka mudwaliro?	1= Natambula 2=Entambula eyabulijjo (bodaboda, bus, tax) 3= Gaali 4= Motoka yaffe 5=ekilala (kyogere).....
22(a)	Okuva bwewazala waliwo ebizibu byona byewasanga ebyakugana okudayo okufuna obujanjabi mu dwaliro?	1=Ye 2=Nedda
22(b)	Byogere?	Wandika ebizibu 1..... 2.....
23(a)	Bwolowozamu kubujanjabi bwewafuna nga ozala, noluvanyuma lwokuzala, kiki kyoyogerakubujanjabi obwo?	1=bwalibulungi nyo 2=Bwalibulungi 3=Bwali Bubi 4=bwali bubi nyo
23(b)	Bakukola kii ekyakugana okudayo mudwaliro nga omaze okuzala okufuna obujanjabi?	1= Bambogolera 2=Tebansomesa bulungi 3=Bankebera bubi 4=Tebaja ngambayise 5= ekilala(Kyogere).....
24	a)Olina kyoyogera ku bujanjabi obwakuwerwa mudwaliro? b)Kyogere?	1= Ye 2=Needa
25	Olina ebyobuwangwa byona ebikugana okugenda okufuna obujanjabi mudwaliro nga omaze okuzala?	1.Ye 2. Needa

Webale kudamu ebibuza

APPENDIX II

The Map of Uganda showing Kampala



APPENDIX III

University of the Western Cape
Department of Physiotherapy
Private Bag x17
Bellville 7535

26/10/2003

**The chairperson,
Hospital Research committee
Mulago Hospital**

Dear Sir/Madam,

Re: Request to carry out a research study at Mulago Hospital

I am a postgraduate student of physiotherapy at the University of the Western Cape, South Africa. I intend to carry out a study with an ultimate aim of finding out the factors affecting utilisation of postnatal services in Kampala district in Uganda. This study is part of the requirement for the award of a Master of Science degree in Physiotherapy.

The purpose of this letter is to request for permission to carry out the study at the hospital in the month of December 2003 to January 2004. The details about the study are contained in the abstract of the proposal attached. It is hoped that the results of the study will be useful in Health Promotion of women in Uganda.

Awaiting your positive response.

Yours faithfully,

Nankwanga Annet
(Msc. Physiotherapy student)

APPENDIX IV

University of the Western Cape
Department of Physiotherapy
Private Bag x17
Bellville 7535

26/10/2003

**The chairperson,
Hospital Research committee
Mengo Hospital**

Dear Sir/Madam,

Re: Request to carry out a research study at Mengo Hospital

I am a postgraduate student of physiotherapy at the University of the Western Cape, South Africa. I intend to carry out a study with an ultimate aim of finding out the factors affecting utilisation of postnatal services in Kampala district in Uganda. This study is part of the requirement for the award of a Master of Science degree in Physiotherapy.

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APPENDIX V

APPENDIX VI