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ASSESSMENT OF CLIENTS' SATISFACTION WITH QUALITY OF POSTNATAL CARE AT SAINT JOSEPH HOSPITAL, JIRAPA

BY

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DECLARATION

I hereby declare that all information produced from this research is as a result of my own work. With the exception of articles and books which have been cited and duly acknowledged in the references of this research, the entire work is mine. To the best of my knowledge, no part of this book has been obtained from a previous publication or accepted for the award of any degree in any University or institution of higher learning except where due acknowledgement is made in this research.

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DEDICATION

This work is dedicated to my wonderful mother, Mrs. Cecilia Bongdegbee Dakurah and my siblings: Bawaana, Naabainie, Maaloo, Zinesere, Bamaaenge and Deme.

Finally, I also dedicate this work to my late father, Gbarenaa Dakurah, May you continue to rest in perfect peace till we meet again.

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LIST OF ABBREVIATIONS

GHS --- Ghana Health Service

GSS --- Ghana Statistical Service

MOH----Ministry of Health

PNC --- Postnatal care

USAID ---United States Agency for International Development

UNDP ---United Nations Development Programme

WHO--- World Health Organization

DEFINITION OF TERMS

Contact time – The total time a patient spend with the doctor during consultation

Client-- A person who accesses care in a health facility

Quality of health care-- Proper performance interventions that are known to be safe and affordable to the society in question and impact positively on morbidity, disability and mortality (GHS, 2005)

Satisfaction--Fulfillment of expectations of PNC services

ABSTRACT

Background: Postnatal period is the period that starts about an hour after the placenta is delivered and stretches to the next six weeks and this time is very important for the continued existence of the woman and her baby. So assessment of client satisfaction with post natal care services is needed to improve quality of health service delivery in the country and impact positively on the survival of both mother and baby during the postpartum period. The aim of this research was to determine the level of satisfaction of clients with the quality of post natal care services at Saint Joseph Hospital, Jirapa.

Method: A cross sectional study among 127 mothers who were receiving care at the postnatal care unit of the Saint Joseph Hospital was conducted. Closed ended questions were used to obtain data from the postpartum women on their contentment with the quality of postpartum care. Logistic regression was used to examine the relationship among the indicators of quality and degree of satisfaction with postnatal care services.

Results: 91% of mothers were happy with the post-delivery care. Majority of the mothers were pleased with the clean surroundings, availability of medicines, attitude of health workers, contact time and agreed that their health and that of their babies improved due to the quality of post natal care services provided them. The variation in participants' view of overall quality of care by age, number of children, educational and employment status were all statistically significant.

Conclusions: Clients overall satisfaction with postnatal care services was high. Management of Saint Joseph Hospital should carry out client satisfaction surveys routinely to improve on the quality of postnatal care services.

Key words: Postnatal, quality, satisfaction

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Postnatal period is the period that starts about an hour after the placenta is delivered and stretches to the next six weeks(USAID, 2002). The client has to be cared for after giving birth as the mother's body including the uterus size returns to a pre-pregnant state. Usually involution takes six to eight weeks but some organs take much longer to return to normal (USAID, 2002).

The objective of the sustainable development goal three (3) is to ensure people live healthy lives and also promote well-being for everyone (UNDP, 2015). The Goal aims to guarantee that everybody get access to health care as well as access to medicines and vaccines that are safe and effective (UNDP, 2015). Since 1990, a lot of interventions have been put in place to avoid preventable child death as well as maternal mortality. Despite these efforts some other statistics remain catastrophically elevated, like the fact that every year, 6 million kids die before their fifth birthday in sub-Saharan Africa (UNDP, 2015).

The quality of postnatal care (PNC) has a significant role to play if neonatal, infant and maternal mortality is to be eradicated or reduced. The objectives of postnatal care include but not limited to helping the woman and family shift to a new family pattern, and responding to their needs by means of prevention, early diagnosis, and management of problems in both mother and child including avoiding mum to child disease spread, transfer of mum and child for expert attention when required, counseling and information for the mother on newborn care and breastfeeding, support of optimum breastfeeding practices, teaching of the mum and her household regarding maternal nourishment and supplementation if needed and also advising and providing of

contraceptives before the recommencement of sexual activity and lastly vaccination of the child (USAID, 2002).

According to the Ghana Statistical Service (2014), a huge number of maternal and newborn losses usually happen during the course of the first two days after the woman has given birth. What this means is that, quick care for both mum and child after delivery is crucial to prevent problems as a result of the delivery. This as well help prevent infections, bleeding and anaemia and also enables provision of important information to the mother on how she can care for herself and her child.

Patronage of post-delivery care services can avert these problems and the usage of these services by women all rest on the quality of care that these women get (Asefa, & Giru, 2016).

Quality can be described as both technical and interpersonal and comprises more than just results. Donabedian (1988) outlined three different issues of quality of care as input, process and output. According to him input denotes to the facility such as the environment of the hospital, the patient, safety of the patient in the hospital or clinic and its cleanliness. Process, however, describes the health personnel use of the input whereas output refers to the client recovering. Donabedian (1988) also provides seven qualities of health care that describe quality. These are; efficacy, effectiveness, efficiency, optimality, acceptability, legitimacy and equity. Quality health care also focuses on interpersonal relationship between provider and client etc.

Patient satisfaction to a large extent determines whether a client seeks medical treatments and pleased with the service (Hildingsson, 2007). If PNC services doesn't meet the expectations of clients, they will underutilize the service (Hildingsson, 2007). On the contrary, if the quality of the services rendered meet the expectations of clients, they will utilize the services (Asefa, &

Giru, 2016). This patronage of the services will go a long way to reduce consequences such as infant, neonatal and maternal mortality. This study seeks to determine postnatal mothers level of satisfaction with the quality of postnatal care services as well as identify the aspects of the care they are satisfied and dissatisfied with.

1.2 Problem statement

The Ghana Health Service has established code of ethics for its staff in an effort to address alleged reduced patient satisfaction within Government health facilities in order to improve service utilization in the country (Boadu, 2011).

Despite these efforts to increase service utilization including postnatal care utilization to prevent infant and maternal mortality, the Upper West Region recorded the highest number of infant mortality in Ghana (64 deaths per 1,000 live births) and also recorded the second highest under-5 mortality of 92 deceases for every 1,000 live deliveries which is the second highest after Northern Region (Ghana Statistical Service, 2014).

Additionally, about 70% of babies did not receive postnatal checkup (Ghana Statistical Service, 2014). This could predispose these babies to childhood diseases. In the Upper West Region, only 0.5% of women that delivered in the region in 2014 received postnatal checkup within the first 7-41 days and 20.9% of these women never received postnatal checkup at all (Ghana Statistical Service, 2014).

With these relatively low levels of postnatal care utilization, several mothers living within the Jirapa Municipality may suffer postnatal complications such as infections, bleeding among others which can lead to deaths among these postnatal women. If postnatal care service doesn't meet the expectations of clients, they will underutilize the service, which can lead to complications (Hildingsson, 2007).

In view of this and also due to the fact that in the Saint Joseph Hospital, the researcher was not aware of any earlier study that assessed the level of satisfaction of postnatal women with the care they accessed during their postpartum period, the researcher decided to undertake this study to assess satisfaction with the quality of post-delivery care services from the view of the clients and to identify and bring to light the exact factors that hindered patient satisfaction at the Saint Joseph Hospital, Jirapa.

1.3 Conceptual framework of clients' satisfaction with quality of PNC

The study adopted Donabedian framework to determine clients' satisfaction with the quality of PNC services. The framework consists of input, Process and Output as indicated in figure 1.1.

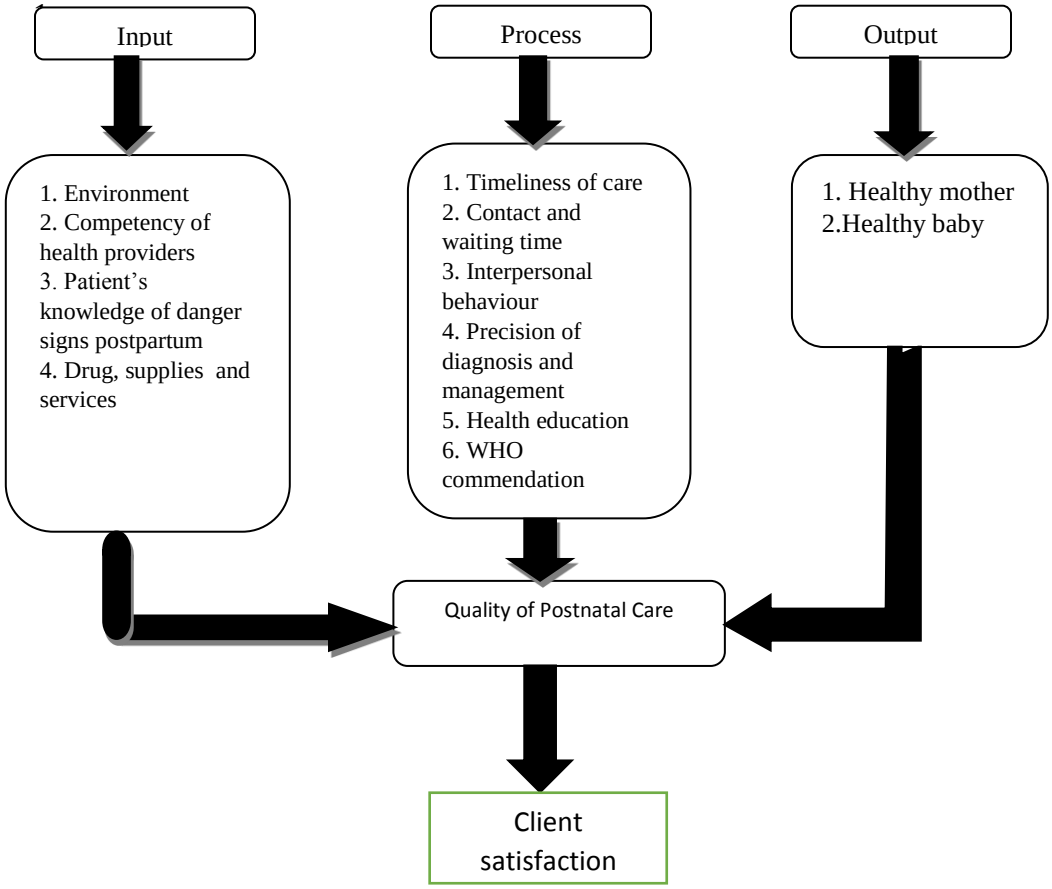

Figure 1.1: Conceptual framework of clients' satisfaction with quality of postnatal care (Modified from Donabedian, 1988)

As shown in Figure 1.1, the input which consists of the PNC environment, competence of care givers, clients' understanding of risk factors postpartum and availability of medicines and supplies affect the quality of postnatal care given. The process examines in what way services are rendered in accordance with promptness of care, waiting time, contact time, interpersonal behavior, clarity of diagnosis, health education and World Health Organization guidelines also

influence the quality of postnatal care services rendered to clients. The Output refers to the health of the mother and baby together post-delivery. All these quality indicators affect the satisfaction of clients with the quality of postnatal care given.

1.4 Justification

The findings of this research will aid authorities of Saint Joseph Hospital, Jirapa to identify precise areas of postnatal care in the hospital that need to be targeted to ensure client satisfaction. The findings of the study can also inform policy makers in planning interventions that will promote utilization of postnatal care services and decrease maternal and newborn mortality. Finally, this study adds to the number of research carried out to draw attention to the quality of PNC services.

1.5 Objectives of the study

1.5.1 General Objective

The general objective of the study was to assess clients' satisfaction with the quality of postnatal care services at the Saint Joseph Hospital, Jirapa.

1.5.2 Specific objectives

The specific objectives of the study were to:

1. determine the level of clients' satisfaction with the quality of postnatal care services at the Saint Joseph Hospital, Jirapa.

2. find out the aspects of postnatal care services clients were satisfied with

3. identify the aspects of postnatal care services clients were dissatisfied with

1.5.3 Research Questions

1. What is the level of clients' satisfaction with the quality of postnatal care services?

2. What are the aspects of postnatal care services clients are satisfied with?

3. What aspects of postnatal care services are clients not satisfied with?

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

This chapter analyses the literature associated with quality of care as well as client contentment with post-delivery care so as to situate the study. The review was centered on studies from both unindustrialized and advanced nations with much importance attached to the methodology and findings.

2.2 Postnatal care

The postnatal period refers to the initial 40 days after delivery (Warren, Pat & Lalla 2006). This period is very crucial to the health and continues existence of the mother and baby. Both mother and baby are most vulnerable during the immediate period after delivery (Warren et al.,2006). When both mother and child are not given the required care, it can lead to death and disabilities(Warren et al.,2006).

According to Warren et al., (2006), in Africa, at least 125,000 females and 870,000 newborns lose their lives during the first week of birth yearly. Both mother and baby are always at the highest risk on the first day of delivery. There are difficulties in the planning and executing of PNC for women and their babies because 18 million females in their reproductive age in Africa at the moment do not deliver in a health facility (Warren et al., 2006). Without considering where they deliver, women and their babies exhaust majority of the postnatal period at home.

Warren et al., (2006) also indicated that half of the deaths that occur among women during the postnatal period usually happen in the first week after delivery and most of these deaths happen within the first 24 hours after the child is born. The leading cause of these deaths in Africa after

delivery is bleeding while Human Immuno Deficiency Virus positive status and infection also contribute to the death of women after delivery significantly. During this period also, emotional support is needed to prevent postnatal depression (Warren et al., 2006). Sub-Saharan Africa has the utmost rates of newborn deaths in the world. About 1.16 million African neonates die in the first 28 days of life with Asphyxia claiming a lot of lives within the first week of birth with infections also contributing to deaths of the babies in the postnatal period as well (Warren et al., 2006).

2.2.1 Delivery of postpartum care to mothers and newborns

The World Health Organization (2013) suggests that after vaginal delivery in the facility, women and their neonates should get post-delivery care in the health care facility for a minimum of a day with no complication before discharge. In addition, timing of postnatal contact is crucial and it is recommended that, if delivery is in a health care facility, the women and infants should get postpartum care for a minimum of a day. If it is delivery outside a health facility, the initial postnatal contact should be timely as feasible within one day after delivery. A minimum of three further postnatal visits are suggested for every woman and child and these contacts should take place on day 3 after delivery (two–three days), between one–two weeks after delivery, and six weeks after delivery. Home visits within the initial seven days post-delivery are suggested for care of the woman and baby (W.H.O, 2013).

2.2.2 Content of postpartum care for the newborn

The baby should be assessed for the following signs throughout each postnatal visit and be transferred for additional assessment if the baby manifests any of these: poor feeding, history of seizures, rapid respiration, severe ribcage in-drawing, absence of spontaneous movement, pyrexia, hypo pyrexia, any jaundice in first day of life. Within postnatal care visits, the

household should be motivated to try to find early healthcare if they find any of the above (WHO, 2013).

All newborns should be fed with only breast milk at birth till the child attains 6 months. Mothers need to be counseled and given assistance for exclusive breastfeeding at each postnatal visit (WHO, 2013). Cord have to also be cared for daily with chlorhexidine and it should be applied to the umbilical cord stump during the initial seven days of life for babies who are delivered at home in locations with high neonatal death (WHO, 2013). Hygienic, dry cord care is also suggested for babies born in health facilities and at home in low neonatal death locations. Use of chlorhexidine in these circumstances may be considered only to substitute application of injurious traditional substance, such as cow dung, to the cord stump (WHO, 2013). A baby should be given first bath 24 hours after birth or at least 6 hours after birth if for cultural reasons the bath cannot be delayed till after 24 hours (WHO, 2013). Proper clothing of the child for ambient temperature is suggested. The mother and baby should be together in one room 24 hours a day (WHO, 2013). Speaking and playing with the baby have to be encouraged and vaccination encouraged as well (WHO, 2013). Preterm and low-birth-weight babies should be identified as early as possible after delivery and have to be given exceptional care as per prevailing WHO commendations (WHO, 2013).

2.2.3 Content of postpartum care for the mother

According to W.H.O (2013), during the first day after delivery, all puerperal mothers should have consistent evaluation for bleeding per vagina, contraction of the uterus, fundal height, fever and heart rate regularly during the initial 24 hours starting from the first hour after delivery. Blood pressure have to also be checked soon after delivery and if it is normal, the second blood pressure measurement ought to be taken within six hours and urine output should be recorded

within six hours (W.H.O, 2013). After 24 hours of delivery, enquiries should continue to be made about general well-being of the mother and assessments made regarding the following at each subsequent postnatal contact: involuntary urination, function of the bowels, healing of any wound to the perineum, pain in the head, fatigue, pain at the back, pain and hygiene of the perineum, mastalgia, uterus tenderness and the vaginal discharge after child birth (W.H.O, 2013). Breastfeeding progress must be evaluated at every post-delivery contact as well as variations in mood, emotional state and behaviour that are not usual of the woman's normal pattern. All women have to be enquired about resolving of mild, transitory postpartum maternal blues at 10–14 days after birth (W.H.O, 2013). Women should be observed for any signs and symptoms of domestic abuse and all women should be questioned about recommencement of sexual contact and possible pain during sexual intercourse as part of an assessment of overall well-being two to six weeks post-delivery (W.H.O, 2013).

Every woman ought to get information about the functional process of recovery post-delivery and counseled on diet, sanitation, especially hand washing, birth gaps and family planning, safer sex comprising usage of condoms, mild workout and rest during the postnatal period and in malaria prevalent zones, women and their babies ought to sleep in insecticide treated bed nets (W.H.O, 2013).

WHO (2013), also recommended that Iron and folic acid ought to be given for a minimum of three months and prophylactic antibiotics should be used among females who have spontaneous vaginal birth to avoid wound problems

2.3 The concept of quality

According to GHS (2005), quality is the degree to which services meet the anticipations of a single person or set of people.

2.3.1 Quality of health care

Quality health care refers to the proper performance of interventions that are identified to be harmless, inexpensive to the society in question and effect positively on morbidity, infirmity and deaths (GHS, 2005). There are several characteristics that add to health care quality. These include access to services, hygienic environment, accessibility of requisite and supplies, qualified and skilled staff, good staff attitude, adherence to professional standards, prudent usage of resources, safety, privacy and confidentiality, sufficient information, decent health results and reasonable charges. Since clients' expectations change with time, unceasing improvement of quality is therefore, essential. Therefore, quality is not just satisfying but appreciating the customer by endlessly meeting and improving upon agreed requirements (GHS, 2005).

2.3.2 Dimensions of quality

According to GHS (2005), the dimensions of quality are outlined as follows:

Access: According to GHS (2005), this refers to the capability of the individual to get services. Access to services may be geographic access (whether people who need services can be reached), financial access (whether users can afford or pay for services), organizational access (this refers to the degree to which services are organized for clients such that they can get care when they want it) and socio-cultural access.

Amenities: These are material resources like infrastructure, vehicles, equipment and supplies required in the provision of health care. Amenities also include activities that advance cleanliness and privacy (GHS, 2005).

Technical competence: This comprises the knowledge and skills needed to provide service. Technical competence can be attained through basic training, on the job training and continuing education. To retain competence, it is necessary for health workers to update their knowledge and skills very often (GHS, 2005).

Efficiency: This is the extent to which available resources are used to obtain the needed effect. It implies delivering quality services using minimal resources (GHS, 2005).

Effectiveness: Service is effective when it yields the needed outcomes. Effective health care services lead to decrease in death, disability, ailment, distress and discontent (GHS, 2005).

Safety: This has to do with reducing to the barest minimum injuries, infections and harmful side effects. Safety also includes security for clients and staff and their belongings (GHS, 2005).

Continuity of service: Deals with writing adequate clinical notes so that any physician who meets the patient would identify what has transpired in earlier consultations to guarantee continuous care. The patient should be told about his condition (GHS, 2005).

Interpersonal Relations: Good interpersonal relationship makes the health care provision setting welcoming to both the health provider and the consumer of the services. Areas of interpersonal relations that need specific consideration are the attitude of staff to clients, making all the pertinent information available to clients and permitting time for the client to give sufficient information to the provider (GHS, 2005).

The World Health Organization (WHO, 2006) has outlined six dimensions to healthcare quality. These are effectiveness, efficiency, accessibility, acceptability, equitability and safety.

2.3.3 Systems view of quality

According to GHS (2005), quality can also be viewed at from the systems point of view. A system is a collection of related processes with a common goal. A system according to GHS (2005) comprises of:

Structure or input: This refers to a set of people and things required to carry out an action.

Process: a series of event which produce a result.

Outcome or output: that which is produced or occurs as a result of an event process.

Impact: refers to the lasting effect of an activity.

2.4 Clients' satisfaction with quality of postnatal care (PNC)

Many factors have been identified to influence females' contentment with maternal health care services. A study carried out on determining factors of women's satisfaction with postpartum care services by Srivastava, Avan, Rajbangshi, and Bhattacharyya,(2015), outlined several factors that determine client's satisfaction, including Structural elements such as good physical surroundings, sanitation, and accessibility of enough health care personnel, medicines and supplies.

Process determining factors according to Srivastava et al. (2015), also comprised interpersonal behaviour, privacy, timeliness, cognitive care, observed provider competency and emotional support. Outcome/output related determinants according to Srivastava et al. (2015), are the state of health of the woman and her baby, access, cost, socio-economic status and reproductive history.

Srivastava et al. (2015), further stated that, process of care dominates the determinants of maternal satisfaction in emerging countries and outlined interpersonal behaviour as the main

determinant with evidence generated around provider behaviour such as courtesy, therapeutic communication, provider self-confidence and competency.

However, Srivastava et al. (2015), didn't carry out meta-analysis to identify the relationship between these indicators and women's' satisfaction. Most studies were carried out on health facility births though there are a lot of home based births.

Aldana,Piechulek, and Ahmed (2017), in their study on customer satisfaction and quality of health care in rural Bangladesh identified provider behaviour, particularly respect and politeness as the most influential predictor of client satisfaction with public health services. For clients, provider behaviour was much more vital than the technical competence of the provider. Furthermore, a decrease in waiting time was also identified as one of the determinants of clients satisfaction (Aldana et al., 2017).

2.5 Summary of chapter

This chapter reviewed relevant literature on clients' satisfaction with postnatal care. The analysis suggest that though literature exist on clients' satisfaction, in the context of Ghana and more specifically the Upper west region, there are few studies that have assessed clients' satisfaction with quality of postnatal care services. This means that there is the need for more research in this area to improve and sustain quality of maternal services. This present study is therefore a contribution towards filling this gap.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter comprises the design of the study, study area, study population, techniques used to gather data, analysis of data and ethical concerns considered.

3.2 Study design/type

A Cross sectional study was used in this research adopting quantitative methods. Cross sectional study is an observational study which is used primarily to determine the prevalence of outcomes of interest, to determine the burden of a disease and also assesses associations between exposures and outcomes as well as helps to provide useful questions for further studies. Since the objective of this research was to assess the extent of satisfaction with postnatal care services among postnatal women with different demographic features, this design was most suitable.

The study was conducted at the Saint Joseph Hospital, Jirapa from September, 2018 to November, 2018.

3.3 Study area

The study location was Saint Joseph Hospital at Jirapa in the Jirapa District. Jirapa District is one of the 11 districts in the Upper West Region. The total area of the district is 1,667 square kilometers. The capital of the district is Jirapa. The district shares boundaries to the South with Nadowli District, to the East with Sissala District, to the West with Lawra District and to the North with Lambussie Karni District.

Saint Joseph's Hospital in Jirapa is the District Hospital. The work was started by the Franciscan Missionaries of Mary in 1949 as a wound dressing centre and was converted to a hospital and adopted by the catholic mission of Tamale in 1953. Two training schools originally attached to

the hospital are now the autonomous Jirapa Nurses' Training College and Jirapa Midwifery Training College. There is also a community health training school. Currently, the Saint Joseph Hospital is the only hospital within the Jirapa District. Figure 3.1 is the map of the Upper West Region showing Jirapa.

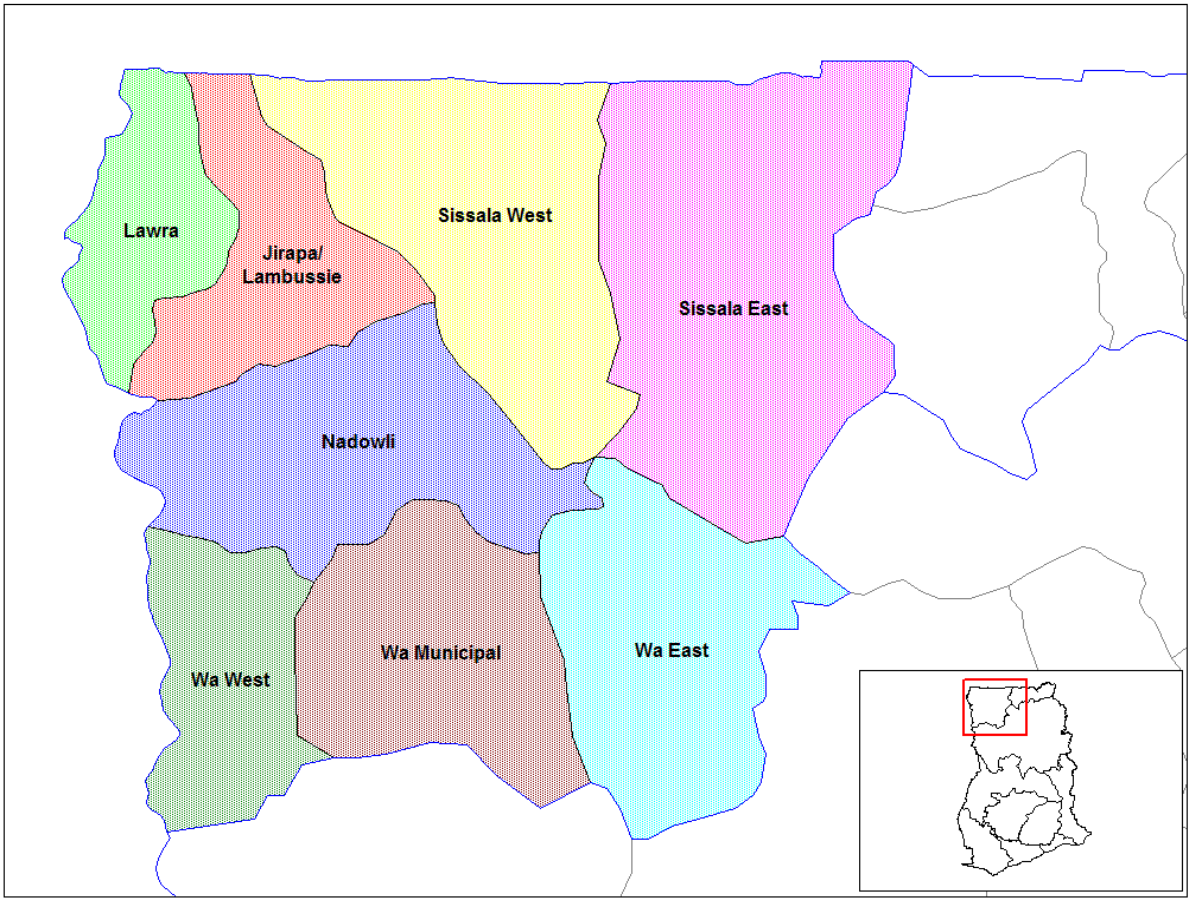

Figure 3.1: Map of the Upper West region showing Jirapa

Source: Google maps.

3.4 Study population

The study populace comprised of all postpartum women receiving postpartum care services at the Saint Joseph Hospital within the period of the study.

3.4.1 Inclusion criteria

All women who were receiving postnatal care services at the Saint Joseph Hospital and agreed to partake in the study were recruited to participate in the study.

3.4.2 Exclusion criteria

All women not receiving postnatal care services at the Saint Joseph Hospital within the period of the study were excluded. Additionally, women receiving postnatal care services at the Saint Joseph Hospital but did not consent to partake were also excluded from the study.

3.5 Study Variables

The variables were divided into dependent and independent as stated below;

Dependent Variable: Client satisfaction

Independent variables: Educational status, socio-economic status, contact time, clean surroundings, timeliness of care, health education, interpersonal relations, precision of diagnosis and management, among others.

3.6 Operational definitions

Quality of PNC

Quality of PNC for the purpose of this study refers to good staff attitude, ensuring secrecy of client's information, acceptable waiting time and contact time, competent and professional health workers, availability of drugs, x ray and laboratory services and health education at the facility. Absence of these components indicates that quality of postnatal care is poor.

Satisfaction of PNC

For the purpose of this study, satisfaction means clients who are happy with the attitude of staff, privacy, waiting time and contact time, happy with the health education given at the facility, willing to take medications and willing to return for follow-ups. Clients who are dissatisfied mean those who are not happy with the components of quality PNC.

3.7 Sample size determination

A minimum sample size of approximately 127 was selected and interviewed with a structured questionnaire. A 12% non – response rate was factored into it.

According to Cochran's (1967), the sample size for this study was calculated using the formula:

$$\text{Sample size, } n = \frac{z^2 p q}{d^2}$$

z = Confidence limits

p= Assumed prevalence of the dependent variable

q= 1-p

d=Acceptable deviation from the true value.

For this study:

z = 1.96 for CI at 95%

p = 0.92 (Asem (2016), found that 92% of PNC clients were pleased with PNC services)

q = 1-0.92 = 0.08

d = 5% = 0.05

$$n = \frac{1.96^2 \times 0.92 \times 0.08}{0.05^2}$$

n = 113.1

Adjustment for a 12% rate of non- responses of 13.57 yielded a final sample size of

126.67 ~ 127

3.8 Sampling method

Systematic random sampling was employed in this study to recruit the postnatal women for the study to give every woman the chance of been selected.

3.9 Sampling procedure

The daily Postnatal Care attendance register was used as a sampling frame. The daily attendance at the PNC was average of 25 postnatal women. The PNC is run from Mondays to Fridays. Data was collected over a 2 week period in which it was estimated that 250 patients would attend the clinic during the data collection period. To determine the sampling interval at which the postnatal women were recruited, it was calculated as follows;

Daily attendance = 25

Data collection period over 2 weeks = 10 days excluding weekends since the PNC does not run during the weekends.

Number of postnatal women attending PNC during data collection period (N) = 25 x 10 =250.

To determine the sampling interval (K) = N/n

Where n = Sample size of 127 postnatal women.

N = Total Population

K = 250/127

K = 1.96 approximately 2.

The first postnatal woman was selected randomly from the PNC register as the starting point. Then every 2nd postnatal woman was selected after the first woman was selected. This procedure was repeated throughout the data collection period until the estimated sample size (127) was achieved. Only those who consented were recruited to participate in this study.

3.10 Data collection methods and tools

The study was carried out from September, 2018 to November, 2018. Designed questionnaires were used in collecting the data. The questionnaire was prepared in English but explained in Dagaare, which is the spoken language within the area. The chief investigator collected the data together with two trained research assistants who were given adequate training for two days before the data collection started. Throughout the data collection period, the research assistants were monitored on daily basis to ensure that the questionnaires filled was complete.

The questionnaires sought facts on the socio-demographic features of mothers, indicators of quality care and overall satisfaction. The questionnaires contained only closed ended questions to obtain information from respondents and this was necessary to get data significant to the research objectives.

3.11 Quality assurance

The entire process of data collection was standardized to obtain a uniform data which was of high quality. The research assistants were trained thoroughly for two days and made sure they knew the objectives of the study. The principal investigator supervised all the data collection sessions to ensure that data was collected from the participants. Questionnaires were checked for completeness on a daily basis before they were accepted and were coded during data entry to

ensure that the questionnaires were not entered twice. Data was entered by two data entry persons separately to make sure data was correctly entered.

3.12 Training of research assistants

Two days training for the data collection team was organized which was made up of two research assistants.

3.13 Pilot study

Pre-testing was carried out by administering the questionnaires at the PNC unit of Han Poly clinic within the Jirapa District. This Polyclinic has similar characteristics as the hospital in the study area. This was done to analyze the strengths, weaknesses and validity of the questionnaire and adjust appropriately.

3.14 Data processing

The complete questionnaires were coded and entry done using Microsoft Excel 2010. The information was transferred to STATA Version 15.0 for analysis.

3.15 Data analysis

The data were described using descriptive statistics. Descriptive statistical analysis was performed to assess the women's levels of satisfaction with the quality of PNC. Cross-tabulation and logistic regression analysis were done to identify the association between the dependent and independent variables. Confidence level was held at 95% and $P<0.05$ was considered as statistically significant. Tables and graphs were used to present the results.

3.16 Ethical consideration

Ethical clearance was obtained from the Ghana Health Service Ethical Review Committee with GHS-ERC Number: GHS-ERC106/12/17. Permission was sought from School of Public Health, University of Ghana, Legon and authorities of Saint Joseph Hospital, Jirapa before the study was conducted.

The clients' consent was sought before they were recruited to participate in the research.

The researcher sought consent from parents or guardians for clients" below the age of 18years before taking the data from them.

Risk and benefits

There were no invasive procedures or the procedures did not cause discomfort or expose participants to any risk. The findings of this study would help increase the quality of postnatal care services at the Saint Joseph Hospital and also help improve the participant's health and that of their babies. The findings of this study would also be of importance to policy makers and management of Saint Joseph Hospital to make and implement policies that would ensure total client satisfaction with the quality of postnatal care services.

Right to refuse

Involvement in this study was voluntary and participants could decide on not to answer a question or all questions. Participants could withdraw from the study anytime without any penalty and would not be denied any health care service if they refused to participate.

Anonymity and confidentiality

Any information provided was handled with strict confidentiality and used for research purposes only. Total privacy was ensured. Data analysis was done at the aggregate level to ensure anonymity. No information pertaining to a participant's identity was recorded. Questionnaires were coded to maintain confidentiality.

Apart from the academic and public health importance, the researcher had no personal interest in the study.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter discusses the results of the study in relation to the research questions. It presents the results from the respondents in the study area. The results sought to determine the level of clients' satisfaction with the quality of postnatal care services, find out the aspects of postnatal care clients were satisfied with and also determine the aspects of postnatal care clients were dissatisfied with at the Saint Joseph Hospital, Jirapa.

4.1 Socio-Demographic Characteristics of Respondents

The study collected information on the socio- demographic characteristics of respondents such as age, marital status, educational level, employment status and number of children of the respondents.

Table 4.1 shows the socio-demographic characteristics of respondents. Most of the respondents representing 55.1% were within 20 to 29 years. This could be as a result of early marriage in the rural areas while 30 to 39 years recorded 30.7%. Those within 15 to 20 years were more than respondents above 40 years with 12.6% and 1.6% respectively, as by the 40 years, most respondents would have been done with child birth. It was noted that this group had at least a child but 42.9% were parents of two. Additionally, the study realized that respondents who had three or more children were all above 30 years. It revealed that more than two-thirds (89.4%) of the respondents were married as opposed to the few who were single (2.4%) and cohabiting (8.1%). The respondents who were unemployed dominated (77.9%) with most having some level of education from primary to tertiary educational level and about few (15.1%) with no education.

Table 4.1 Socio-demographic characteristics of respondents (*n*=127)

Characteristics	Frequency	Percentage (%)
Age		
15 – 20 years	16	12.60
20 – 29 years	70	55.12
30 – 39 years	39	30.71
40years and above	2	1.57
Number of Children		
One	39	30.71
Two	34	26.77
Three	32	25.20
Four and More	22	17.32
Employment Status		
Employed	28	22.05
Unemployed	99	77.95
Marital status		
Single	3	2.36
Married	114	89.76
Cohabiting	10	7.88
Education level		
None	19	14.96
Primary/JHS	35	27.56
Secondary	50	39.37
Tertiary	23	18.11

Source: Fieldwork

4.2. PNC Attendance at Saint Joseph Hospital

The results as indicated in table 4.2 shows that only a few of the clients were referred for postnatal care (11.81%) to the Saint Joseph Hospital. Majority of the respondents (88.19%) were walk-in clients to have their children undergo the postnatal care, the referrals were mostly from public facilities. The respondents had babies for postnatal care with age ranging from zero to four years. It was observed that just two of the study respondents were at the facility for postnatal care with children of ages three to four, one for three years and the other four years. Majority of the respondents had babies between zero to one year of age (72.4%). As they explained, these were the early days of their children and attention must be given to them to aid their survival, as all anomalies would be detected early through the postnatal care. The number reduced to 20.5% and 5.5% for ages one and two respectively.

Table 4.2: PNC attendance at Saint Joseph Hospital (*n*=127)

Characteristics	Frequency	Percentage (%)
Form of PNC at SJH		
Walked-in	112	88.19
Referred	15	11.81
Referred Facility		
Private	3	21.43
Public	11	78.57
Age of Babies for PNC		
0 – 1year	92	72.44
1year	26	20.47
2years	7	5.51
3years	1	0.79
>=4years	1	0.79

4.3 Number of Postnatal visits

Figure 4.1 clearly demonstrate that most of the study participants (72%) visited the facility for postnatal care regularly more than four times, at least once (10%), two and three times recorded 9% each. This indicates that the study respondents knew of the importance of postnatal care.

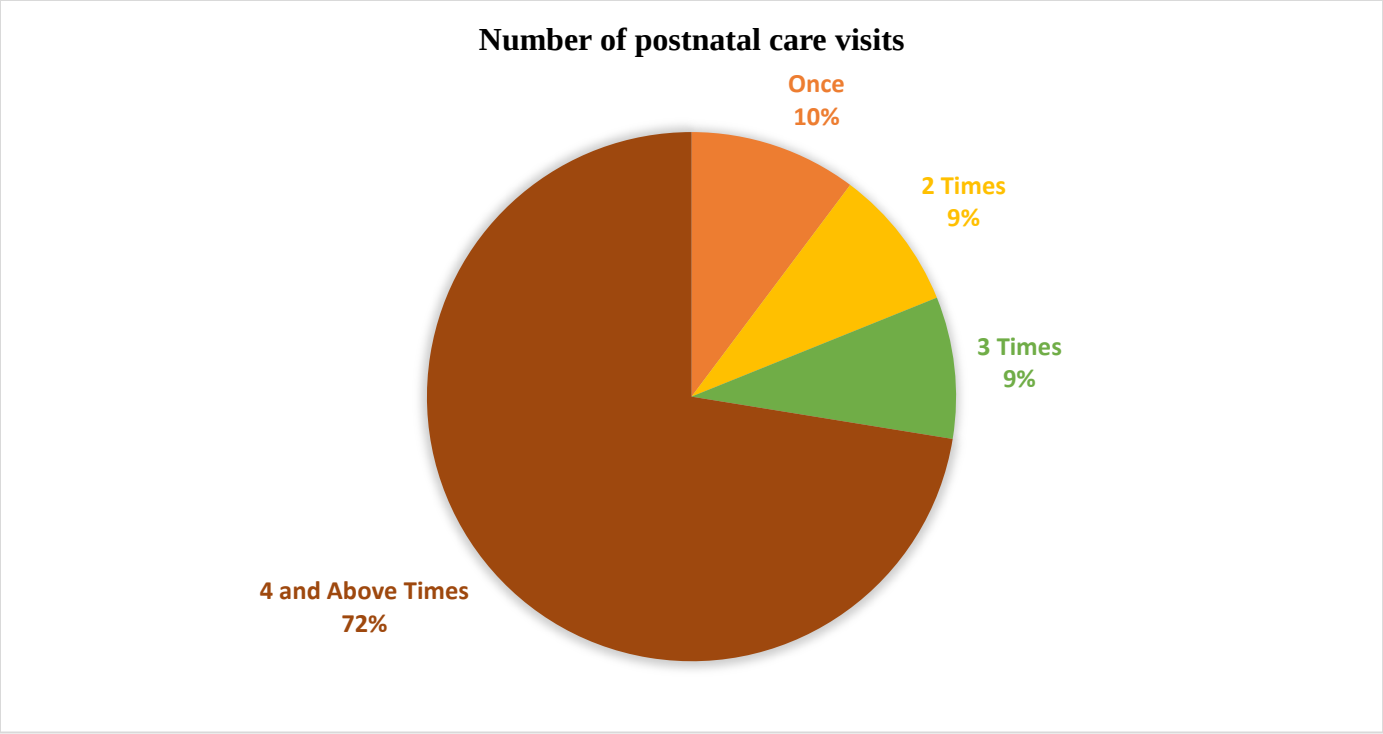

Figure 4.1: Number of postnatal visit

4.4 Quality of PNC at the Saint Joseph Hospital

The study sought to assess the quality of postnatal services considering input, process and output as key indicators. Table 4.3 shows the quality of PNC based on the indicators/pointers of quality. The study considered cleanliness of the PNC clinic environment, cleanliness of toilet facilities, competence and professional health workers, prescribed drug availability and availability of X-ray and laboratory for key service provisions as the indicators of input of quality of care for postnatal care. The study assessed the process based on the length of time a client has to wait before she is attended to, contact time, attitude of health workers, and clearness of diagnosis and

treatment. Finally, the aspect of output was considered as to how respondents were knowledgeable on postnatal matters and how well their health and that of their babies had improved due to the quality of care provided.

The study showed that about 87% of respondents agreed that the environment was clean, 68% also agreed that the toilet facility of the PNC clinic was clean. Even though a little more than average agreed to this, about 23.6% could not ascertain to the cleanliness of the toilet facility. Majority of the respondents agreed further on the competence of the health care providers (81.8%) and with services of the laboratory and x-ray availability with 93.7% and 4.7% strongly agreed to this indicator. This explains why most of respondents professed that the input quality of care was good.

Looking at the processes as part of the quality of care indicators such as waiting time, contact time, attitude of health workers and clarity of diagnosis and treatment, respondents generally agreed that before seeing the nurse/midwife and being attended to by a doctor, they had to wait too long with 65.3% and 62.2% respectively. However they established that they were happy with the waiting time (62.2%) but with 29.2% disagreeing with this assertion. About 74.01% of the respondents agreed the contact time was enough, 88.10%, of the respondents also agreed that the contact time with the health care providers was enough to solve all their problems. Quality of care observing the attitude of the health providers included professionalism of health workers in treatment with respect, privacy when providing service to clients, encouraging questions asking and giving adequate answer. Majority of the participants recorded high and agreed to the several aspects of the indicator, attitude of the health providers.

Respondents perceived that the health providers explained their diagnosis to their understanding and also made them understand their health status and the health status of their babies as well as

explained all the rationales of the various treatments before administering medications. Majority of the participants approved that they understood their health status (99.2%) while 98.4% agreed on clarity of procedures and treatment.

The facet of quality care that has to do with the degree to which clients perceived to have enough information on the significance of taking medicines and the danger signs after delivery and improved health due to the care provided were highly agreed by respondents of about 98% and 99% respectively and this confirms the reason why clients were willing to return for follow-ups (89.8%) and ready to recommend the service to other relative or friends (86.6%).

Table 4.3: Quality of PNC at St. Joseph Hospital based on the indicators of quality.

Indicators		Strongly Disagree N (%)	Disagree N (%)	Undecided N (%)	Agree N (%)	Strongly Agree N (%)
STRUCTURE/INPUT						
	The PNC clinic environment is clean	-	4(3.15)	1(0.79)	111(87.40)	11(8.66)
	The toilet facilities at the PNC clinic is clean	1(0.79)	6(4.72)	30(23.62)	87(68.50)	3(2.36)
	There are competent and professional health workers	-	7(5.51)	3(2.63)	104(81.8)	13(10.24)
	Prescribed drugs are available	-	33(25.9)	10(7.87)	80(62.99)	4(3.15)
	Laboratory and x ray services are available	-	2(1.57)	-	119(93.70)	6(4.72)

PROCESS						
Waiting Time	I always wait too long before seeing the nurse/midwife	3(2.39)	38(29.9)	2(1.57)	83(65.35)	1(0.79)
	I always wait too long before seeing the doctor	1(0.79)	42(33.0)	5(3.94)	79(62.20)	-
	I am happy with the time I always have to wait before they attend to me	4(3.15)	38(29.29)	-	79(62.20)	6(4.72)
Contact Time	I stay long with the health provider	1(0.79)	31(24.41)	-	94(74.01)	1(0.79)
	The time I stay with the health provider is always sufficient to solve my problems	1(0.79)	5(3.97)	1(0.79)	112(88.10)	8(6.35)
Attitude of health workers						
	The nurse/midwife is professional and treat me with reverence	-	30(23.6)	3(2.36)	82(64.57)	12(9.45)
	The doctor is professional and treat me with admiration	1(0.79)	5(3.97)	-	110(86.51)	11(8.73)
	Secrecy was ensured throughout dealings with the staff	-	24(18.9)	2(1.57)	89(70.08)	12(9.45)
	The staff motivated me to probe the care I receive	-	3(2.36)	4(3.15)	107(84.2)	13(10.24)
	The health staff responded to all my probes to my full understanding	-	2(1.57)	3(2.36)	107(84.2)	15(11.81)

Clarity of diagnosis and treatment	The doctor/midwife explained my health state and that of my baby to me	-	1(0.79)	-	120(94.4)	6(4.72)
	The doctor/midwife made it clear the type of medication prescribed and its importance	-	2(1.57)	-	115(90.5)	10(7.87)
OUTPUT Care Outcome						
	I have enough information on the benefits of taking my medicines and the risk factors after delivery	-	2(1.57)	3(2.36)	113(88.98)	9(7.09)
	My health status together with my baby has improved because of the better care we receive	-	1(0.79)	1(0.79)	112(88.19)	13(10.24)
	I will readily come back for reviews since I am pleased with the care I receive	1(0.79)	-	-	114(89.76)	12(9.45)
	I will eagerly take my drugs since pleased with the services	-	-	-	113(88.98)	14(11.02)
	I will freely endorse the service to a family or colleague	-	-	1(0.79)	110(86.61)	16(12.60)

4.5 Health education based on WHO recommendation

Health education encompassed facts on the usage of treated bed nets, prompt and giving the baby only breast milk, day-to-day food and nourishment in the course of breastfeeding, precise health problems that could arise in the course of the first month post-delivery, next post-delivery appointment, family planning and regular baby vaccination. Most of the participants established that they had gotten sufficient facts on every facets of promoting health that the study measured, all above 80%.

4.6 Level of Satisfaction with quality of PNC

The study examined overall quality of postnatal care based on the socio-demographic characteristics of respondents. Almost all of the study participants disagreed and said 'NO' to the thinking that the quality of care received from the facility was because of their socio-demographic characteristics, which included age, number of children, educational background, marital and employment status as shown in table 4.4

Table 4.4: Quality of PNC received based on socio-demographic characteristics

Socio-demographic Characteristics	**YES N (%)**	**NO N (%)**
Age	1 (0.79)	126 (99.21)
Number of Children	0 (0)	127 (100)
Educational Background	0 (0)	127 (100)
Marital Status	0 (0)	127 (100)
Employment Status	1 (0.79)	126 (99.21)

4.6.1 Rating of quality of PNC

About 55.1% of respondents ranked the quality of the postnatal care as good while 24.4% and 8.7% ranked it as very good and excellent respectively. This is shown in table 4.5.

Table 4.5: Rating of quality of PNC

Rate of the quality of postnatal care	**N (%)**
Excellent	**11 (8.66)**
Very Good	**31 (24.41)**
Good	**70 (55.12)**
Fair	**15 (11.81)**

4.6.2 Overall rating of quality of PNC by socio-demographic characteristics

The study examined the overall rating of quality of PNC by the socio-demographic features of the study participants. The change in study participants opinion of overall quality of care by age, number of children, educational and employment status were all statistically significant ($p<0.05$). However, there was no significant association between respondents' marital status and their overall rating of quality of the postnatal care ($p>0.05$). These are indicated in table 4.6

Table 4.6: Overall rating of quality care by socio-demographic features

	Overall rating of quality care by socio-demographic characteristics				
Characteristics	**Excellent**	**Very Good**	**Good**	**Fair**	**Chi-Square P-Value**
Age (years)					**0.023**
0 – 20	4	2	9	1	
20 – 29	5	22	39	4	
30 – 39	2	6	21	10	
40 and above	0	1	1	0	
Number of Children					**0.000**
1	8	12	18	1	
2	1	10	22	1	
3	0	3	19	10	
4 and more	2	6	11	3	
Educational Status					**0.000**
None	5	8	6	0	
Primary	0	5	26	4	
Secondary	5	15	27	3	
Tertiary	1	2	11	8	
Employment Status					**0.001**
Employed	3	3	13	9	
Unemployed	8	28	57	6	
Marital Status					**0.895**
Married	11	25	61	13	
Single	0	1	2	0	
Co-habiting	0	2	7	1	

4.6.3 Overall satisfaction with quality of postnatal care

The study assessed the extent to which respondents were satisfied with the postnatal care services received. Overall satisfaction with the quality of postnatal care was mostly positive as 91% of the respondents were satisfied with the quality of postnatal care. However, 9% were not satisfied with the quality of postnatal care service as shown in Fig 4.2.

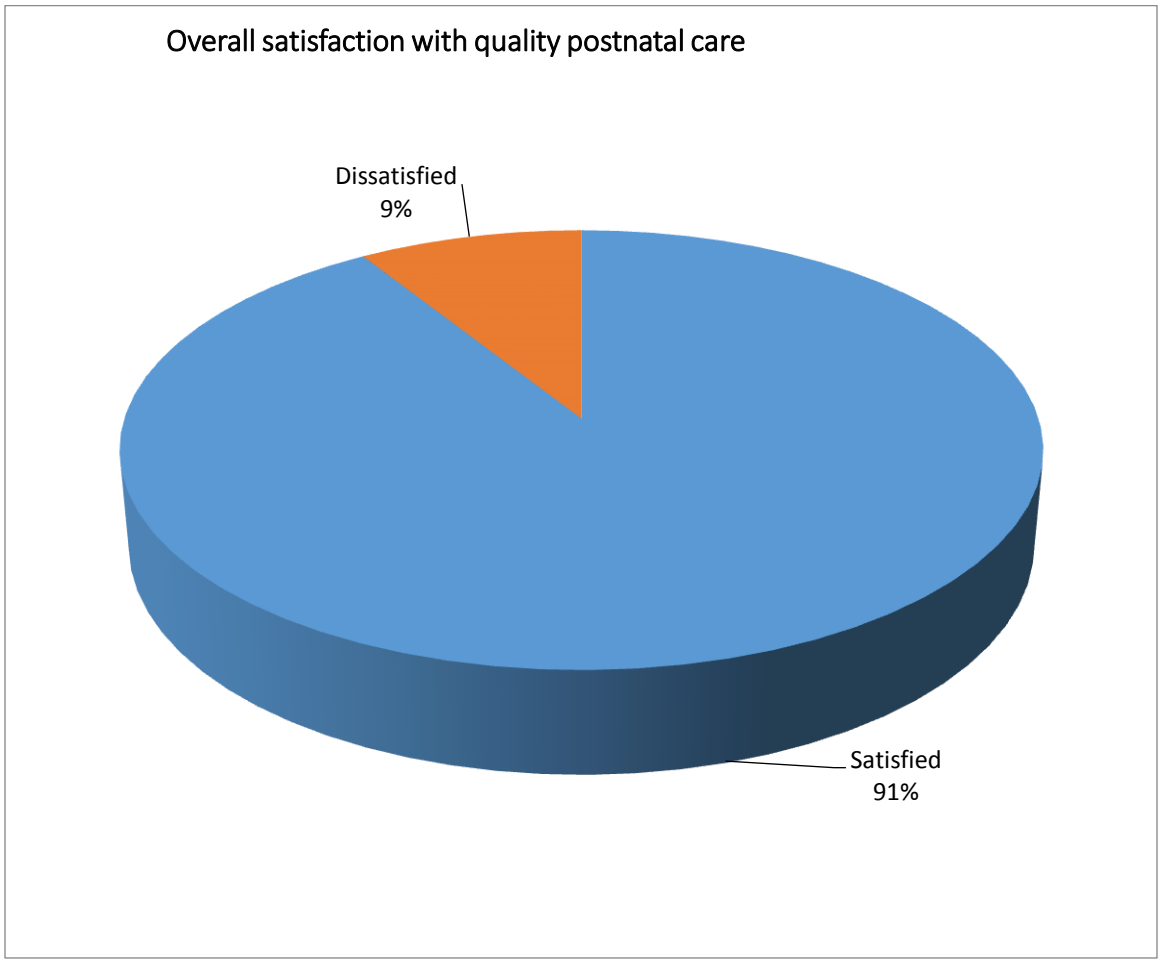

Figure 4.2: Overall level of satisfaction with postnatal care quality

4.7 Overall level of satisfaction with quality of PNC and socio-demographic characteristics

A chi-square analysis was carried out in this study to examine the relationship among the socio-demographic characteristics and the extent of satisfaction. The chi-square analysis showed that age, number of children, level of education, employment and marital status were not statistically related with their general level of contentment with quality of care ($p>0.05$). This is presented in table 4.7.

Table 4.7: Overall level of satisfaction with quality of postnatal care and socio-demographic characteristics.

	Overall level of satisfaction of postnatal quality care by socio-demographic characteristics					
Characteristics	**Very Dissatisfied**	**Dissatisfied**	**Okay**	**Satisfied**	**Very Satisfied**	**Chi-Square P-Value**
Age (years)						**0.171**
0 – 20	0	0	3	11	2	
20 – 29	0	9	14	46	1	
30 – 39	1	1	9	28	0	
40 and above	0	0	0	2	0	
Number of Children						**0.278**
1	0	2	5	30	2	
2	0	4	9	20	1	
3	0	4	8	20	0	
4 and more	1	0	4	17	0	
Educational Status						**0.071**
None	0	2	1	14	3	
Primary	0	1	11	23	0	
Secondary	1	5	8	36	0	
Tertiary	0	2	6	14	0	
Employment Status						**0.463**
Employed	0	2	9	16	1	
Unemployed	1	8	17	71	2	
Marital Status						**0.993**
Married	1	9	22	75	3	
Single	0	0	1	3	0	
Co-habiting	0	1	3	9	0	

4.8 Bivariate chi-square analysis showing association among indicators of quality care and level of satisfaction.

A bivariate chi-square analysis was conducted to investigate the association among pointers of quality of care and extent of satisfaction as indicated in table 4.8.

Most of those who approved the outcome as an indicator for excellence/quality of care were most pleased with the postpartum care at the Saint Joseph Hospital. The results revealed that respondents' who agreed that their health status and that of their children had improved as a result of the better care they received were most likely to rate great score for general satisfaction with excellence/quality of care as against those who did not agree or undecided about environmental hygiene ($p<0.05$). For the structure and process aspects of care, the chi-square test showed that there was no statistical significance of association among total satisfaction and the indicators with waiting and contact time, as well as attitude of health workers and clarity of diagnosis and treatment ($p>0.05$).

Furthermore, there was no significant association with two of the indicators which included structure/input and process. However, there was a significant association between outcome/output as an aspect of the care and the level of satisfaction particularly relating to improvement of the health of the respondent and their babies as a result of the better care rendered.

Table 4.8: Bivariate chi square analysis showing the association between indicators of quality of care and levels of satisfaction

Indicators				Chi-Square P- Value
		Dissatisfied	**Satisfied**	
STRUCTURE/ INPUT	**The PNC clinic environment is clean**			**0.629**
	Disagree	0(0)	4(100)	
	Undecided	0(0)	1(100)	
	Agree	11(9.1)	100(90.9)	
	Strongly agree	0(0)	11(100)	
	The toilet facilities at the PNC clinic is clean			**0.902**
	Strongly Disagree	0(0)	1(100)	
	Disagree	0(0)	6(100)	
	Undecided	3(10)	27(90)	
	Agree	8(9.20)	79(90.80)	
	Strongly agree	0(0)	3(100)	
	There are competent and professional health workers			**0.436**
	Disagree	1(14.29)	6(85.71)	
	Undecided	1(33.33)	2(66.67)	
	Agree	8(7.69)	96(92.31)	
	Strongly agree	1(7.69)	12(92.31)	
	Prescribed drugs are available			**0.834**
		2(6.06)	2(6.06)	
	Disagree	1(10.00)	1(10.00)	
	Undecided	8(10.00)	8(10.00)	
	Agree	0(0.00)	0(0.00)	
	Strongly agree			

	Laboratory and x ray services are available			**0.710**
	Disagree	0(0.00)	2(100.00)	
	Agree	10(8.40)	109(91.6)	
	Strongly agree	1(16.67)	5(83.33)	
PROCESS				
Waiting Time	**I always wait too long before seeing the nurse/midwife**			**0.952**
	Strongly Disagree	0(0.00)	3(100.00)	
	Disagree	3(7.89)	35(92.11)	
	Undecided	0(0.00)	2(100.00)	
	Agree	8(9.64)	75(90.36)	
	Strongly agree	0(0.00)	1(100.00)	
	I always wait too long before seeing the doctor			**0.894**
	Strongly Disagree	0(0.00)	1(100.00)	
	Disagree	4(9.52)	42(90.48)	
	Undecided	0(0.00)	5(100.00)	
	Agree	7(8.86)	8(91.14)	
	I am happy with the time I always have to wait before they attend to me			**0.523**
	Strongly Disagree	0(0.00)	4(100.00)	
	Disagree	2(5.26)	36(94.24)	
	Agree	9(11.39)	70(88.61)	
	Strongly agree	0(0.00)	6(100.00)	
Contact Time	**I stay longer with the health provider**			**0.919**
	Strongly Disagree	0(0.00)	1(100.00)	
	Disagree	2(6.45)	29(93.55)	
	Agree	9(9.68)	9(90.32)	
	Strongly agree	0(0.00)	0(100.00)	

	The time I stay with the health provider is always sufficient to solve my problems			**0.681**
	Disagree			
	Undecided	0(0.00)	5(100.00)	
	Agree	0(0.00)	1(100.00)	
	Strongly agree	11(9.82)	101(90.18)	
		0(0.00)	8(100.00)	
Attitude of health workers				
	The nurse/midwife is professional and treat me with reverence			**0.949**
	Disagree	3(10.00)	27(90.00)	
	Undecided	0(0.00)	3(100.00)	
	Agree	7(8.54)	75(91.46)	
	Strongly agree	1(8.33)	11(91.67)	
	The doctor is professional and treat me with admiration			**0.657**
	Disagree	1(20.00)	4(80.00)	
	Agree	9(8.18)	101(91.82)	
	Strongly agree	1(9.09)	10(90.91)	
	My secrecy was maintained during interaction with the health provider			**0.977**
	Disagree	2(8.33)	22(91.67)	
	Undecided	0(0.00)	2(100.00)	
	Agree	8(8.99)	81(91.01)	
	Strongly agree	1(8.33)	11(91.67)	

	The health staff motivated me to probe the care I receive			**0.522**
	Disagree			
	Undecided	0(0.00)	2(100.00)	
	Agree	0(0.00)	4(100.00)	
	Strongly agree	11(10.28)	96(89.72)	
		0(0.00)	13(100.00)	
	The health worker answered all my probes to my understanding			**0.826**
		0(0.00)	2(100.00)	
	Disagree	0(0.00)	3(100.00)	
	Undecided	9(8.41)	98(91.59)	
	Agree	2(13.33)	13(86.67)	
	Strongly agree			
Clarity of diagnosis and treatment	**The doctor/midwife explained my health state and that of my baby to me**			**0.704**
	Disagree	0(0.00)	1(100.00)	
	Agree	11(9.17)	109(90.83)	
	Strongly agree	0(0.00)	6(100.00)	
	The doctor/midwife made it clear the type of medication prescribed and its importance			**0.899**
	Disagree	0(0.00)	2(100.00)	
	Agree	10(8.70)	105(91.30)	
	Strongly agree	1(10.00)	9(90.00)	

OUTCOME

Care Outcome

I have enough information on the benefits of taking my medicines and the risk factors after delivery			**0.891**
Disagree	0(0.00)	3(100.00)	
Undecided	0(0.00)	1(100.00)	
Agree	10(9.43)	96(90.57)	
Strongly agree	1(5.88)	16(94.12)	
My health and that of the new-born has been improved due to quality of care provided			**0.013**
Disagree	0(0.00)	1(100.00)	
Undecided	1(100.00)	0(000.00)	
Agree	9(8.03)	103(91.96)	
Strongly agree	1(7.69)	12(92.31)	
I will readily come back for reviews since I am pleased with the care I receive			**0.503**
Strongly Disagree			
Agree	0(0.00)	1(100.00)	
Strongly agree	11(9.64)	103(90.36)	
	0(7.69)	12(100)	
I will eagerly take my drugs since pleased with the services			**0.222**
Agree	11(9.64)	102(90.36)	
Strongly agree	0(0.00)	14(100)	

	I will freely endorse the service to family or acquaintance		**0.394**
	Undecided	0(0.00)	1(100.00)
	Agree	11(10.00)	99(90.00)
	Strongly agree	0(0.00)	16(100)

4.9 Logistic regression analysis showing the association between indicators of quality of care and levels of satisfaction

Table 4.9 illustrates results from a logistic regression analysis examining relationship among indicators of excellence/quality of care and levels of satisfaction. Patients who approved that the surroundings was clean were 25 times more likely to be pleased with the quality of care than those who disagree, after adjusting for age, parity and educational level [AOR=25.01, 95%(C.I=4.53-77.84)] .

Table 4.9: Logistic regression analysis showing the association between indicators of quality of care and levels of satisfaction

Indicators		**Satisfaction**			
		Crude OR	**95% CI**	**Adjusted OR**	**95% CI**
STRUCTURE/ INPUT	**The PNC clinic environment is clean**				
	Disagree	Ref			
	Undecided	1.36	0.77-4.55	0.52	0.90-9.26
	Agree	15.98	9.35-82.38	25.01	4.53-77.84

	The toilet facilities at the PNC clinic is clean				
	Disagree	Ref			
	Undecided	0.83	0.31-2.23	0.86	0.29-2.53
	Agree	9.62	2.99-30.98	11.34	3.32-38.73
	There are competent and professional health workers				
	Disagree	Ref			
	Undecided	5.52	0.34-18.43	6.09	8.03-16.35
	Agree	37.12	9.32-22.4	21.32	14.23-78.54
	Prescribed drugs are available				
	Disagree	Ref			
	Undecided	3.31	0.93-20.46	6.15	0.38-43.13
	Agree	10.58	4.03-36.48	31.27	2.17-102.41
	Laboratory and x ray services are available				
	Disagree	Ref			
	Undecided	0.14	0.16-3.54	0.77	0.98-2.44
	Agree	13.71	8.23-81.45	12.01	3.55-41.22

PROCESS					
Waiting Time	**I always wait too long before seeing the nurse/midwife**				
	Disagree	Ref			
	Undecided	3.44	1.34-35.34	4.77	1.06-15.65
	Agree	4.72	4.18-10.39	5.22	5.16-12.25
	I always wait too long before seeing the doctor				
	Disagree	Ref			
	Undecided	0.83	1.18-23.66	4.17	0.45-41.26
	Agree	18.38	2.18-32.48	34.21	7.63-62.44
	I am happy with the time I always have to wait before they attend to me				
	Disagree	Ref			
	Undecided	0.53	0.46-2.56	0.93	0.23-1.40
	Agree	11.29	4.22-41.23	52.11	0.64-13.4
Contact Time	**I stay longer with the health provider**				
	Disagree	Ref			
	Undecided	0.86	0.41-1.47	0.53	0.07 - 4.03
	Agree	2.30	0.54 - 5.97	12.31	3.10-68.90

	The time I stay with the health provider is always sufficient to solve my problems				
	Disagree	Ref			
	Undecided	0.41	1.74-10.32	3.60	1.06-38.87
	Agree	13.07	6.25-71.4	21.40	2.04-93.25
Attitude of health workers					
	The nurse/midwife is professional and treat me with respect				
	Disagree	Ref			
	Undecided	1.32	1.14-3.86	0.52	0.53-9.51
	Agree	0.87	5.21-42.83	3.60	10.12-36.51
	The doctor is professional and treat me with respect				
	Disagree	Ref			
	Undecided	1.20	0.62-33.20	0.53	0.11-5.46
	Agree	8.21	1.66-17.86	6.23	1.06-12.63
	Secrecy was ensured in my dealings with the health care provider				
	Disagree	Ref			
	Undecided	4.41	0.35-42.36	14.18	1.32-18.65
	Agree	3.65	6.58-12.4	22.17	9.56-16.21

	The health provider motivated me to probe the care I receive				
	Disagree	Ref			
	Undecided	0.42	0.42-15.20	2.75	0.40-12.76
	Agree	4.12	1.15-31.62	2.03	1.64-26.84
	The health worker answered all my questions to my understanding				
	Disagree	Ref			
	Undecided	0.51	0.21-2.96	6.02	3.24-9.12
	Agree	12.37	3.15-21.83	1.28	2.16-15.24
Clarity of diagnosis and treatment	**The doctor/midwife explained my health state and that of my baby to me**				
	Disagree	Ref			
	Undecided	2.11	0.42-6.13	4.01	4.12-52.13
	Agree	4.82	1.42-33.98	10.41	3.15-74.11
	The doctor/midwife made it clear the type of medication prescribed and its importance				
	Disagree	Ref			
	Undecided	0.25	0.33-7.43	11.07	5.06-28.65
	Agree	12.09	10.18-100.4	9.77	9.46-92.25

OUTCOME					
Care Outcome					
	I have enough facts on the benefits of taking my drugs and the danger signs after delivery				
	Disagree	Ref			
	Undecided	0.44	5.44-18.43	0.15	1.79-19.56
	Agree	10.33	4.11-52.34	1.11	4.03-111.38
	My baby's health and my health status has improved due to the good care we receive				
	Disagree	Ref			
	Undecided	0.12	1.77-27.23	0.86	0.91-1.53
	Agree	5.36	3.09-39.18	12.14	3.32-31.73
	I will freely come back for review since am happy with the care				
	Disagree	Ref			
	Undecided	5.17	4.21-21.33	4.87	1.76-19.35
	Agree	23.12	11.58-107.9	22.47	9.56-102.25

	I will freely take my drugs since am pleased with the care				
	Disagree	Ref			
	Undecided	1.53	2.98-16.16	5.21	4.54-42.76
	Agree	12.16	8.01-31.68	11.23	7.43-67.24

CHAPTER FIVE

DISCUSSIONS

5.1 Introduction

This chapter discusses the main findings related to the study objectives and their relationship with current literature. The study objectives aimed to determine the level of clients' satisfaction with the quality of postnatal care services, the aspects of postnatal care clients were satisfied and dissatisfied with and how the findings were related to previous studies. This was to make information available for policy makers to make informed decisions. The study is limited to the views of the clients' satisfaction with the quality of care at the PNC unit.

5.2. Socio-demographic characteristics of respondents

The study collected information on the socio-demographic characteristics of respondents such as age, marital status, educational level, employment status and number of children of the respondents.

Majority of the respondents representing 55.1% were within 20 to 29 years and this was similar to a study carried out by Asem (2016) in which most of the respondents (65.3) were between the ages of 20-29. The study also revealed that more than two-thirds (89.7%) of the respondents were married as opposed to the few who were single (2.4%) and cohabiting (7.8%). Unemployed respondents dominated the study (77.9%) which is contrary to a study conducted by Asem (2016) to evaluate maternal contentment with postpartum care in which only 14% of the respondents were unemployed. Most respondents have some level of education from primary to tertiary educational level and about few (15.1%) with no education.

5.3 Level of satisfaction with quality of postnatal care services

The study showed that generally the hospital's environment was clean (87.4%) which is contrary to a study conducted in Nigeria by Sholele et al., (2013) which found cleanliness of the environment to be 48%. Majority of the respondent agreed on the competency of the health workers (81.8%) with the facility adequately rendering service in laboratory and x-ray, this explains why most of study participants alleged the structural/input aspect of care as good. Almost all of the study respondents disagreed to the thinking that the quality of care received from the facility was in any way related to their socio-demographic characteristics that is age, number of children, educational background, marital and employment status.

The variation in the study participants view of overall quality of postnatal care by age, number of children, educational and employment status were all statistically significant and this is similar to a research conducted by Kambala et al. (2015) which indicated that some socio-demographic features are extremely related to mothers view of quality of care. However, there was no significant association between respondents' marital status and their overall rating of quality postnatal care.

The study assessed the extent to which respondent were satisfied with the postnatal care services received. Overall satisfaction with quality postnatal care was mostly positive having more than half of the respondents been satisfied with the quality of postpartum care at Saint Joseph Hospital. About 91% of the respondents were satisfied with the quality of postnatal care. However, 9% were dissatisfied with the quality of postnatal care service which was similar to Jeminusi (2013) in a research on maternal contentment with PNC services, which revealed an overall satisfaction of 98.5% and opposes a study by Khan (2012), where the overall satisfaction level was found to be 61%.

The study showed that age, number of children, educational level, employment and marital status of the respondents were not statistically significant to their general level of satisfaction with quality of care. This clearly shows that respondents' rating and overall satisfaction of the postnatal care at the Saint Joseph Hospital was based on the key indicators selected for the study. Asem (2016) saw that a lot of the socio-demographic features were established not to have any relationship with the observed quality of postnatal care with the exception of age, opposing to that is a corresponding research work by Kambala et al., (2015),which exposed that some socio-demographic features were greatly related with females' view of the quality of care. Example, females with good education rated the quality of care greater since they were capable to make superior choices and appreciate the remunerations of pursuing care but this was not the case at Saint Joseph Hospital.

The study revealed that respondents who agreed that their health status together with their babies had improved because of the better care they received were most likely to rate great for general satisfaction with the quality of care against persons who didn't agree to or undecided about cleanliness of the health care environment. However, Asem (2016), indicated that hygienic surroundings, obtainability of drugs and other services, precision of diagnosis, time respondents have to wait before attended to and the time they spend with the health provider during consultation as well as some facets of interpersonal care were significantly associated with the level of satisfaction but more specifically Asem (2016) found that postpartum women were content with how clear their diagnoses was explained to them and also content with the way the health providers treated them with respect while this study saw high satisfaction with the outcome of the care, that is, improvement in respondents health and that of their new-born.

With the structural and process aspect of care, there was no significant relationship among overall level of satisfaction and the quality of care indicators. However, output/outcome of the quality of postnatal care for the respondents was statistically significant to their overall level of satisfaction. The outcome of the postnatal care was what really caused the satisfaction of the respondents as the clients' who agreed that their health status and that of their babies improved due to quality of care they received were significantly most likely to report pleased with the quality of postpartum care given at the hospital and high score their overall satisfaction.

5.4 Aspects of postnatal care services clients were satisfied with

Respondents indicated good level satisfaction on cleanliness of the environment and toilet facilities of the postnatal care clinic, competence of health workers and availability of service facilities,contact time, attitude of health personnel, unambiguousness of diagnosis and management.

The study showed that 87.4% of the respondents were pleased with the environmental hygiene and this opposes Karkee et al. (2014) work in Nepal, in which respondents rated lowest for cleanliness in Government owned hospitals. About 68% also agreed that the toilet facility of the PNC clinic was clean. Majority of respondents agreed more on the competence of the health providers (81.8%) and 93.7% agreed to the availability of the laboratory and x-ray services. About 88.1%, of the respondents indicated the contact time was sufficient to solve their problems and were highly satisfied. Most participants rated high and agreed to the several facets of the indicator; attitude of the health workers (73.9% - 96.1%).

The facet of quality of care that dealt with the degree to which clients professed to have enough facts on the significance of taking their drugs and the danger signs after delivery as well as improved health due to the care provided was highly agreed by respondents of about 98% and 99% respectively and this confirms the reason why clients were eager to come for follow-ups

and ready to vouch for the service to other relatives or friends based on their highly satisfied needs and this was similar to a study by Ashraf *et al* (2012) in Pakistan in which 78% of women intended to continue using the services.

5.5 Aspects of postnatal care clients were not satisfied with

Respondents generally agreed that before seeing the nurse/midwife and being attended to by a doctor, they had to wait too long with 65.4% and 62.2% respectively. This was expressed as a great dissatisfaction by respondents and this conclusion backed what Zamawe et al. (2015) stated in their research, in which mothers said long waiting time prevented them from utilizing postpartum services. Some of the clients (23.6%) were not satisfied with the postnatal care due to some conduct by nurse/midwife who the respondents described as unprofessional and treated them with little or no respect and this supports the findings of previous research by Kambala et al. (2015), Moyer et al. (2013), and contradicts studies by Warren et al. (2015), where women showed greater contentment as the health providers respected them. Moreover, some respondents (18.9%) were also dissatisfied with privacy during interaction with the health workers.

5.6 Limitations of the study

This study was carried out within two weeks and as a result included only participants who attended the facility within the two week period. Mothers who attended the facility subsequently may have diverse views about the quality of postnatal care services. Lack of funding was also a limitation to this study since adequate funding would have helped to increase the sample size of this research. Additionally, the study was carried out among only the PNC clients and did not reflect client satisfaction with the services rendered in the entire hospital.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

This study sought to determine clients' level of satisfaction with quality of postnatal care services at Saint Joseph Hospital, find out the aspects of PNC services clients were satisfied with and finally identify the aspects of PNC services clients were not satisfied with.

The study revealed that mother's contentment with quality of postnatal care services was very great even though they disagreed that the quality of care they received was not due to their socio-demographic characteristics. The study also revealed that, the women were not satisfied with the waiting time before they saw the doctor or the midwife at the postnatal clinic as they complained of long waiting time. However, the women agreed that the contact time with the doctor/ midwife was enough to remedy their health problems.

The study also revealed good level of satisfaction with the cleanliness of the environment, hygienic toilet facilities, competent health providers and clarity of diagnosis and treatment. Some of the respondents were however, not satisfied with the postnatal care due to the conduct of some midwives which they described as unprofessional and that they treated them with little or no respect. The study also revealed that some respondents were dissatisfied with privacy during interaction with the doctor/midwife.

Finally, the outcome of the postnatal care for the respondents was statistically significant to their overall level of satisfaction.

This research is beneficial for signifying the facets of PNC that need to be targeted and also contributes to existing knowledge on clients' satisfaction with quality of PNC. Additionally, this study will inform policy makers to appreciate what motivates postpartum mothers to access

services and also will be useful in determining the aspects of post natal care that need to be improved to meet clients' satisfaction.

6.2 Recommendations

Based on the findings of this study, the following recommendations are made;

1. The study recommends that more nurses/midwives as well as doctors should be provided at the PNC unit to help reduce waiting time.

2. Though the sanitation condition of the PNC unit was found to be satisfactory, the hospital authorities should find innovative ways of ensuring continuous improvement in the sanitation at the PNC unit of the hospital.

3. The facility should embark on all-inclusive health education on postpartum care particularly in providing nutritional information for breast feeding mothers.

4. Though attitude of health workers was also found to be satisfactory, it can be improved upon by organizing training for health workers on customer care

5. Management of Saint Joseph Hospital should carry out client satisfaction surveys routinely to improve on the quality of PNC.

6. Continuous monitoring and evaluation of services at the postnatal clinic by health providers and policy makers should be instituted by the hospital management and supported by the Ghana Health Service to ensure that postnatal services are tailor-made to meet the needs of clients.

7. Policy makers should plan interventions that will promote utilization of postnatal care services and decrease maternal and new born mortality.

REFERENCES

Aldana, J.M., Piechulek, H., & Al-sabir, A. (2017). *Client satisfaction and quality of health care in rural Bangladesh* (Vol.79)

Asefa, S.B.Y., & Giru, B. W. (2016). *Prevalence of Postnatal Care Utilization and Associated Factors among Women Who Gave Birth and Attending Immunization Clinic in Selected Government Health Centers in Addis Ababa* , *26*(6), 94–108.

Asem, C.K (2016) *Women satisfaction with quality of postnatal care in the Ledzokuku Krowor Municipal Assembly (Lekma) Hospital*.

Ashraf, M., Ashraf, F., Rahman, a, & Khan, R. (2012). *Assessing women"s satisfaction level with maternity services*: Evidence from Pakistan. International Journal of Collaborative Research on Internal Medicine and Public Health, *4*(11), 1841–1851. Retrieved from http://www.iomcworld.com/ijcrimph/files/v04-n11-03.pdf

Bhanu, P. (2010). Patient Satisfaction. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047732/ doi: 10.4103/0974-2077.74491

Cochran, W. G. (1977). *Sampling Techniques* (3rd Editio). New York: John Wiley & Sons.

Donabedian, A. (1988) *The quality of care: How can it be assessed?.* Jama, 260 (12), 1743-1748

Ghana Health Service. (2015). *The Patient Charter*. Retrieved from www.ghanahealthservice.org Date accessed 25/11/2015.

Ghana Statistical Service. (2015). *Demographic and Health Survey 2014 Key Indicators*. Accra.

Ghana Health Service. (2005). *Health care quality assurance manual.* Ghana Health Service. Accra

Hildingsson, I. M. (2007). *New parents ' experiences of postnatal care in Sweden*. https://doi.org/10.1016/j.wombi.2007.06.001

Kambala, C., Lohmann, J., Mazalale, J., Brenner, S., Allegri, M. De, Muula, A. S., & Sarker, M. (2015). *How do Malawian women rate the quality of maternal and newborn care? Experiences and perceptions of women in the central and southern regions*. *BMC Pregnancy*

Karkee, R., Lee, A. H., & Pokharel, P. K. (2014). *Women"s perception of quality of maternity services: a longitudinal survey in Nepal*. *BMC Pregnancy and Childbirth*, *14(1)*, 45. http://doi.org/10.1186/1471-2393-14-45

Moyer, C. A., Adongo, P. B., Aborigo, R. A., Engmann, C. M. (2013). " *They treat you like you are not a human being " :Maltreatment during labour and delivery in rural northern Ghana*. *Midwifery*, 1–7. http://doi.org/10.1016/j.midw.2013.05.006

Sholeye, O. ., Abosede, O. ., & Jeminusi, O. . (2013). *Three Decades after Alma-Ata : Are Women Satisfied with Antenatal Care Services at Primary Health Centres in Mushin , Lagos ?* Online Journal of Medicine and Medical Science Research, *2*(3), 24–29. http://onlineresearchjournals.org/JMMSR/pdf/2013/mar/Sholeye et al..pdf

Srivastava, A., Avan, B. I., Rajbangshi, P., & Bhattacharyya, S. (2015). *Determinants of women's satisfaction with maternal health care: a review of literature from developing countries*. *BMC Pregnancy and Childbirth*. https://doi.org/10.1186/s12884-015-0525-0

UNDP. (2015). *Sustainable Development Goals.* www.undp.org/content/dam/undp/.../SDGs_Booklet_Web_En.pdf

USAID. (2002). *Postnatal Care.* pdf.usaid.gov/pdf_docs/Pnadn147.pdf

Warren,C., Daly, P., Lalla, T., & Pyande, M. (2006). *(UK), National Collaborating Centre for Primary Care*, (Imci). Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK55925/

Warren, C. E., Abuya, T., Kanya, L., Obare, F., Njuki, R., Temmerman, M., & Bellows, B. (2015). *A cross sectional comparison of postnatal care quality in facilities participating in a maternal health voucher program versus non-voucher facilities in Kenya*. *BMC Pregnancy & Childbirth*, 1–14. http://doi.org/10.1186/s12884-015-0588-y

WHO. (2013). *WHO recommendations on Postnatal care of the mother and newborn*. *World Health Organization*. Geneva. Retrieved from http://apps.who.int/iris/bitstream/10665/97603/1/9789241506649_eng.pdf WHO.

WHO. (2006).Quality of care www.who.int/management/quality/assurance/QualityCare_B.Def.pdf

Zamawe, C., Masache, G., & Dube, A. (2015). *The role of the parents" perception of the postpartum period and knowledge of maternal mortality in uptake of postnatal care:* A qualitative exploration in Malawi. *International Journal of Women's Health*, *7*, 587. http://doi.org/10.2147/IJWH.S83228

APPENDICES

Appendix A: Consent form for study participants

Topic: Assessment of clients' satisfaction with quality of postnatal care at Saint Joseph hospital, Jirapa.

Institution: Department of Health Policy, planning and Management:

School of Public Health-College of Health Sciences, University Of Ghana.

Background

Dear participant, my name is Elisha Abengmeneng Nonoh. I am a student from the School of Public Health, University Of Ghana. I am conducting a study on the topic ''Assessment of Clients' Satisfaction with Quality of Postnatal care at Saint Joseph Hospital, Jirapa. In order to ensure that you are informed about the study, I am seeking you to read this consent form. You will also be asked to sign it. Please ask me to explain anything you do not understand.

Procedures

The study will involve answering questions from a structured questionnaire on Client Satisfaction with Quality of Postnatal care. There will be no invasive procedures or intake of any product. This is purely an academic research in partial fulfillment for the award of MPH degree and your cooperation will be appreciated.

Risk and benefits

There will be no invasive procedures and procedures will not cause discomfort to participants. The finding of this study will be of importance to policy makers and management of Saint Joseph Hospital to make and implement policies that will ensure total client satisfaction with the quality of postnatal care services.

Right to refuse

Participation in this study is voluntary and you can choose not to answer a question or all questions. You can withdraw from the study anytime you so wish, however, I encourage you fully participate since your opinion will help improve the quality of postnatal care services at the Saint Joseph Hospital. You will not be denied any health care service if you refuse to participate.

Anonymity and confidentiality

Any information you will provide will be handled with strict confidentiality and will be used for research purposes only. Data analysis will be done at the aggregate level to ensure anonymity.

Before taking consent

Do you have any question you wish to ask about the study? Yes/No

If yes, please write your question……..

If you wish to ask me later, please contact me Elisha Abengmeneng Nonoh on 0201798602 or email: nonohelisha@yahoo.com or the Ghana Health Service Ethical Review Committee Administrator, **Ms. Hannah Frimpong on phone number 050 7041223.**

Consent to participate in the study

I have read (or had read to me), the above information describing the process, benefits and risk of participating in this study. I have had the opportunity to ask questions about it and all questions I asked have been answered to my satisfaction. I consent voluntarily to participate as a subject in this study and understand that I have the right to withdraw from the study at any time without in any way it affecting my further medical care.

Date:

Signature or Thumb print of study Participant:

Name of Witness:

Date and Signature or Thumb print of witness:

I confirm that the individual has not been forced into giving consent and the consent has been given voluntarily.

Name of Researcher:

Signature of Researcher:

Date:

Appendix B: Consent form for parent or guardian

Topic: Assessment of clients' satisfaction with quality of postnatal care at Saint Joseph hospital, Jirapa.

Institution: Department of Health Policy, planning and Management:

School of Public Health-College of Health Sciences, University Of Ghana.

Procedure: Information required from you for this study includes background characteristics and the rating of the level of client satisfaction with services provided at the postnatal care facility. Data collection is through the administration of a structured questionnaire.

Risk and benefits: There are no risks involved if you take part in this study, there are also no incentives but any information that you will provide will help improve your health and that of the community.

Right to refuse: You have the right to refuse to participate in this study. You will not be denied any health care service if you refuse to participate.

Anonymity and Confidentiality: You are assured of strict anonymity and confidentiality on any information that will be given.

If you have further questions about the study, please contact me Elisha Abengmeneng Nonoh on 0201798602 or email: nonohelisha@yahoo.com or the Ghana Health Service Ethical Review Committee Administrator, **Ms. Hannah Frimpong on phone number 050 7041223**

Appendix C: Child Assent Form

(To be filled by clients' below the age of eighteen (18) years)

My name is Elisha Abengmeneng Nonoh. I am a student from the School of Public Health, University Of Ghana. I am conducting a study on the topic ''Assessment of Clients' Satisfaction with Quality of Postnatal care at Saint Joseph Hospital, Jirapa. I will be grateful if you participate in this research.

General information

If you agree to participate in the study, you will be asked to provide information regarding to your satisfaction with the care you receive.

Possible Benefits

Your participation in this study will help in policy formulation which will improve the quality of care clients' receive at the postnatal care unit.

Possible Risks and Discomforts

This study is not associated with any physical or psychological risk to you or your child.

Voluntary Participation and Right to Leave the Research

Participation in this study is voluntary and you can choose not to answer a question or all questions. You can withdraw from the study anytime you so wish, however, I encourage you fully participate since your opinion will help improve the quality of postnatal care services at the Saint Joseph Hospital. You will not be denied any health care service if you refuse to participate.

Confidentiality

The information that will be obtained in this study will be kept confidential and will not be accessed by any unauthorized person.

If you have further questions about the study, please contact me Elisha Abengmeneng Nonoh on 0201798602 or email: nonohelisha@yahoo.com or the Ghana Health Service Ethical Review Committee Administrator, **Ms. Hannah Frimpong on phone number 050 7041223.**

Appendix D: Questionnaire on assessment of clients' satisfaction with quality of postnatal care at Saint Joseph Hospital, Jirapa.

Interview Date: ……

ID No ……

INSTRUCTION:

Please tick the appropriate answer.

A. Demographic characteristics of clients.

Q1. Age <20 years ☐ 20-29 years ☐ 30-39 years ☐ 40 years and above ☐

Q2. Number of children: 1 ☐ 2 ☐ 3 ☐ 4 and more ☐

Q3. Educational level: None ☐ Primary ☐ Secondary ☐ Tertiary ☐

Q4. Employment status: Employed ☐ Unemployed ☐

Q5. Marital status: Married ☐ Single ☐ Widowed ☐ Divorced ☐

Separated ☐ Co-habiting ☐

Q6a. How did you attend PNC at Saint Joseph Hospital? Walked-in ☐ Referred ☐

Q6b. If referred, from which Facility? Private ☐ Public ☐

Q7. How old is your baby? < 1 year ☐ 1 year ☐ 2 years ☐ 3 years ☐

4 years and above ☐

Q8. Number of PNC visits so far? Once ☐ 2 times ☐ 3 times ☐ >3times ☐

B. Indicators of quality care

Structure/Input

Structure/Input	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**
Q9. The PNC clinic environment is clean					
Q10. The toilet facilities at the PNC clinic is clean					
Q11. There are competent and professional health workers					
Q12. Prescribed drugs are available					
Q13. Laboratory and x ray services are available					

Process

Waiting time	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Q14. I always wait too long before seeing the nurse/midwife					
Q15. I always wait too long before seeing the doctor					
Q16. I am happy with the time I always have to wait before they attend to me					

Contact time	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Q17. I spend a lot of time with the nurse/midwife/doctor					
Q18. The time I usually spend with the nurse/midwife/doctor is enough to address my concerns					

Attitude of health workers	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Q19. The nurse/midwife is professional and treat me with reverence					
Q20. The doctor is professional and treat me with admiration					
Q21.Secrecy was ensured throughout dealings with the staff					
Q22.The staff motivated me to probe the care I receive					
Q23. The health staff responded to all my probes to my full understanding					

Clarity of diagnosis and treatment	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Q24. The doctor/midwife explained my health state and that of my baby to me					
Q25. The doctor/midwife made it clear the type of medication prescribed and its importance					

Health education based on WHO recommendation	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Q26. I am taught the use of insecticide treated bed nets throughout infancy					
Q27. Early and exclusive breastfeeding in the first six months after delivery					
Q28. Daily diet and nutrition during breastfeeding.					
Q29. Specific health problems that can occur during the first month after birth (danger signs) that require prompt attention.					
Q30. Date for next PNC visit was communicated to me.					
Q31. Family planning and Contraceptive usage.					
Q32. Routine child immunizations					

Outcome/Output

Care Outcome/Output	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Q33. I have enough information on the benefits of taking my medicines and the risk factors after delivery					
Q34. My health and that of the new-born has been improved due to quality of care provided					
Q35. I will willingly return for follow-ups because I am happy with the care given to me					
Q36. I will willingly take my medications because I am happy with the care					
Q37. I will willingly recommend the service to other relative or friend					

Overall quality of PNC	**Yes**	**No**
Q38. I think the quality of care I received was because of my		
A. Age		
B. Number of children		
C. Educational background		
D. Marital status		
E. Employment status		

	Excellent	Very Good	Good	Fair	Poor
39. Overall, how would you rate the quality of postnatal care?					
Overall satisfaction	Satisfied		Dissatisfied		
Q40. Overall, how would you rate your level of satisfaction with the quality of postnatal care?					