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MOTHERS' SATISFACTION WITH IMMEDIATE POSTNATAL CARE PROVIDED AT NDOLA CENTRAL HOSPITAL, ZAMBIA.

BY

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A Dissertation submitted in partial fulfillment of the requirements for the award of

Degree of Master of Science in Nursing, Maternal and Child Health Major

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DECLARATION

I, **Mutinke Zulu**, declare that the work presented in this Dissertation for the award of a Master of Science Degree in Nursing, Maternal and Child Health Major, to the University of Zambia is entirely my work and has not been presented wholly or partially for any other qualification or to any other institution. I further declare that all the sources of information quoted in this work have been dully cited and appear on the list of references.

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I, **Dr Dorothy Chanda,** having supervised and read through this dissertation, am satisfied that this is the original work of the author under whose name it is presented. I confirm that the work has been completed satisfactorily and approve it for final submission.

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CERTIFICATE OF APPROVAL

This Dissertation entitled **"Mothers' Satisfaction with Immediate Postnatal Care Provided at Ndola Central Hospital."** by **Mutinke Zulu**, has been approved in partial fulfillment of the requirements for the award of a Master of Science Degree in Nursing, Maternal and Child Health Major, by the University of Zambia.

Examiner I

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Examiner II

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Examiner III

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To my daughters, Mukena and Tabo Muyumbwa, "the apple of my eyes"

To my late husband; Major Nobutu Muyumbwa. "Gone too soon to see the completion of this project which you dearly supported, till we meet again."

ABSTRACT

Introduction- Many mothers and their babies do not receive the recommended immediate postnatal care despite delivering from the hospital. At Ndola Central Hospital, there have been reports of mothers complaining of poor health care provision. Records also revealed high numbers of neonatal and maternal mortality. Between 2011 and 2013, a total of 265 and 47 cases of neonatal and maternal mortality respectively were recorded. Maternal and Neonatal morbidity and mortality are the traditional measures of the quality of care. To complement them, a patient centered measure such as measuring levels of mothers' satisfaction with the care is required. The objective of this study was to determine the levels of mothers' satisfaction with the immediate postnatal care provided at Ndola Central Hospital. It also aimed at establishing the association between mothers' satisfaction with the immediate postnatal care with socio demographic and obstetric characteristics. Mothers' opinions regarding their satisfaction with care can provide an opportunity to plan and implement appropriate strategies that improve the quality of care.

Methodology -A hospital based cross sectional study was conducted at Ndola Central Hospital between November and December, 2014. Two hundred and two mothers in the immediate postnatal period were selected by purposive sampling method. A structured interview schedule adapted from the Jipi's Satisfaction with Postnatal Nursing Care Questionnaire was employed for data collection. The tool had six satisfaction subscales namely; information, communication, care and comfort, value and preferences, orientation and care specific to postnatal; on a five point Likert scale. It also had 11 socio demographic and obstetric characteristics. Mothers were interviewed one at a time. Stata version 10.0 running on windows 7 was used for data analysis. Spearman's correlation coefficient (r) was used to investigate the association between variables. Linear regression modeling was also applied to test the significance of the association.

Results- Overall, 26.2 percent of the mothers were fully satisfied with the immediate postnatal care provided, 35.6 percent were moderately satisfied, 27.2 percent were minimally satisfied, 9.9 percent were satisfied and 1 percent was dissatisfied with the immediate postnatal care provided. Of the six satisfaction subscales, information scored the lowest (63.4%) while communication scored the highest (85.9%). Of the 11 socio demographic and obstetric characteristics only the mothers' employment status (p- value = 0.024) and the baby's condition at birth (p-value = 0.037) had statistically significant association with the mother' satisfaction with the immediate postnatal care.

Conclusion- The study showed that the levels of satisfaction with the immediate postnatal care provided at Ndola Central Hospital were low among mothers as it would have been preferred that more mothers than 26.2% reported to be fully satisfied with the care provided. Individualized and satisfactory care was not provided as some mothers reported more satisfaction than others depending on their differences in characteristics. Periodic evaluation of the postnatal care must be done in order to improve the quality of care delivered, reduce neonatal and maternal morbidity and mortality and also satisfy the needs of the mothers and their babies.

Key Words: Immediate Postnatal Care, Postnatal Mothers, Satisfaction

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TABLE OF CONTENTS

CONTENTS **PAGE**

CHAPTER THREE

CHAPTER FOUR

CHAPTER FIVE

APPENDICES

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

C/S…….....Caesarean Section

CSO……..Central Statistical Office

GNC…….General Nursing Council

HIV……...Human Immunodeficiency Virus

MoH…….....Ministry of Health

NCH…….....Ndola Central Hospital

PMTCT…….Prevention of Mother to Child Transmission

PNC……..Postnatal Care

SCBU ……..Special Care Baby Unit

SVD……..Spontaneous Vaginal Delivery

UNESCO……...United Nations Educational, Scientific and Cultural Organization

WHO……..World Health Organization

ZDHS…….Zambia Demographic Health Survey

CHAPTER ONE

1.0: Introduction

This study describes satisfaction with postnatal care (PNC) among mothers as a measure of quality of care provided at Ndola Central Hospital (NCH). Satisfaction with care is an area of concern that has to be addressed when nursing care is being monitored because caring has been recognized as central to nursing practice, but perhaps it has never been more important ever before than today when more health care clients are more informed about the expected care (Sharma & Kamra, 2013).

Postnatal care is an important tool in both preventive and promotive maternal and child health care (Lagro et al., 2006). It can improve maternal and newborn health by timely identifying and addressing postnatal complications, connecting mothers to family planning services, promoting breastfeeding and immunizations and increasing access to other key interventions for newborn survival (Khanal et al., 2014). However, PNC is among the weakest of all reproductive and child health programmes (Warren et al., 2010). Poor quality of care leads to dissatisfaction among mothers and increased neonatal and maternal morbidity and mortality.

1.1: Background Information

Postnatal care is the individualized care provided to meet the needs of the mother and her baby following child birth (National Institute for Health and Care Excellence -NICE, 2013). It constitutes an essential component of the package of Maternal and Child Health (MCH) services (Lomoro et al., 2002). After delivery, the mother is expected to recover from labor, revert physically and psychologically to her pre-gravid state and adapt to her new role as a mother. The baby is equally expected to adapt to extra uterine life (Sines, 2007).

Postnatal Care is therefore, a cardinal intervention towards ensuring this maternal adjustment and neonatal adaptation following delivery. It is also an integral, indispensable and important intervention towards the reduction of the maternal and neonatal morbidity and mortality associated with the postnatal period.

It has been estimated that if routine PNC reached 90 percent of mothers and their babies, 10-70 percent of deaths could be averted (Warren et al., 2010). The World Health Organization (WHO) recommends that mothers and the newborn babies should receive PNC in the facility and discharged after at least 6 hours following birth if the delivery was conducted in a health facility and was uncomplicated and about three days after a caesarean birth. If the delivery was at home, the first postnatal contact should be as early as possible within 24 hours of birth. The World Health Organization also recommends that at least 3 additional postnatal contacts should be made for all mothers and newborns, on day 3, between day 6 and14 after birth and 6 weeks after birth (WHO, 2013).

The PNC provided includes assessment of the mother and baby with the aim of detecting any problem early, preventing morbidity and promoting the general health and well being of the mother and the baby. The mother is assessed for vaginal bleeding, pallor and uterine contraction. Fundal height, temperature, pulse rate including blood pressure are also checked to monitor the mothers' well being and detect any abnormality. The mother is encouraged on early ambulation and frequent voiding to promote uterine contraction and prevent severe vaginal bleeding. The mother is also encouraged to do gentle exercise and make time to rest during the postnatal period.

In addition, PNC involves physical assessment of the baby to note any abnormalities such as hypothermia, jaundice or any signs of infection. Information, Education and Communication is provided on topics such as nutrition, hygiene, birth spacing, safer sex, prevention of malaria, baby care and importance of subsequent postnatal clinic visits (WHO, 2013). The immediate PNC is necessary as it helps in the prevention, detection and treatment of any complications on the mother and baby as early as possible (Chirdan et al., 2013). It offers an important opportunity to assess the mother's knowledge, address all identified needs and educate her on available health care services. It also empowers the mother with appropriate skills in safeguarding her health and that of her baby considering the high risk of morbidity and mortality associated with the postnatal period (Warren et al., 2010).

The Central Statistical Office (CSO, 2009) reports that more than a third of the neonatal and maternal morbidity and mortality occur on the first day while more than half occur

in the first three days of the postnatal period. Given the exceptional extent to which the morbidity and mortality of mothers and babies occur in the first days after birth, the immediate postnatal period is, therefore, a special and critical time for both the mother and her neonate (Vallely et al., 2005). It is the ideal time to deliver interventions to improve the health and survival of both the newborn and the mother and calls for the provision of prompt and adequate PNC to the satisfaction of the mothers.

Peterson et al. (2007) in a study to determine adolescents' perceptions of inpatient postpartum nursing care in Ontario, revealed that a high satisfactory experience during the immediate postnatal period improves mothers' compliance with health teaching and use of subsequent recommended care. Satisfied clients also have better outcomes and show different reactions in comparison to the unsatisfied ones. Kumbani (2012) in a study conducted in Malawi to assess whether Malawian women critically assess the quality of care reported that mothers' satisfaction as well as the availability of the care was important as it influenced whether the women will use or not use the services. The care provided must, therefore, result in high levels of satisfaction if mothers are to continue using subsequent services which will in turn promote their health and that of their babies.

However, studies have reported that PNC is the area where clients are least satisfied among maternity services (Banerjee, 2003; Warren et al., 2010; Chimtembo et al., 2013). Unsatisfactory care during the immediate postnatal period can negatively influence other MCH programs along the continuum of care. For instance, lack of support for healthy home behaviors such as exclusive breastfeeding can lead to malnutrition in children (Warren, 2010). Additionally, mothers and babies may be lost to follow up for prevention of mother to child transmission (PMTCT) of Human Immunodeficiency Virus (HIV) including missing out on important immunization against preventable childhood diseases. It is the responsibility of the midwives and other skilled health care providers to provide quality PNC that can satisfy the needs of the mothers and their babies.

However, midwives sometimes tend to give clients the care which they deem worth giving and not necessarily what is recommended and required of the mothers and their babies (UNESCO, 2010). This could be due to various factors such as inadequate time to take care of the mothers and their babies, work load, changing shifts and improper

provider to client ratios (Chwinui, 2009). In addition, with hospital length of stay after a delivery that has decreased to about six hours after spontaneous vaginal delivery and about three days after a caesarean birth, midwives would want to provide the care that promotes clients' autonomy and an increased sense of participation. This can involve great challenges when trying to satisfy the needs of the mothers and their babies as well as on reducing the incidences of neonatal and maternal morbidity and mortality (Ellberg, 2008).

1.2: Statement of the Problem

Many mothers and their babies do not receive the recommended immediate PNC despite delivering from the hospital (Sines et al., 2007). Lack of care during this period can result in death or disability as well as missed opportunities to promote healthy behaviors affecting mothers, neonates and other children. There is lack of information on the content and appropriateness of what is provided as care to the mothers and their babies during the immediate postnatal period at Ndola Central Hospital. A number of strategies have been implemented in order to improve the care provided to mothers and neonates during the immediate PNC at NCH. Such measures include free provision of PNC services and training of nurses as midwives in order to improve the staffing levels on the postnatal wards which would further improve the number of skilled health care providers offering care to the mothers and their neonates. Others measures include the development of protocols and guidelines for the provision of care to the mothers and their neonates to guide health care providers during the provision of PNC. However, there have been reports of mothers complaining of poor postnatal care provision at Ndola Central Hospital which may lead to dissatisfaction among mothers. Records also showed that there are high incidences of neonatal morbidity and mortality including and maternal mortality at the hospital.

For instance, a total of 7126 neonates were admitted between 2011 and 2013. Of these, a total 265 neonates died representing 3.7%. Equally, a total of 47 cases of maternal mortality were recorded between 2011 and 2013(Table 1.1).

Table 1.1: Neonatal Morbidity and Mortality and Maternal Mortality at NCH (2011-2013)

Year	Neonatal Morbidity	Neonatal Mortality	**Percentage**	Maternal Mortality
2011	1872	52	2.8	13
2012	2422	72	3	18
2013	2832	141	5	16
Total	7126	**265**	3.7	**47**

NCH, 2011-2013 Registers.

Maternal and Neonatal morbidity and mortality are the traditional clinical measures of the quality of care. To complement them, a patient centered measure such as measuring levels of mothers' satisfaction with the care which is another important health care outcome is required (Sharma & Kamra, 2013).

1.3: Study Justification

Clients' satisfaction with the immediate PNC is important because it improves compliance with health teaching and use of subsequent recommended care. In addition, clients' opinions regarding their satisfaction with PNC can be considered an important opportunity for care providers to plan and implement appropriate strategies that improve client outcomes such as satisfaction and reduction in morbidity and mortality. Despite the recognized importance of the immediate postnatal period, PNC is among the weakest and the most neglected area of all reproductive and child health programs and health care during the postnatal period is inadequate in many parts of the world (Chimtembo et al., 2013; Warren et al., 2010; UNESCO, 2010).

There is generally, scarcity of published information on mothers' satisfaction with immediate PNC in Zambia. Generating such evidence of the levels of satisfaction among postnatal mothers would be critical in informing policy decisions on areas to direct resources in future improvements on health care delivery. This study therefore, sought to determine the levels of mothers' satisfaction with immediate PNC provided at Ndola Central Hospital.

1.4: Study Question

What are the levels of mothers' satisfaction with the immediate PNC provided at Ndola Central Hospital?

1.5: Study Objectives

1.5.1: General Objective

To determine the levels of mothers' satisfaction with immediate PNC provided at Ndola Central Hospital.

1.5.2: Specific Objectives

1. To measure the levels of mothers' satisfaction with the immediate PNC provided at NCH.
2. To assess the association between mothers' satisfaction with immediate PNC with socio-demographic and obstetric variables

1.6: Research Hypothesis

Null Hypothesis

There is no significant association between levels of mothers' satisfaction with the immediate PNC with some socio-demographic and obstetric variables.

1.7: Conceptual Definitions of Terms

Postnatal Period- The period beginning immediately after the delivery of the placenta and membranes and continues for 6 weeks (Fraser & Cooper, 2003).

Postnatal Care- The individualized care provided to meet the needs of a mother and her baby following childbirth up to six weeks postpartum (NICE, 2013).

Satisfaction: The degree to which mothers' desired expectations, goals and or preferences are met by the health care provider and or service (Debono & Travaglia, 2009). Satisfaction is related to the extent to which general health care needs and condition specific needs are met (Asadi-Lari, et al., 2004).

1.8: Operational Definitions of Terms

Immediate Postnatal Period: In this study the immediate postnatal period refers to the period beginning immediately after the delivery of the placenta and membranes and continues until the mother and newborn are discharged from the postnatal ward. It is the period where close supervision by a midwives or any other skilled attendant is required so that any problems can be identified promptly and appropriate interventions instituted.

Immediate Postnatal Care: This is the attention and supervision that the mother and newborn received immediately after delivery till discharge from postnatal ward. This care included the physical examination of the mother and baby, immunization and the information, education and counseling provided. The immediate PNC was measured according to the six satisfaction subscales of the interview schedule namely, orientation, care and comfort, communication, information, value and preferences and care specific to postnatal.

Satisfaction: The extent to which PNC fulfils the expectations of the mothers during their time of admission to the postnatal ward till discharge. Satisfaction was measured using 39 items of the interview schedule which were on a 5 point Likert scale with 5 being the highest score and 1 the lowest score.

1.9: Study Variables

1.9.1: Dependent Variable

Mothers' Satisfaction with immediate postnatal care

1.9.2: Independent Variables

Immediate Postnatal Care

Socio-demographic and obstetrics characteristics (Age, marital status, education level, ward type, employment status, duration of admission to the ward, gestation age at delivery, mode of delivery, parity, mother's and baby's condition after delivery), table 1.2.

Table 1.2: Variables and Cut off Points

Variable Dependent Variable	Type	Indicator	Scale of Measurement /Cut-off Points	Question Number
Satisfaction with immediate PNC	Categorical	Highly Satisfied	Scores between 165-195 (i.e 85-100%) of the 39 items whose total score is 195	11-49
		Moderately Satisfied	Scores between 134-164 (i.e 69-84%) of the 39 items whose total score is 195	11-49
		Minimally Satisfied	Scores between 103-133 (i.e 53-68%) of the 39 items whose total score is 195	11-49
		Satisfied	Scores between 72-102 (i.e 37-52%) of the 39 items whose total score is 195	11-49
		Not Satisfied	Scores between 39-71 (i.e 20-36%) of the 39 items whose total score is 195	11-49

Table 1.2: Variables and Cut off Points cont'

Independent Variables				
Socio-demographic Variables 1. Age,	Continuous	In years		1
2. Marital status	Categorical	Single Married (Separated, Widowed or Divorced)		2
3. Education level,	Categorical	None Primary Secondary Tertiary		3
4. Employment status,	Categorical	Employed Unemployed		4
5. Time spent on the ward	Continuous	In hours		6

Table 1.2: Variables and Cut off Points cont'

Independent Variables cont'	Type	Indicator	Scale of Measurement/Cut-off Points	Question Number
Obstetrical Variables 6. Parity	Categorical	Prim para Multi para Grand Multi Para	1 child 2-4 children 5 children and more	5
7. Mode of delivery	Categorical	Normal delivery Complicated delivery	Spontaneous Vaginal Delivery (SVD) Interventional Delivery	7
8. Gestational age at delivery	Categorical	Preterm Term	Born before 28 weeks of gestation Born after 28weeks of gestation	8
9. Baby's condition at birth	Categorical	Good Poor	Apgar Score 5/10 and above Apgar Score 4/10 and below	9
10. Mother's condition after delivery	Categorical	Good Poor	No health problems Had health problems	10

1.10: Conceptual Framework

Adapted from Jipi's Postnatal Satisfaction with Nursing Care Questionnaire (JPSNQ)

The conceptual framework was adapted from the Jipi's postnatal satisfaction with nursing care questionnaire (JPSNQ) to guide this study. According to this framework, client satisfaction is the dependent variable. It is influenced by various independent variables, such as orientation, information, communication, comfort and care, care specific to postnatal and values and preferences of postnatal mothers which are sub- scales of measuring the levels of mothers' satisfaction with PNC (Varghese & Rajagopal, 2012).

In addition, the framework has 11 socio-demographic and obstetric variables which are included as predictors of the levels of mothers' satisfaction with PNC provided. These items include mother's age, marital status, level of education, employment status, parity, length of stay on the ward, type of ward, mode of delivery, baby's condition after delivery and the mother's condition after delivery.

Conceptually, mothers are satisfied with the immediate PNC if the information, communication, care and comfort, orientation, values and preferences and the care specific to postnatal provided to them while admitted to the postnatal ward meet their expectations. In addition, the mothers' socio- demographic and obstetric characteristics influence the levels of mothers' satisfaction with the PNC they receive.

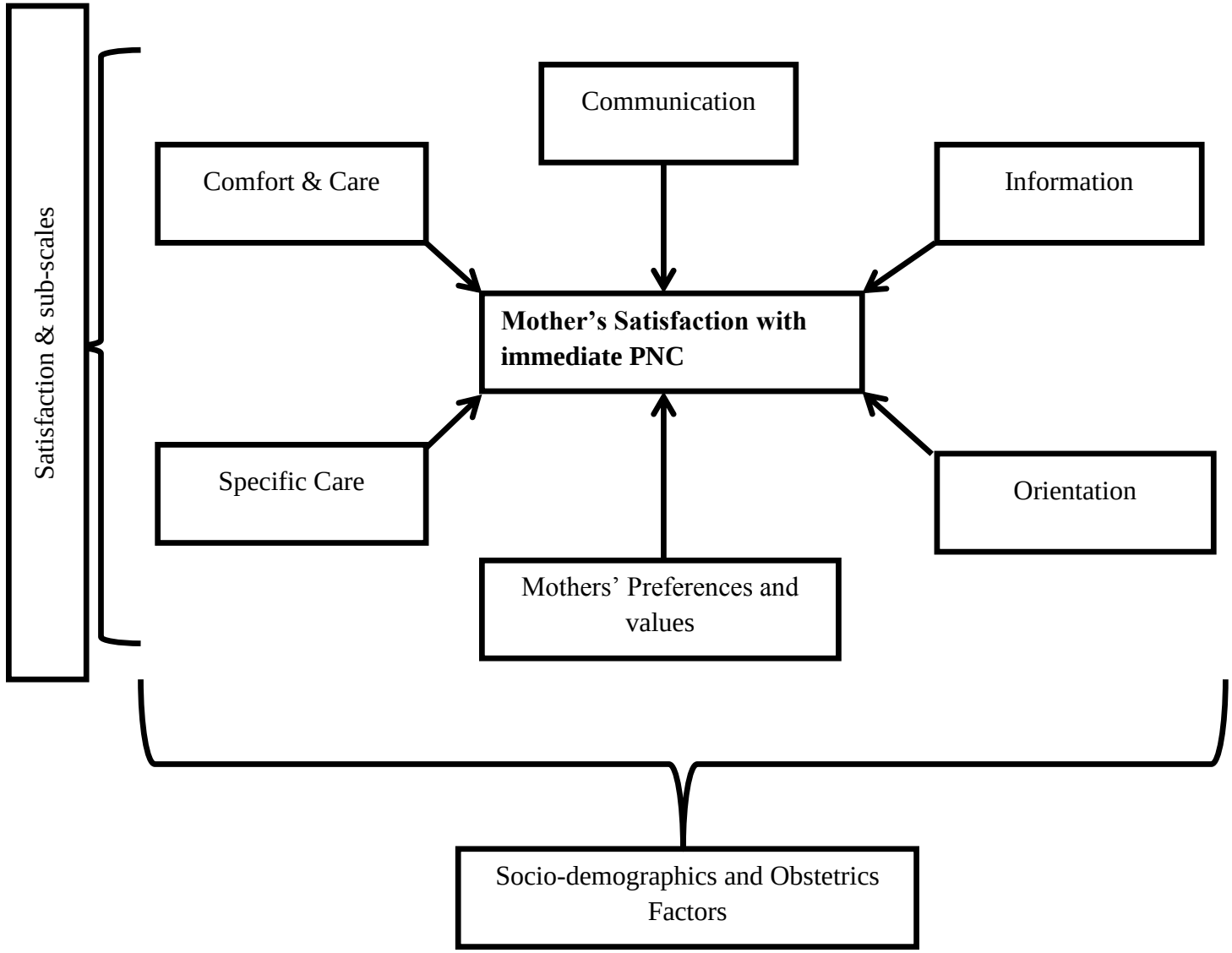

Figure 1.1: Conceptual Framework (Adapted from the Jipi's Postnatal Satisfaction with Nursing Care Questionnaire)'

Figure 1.1 presents the conceptual framework with variables that guided the study in determining the levels of satisfaction with immediate PNC.

CHAPTER TWO

2.0: Literature Review

2.1: Introduction

This chapter presents a review of literature on other studies done on postnatal care and mothers' satisfaction. The literature review is presented according to the study variables which include; satisfaction with postnatal care, socio-demographic and obstetric variables such as mother's age, marital status, level of education, employment status, parity, length of stay on the ward after delivery, type of ward, mode of delivery, baby's and mother's condition after delivery.

The sources of this literature include published articles from computerized database such as Google scholar and PubMed. Other sources include WHO publications and some midwifery textbooks. The major search terms used were postnatal care, quality of postnatal care, postnatal period and mothers' satisfaction with PNC.

2.2: Overview of Postnatal Care

Postnatal care is important for both the mother and the baby as it provides an opportunity to detect and treat any complications arising from the delivery as well as to provide the mother with information on how to care for herself and her baby. It is a long term investment for the health of mother and the newborn baby. The World Health Organization (2013) recommends that PNC should be accessible to all mothers and their babies. It has also provided guidelines for proper provision of care to the mothers and their babies during the postnatal period.

The postnatal period is recognized as a critical time for both the mother and the newborn because of the enormous incidences of morbidity and mortality that is associated with this period. However, many women and their newborns do not have access to health care during the early postnatal period. This puts them at an increased risk of illness and death (Warren et al., 2010).

Among the more than 500, 000 women who die worldwide each year due to complications of pregnancy and childbirth, most deaths occur during immediate postnatal period or within few hours and days after childbirth (WHO, 2010).

Considerable progress has been made globally in improving maternal health. Around the world, the maternal mortality ratio has decreased from 380 to 210 per 100,000 live births between 2000 and 2013 (WHO, 2013). Annual maternal mortality rates in developed countries such as the United Kingdom and United States of America are estimated at 8 and 16 per 100,000 live births respectively which are very impressively low. These figures show that it is possible to reduce the morbidity and mortality among mothers and their babies with proper interventions that can be developed when satisfaction levels among mothers are determined.

In Africa however, the mortality of mothers and newborns are still very high. The World Health Organization (2010), reports that at least 125,000 women and 870,000 neonates die in the first week after birth every year. In the Sub- Sahara African countries, the rates are over 400 per 100,000 live births with few exceptions like South Africa where maternal mortality rate is estimated at 237 per 100,000 live births which can be said to be among the lowest though still relatively high (WHO, 2010).

In Zambia, the maternal mortality rate is estimated at 398/100, 000 live birth while the neonatal mortality is estimated to be 24 /1,000 live birth (CSO et al., 2015). Though these rates demonstrate a reduction when compared to the maternal and neonatal mortality rates of 591/100,000 and 34/1,000 live birth respectively in 2009, they are still enormously high and call for the provision of quality and satisfactory PNC if a further reduction is to be achieved. Yet the postnatal period has continued to receive the lowest coverage and attention along the continuum of care for child bearing.

In many parts of the world, health care during the postnatal period is inadequate and PNC in hospital is usually a particular cause of dissatisfaction among mothers (UNESCO, 2010). Mothers would want healthcare professionals to have enough time to support their recovery and to help them gain confidence in taking care of their babies.

However, mother's needs and those of their newborns during this period have been all too often over shadowed by the attention given to pregnancy and labor. This ignores the fact that the majority of maternal deaths and disabilities occur during the first few hours of the postpartum period (WHO, 2010). It also ignores the fact that the health care that a mother receives during pregnancy, at the time of delivery and soon after delivery is equally important for the survival and well being of both the mother and her baby.

In Victoria State, Australia, a review of PNC in public hospitals indicated that the needs of women and their babies during the postnatal period were often eclipsed by attention given to pregnancy and delivery (UNESCO, 2010). This predisposes the mothers and their babies to adverse health outcomes as their health needs are not met at this critical moment in their reproductive lives.

Lomoro et al. (2002) in a study conducted in central Shanghai China, to assess mothers' perspectives on the quality of PNC services provided also stated that both the content and quality of services provided to mothers and their babies during the postnatal period deserve special attention considering the health implications of the postnatal period. This is because the study established that more resources were allocated to other areas of maternity care and PNC had not been a priority issue nor assessed. Another study to assess outcomes of various care options in Sweden by Ellberg (2008) noted that the postnatal care options were not always the most cost minimizing and postnatal routines influenced neonatal morbidity and parental satisfaction and so the postnatal services needed to be improved.

Poor quality of care and unsatisfactory experiences among mothers lead to underutilization of health services (Rani et al., 2008). A study conducted in Ghana by Turkson (2009) reported that poor attitude of some health workers, long waiting times, high cost of services, inadequate staff levels, policy of payment for health services, frequent referrals to hospitals and lack of ambulances at facilities were detrimental to the effective delivery of healthcare. All these aspects contribute to the quality of care provision and so if they are found lacking, quality of care is compromised and results in low levels of satisfaction among clients.

In South Africa, a report on maternity care by Beksinska et al. (2006) stated that PNC had not been adequately prioritized, formally addressed, monitored nor evaluated as other maternal and child health care services. The same report also stated that although PNC attendance was high in South Africa, the services rendered and other attributes such as the timing and providers' attitudes needed to be critically assessed as they were also important for the achievement of optimum quality of care. Assessment of the quality of care provided to mothers and their babies in the postnatal period would expose areas that need improvement so as to meet the needs of mothers and their babies.

Mrisho et al. (2009) in a study conducted on the use of antenatal and postnatal care from the perspectives and experiences of women and health care providers in rural southern Tanzania stated that much less was known about the quality of PNC provided. This is because little attention was paid to PNC compared to other areas of maternity care. If much attention is given to the care provided to the mothers and their babies during the postnatal period, policy makers and health care providers would identify areas that require attention and channel the scarce resources so as to satisfy the needs of the mothers and their babies.

In Mozambique, Petterson et al. (2007) identified that unsupportive environments, non empowering and limited interaction with women, a sense of professional inadequacy and inferiority and non-appliance of best caring practices were some of the barriers to the provision of satisfactory perinatal care to mothers and their babies. This is because these aspects contribute greatly to the experience that mothers have during the postnatal period. According to findings of a study on post natal care in Bubi district, Zimbabwe, the quality of PNC services was rather poor and was more geared towards the baby than the mother (Sibanda et al., 2001). This means that most mothers would not receive the recommended care which would predispose them to various problems during the postnatal period. Mothers would also not understand the importance of PNC and would lack information necessary for their wellbeing. The mothers would only care about the care for their babies as informed by the health care system which was more geared towards the baby than the mother.

A study on the quality of maternity care for adolescent mothers in Mbabane, Swaziland by Mngadi et al. (2002) reported that the quality of care offered to the adolescent postnatal mothers was optimal. Most adolescents interviewed during the study reported to be satisfied with the care they received during the postnatal period. However, this may not entirely mean that the care was satisfactory considering the fact that these adolescents are inexperienced with the care provided during the immediate postnatal period. The adolescent mothers could have had low or no expectations at all and therefore rated highly the care provided.

In Zambia, the situation is not any different in terms of attention paid to antenatal care and delivery at the expense of PNC. Available literature is mainly on other areas of maternity care and not on satisfaction with immediate PNC. Kyei et al. (2012) evaluated the quality of antenatal care in Zambia and reported that evaluating the level of ANC provision at health facilities is an efficient way to detect where deficiencies are located in the system. Lohela et al. (2012) explored the influence of distance to delivery care and of level of care on early neonatal mortality in rural Zambia. There is generally scarcity of published information on studies determining the levels of mothers' satisfaction with the immediate PNC in Zambia and Ndola in particular.

2.3: Mothers' Satisfaction with Postnatal Care

Client' satisfaction has been widely recognized as one of the critical indicators of the quality and the efficiency of the health care systems just like the reduction of morbidity and mortality (Chirdan et al., 2013). It is an essential aspect if mothers have to continue to utilize subsequent health care services, comply with teachings and improve the health outcome (Lochoro, 2004). Any assessment of care outcome is therefore, incomplete if it does not determine the levels of clients' satisfaction because clients are important stakeholders in the delivery of health care. Knowledge of the degree or levels of client satisfaction serves to identify areas of improvement when clients' expectations exceed what the health care system can afford to offer (Matizirofa, 2006).

Many women report lower levels of satisfaction with the care and support they receive during the postnatal period than at any other phase of their maternity care (Forster et al., 2005). Various factors including attitude of staff, comfort and care, time spent at the hospital, communication, client's health condition and education level have been found to influence patient's satisfaction with care (Nwaeze et al., 2013).

Feeling listened to and well supported as well as receiving timely and consistent information are other important factors that contribute to mother's satisfaction with their postnatal care experience. Providing information and education relating to the normal physiological changes associated with childbirth, breastfeeding, parenting and other health promotion messages is also necessary during the postnatal period as it is aimed at giving the mother the confidence needed for self care and to care for the baby after discharge from the postnatal ward (McLellan & Laidlaw, 2013).

Changole et al. (2010) in a study to determine the extent to which pregnant women are satisfied with the care in hospital in Malawi, reported that almost all (97.3%) of the mothers were satisfied with the care they received from admission through labour and the immediate postpartum period. The satisfaction was mainly due to the frequent reviews of patients by nurses and doctors in the unit. Muhondwa et al. (2008) in a study to determine patient' satisfaction in a hospital in Tanzania also reported that most patients were satisfied with the care that they received. The study also noted that although only a small proportion of patients expressed dissatisfaction with the aspects of the services provided, they were significant in the sense that they constitute a call for action towards improving the overall general client satisfaction.

2.4: Socio- demographic and Obstetric Variables

2.4.1: Mother's Age

Age is a cardinal feature of mothers in relation to child bearing as it is associated with various effects and outcomes. Young mothers are a diverse group and have differing needs just like older mothers. This brings the need for the provision of quality and individualized PNC in order to prevent the maternal and neonatal morbidity and mortality associated with the period following delivery.

A study in Kolkata by Banerjee (2003) indicated that younger mothers seemed to be less satisfied with the PNC they received than older mothers. This is most likely because young mothers may not be quite familiar with the services offered during the immediate postnatal period when compared to older mothers. In addition, young mothers may have much higher expectations than older mothers which leave them unsatisfied if their expectations are not met.

On the other hand, older mothers, after having visited the health facility more times, become more accustomed to the care and are, therefore, more satisfied with the care they receive. In Saudi Arabia, a study that was conducted by Moawed et al. (2009) indicated that there was a negative correlation between mothers' age and satisfaction of PNC. This meant that as the age of the mother increased the levels of satisfaction decreased and vice versa.

2.4.2: Level of Education

According to the ZDHS, only 8% of women aged 15-49 in Zambia have no formal education (CSO, 2015). This implies that a number of women in Zambia have some form of formal educational. Educational attainment is one of the most influential factors affecting the understating and appreciation of health care messages and services provided. According to study findings at a health centre in Rural Bengal by Das et al., (2010), all the illiterate mothers considered the quality of services to be satisfactory or good while the literate mothers found the services to be of poor quality and unsatisfactory.

With increasing education, one's expectations also increase and one becomes more critical of issues which may explain the low levels of satisfaction among the educated than the illiterate. To overcome this disparity, holistic but individualized health care services should be provided so as to achieve a satisfactory level of perception among the majority of the beneficiaries served regardless of their literacy levels.

2.4.3: Marital Status

According to the ZDHS (2015) the majority (60%) of women in Zambia are married. This indicates that like any other African society, the institution of marriage is valued in Zambia. It may also imply that mothers have a source of financial and social support. Support plays a vital role towards the achievement of better health outcomes for mothers and their babies as it complements efforts from the health care provision.

2.4.4: Length of stay on the ward after Delivery

The time that mothers and their babies spend in hospital following childbirth has steadily declined. The minimum length of stay for a public hospital birth is about six hours for uncomplicated vaginal birth. After a caesarean section birth, the length of stay in hospital lengthens to three days if the mother is without complications or even more if there are complications. In addition**,** where specific risk factors are identified, the mother and baby can be kept in the facility longer to enable extra support for feeding, warmth and care for any complications that may have arisen. Extra hospital stay and care is specifically needed for Low birth weight babies and preterm babies.

Studies (Chirdan et al., 2013; Misra et al., 2013), in Jos state Nigeria and western India respectively, indicated that overall, clients were satisfied with the obstetric care they received and that the clients further stated that they would come to the same facility again to receive PNC in their subsequent pregnancies. The mothers also indicated that they would recommend the facility to others for health care. However, the mothers expressed concern with shortened hospital stay after delivery. They recommend that postnatal stay in hospital after normal delivery needed to be extended to at least 48 hours. This is to allow for provision of thorough care to mothers and their babies which will raise their levels of satisfaction.

2.4.5: Type of Ward

The environment where mothers and their babies receive care has an effect on satisfaction. According to Coffey (2011), women who receive care from the private system demonstrate higher levels of satisfaction compared to those who receive care from the public settings. Reasons for higher satisfaction rates in the private settings include the fact that mothers in private setting have the opportunity to exercise their right of choice. They are also privileged to have their partners stay overnight, have more pleasing aesthetics and individual rooms.

Tateke et al. (2012) in a study on determinants of patient satisfaction with health services at public and private hospitals in Addis Ababa, Ethiopia reported that patients at the private hospitals were more satisfied with the health care they received than those at the public hospitals. However, some of the predictors of patient satisfaction were common to both settings.

Sharma and Kamra (2013) in a study on patient satisfaction with nursing care in Public and Private hospital in Ludhiana, India reported that mean patient satisfaction with nursing care score was significantly higher in private hospitals (80.83±15.88) as compared to public hospitals (64.88±21.36) ($P<0.001$).

Unlike the public facilities, the private settings usually have fewer clients thus the health care providers have more time to provide comprehensive care to the clients. In addition, socio-demographic differences between women accessing public and private obstetric care are also important in determining levels of satisfaction with care. It is a fact that most women accessing care from the private setting are economically empowered, educated and more critical of the standards of care they receive than those in the public settings which can result in different levels of satisfaction (Tateke et al., 2012).

2.4.6: Parity

Parity is another characteristic reported to have an influence on levels of satisfaction with care. Lamadah et al. (2014) in a study to determine mothers' satisfaction regarding quality of postpartum nursing care and discharge teaching plan at Ain Shams Maternity and Gynecological hospital reported that mothers with low parity were more satisfied with the quality of postpartum care.

Ensuring that new mothers are satisfied with their maternity care is therefore vitally important as it occurs during the biggest transition they will ever face in life and can significantly impact upon their child bearing experience and their wellbeing. Parity also determines the levels of experience and interaction one has with the health care providers which may affect the levels of satisfaction with PNC received (Lamadah et al., 2014). However, a study in Uganda by Basemera (2010) reported that there was no significant relationship between parity and the satisfaction with the PNC services provided to HIV positive mothers in Mulago hospital.

2.4.7: Mode of Delivery

Spontaneous vaginal delivery is considered the normal births as it is free from intervention, reduces a woman's hospital length of stay and it is cheaper and safer. There is a highly negative correlation between mode of delivery and satisfaction (McLellan, 2013). For women who have undergone a caesarean section, postnatal care is important to prevent and where necessary, treat postnatal complications such as the infection that may arise (Sadat, 2013).

Venkatesh et al. (2013) in a study conducted to determine the quality of postnatal care given to babies by health care workers, reported that mothers who delivered by CS were more satisfied with quality of care compared to those who had spontaneous vaginal deliveries. On the contrary, a study conducted among the adolescents postnatal mothers in Mozambique revealed that post cesarean section mothers were less satisfied with PNC services than those who had delivered vaginally (Peterson et al., 2007).

2.4.8: Gestation Age at Delivery

Preterm birth, defined as childbirth occurring at less than 37 completed weeks of gestation (WHO, 2010), is a major cause of low birth weight and a major determinant of neonatal mortality and morbidity which ultimately affect satisfaction levels among mothers. According to a study in India by Venkatesh et al. (2013), mothers of preterm infants were more satisfied with the quality of PNC than those with term babies and normal spontaneous vaginal deliveries. The study also reported that the quality of care given to babies based on mother`s perception was poor even though adequate counseling had been given in key areas of newborn care.

2.4.9: Baby's Condition after Delivery.

The baby' condition after delivery dictates the amount of attention given by health care providers (Ellberg, 2008). More attention tends to be directed towards babies whose condition is poor compared to the healthy babies. This would influence the levels of satisfaction among mothers. Kumbani (2012) reported that women and neonates without problems were not assessed in the postnatal ward until it was time for discharge. This led to low levels of satisfaction among mothers as they did not receive the recommended care.

2.5: Conclusion

From the literature reviewed, patients' satisfaction with care has been shown to be influenced by various factors such as socio-demographic and obstetric characteristics. The client's age, education level, employment and marital status have been shown to have great influence on the levels of mother's satisfaction with the immediate PNC provided. Parity, mother's health condition and the baby's condition at delivery have also been found to influence the levels of mother's satisfaction with the immediate PNC provided. Adequate provision of information and communication with mothers has been found to be associated with high levels of satisfaction with care and vice versa. Shortened hospital stay, lack of support from health care providers and lack of interaction have been found to be disassociated with dissatisfaction among other factors.

Further, the literature has revealed that the postnatal period is generally associated with low levels of satisfaction among mothers. However, there are discrepancies in studies reviewed such as levels of satisfaction and their determinant. These discrepancies could be as a result of differences in study setting and population, socio- cultural influence and other factors such as mother's preferences.

This literature review also highlights the importance of postnatal care towards the promotion of maternal and child health and the reduction of morbidity and mortality among mothers and their babies. However, much attention has been paid to other areas of maternal and child health at the expense of PNC. Available literature is mainly on utilization of PNC and factors affecting its utilization. Generating information on levels of mothers' satisfaction with immediate PNC will inform decision on measures to improve the quality of PNC which will ultimately reduce the neonatal and maternal mortality.

CHAPTER THREE

3.0: Methodology

3.1: Introduction

This chapter describes the study design, study setting, study population, sample selection methods and sample size. The data collection technique, data collection tool as well as its validity and reliability and ethical and cultural consideration for the study are also discussed in this chapter.

3.2: Study Design

This study was a hospital based cross sectional study. This design was selected because it is not so expensive and is less time consuming considering that the study had to be conducted within the limited academic time and resources. The study design allowed the researcher record information from postnatal mothers without manipulating the study environment. It also enabled the researcher to observe multiple variables at once and make inferences about possible relationships among them.

3.3: Study Setting

The study was conducted at Ndola Central Hospital. Ndola Central Hospital is one of the central hospitals in Zambia located in Ndola District, about 320kilometers north of Lusaka. The hospital has two postnatal wards, one caters for clients under the low cost department while the other provides care to clients under the high cost or fee paying department. The wards provide immediate PNC to clients who had spontaneous vaginal deliveries as well as to those who had interventional deliveries like Caesarean births and instrumental deliveries.

3.4: Target Population

The target population for this study was all in-patient postnatal mothers that received PNC on the postnatal wards at NCH.

3.5: Study Population

The study population comprised of all postnatal mothers who received PNC on the postnatal wards at NCH and were discharged during the period of data collection.

3.6: Sample Selection

Purposive sampling method was employed when selecting participants among those postnatal mothers who were discharged each week day during the period of data collection. Since the study population was homogeneous, the participants were selected because they had particular characteristics that were of interest in answering the research questions. However, Purposive samples are highly prone to researcher bias. To overcome this bias, the researcher carefully considered the inclusion and exclusion criteria of participants and expert elicitation was sought when setting the criteria for selecting participants' characteristics.

3.6.1: Inclusion Criteria

All postnatal mothers who were discharged from the postnatal wards during the period of data collection were eligible to be included in the study. The mothers were above the age of 18 years and were willing to give written consent to participate in the study. Postnatal mothers under the age of 18 years but willing to participate in the study and whose parents or guardians were available to grant them permission to participate in the study were also eligible to be included in the study.

3.6.2: Exclusion Criteria

All postnatal mothers who were unwell, still admitted and those who experienced a still birth or neonatal death before discharge from the postnatal ward were excluded from taking part in the study. Young mothers, below the age of 18 years who were willing to participate in the study but whose parents or guardians were unavailable to grant them permission to participate in the study were also excluded from the study.

3.7: Sample Size

A total sample of two hundred and two (202) postnatal mothers comprised the sample size for this study. The sample size was calculated to be 201 postnatal mothers after estimating the study population size to be 420 mothers who would be discharged from the postnatal wards in a period of one month. However, during data collection an extra postnatal mother was incidentally interviewed and was part of the data analyzed as her inclusion would not have made significant alterations to the findings rather the larger the sample the more significant the result.

The sample size was computed using Open Epi- Epidemiological calculator version 2 as illustrated below.

Sample Size Calculation for Frequency in a Population

Population size (for finite population correction factor or fpc) (N): 420

Hypothesized % frequency of outcome factor in the population (p): 50%+/-5

Confidence limits as % of 100 (absolute +/- %) (d): 5%

Design effect (for cluster surveys-DEFF): 1

Confidence	Level (%)	Sample Size
	95%	**201**

Equation

Sample size n = [DEFF*Np(1-p)]/ [(d2/Z21-α/2*(N-1)+p*(1-p)]

3.8: Data Collection Tool

A structured interview schedule was used for data collection. It was adapted and modified from the Jipi's Postnatal Satisfaction with Nursing Care Questionnaire (JPSNQ) which is a validated tool for measuring satisfaction with postnatal nursing care among mothers. The interview schedule was arranged in two sections. The first section (Section A) had 11 items on the mothers' socio-demographic and obstetric characteristics. The socio-demographic characteristics included; mother's age, marital status, level of education, employment status, parity, length of stay on the ward, mode of delivery, baby's and mother's condition after delivery.

The second section (Section B) had 6 satisfaction sub scales namely; Information, communication, orientation, value and preferences, care and comfort and care specific to postnatal. The 6 satisfaction subscales had 39 items gauged on a 5 point Likert scale. The scores were defined as: 5 = fully satisfied (85-100%), 4 = moderately satisfied (69-84%), 3 = minimally satisfied (53-68%), 2 = satisfied (37-52%) and 1 = not satisfied (20-36%). For each of the six satisfaction sub-scale, scores were summed up and divided by the number of items in that sub-scale to obtain a mean score. An overall mean for all the 6 sub-scales gave the total score which could be attained as a general measure of mother's satisfaction.

3.8.1: Validity

A validated tool was used for data collection. The tool had clearly phrased questions and in simple terms which made the administration and understanding of the questions easy by both the interviewer and the respondent.

3.8.2: Reliability

The tool had standardized questions which were accurate, clear, and simple to avoid ambiguity and misinterpretations. The tool had a reliability co-efficiency of (r-0.834) demonstrating that it was a reliable tool. The postnatal mothers were informed of the purpose of the interview and the need for them to respond truthfully. The questions were administered in the same order to all the mothers, one at a time in a private room to make the mother feel secure and at easy when answering the questions.

3.9: Data Collection Technique

Data was collected from the postnatal mothers for a period of four weeks from November to December, 2014. Face to face exit interviews were conducted with each postnatal mother at a time in a private room. Postnatal mothers who had been discharged were approached to request them to participate in the study. The interviewer introduced herself to the participant to make her less anxious and create a working rapport. The purpose of the study was explained to participant for her to understand the process and give informed consent.

Confidentiality was assured with the use of unique identification codes and not names. Verbal and written Consent was obtained before conducting the interview. The participants were informed that participation was voluntary and that they were free to decline participation or withdraw from the study at any point, without giving any explanations or fear of receiving a penalty.

Questions were read out to the participants and those which were not understood were read again without directing the participant to the answer. Clarifications on questions not fully understood were made and responses were immediately written down on the interview schedule to avoid missing out relevant data. Two research assistants were recruited and oriented to the purpose of the study and the process of data collection. Therefore, three interviewers were involved in collecting data. About 10 postnatal mothers were interviewed each week day with each interview taking approximately 15 to 20 minutes. None of the respondents who met the inclusion criteria declined to be interviewed. After the interview, the interviewer thanked each of the respondents for participating in the study.

3.10: Ethical and Cultural Considerations

Ethical approval was sought from ERES Converge IRB. The researcher also obtained permission from the medical superintendent, Ndola Central Hospital to conduct study at the institution. Written and verbal informed consent was obtained from each participant after explaining the content of the participant information sheet during data collection. The researcher assured the participants of confidentiality and anonymity and no name or any form of identity was indicated on the interview schedule form. The mothers were interviewed one at a time in a private room for them to feel secure and free and be able to answer sincerely without any feeling of intimidation. The participants were informed that participation in the study was purely on voluntary basis and no form of payment or incentives were to be provided.

CHAPTER FOUR

4.0: Data Analysis and Presentation of Findings

4.1: Introduction

This chapter describes the data analysis and presentation of findings of the study conducted to determine the levels of mother's satisfaction with the immediate PNC which was conducted at Ndola Central Hospital. The study comprised of 202 postnatal mothers selected purposively from those discharged from the postnatal wards during the period of data collection. Face to face exit interviews were conducted with each postnatal mother using a structured interview schedule.

4.2: Data Analysis

The interview schedule had pre-coded responses with 39 items gauged on a 1- 5 point Likert scale. In this scale, 1 indicated the lowest while 5 indicated the highest level of satisfaction. The scores were defined as: 5 = fully satisfied, 4 = moderately satisfied, 3 = minimally satisfied, 2 = satisfied, 1 = not satisfied. For each sub-scale, scores were summed and divided by the number of items in that sub-scale to obtain a mean score. An overall mean for all the 6 sub-scales gave the global score which could be attained as a general measure of mother's satisfaction.

During data collection, the interview schedules were checked by the interviewer for completeness, legibility, accuracy and consistency. Epidata data management software running on windows 7 was used for designing the database, entering the data and for validation. Frequency tables, graphs and cross tabulations were generated. Numerical descriptions were done to make the data more meaningful.

Stata 10.0 was employed for data analysis. Spearman's correlation coefficient (r) was used to investigate the association between the mothers' socio-demographic and obstetric characteristics with the general satisfaction with PNC. Linear regression modeling was used to investigate the significance of the association between mothers' satisfaction and the 11 independent variables and 95% confidence interval and a p- value of 0.05 was set. In doing so, the effect of one variable on mother's satisfaction was examined while controlling for the other variable as confounders.

4.3: Presentation of Findings

The findings have been presented in three sections according to the study objectives. These sections include; the mothers' socio demographic and obstetric variables, mothers' satisfaction with immediate PNC and the tests of association and significance of the association between mother' satisfaction with PNC with the socio demographic and obstetric characteristics.

4.3.1: Mothers' Socio-demographic and Obstetric Characteristics

Eleven components were considered under the mothers' socio-demographics and obstetric variables. These include mothers' age, marital status, employment status, level of education, ward of admission and duration of stay in hospital. Others include parity, gestation age at delivery, mode of delivery, baby's condition at birth as well as the mother's condition after delivery. Frequencies, percentages, mean and cross tabulations were used to summarize the 11 items on mother's socio-demographic and obstetric characteristics.

Table 4.1 (a): Mothers' Socio -demographic and Obstetric Characteristics (n=202)

Mothers' demographics Characteristics	Proportion of study population		Mean	95% CI
	n	%		
Age Group (yrs.)				
15-19	46	22.8		
20-30	93	46.0	26.6	(25.5-27.6)
31-45	63	31.2		
Education				
None	13	6.4		
Primary	49	24.3		
Secondary	100	49.5		
Tertiary	40	19.8		
Marital status				
Single	32	15.8		
Married	170	84.2		
Employment				
Employed	45	22.3		
Unemployed	157	77.7		
Ward				
High cost	51	25.2		
Low cost	151	74.8		
Parity(Children)				
1	77	38.1		
2-4	93	46.1	2.6	(2.4-2.9)
>5	32	15.8		
Admission (days)				
0-2	140	69.3		
3-5	46	22.8	2.2	(1.85- 2.6)
6-12	16	7.9		

Table 4.1(a) shows that most (46.0%) mothers were aged between 20-30 years (mean =26.6 years). Almost half (49.5%) of the mothers went up to secondary school level of education while a few (6.4%) had never been to school. Majority (84.2%) of the mothers were married. Most (77.7%) of the mothers were unemployed. A quarter (25.2%) of the mothers was admitted to the high cost postnatal ward.

Table 4.1 (b): Mothers' Socio-demographic and Obstetric Characteristics cont' (n=202)

Mothers' Demographics Characteristics	Proportion of study population	
	n	%
Gestation		
Term	160	79.2
Preterm	42	20.8
Mode of Delivery		
Spontaneous	149	73.8
Intervention	53	26.2
Baby's condition		
Good	168	83.2
Poor	34	16.8
Mothers Condition		
Good	188	93.1
Poor	14	6.9
Total	**202**	**100**

Table 4.1(b) shows that only 20.8% of the babies were born preterm. The majority (73.8%) of the mothers had spontaneous vaginal deliveries. The table also shows that 16.8% of the babies had a poor condition at birth while the majority (93.1%) of the mothers had no health problems after delivery.

4.3.2: Mothers' Satisfaction with Immediate Postnatal Care

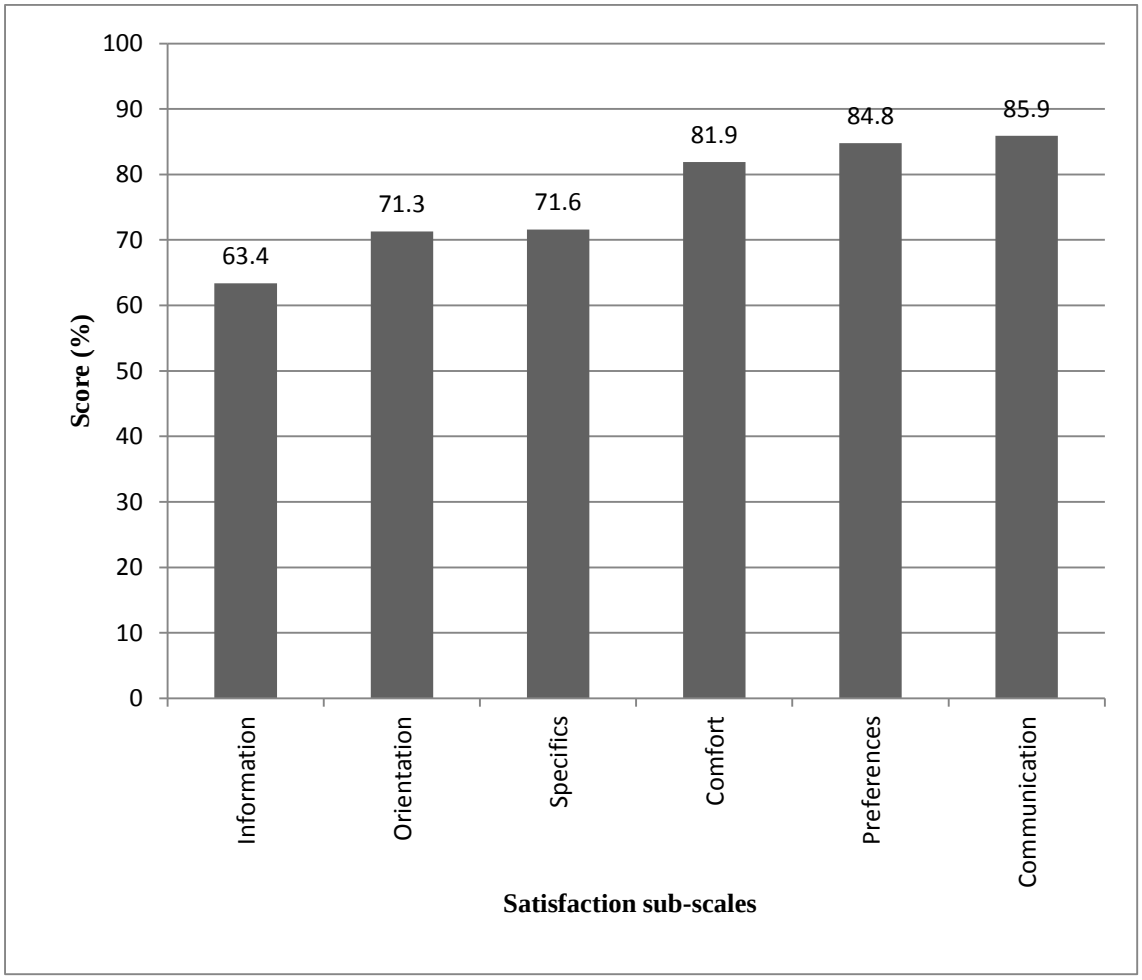

Figure 4.1: Mothers' Satisfaction Scores on the Six PNC Satisfaction Sub-Scales (n=202)

Figure 4.1 shows that information scored the lowest (63.4%) among the six satisfaction subscale while communication scored the highest (85.9%)

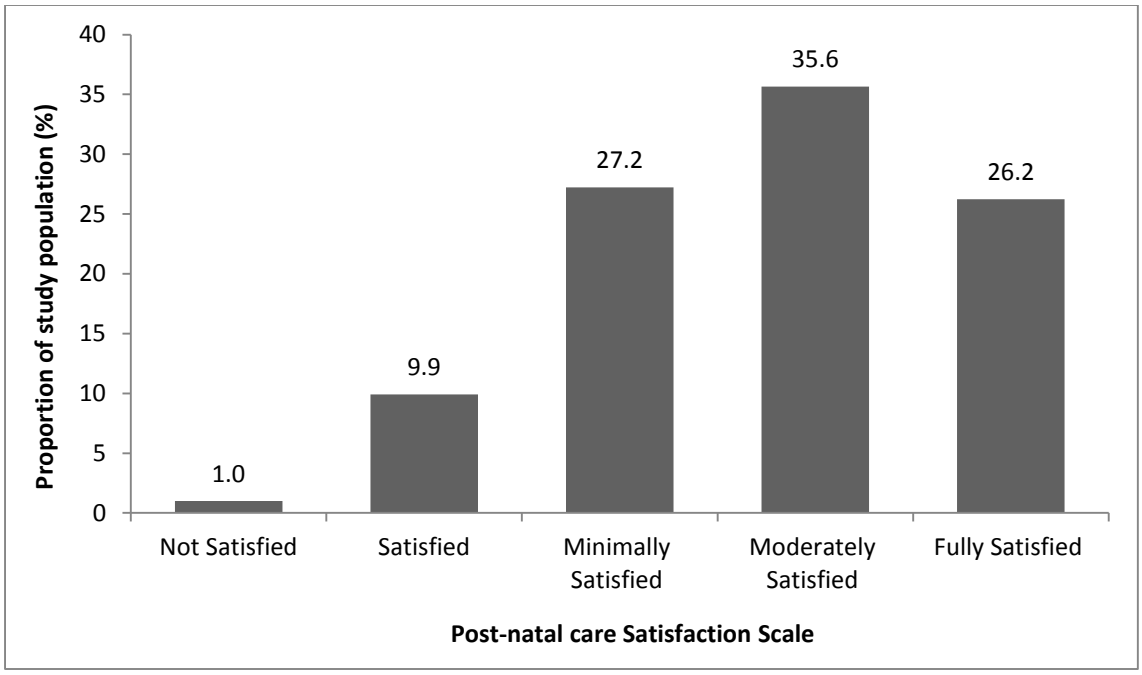

Figure 4.2: Overall Mothers' Satisfaction with immediate PNC provided at Ndola Central Hospital (n=202)

Figures 4.2 shows that overall, 26.2% of mothers were fully satisfied with the immediate PNC and only 1% of the mothers were not satisfied with PNC provided at Ndola Central Hospital.

4.3.3: Association between Variables

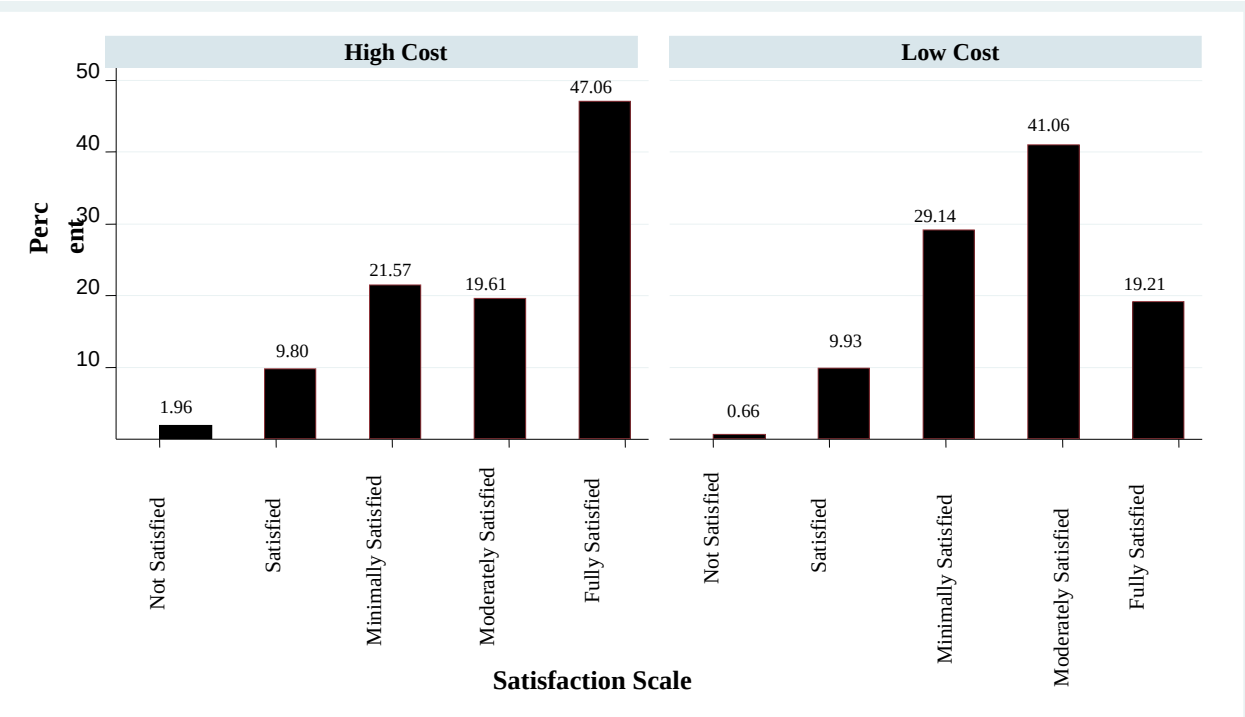

Figure 4.3: Mothers' Satisfaction in relation to Ward of Admission (n=202)

Figure 4.3 shows that most mothers who were admitted to the high cost ward (47.06%) were fully satisfied with the immediate PNC than those admitted to the low cost ward (19.21%). Both wards had very few mothers who were not satisfied with the immediate PNC (1.9 % and 0.66%) for low cost and high cost postnatal ward respectively. There was no statistically significant association between satisfaction and ward of admission (p-value = 0.116).

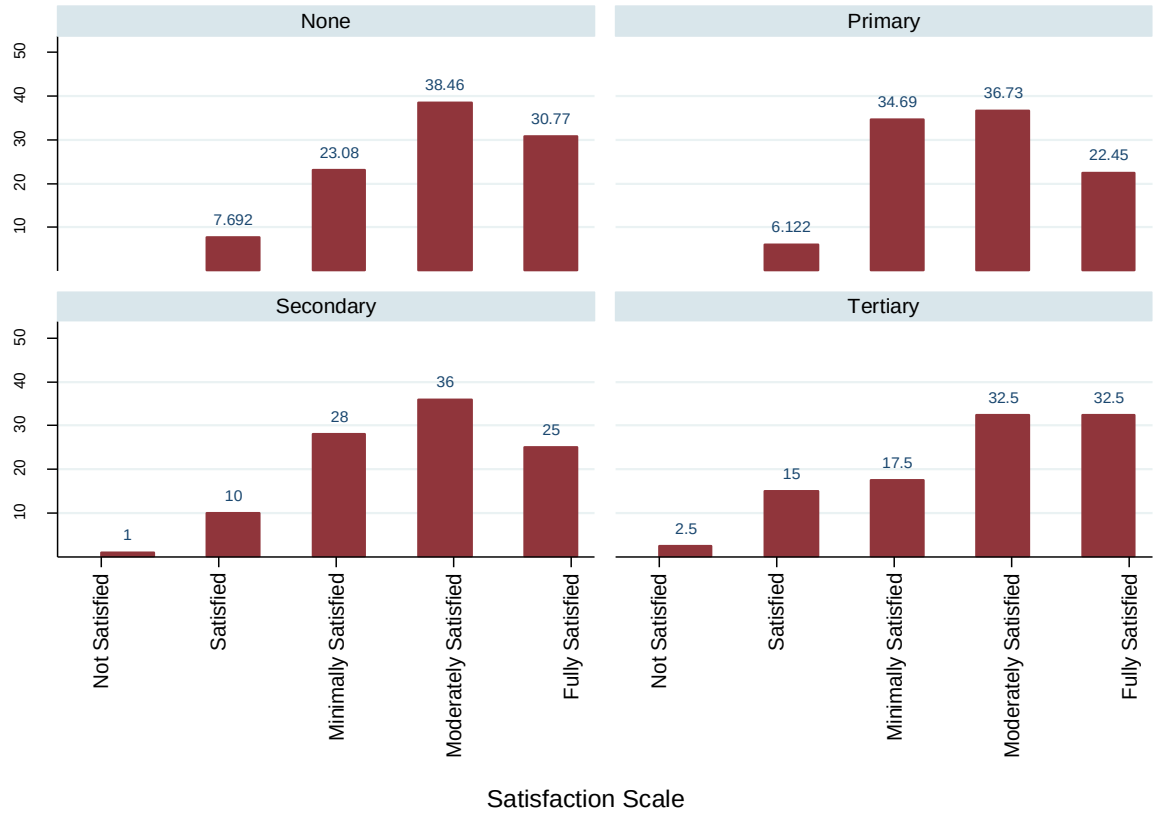

Figure 4.4: Mothers' Satisfaction in relation to Education Level (n=202)

Figure 4.4 above shows that none of the mothers with primary level education or no education at all stated that they were not fully satisfied scale while most of the mothers along all levels of education were moderately satisfied with the immediate PNC. There was no statistically significant association between satisfaction and level of education (p-value = 0.155).

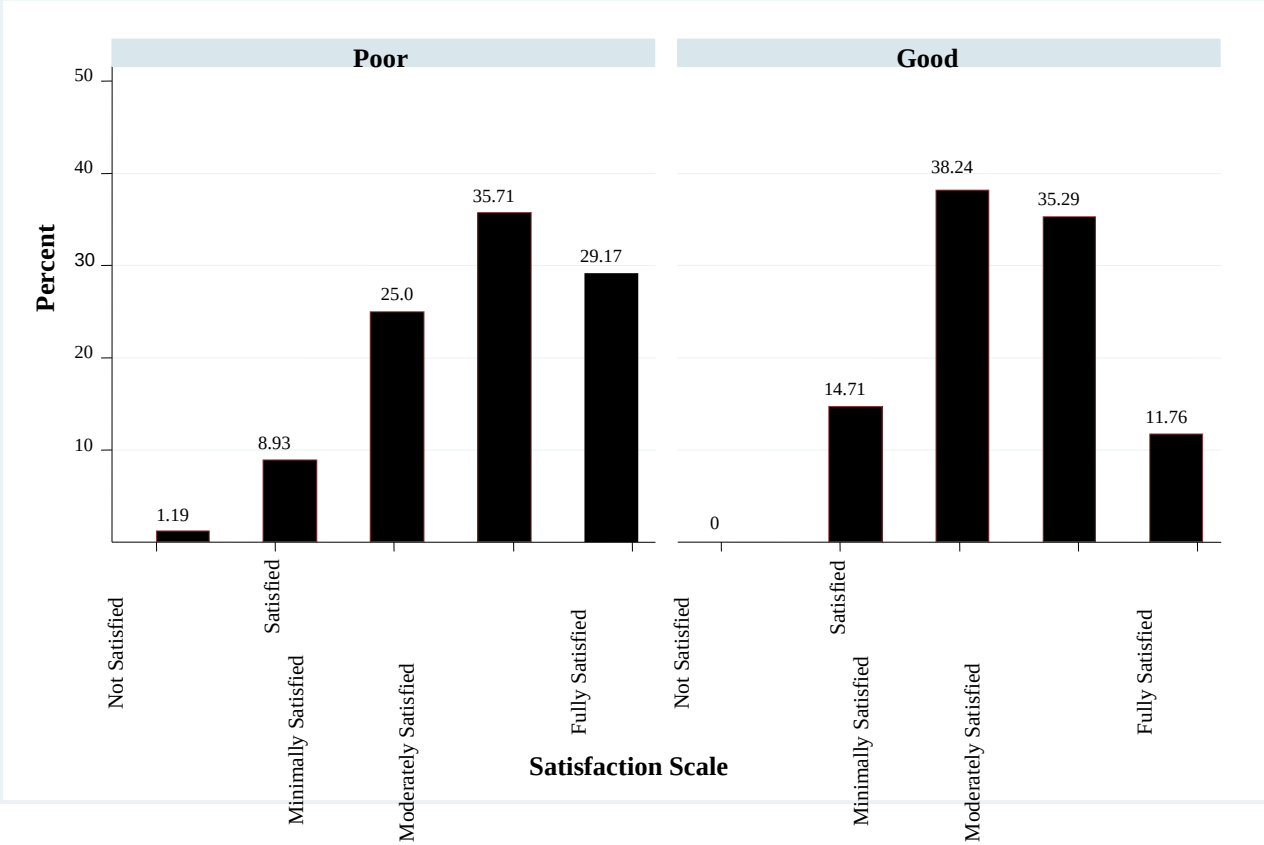

Figure 4.5: Mothers' Satisfaction in relation with baby's Condition at Birth (n=202)

Figure 4.5 shows that 29.17% of mothers whose baby's condition was poor at birth were fully satisfied while only 11.79% of those mothers whose baby's condition was good at birth were fully satisfied with the immediate PNC. The figure also shows that most of the mothers (35.71% and 35.29%) respectively in both categories were moderately satisfied with the immediate PNC. There was a statistically significant association between satisfaction and baby' condition at birth (p-value = 0.037).

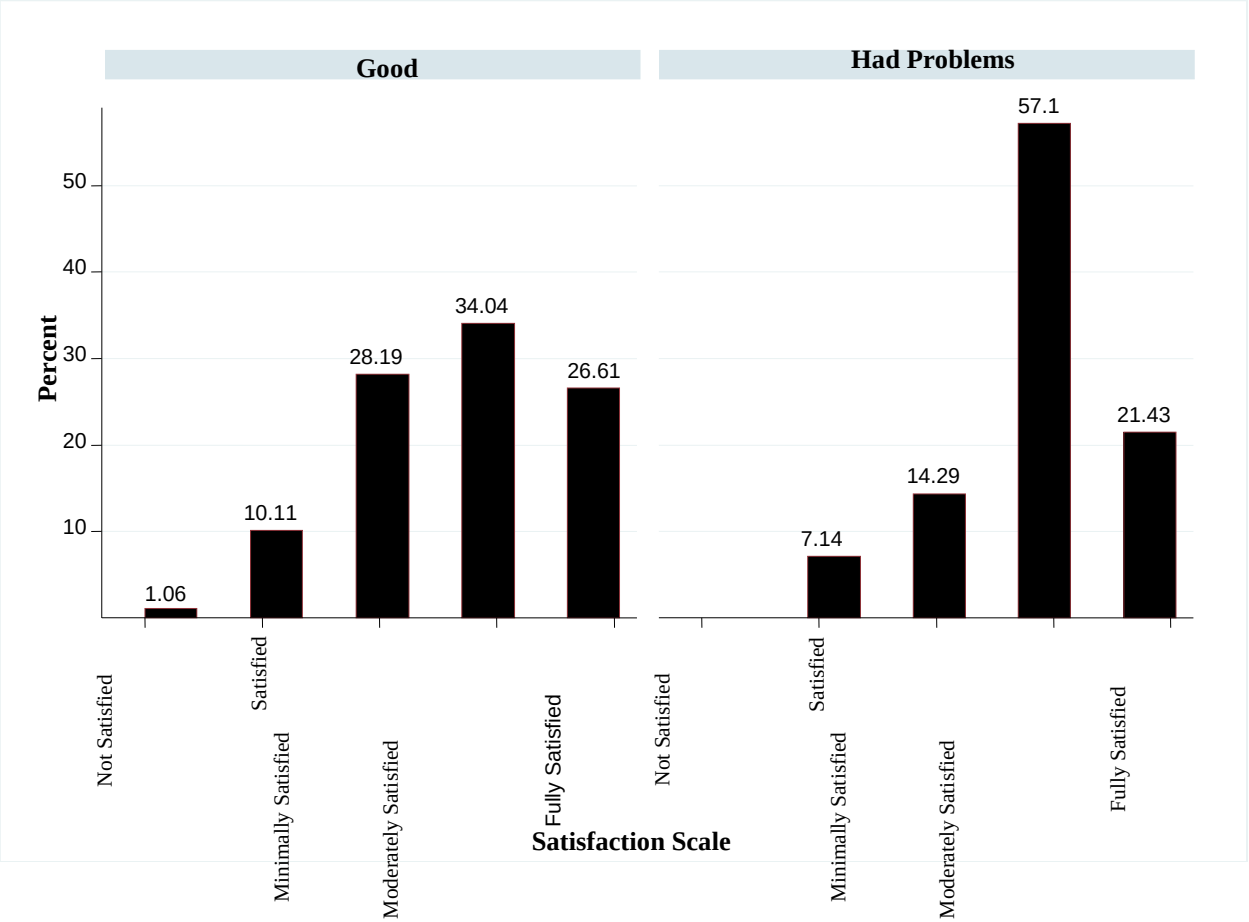

Figure 4.6: Mothers' Satisfaction according to Mother' Condition after delivery (n=202)

Figure 4.6 shows that majority of the mothers (34.04 and 57.1 %) respectively, in both categories were moderately satisfied with the immediate PNC**.** None of the postnatal mothers who had problems after delivery indicated that they were not satisfied while only a few (1.06%) of those mothers whose condition was good after delivery were not satisfied. There was no statistically significant association between satisfaction and mother' condition after delivery (p-value = 0.724).

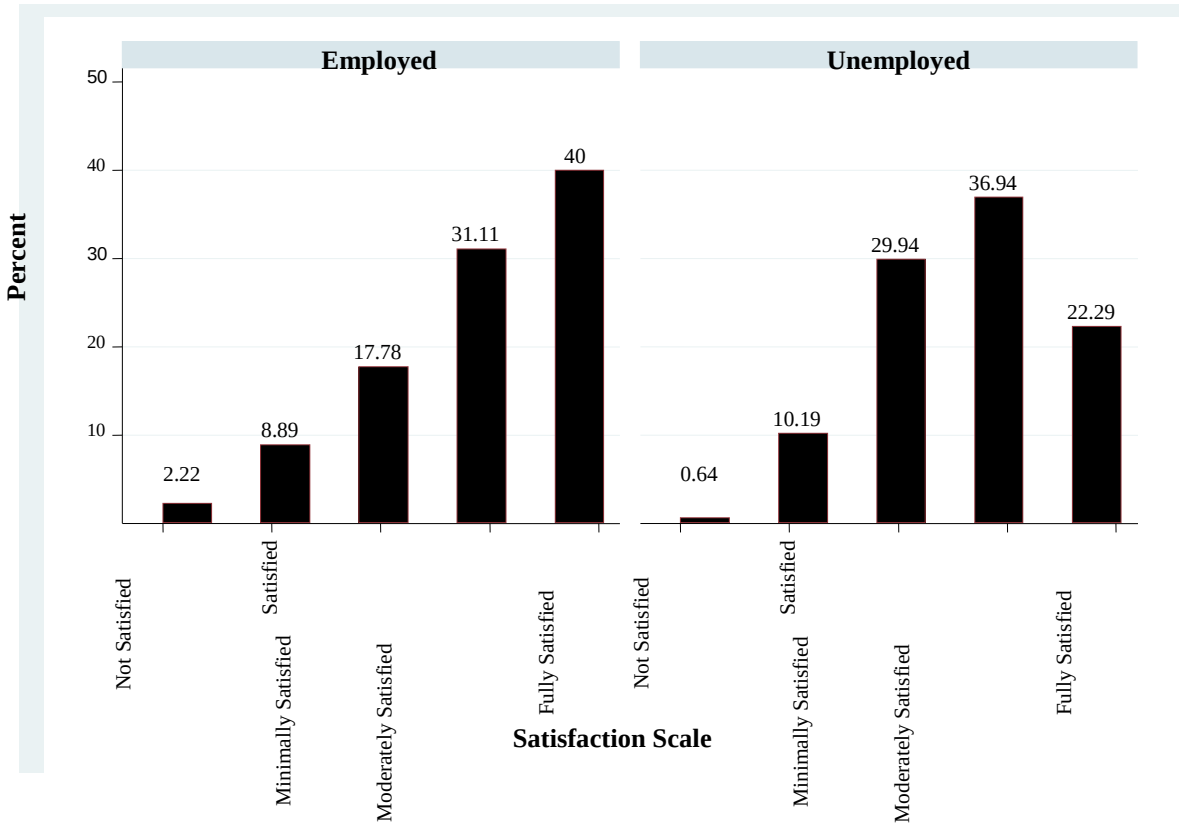

Figure 4.7: Mothers' Satisfaction in relation to Mothers' Employment Status (n=202)

Figure 4.7 shows that more unemployed mothers (40%) were fully satisfied than those who were employed (22.29%). There was a statistically significant association between satisfaction and employment status (p-value = 0.024).

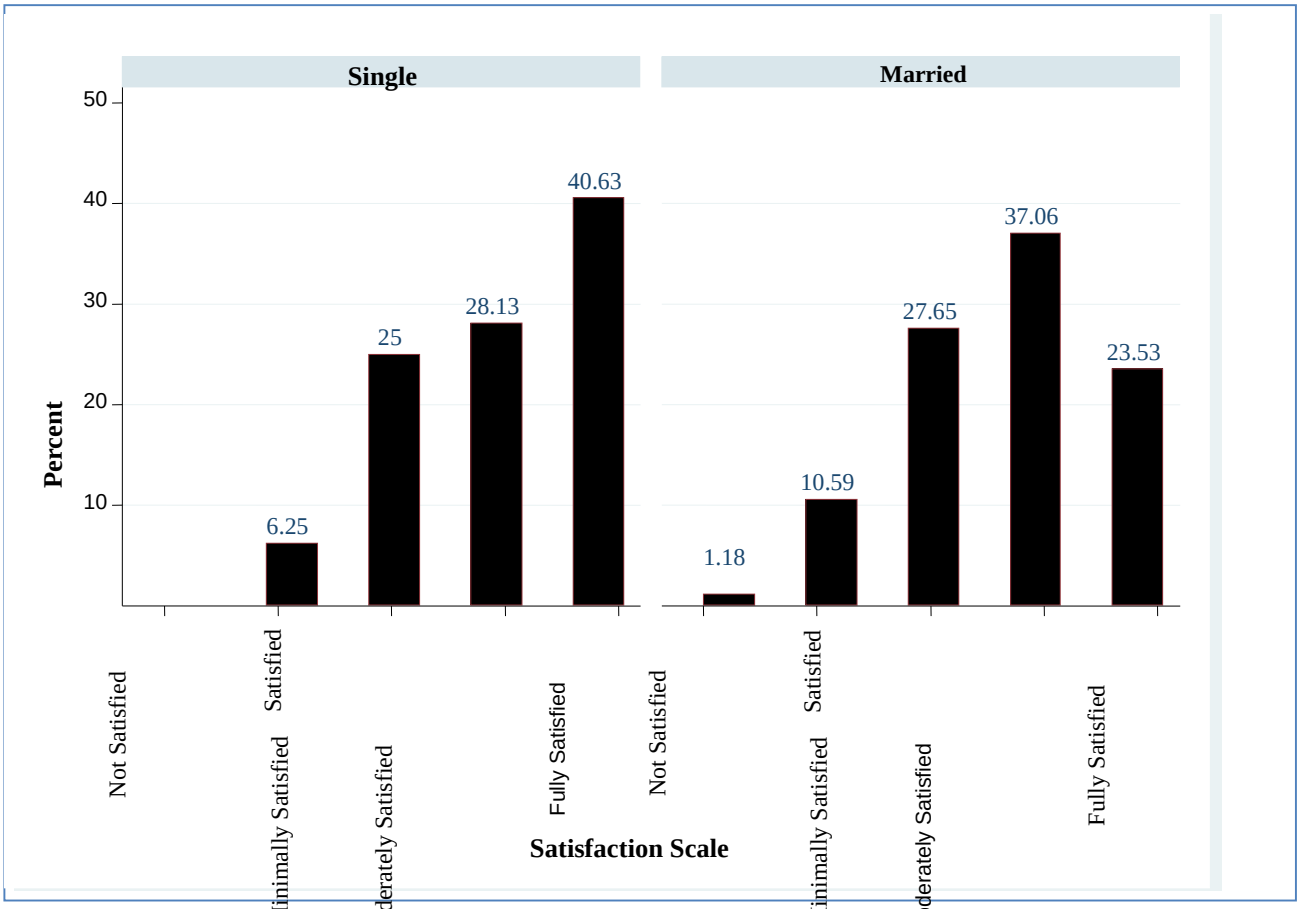

Figure 4.8: Mothers' Satisfaction in relation to Mothers' Marital Status (n=202)

Figure 4.8 shows that most of the single mothers (40.6%) were fully satisfied with the immediate postnatal care. None of the single mothers stated that they were not satisfied with the care while only a few (1.1%) of the married mothers were not satisfied with the immediate postnatal care provided. There was no statistically significant association between satisfaction and marital status (p-value = 0.155).

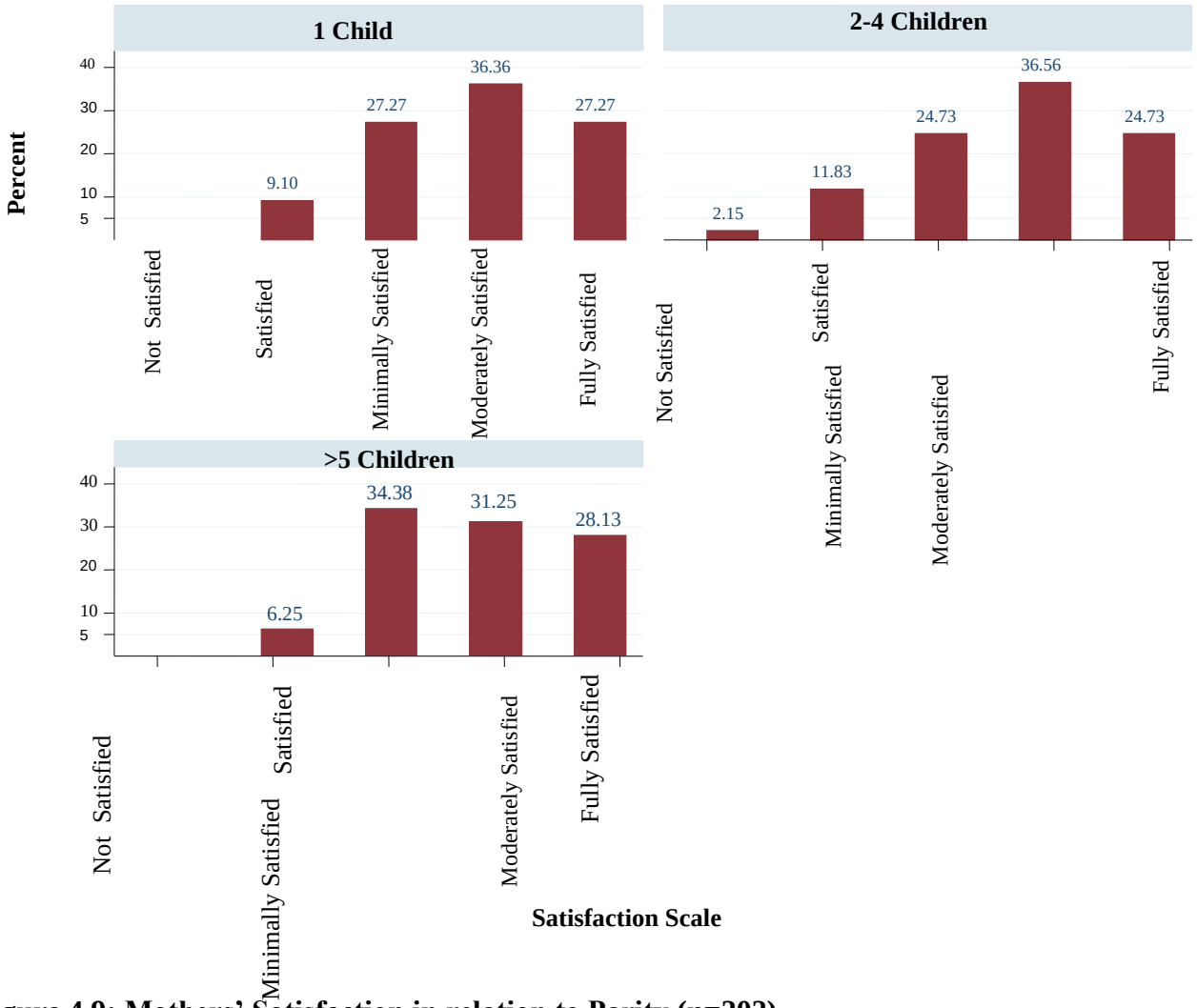

Figure 4.9: Mothers' Satisfaction in relation to Parity (n=202).

Figure 4.9 shows that only a few (2.15%) of the mothers were not satisfied with the immediate postnatal care provided and the satisfaction levels were within the same range for the primiparous, multiparous and the grand multiparous. There was no statistically significant association between satisfaction and parity (p-value = 0.458).

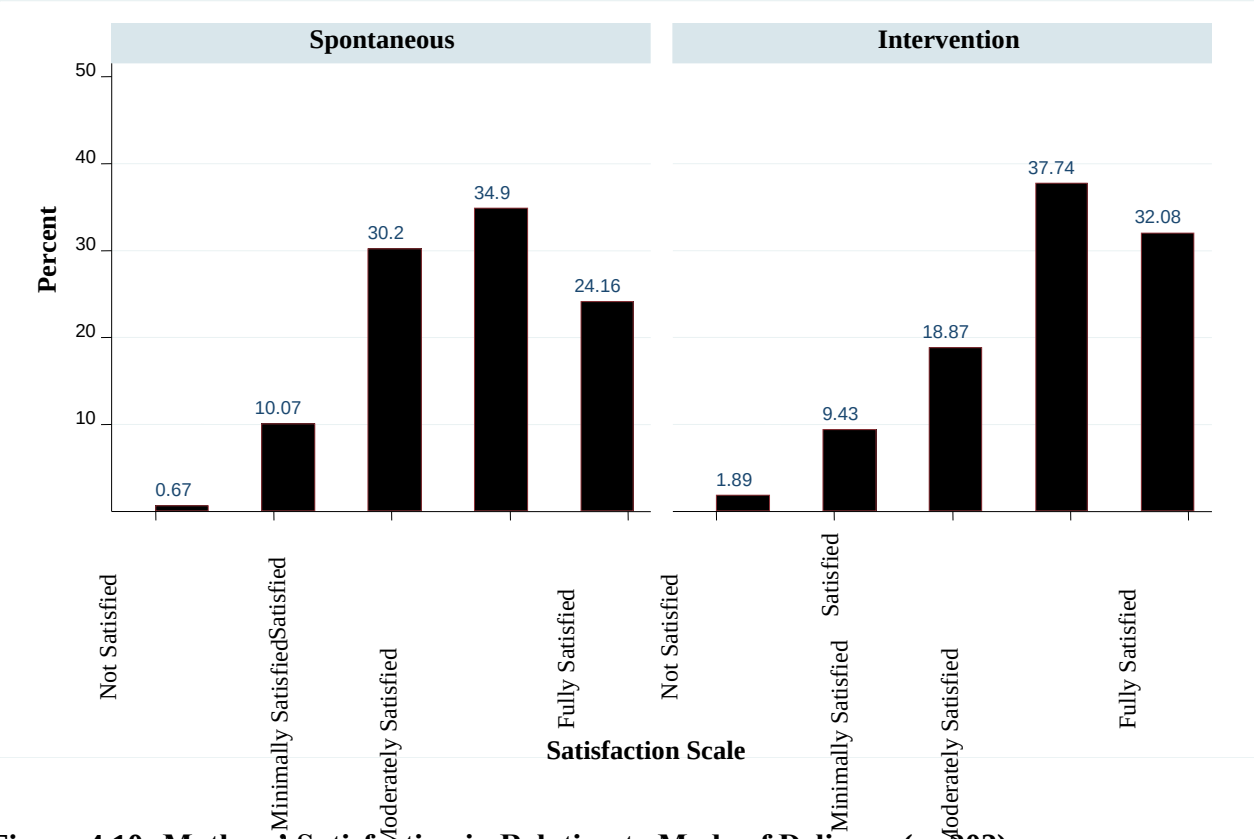

Figure 4.10: Mothers' Satisfaction in Relation to Mode of Delivery (n=202)

Figure 4.10 shows that more mothers whose deliveries had interventions (37.2%) were fully satisfied than those who had spontaneous vaginal deliveries (24.1%). There was no statistically significant association between satisfaction and mode of delivery (p-value = 0.963).

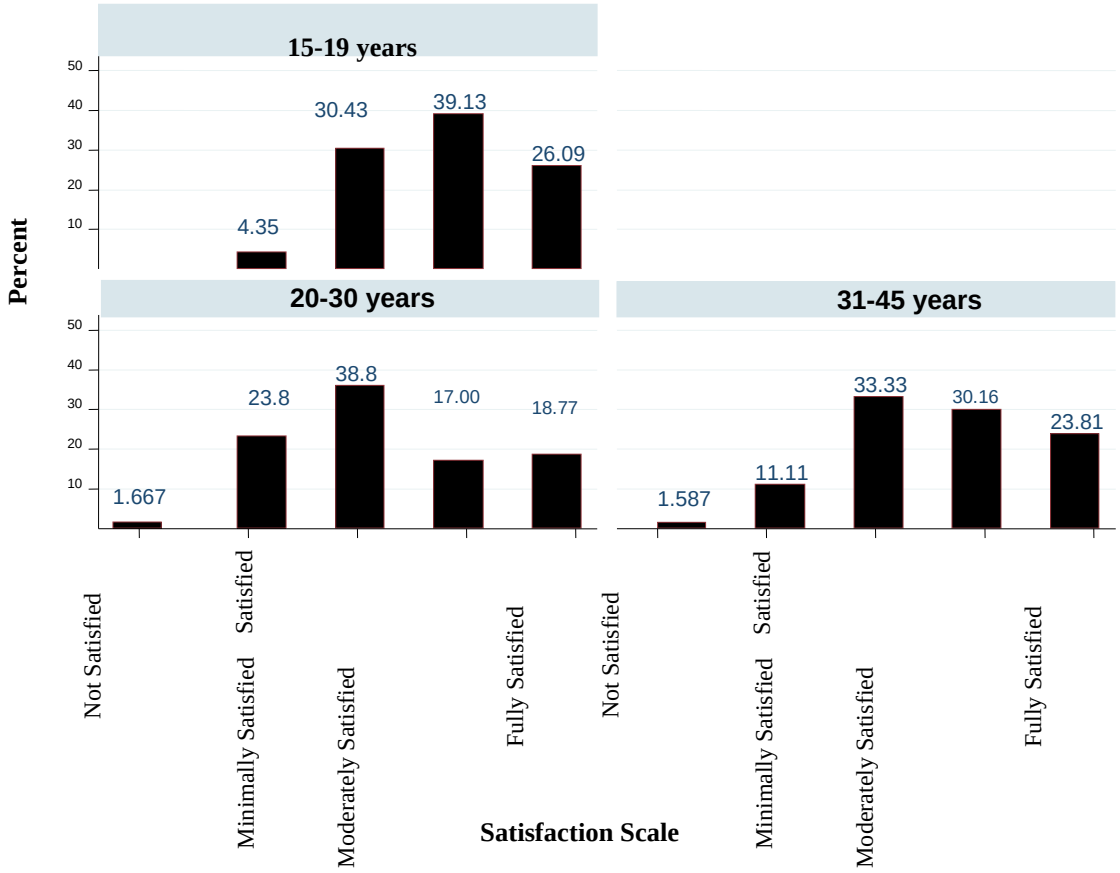

Figure 4.11: Mothers' Satisfaction in relation Mothers Age Groups (n=202)

Figure 4.11 indicates that none of the adolescent mothers indicated that they were not satisfied with the immediate PNC and most mothers were minimally satisfied with the postnatal care provided across all age groups. There was no statistically significant association between satisfaction and mother's age (p-value = 0.209).

4.3.3.1: Spearman's Correlation Coefficient

Table 4.2: Spearman's Correlation Coefficients between Variables (n=202)

Correlation Statistics	**Spearman's Coefficient**	**Significance Level**
Mother's Age	-0.048	0.496
Ward Type	-0.130	0.065
Marital Status	-0.109	0.123
Education Level	-0.003	0.962
Employment Status	**-0.148***	**0.035***
Parity	-0.010	0.887
Length of Admission	0.036	0.610
Delivery Mode	0.048	0.499
Gestation at Delivery	**-0.140***	**0.047***
Babies' Condition	**-0.180***	**0.010***
Mother's Condition	0.055	0.435

Table 4.2 presents the correlation coefficient representing the degree of linear association between Satisfaction and other variables. Of the 11 socio-demographic and Obstetric variables examined, only employment status, gestation at delivery and the baby's conditions were correlated with the mothers' levels of satisfaction with immediate PNC. All these relationships were inverse or negative. The strength of these relationships was <-0.35 in all cases and hence very weak association.

4.3.3.2: Linear Regression Model

Table 4.3: Linear Regression Model (n=202)

Socio-demographic Characteristics	Regression Coefficient	95% Confidence interval		*t-test statistic	p – value
Age	-0.31	-0.81	0.17	-1.26	0.209
Marital Status	-4.83	-11.50	1.84	-1.43	0.155
Education	-2.35	-5.60	0.89	-1.43	0.155
Employment Status*	**-7.02**	**-13.13**	**-0.91**	**-2.27**	**0.024***
Parity	0.73	-1.21	2.67	0.74	0.458
Length of Admission	0.01	-0.03	0.05	0.52	0.602
Delivery Mode	0.15	-6.41	6.72	0.05	0.963
Gestation	-2.65	-8.34	3.03	-0.92	0.359
Baby's Condition*	**-6.56**	**-12.74**	**-0.39**	**-2.1**	**0.037***
Mothers' Condition	1.54	-7.04	10.13	0.35	0.724
Ward Type	-4.32	-9.73	1.08	-1.58	0.116

Table 4.3 shows that after adjusting for the confounding effects of mother's age; marital status; education; employment; parity; duration of admission; delivery mode; gestation length; and ward of admission, only the mother' employment status and baby's condition at birth had statistically significant association with satisfaction with a p-value of 0.024 and 0.037 respectively.

CHAPTER FIVE

5.0: Discussion of Findings

5.1: Introduction

There is a high risk of mortality for both the mother and the baby in the immediate postnatal period (CSO, 2009; CSO, 2015, Warren et al., 2010). A large proportion of these maternal and neonatal deaths occur during the immediate postnatal period which is during the first few hours following delivery. However, there is lack of published information concerning the care provided to mothers and their babies during the immediate postnatal period at Ndola Central Hospital. There is also lack of information regarding the levels of mothers' satisfaction with the care they receive during the immediate post natal period at Ndola Central Hospital. This study aimed at determining the levels of mothers' satisfaction with immediate PNC provided at Ndola Central Hospital. The study comprised of 202 postnatal mothers in the postnatal wards at the Hospital and data was collected using a structured interview schedule. This chapter discusses the findings of the study.

5.2: Socio-demographic and Obstetric Variables

Most mothers were aged between 20-30 years with the mean age of 26.6 years. Most mothers were multiparous with a mean parity of 2.6 (Table 4.1a and Table 4.1b). The results are similar to findings by a study conducted by Varghase et al. (2012) to determine the quality of postnatal care given to babies by health care workers in South India, which reported that most postnatal mothers were aged between 25-34 years. This is expected because this age group is the peak child bearing age among women and pregnancy and delivery is safer for this age group than younger or older age women.

This study revealed that mothers stayed longer in hospital than the recommended minimum of six hours hospital stay after delivery. The mean duration of hospital stay after delivery was 53.5 hours (about 2½ days).

This is because most mothers who deliver at Ndola Central Hospital are referred from the local health centres after diagnosing or suspecting a problem with their pregnancy or labour. More time is allowed before discharge to observe and provide necessary care to these mothers and their babies. A study in Swaziland by Mngadi et al. (2002) on the quality of maternity care for adolescent mothers reported similar findings that 14 (42%) of the adolescents who delivered vaginally stayed for at least 24 hours in the postnatal ward before being discharged while mothers who delivered by Caesarean section remained in the postnatal ward for 7 days after the operation.

Studies report that mothers express concern with shortened hospital stay. Misra et al. (2013) in a study on client's perspective on obstetric care received at 24x7 primary health centers of a district located in western India reported that clients expressed concern with shortened hospital stay after delivery and recommend that postnatal stay be extended to at least 48 hours. Similarly, Brown et al. (2005) in a study on women's views and experiences of postnatal hospital care in Victoria, Australia, reported that staying in hospital only 1-2 days was associated with less positive ratings of postnatal hospital care. Extended hospital stay after delivery would enable mothers gain the necessary knowledge and confidence on baby and self care which would raise their levels of satisfaction with care provided.

This study showed that almost half (49.5%) of the respondents attained secondary school level of education while only a few (6.4%) had never been to school. This is because the study was conducted in an urban setting where most residents can easily access education than in rural settings where most schools are not easily accessible due to long distance. This finding is supported by the ZDHS (2015) report which stated that women in urban areas are more likely to have a secondary education or higher than their rural counterparts. This implies that at least almost all the respondents were able to read and write. This is important because educational attainment is one of the most influential factors affecting people's knowledge, attitudes and behaviors in various facets of life and has been shown to be an important determinant of health (ZDHS, 2015). Literacy also enhances the ability of the patient to know their expectations from the health care and so would be able to state their satisfaction with the care provided.

The current study revealed that the majority of the mothers (84.2%) were married. Most women in Zambia marry by the age of 20 years and about 60% of women in Zambia aged 15-49 are currently married as reported by ZDHS (2015). This finding indicates that like other African societies and culture, participants in this study value the institution of marriage and they could have had some form of social and moral support from their significant others. Social and moral support throughout pregnancy, delivery and the postnatal period has proven to improve health outcomes for the mothers and the babies. It also helps the mother to have a satisfactory experience with child bearing (Das et al., 2015).

The study also showed that the majority (77.7%) of mothers were house wives and depended on their husbands for financial support. This is similar to study findings by Faride et al. (2013) who documented that majority (80%) of their participants were housewives. Most families in African communities tend to prioritize the education of male children than that of female children. This makes the girl child drop out of school to enter into marriage. On the other hand, with the increase in poverty and unemployment levels in the country, some girls would have obtained good grades in school but lacked sponsorship for higher learning and employment opportunities and therefore end up in marriage.

In this study, most mothers had spontaneous vaginal deliveries (SVD) and had no medical problems or complications after delivery. This is similar to findings by Venkatesh et al. (2013) in a study conducted at a Medical College Hospital in South India to determine the quality of postnatal care given to babies by health care workers, who reported that most babies were born by SVD. Spontaneous vaginal delivery has long been considered the preferred outcome for pregnancy because of the associated health, economic and social benefits (Patterson, 2008). Therefore, most mothers would feel that they had a satisfactory experience with pregnancy and delivery after having a spontaneous vaginal delivery.

This study showed that about 20.8% of the babies were born preterm while 16.8% of the babies were in a poor condition at birth (Table 4.1). Preterm delivery is one of the expected outcomes of pregnancy.

According to WHO (2014), an estimated 15 million babies are born too early or as preterm every year. This implies that more than 1 in 10 babies born are born preterm. This also means that special care must be provided to these babies as they are at an increased risk of neonatal mortality than the babies who are born at full term. Losing a baby after delivery would further reduce the mothers' levels of satisfaction with the services provided during the immediate postnatal period.

5.3: Mothers' Satisfaction with Immediate Postnatal Care

This study revealed that overall, 26.2% of mothers were fully satisfied with the immediate PNC and only 1% of the mothers were not satisfied with PNC provided at Ndola Central Hospital (Figure 4.2). Similarly, Bernejee (2003) in a study to assess client' perception awareness, satisfaction and MCH service utilization in Kolkata reported that 22.5% of the mothers felt that the PNC was fully satisfactory but 16.0% thought it was poor or very poor. Khanam et al. (2012) in a study conducted in India on patient satisfaction with maternal and child health services also reported that 22.64 % of the respondents were fully satisfied with the in- patient PNC services provided.

This study showed that of the 202 respondents, 71 mothers (35.6%) were moderately satisfied with the immediate PNC provided at Ndola Central Hospital. This finding is consistent with findings by Varghese & Rajagopal (2012) in a study to determine the postnatal mothers' satisfaction with care provided by nursing personnel in Karnataka state India who reported that (39%) of postnatal mothers were moderately satisfied with the care provided. Other studies have reported even higher numbers of mothers who are not fully satisfied with the immediate PNC provided. Lamadah (2014) reported that the majority (71.0%) of the mothers were not satisfied with the PNC provided to them in Egypt. All these studies reveal that care during the immediate postnatal period is associated with low levels of satisfaction as it would be preferred that higher percentages of mothers report to be fully satisfied with the care provided. Low levels of satisfaction among mothers are a source of concern and may entail that the mothers and their babies do not receive adequate care during the immediate PNC. It could also mean that mothers have higher expectations during the immediate postnatal period which they feel are not well met.

Contrary to findings of this study that reported low levels of satisfaction with immediate PNC provided, other studies have reported high levels of satisfaction with care among mothers. Changole et al. (2010) in a study to determine the extent to which women were satisfied with the care they received at the Queen Elizabeth Central Hospital maternity unit, Blantyre reported that 97.3% of the women interviewed were very satisfied with the care that they received. This satisfaction was mainly due to the frequent reviews they received from nurses and doctors in the unit. Kowalewska et al. (2014) in a study on satisfaction with obstetric care in the early postnatal period in Poland also reported that more than a half of the respondents assessed their satisfaction with the care as good or very good. Chirdan et al. (2013) in a study on client satisfaction with maternal health services comparison between private and public hospital in Jos State Nigeria reported that clients were generally satisfied with the maternity care provided.

Mothers' satisfaction with PNC is important because high satisfactory experience during the immediate postnatal period improves mothers' compliance with health teaching and use of subsequent recommended care (Peterson et al., 2007). Satisfied clients also have better outcomes and show different reactions in comparison to the unsatisfied ones. Therefore, mothers' satisfaction with the immediate PNC can determine the use of subsequent health care services and reduce the neonatal and maternal mortality.

This study revealed that mothers were least satisfied with the aspect of information which scored the lowest (63.4%) among the six satisfaction subscale while they were most satisfied with the aspect of communication which scored the highest (85.9%) (Figure 4.1). This is similar to findings by Faride et al. (2013) in a study to determine dissatisfaction with labor and delivery care procedures in educational and non-educational hospitals in Tabriz, that most mothers considered the midwives' performance to be desirable when it comes to giving information. Similarly, another study by Naghizadeh et al. (2014) on maternal satisfaction with prenatal and postnatal care in Tabriz, Iran reported that mothers were least satisfied with the information they received.

On the contrary, Lumadi (2011) reported that mothers were mostly satisfied with the information provided by nurses about looking after themselves and their babies at after

discharge. Information is cardinal and is a key component of health promotion. It can empower the mothers with knowledge on self care and the care for their babies.

This would promote their long term physiological and emotional well being. With the reduced hospital stay and increased nurse patient ratio, midwives would tend interact less with the mothers thereby omitting the importance of informing and involving mothers during the delivery of care. If the need for interaction and information is not fully met, the mothers are denied their right to knowledge. It can also deprive mothers of the much desired skill and confidence necessary to care for themselves and the new babies during the postnatal period. Mothers should therefore be fully informed and should understand the aims and process of postnatal care. This should be supported by provision of evidence based information offered in a form tailored to the needs of the individual mother.

This study showed that mothers were fully satisfied with the aspect of communication. Healthcare communication has been shown to impact on levels of patient satisfaction (Waldenström et al., 2006). The midwife or nurse who provides for the physical care of both mother and newborn has an obligation to teach new mothers how to care for themselves and their newborn (WHO, 2010). Measures of communication, such as time spent discussing problems are significantly linked to satisfaction levels with maternity care as a whole (Rudman, 2007).

The provision of competent and positive experiences while communicating to the mothers regarding self care and care of the baby along with the development of mentoring relationships between midwives and mothers are essential to PNC. It also contributes to both maternal and neonatal health outcomes and satisfaction with the immediate PNC (Peprah, 2014). However, mothers feel they are left out of their care because of lack of interaction with midwives. A study by Naghizadeh et al. (2013) on assessment of mother`s satisfaction with education and information provided by maternal care givers at Tabriz educational and non-educational hospitals showed that in both settings, the mothers' satisfaction rate with communication was low.

Similarly, National Health Service (2011) reported that women in London did not always feel that maternity service providers communicated with them effectively. Another report

by Sharma & Kamra (2013) in a study to assess the patient' satisfaction with nursing care in selected public and private hospitals stated that communication and offering emotional support dimensions of nursing care had the lowest score in both private and public hospitals. Inadequate communication makes the mothers to feel unsupported especially in relation to postnatal care. It is therefore necessary to encourage care givers to provide mothers with necessary educations and communication throughout the period of care provision.

On the contrary, a study conducted on 1562 women by Changole et al. (2010), on patients' satisfaction with reproductive health services provided at Gogo Chatinkha Maternity Unit, Blantyre, reported that almost all (99.1%) the study respondents found their relationship/interaction with the health care provider either good or very good. The strategies used by health care providers in relating to the mothers in this case need to be explored and adopted in order to achieve similar better ratings.

5.4: Association between Satisfaction with Socio-demographic and Obstetric Variables

Satisfaction with postnatal care is a multifaceted aspect. It is influenced by so many different factors which are rather interlocked with each other (Melese et al., 2014). Patients with lower expectations tend to be more satisfied. Socio demographic and obstetric characteristics such as age, education attainment, parity and gestational age at delivery, health condition at delivery are some of the factors considered to influence satisfaction ratings.

In this study, a correlation coefficient representing the degree of linear association between satisfaction and socio demographic and obstetric variables was used. Of the 11 socio demographic and obstetric variables examined, only employment status ($r = -0.148$), gestation at delivery ($r = -0.140$) and the baby's conditions ($r = -0.180$) were correlated in an inverse manner with the mothers' levels of satisfaction with immediate PNC (table 4.2).

After linear regression modeling, only employment status (p- value = 0.024) and the baby' condition at delivery (p-value = 0.037) had statistically significant associations with the levels of mother's satisfaction with the immediate PNC (table 4.3).

Mothers who were in employment were less satisfied than those who were unemployed. Mothers in employment would be assumed to be more conversant and critical with standards of care and conditions expected from the health care providers. Such mothers would be more sensitive to any negative or poor service than those who are unemployed which could affect their levels of satisfaction with the PNC they received. Therefore, getting information from employed mothers on the performance of postnatal care in a hospital would be more informative to management.

This study revealed also that mothers whose babies were in good condition were less satisfied than mothers whose babies were in poor a condition. The baby's condition at birth would, therefore, determine how much attention is attracted from the midwives. If the baby' condition is poor, the midwives would direct more attention and care to such a baby in order to stabilize the baby and save life. The baby would receive preferential treatment compared to the one who is healthy. This would result in higher satisfaction levels for mothers whose babies' condition is poor than the other category. However, it is also possible that mothers whose baby's condition at birth is poor would attribute the baby's poor condition to lack of proper care to the baby after delivery and would therefore feel less satisfied with the immediate PNC they received.

This study established an association between gestational age at delivery and levels of mothers' satisfaction with the immediate postnatal care provided though the association was not statistically significant. Similarly Venkatesh et al. (2013) in a study conducted in India on quality of postnatal care delivered to neonates reported that mothers who delivered preterm babies were more satisfied with PNC compared to mothers with babies who were born at full term. In this case, it could mean that midwives paid more attention to the preterm babies probably because of high risks of morbidity and mortality associated with the preterm babies compared to full term born babies. This extra attention lead to better outcomes which made the mothers of preterm babies more satisfied with the care they received.

This study did not establish any significant association in the overall satisfaction scores for other characteristics such as ward of admission, age, marital status, parity or level of education and mode of delivery. This is contrary to the findings by Venkatesh et al. (2013) in a study conducted to assess care provided to neonates in India who reported that multiparous were less satisfied with the care they received than the prim parous. This could be due to the fact that more attention tends to be given to primparous than the multiparous in order to detect and attend to any complications without delay. It could also mean that primparous lack experience with the care provided after delivery and are therefore less critical than multiparous who know their expectations during the postnatal period. Venkatesh et al. (2013) reported also that mothers who delivered by caesarean section (C/S) were more satisfied with PNC compared to those who delivered through SVD. This could mean that midwives paid more attention to mothers who delivered through C/S because these mothers normally complain of incision pain and frequently ask for help than those who deliver spontaneously.

According to Chimtembo et al. (2013) in a study conducted to assess the quality of postnatal care services offered to mothers in Dedza district, Malawi, checking of vital signs was omitted on mothers that delivered normally and was only performed on those that presented with a risk factor or complaint due to pressure of work. With low staffing levels, midwives would want to prioritize care provision depending on need and urgency of the situation thereby leaving out those who are perceived to be in a stable condition. However, Petersen (2004) in a study conducted in Mozambique reported that mothers who delivered by caesarean section were not satisfied with the PNC they received. With the pain and limited self-care associated to C/S, mothers would feel less satisfied if the midwives delay to attend to their needs or do not help the mothers with care of the baby.

Another study conducted by Banerjee (2003) to assess the perception of the clients in terms of knowledge, satisfaction and utilization of MCH services in India reported that adolescents or younger mothers were less satisfied with the PNC they received compared to older mothers.

This could be due to the fact that adolescent mothers lacked experience or were not familiar with PNC while the multiparous mothers, having visited the health facility more frequently, became more accustomed to it and were therefore more satisfied with the PNC care they received.

The current study did not establish any significant association between education levels, marital status and parity with satisfaction with PNC. This is contrary to findings by Lamadah (2014) in a study conducted in Egypt on mothers' satisfaction regarding quality of postpartum nursing care and discharge teaching plan at Ain Shams maternity and gynecological hospital which reported that mothers with low levels of education, house wives and those who had high parity were more satisfied with the PNC provided. In another study by Das et al. (2010) conducted to assess client' satisfaction with Maternal and Child Health Services in Rural Bengal, all the illiterate mothers considered the quality of PNC services to be satisfactory or good whereas graduate mothers considered the care as very poor and non-satisfactory. With increased education levels, one's expectations increase and one becomes more critical of issues, which may explain the low satisfaction levels among the highly educated mothers.

5.5: Application of the Conceptual Framework

The conceptual framework that was adopted from the Jipis Satisfaction with Postnatal Nursing Care Questionnaire supported this study. It proposed that orientation, information, communication, comfort and care, care specific to postnatal and value and preference of postnatal mothers as well as the socio- demographic and obstetric characteristics affect the levels of mothers' satisfaction with immediate postnatal care provided. Mothers were least satisfied with the aspect of information while the aspect of communication was more satisfying. The study also established that some socio-demographic and obstetric variables namely; employment status and the baby's conditions at delivery affect the levels of mothers' satisfaction with the immediate PNC they receive. Therefore, all the components of the framework were applicable and very helpful as they formed the basis of determining the levels of satisfaction and factors that are associated with the levels of satisfaction among mothers at NCH.

5.6: Strengths of this Study

The study achieved the main objective of determining the levels of mother' satisfaction with the immediate PNC provided at Ndola Central Hospital.

The study also established that there is statistically significant association between levels of mother's satisfaction with the immediate PNC and some socio-demographic and obstetric variables namely; employment status and the baby's' condition at birth. It has added to the body of knowledge which will inform policy towards development of strategies that will improve the care provided during the immediate PNC and promote the health of mothers and their babies.

5.7: Limitations of the Study

The collection of data involved face to face interviews with postnatal mothers which could have affected their openness when answering questions despite the reassurance that was given to them before beginning the interview. Their responses therefore, may not have presented the true picture of their levels of satisfaction with the care provided.

The study was conducted from one central hospital and purposive sampling method was used to select the participants. Therefore, the results cannot be generalized to the whole country because of the subjectivity and non probability based nature of unit selection. With purposive sampling method it is difficult to defend the representativeness of the sample and to convince the reader that the judgment used to select participants to the study was appropriate.

5.8: Implications to Nursing

5.8.1: Implications to Nursing Education

The study revealed that the area of information scored the lowest among the satisfaction subscales. Information is a critical tool in achieving better health outcome for the clients. Nursing education should, therefore, emphasize the importance of nurse -client interaction so that nurses and midwives develop the skill and attitude of providing adequate information to the postnatal mothers.

This is because nursing education plays a pivotal role in grooming and shaping student nurses' into professionals capable of providing satisfactory care. This will avoid discharging mothers while they are still having doubts about their health, self care and that of their babies.

5.8.2: Implications to Nursing Administration

The results showed that only a few mothers (26.2%) were fully satisfied with the care they received. Nurse administrators are required to monitor the practices of midwives during the day to day provision of care to mothers and their babies. The nurse administrators need to regularly perform rounds to monitor the performance of midwives so as to offer on the spot guidance. The nurse administrators must also ensure that the wards have adequate numbers of midwives. This is because inadequate staffing levels results in compromised standards of care which leaves mothers unsatisfied with the care. Under staffing also leads to burnouts among midwives and therefore would compromise the care provided to the mothers and their babies.

5.8.3: Implications to Nursing Practice

This study revealed varying levels of satisfaction among mothers with most of them only being moderately satisfied with the care they received. The study also revealed significant association between levels of mothers' satisfaction with immediate PNC and some socio-demographic and obstetric variables namely; babies condition at birth and employment status. This could mean that midwives did not provide individualized care to each postnatal mother thereby leaving some mothers less satisfied than others.

Midwives should provide equal but individualized attention to all mothers and their babies regardless of their condition or health status in order to raise the satisfaction levels among mothers.

5.8.4: Implications to Nursing Research

This study revealed that there were low levels of satisfaction with the immediate PNC among mothers. However during literature search, there was generally scarcity of publications on satisfaction with PNC in Zambia.

Therefore, more research needs to be done in this area so as to come up with a body of knowledge in nursing to guide policy and the provision of care to mothers and their babies.

5.9: Conclusion

The immediate PNC provided in the hospital is rarely viewed as part of a continuum of effective maternity care for individual mothers and their babies. It remains an over looked aspect of maternity service delivery despite the postnatal period being associated with the high risk of neonatal and maternal morbidity and mortality. This study revealed that the levels of satisfaction with the immediate PNC provided at NCH were low among mothers. This is because it would have been preferred that more mothers than 26.2% reported to be fully satisfied with the care they received. Satisfaction with care is a cardinal health care outcome and indicator of quality of care just like the reduction of neonatal and maternal morbidity and mortality.

Mothers were found to be less satisfied with the aspect of information provided during the immediate postnatal period at NCH. Further, selected socio-demographic and obstetric characteristics namely, the baby's condition at birth and the mothers' employment status were found to be significantly associated with the levels of satisfaction with immediate PNC among mothers at NCH.

There is need for corrective measures to address low levels of satisfaction with immediate PNC among mothers. The quality of care provided by the midwives must be improved. Midwives must provide equal but individualized attention to all mothers regardless of their health status and condition after delivery. The care must be provided in accordance with the principles of individualized care. The reasons for low overall satisfaction among mothers also need to be explored and periodic evaluation of the care provided must be conducted so as to identify causes of dissatisfaction with immediate PNC among mothers and address all areas of concern with regards to mothers' satisfaction with care provided and NCH.

5.10: Recommendations

5.10.1: Recommendation to the Midwives

The study revealed that the overall satisfaction with immediate PNC is low among mothers at NCH. Midwives need to improve the quality of care provided to all mothers during the immediate postnatal period regardless of the circumstances like baby's condition, gestational age and mode of delivery. Midwives should also provide individualized but holistic PNC to all mothers so that the levels of satisfaction are improved among all mothers.

5.10.2: Recommendations to the Hospital Management

The study findings indicate that some mothers were fully satisfied with the immediate PNC provided at NCH than others. Ndola Central Hospital management must therefore strengthen supportive supervision so as to assist midwives to adhere to the PNC guidelines and to master the necessary skills in providing PNC services to the satisfaction of mothers.

The hospital management must also organize regular clinical care meetings and presentations which will enable midwives refresh their knowledge and skill of delivering care to the satisfaction of mothers.

Considering the fact that midwives may be overwhelmed with a lot of mothers and babies to care for on the wards owing to the increased nurse patient ratios, the nurse managers need to lobby for more midwives to be allocated to the postnatal wards to reduce on work load which will enable them provide satisfactory care to all the mothers and babies.

5.10.3: Recommendations to the Ministry of Health

As a measure to improve the levels of satisfaction with immediate PNC provided at NCH, the Ministry of Health should expand the establishment so that more midwives can be employed who will, in turn, deliver care to the satisfaction of mothers.

The Ministry of Health should also expand the establishment for the Schools of Midwifery so that more educators are available to build capacity in student midwives who will be responsible for the delivery of satisfactory care in health facilities to the satisfaction of mothers.

5.10.4: Recommendations to Nursing Educators and the General Nursing Council

The study revealed that mothers were less satisfied with the component of information given to mothers during the immediate postnatal period at NCH. The nurse educators must, therefore, teach and emphasize the skill of giving Information, Education and Communication as it is an important health promotion tool. This will enable nurses and midwives give mothers detailed information to avoid discharging mothers while they are still having doubts about self care and the care of the baby after discharge. The midwifery curriculum should also be strengthened particularly on PNC in order for the midwives to acquire adequate knowledge which will enable them render quality PNC upon qualifying to the satisfaction of mothers and their babies. More hours should be allocated for clinical experience on the postnatal wards for student midwives to gain knowledge and skill to provide satisfactory care to the mothers and their babies.

5.10.5: Recommendations for Further Research

This study was limited to the scope of determining the levels of mothers satisfaction with the immediate PNC provided at NCH from the mothers' perspective. Future research should therefore be directed at assessing midwives' provision of the care and other service related factors which will be beneficial in evaluating the quality of the immediate PNC provided.

The study was also limited to postnatal care. It is, therefore, recommended that studies on client satisfaction should be extended to the other areas of the maternal and child health care at the hospital such as labour ward, antenatal ward and special care baby unit so that necessary changes and guidelines towards improvement of quality and satisfaction levels of mothers at the hospital are formulated.

There is also need to carry out this same study at a large scale so as to allow for generalization of the study findings.

5.11: Dissemination and Utilization of Findings

The results of the study were presented during the postgraduate seminar week on 7th April 2015. The results will also be presented to management at NCH which was the study site. The results will be published in any recognized journal such as the Zambian Medical Journal or the journal of Agriculture and Biomedical Sciences. In addition, bound copies of the study will be submitted to the Department of Nursing Sciences, UNZA -Medical Library, Main Library and ERES Converge IRB. The researcher will also present this report during clinical meetings at NCH to inform the midwives and other health care providers at Ndola Central Hospital.

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APPENDIX A: PARTICIPANT INFORMATION SHEET

1. **Self-Introduction**

   My name is Mutinke Zulu. I am a nurse by profession and I am currently pursuing a Master of Science in Nursing at the University of Zambia.

2. **Study Title**

   "Mother' Satisfaction with Immediate Postnatal Care Provided at Ndola Central Hospital"

3. **Purpose of the Study**

   To determine mothers' satisfaction with immediate postnatal care provided at Ndola Central Hospital.

4. **Procedure**

   Face- to face exit interviews will be conducted with postnatal mothers upon discharge from the postnatal ward. You will be interviewed one at a time in a separate private room. You are expected to answer questions concerning the care you received while admitted on this ward. The interview will take about 10 minutes. You have been selected to participate in this study because you have just been discharged from this ward hence you will be in a better position to inform this researcher on the care you received during your stay on this ward.

5. **Voluntariness**

   Participation in this study is entirely voluntary and you are free to decline or withdraw from taking part in this study without giving any reason. There will be no penalty for that. You also have the right not to answer any questions that you may deem personal or otherwise.

6. **Guarantee of Confidentiality**

   Be assured that the information you will provide during this interview will be confidential and all the forms will be kept under lock and key to prevent unauthorized people from accessing the information.

7. **Risk/Benefits/Discomforts**

   There are no risks involved in this study. There will be no direct benefits to the participants. However, participants with any questions regarding their care or that of their babies will be given appropriate information during data collection.

8. **Compensation/Reimbursement**

   No compensation will be given to the participants in this study

9. **Consequences of Injury**

   No injuries are anticipated in this study as no invasive procedures will be involved.

   If you have any questions about the study please contact the principal investigator or the chairperson for ERES IRB at the following addresses and contact numbers;

10. **Contact Details of Principal Investigator**

    Mutinke Zulu
    The University of Zambia
    Department of Nursing Sciences
    P.O. Box 50110
    Lusaka
    Cell No: +260976 726588
    Email: zulumutinke@gmail.com

11. **Contact Details of Ethics Committee**

    The Chairperson
    ERES Converge IRB
    33 Joseph Mwilwa Road
    Rhodes Park
    Lusaka
    E-mail: eresconverge@yahoo.co.uk
    Phone Number: +260 955 155633, +260 955 155634

    If you choose to participate in this study, may you please sign the informed consent form provided below.

APPENDIX B: INFORMED VOLUNTARY CONSENT FORM

The information about this study as contained in the participant information sheet has been explained to me. I was given the opportunity to ask questions about the study which have been adequately answered.

I now consent voluntarily to participate in this study and understand that I have the right to withdraw from the study at any time without giving reasons and without any penalties. I understand also that I have the freedom not to answer particular questions that I may deem personal or otherwise during the interview.

My signature below signifies that I am willing to participate in this study:

I_____ understand the conditions and purpose of this study and I agree to be a participant in this study.

Participant' Signature_____ Date_____

Participant's right thumb print (if unable to write):_____

Interviewer' Signature_____ Date_____

Name of Witness: _____

Signature of Witness:_____ Date:_____

Name of Researcher: _____

Signature of Researcher:_____ Date: _____

APPENDIX C: PARENTAL/ GUARDIAN PERMISSION FORM FOR MINORS (MOTHERS BELOW THE AGE OF 18YEARS)

1. **Title of Study**: Mothers' Satisfaction with Postnatal Care provided at Ndola Central Hospital.
2. **Principal Investigator**: Mutinke Zulu
3. **Purpose of the Study**: To determine mothers satisfaction with postnatal care provided at Ndola Central Hospital. Your permission is being sought to have your child participate in this study. I will read and explain to you the following information carefully before you decide whether or not to give your permission to your child.
4. **Procedure**: Face to face interviews will be conducted with each postnatal mother. She will be asked questions about the care she and her baby received while admitted to this ward. She is expected to answer honestly and truthfully without any fear or favor.
5. **Discomforts/Risks**: There are no risks or discomforts expected in this study.
6. **Incentives/Benefits**: There are no direct benefits to your child for participating in this study. However, The results of this study will help us know the kind of care mothers receive while on this ward and will help us identify good practices and also put in measures to correct any short comings during the provision of care to postnatal mothers and their babies.
7. **Duration**: Participation in the study will take about 10 minutes.
8. **Confidentiality**: All records will be kept confidential and will be available only to professional researchers and staff. If the results of this study are published, the data will be presented in group form and individual mothers will not be named or identified.
9. **Voluntary Participation**: Your child's participation in this study is voluntary. At the time of the study, your child will once again be reminded of this by the researcher.
10. **Termination of Participation:** If at any point during the study you or your child wishes to terminate the session, we will do so.

This research has been reviewed and approved by ERES Converge IRB. If at any time before, during or after the study your child experiences any physical or emotional discomforts that are as a result of her participation, or if you have any questions about the study or its outcomes, please feel free to contact us on the addresses provided below.

11. **Contact Details of Principal Investigator**

Mutinke Zulu
The University of Zambia
Department of Nursing Sciences
P.O. Box 50110
Lusaka
Cell No: +260976 726588
Email: zulumutinke@gmail.com

12. **Contact Details of Ethics Committee**

The Chairperson
ERES Converge IRB
33 Joseph Mwilwa Road
Rhodes Park
Lusaka
E-mail: eresconverge@yahoo.co.uk
Phone Number: +260 955 155633, +260 955 155634

Signing the Form below will allow your child to participate in the study. If you do not wish to allow your child to participate please do not sign below.

Parent'/ Guardian' Details

I, the parent or guardian of _____, a minor _____ years of age, permit her participation in a program of research named above which is being conducted by Mutinke Zulu.

Signature _____ Date _____

Parent/Guardian's right thumb print (if unable to write) _____

Participants' Details

I, _____, agree to participate in the program of research named above and understand that my participation is voluntary.

Signature of Participant_____ Date _____

Participant's right thumb print (if unable to write): _____

Name of Investigator _____Date _____

Signature of Investigator _____Date_____

APPENDIX D: ASSENT FORM FOR MINORS (PARTICIPANTS BELOW THE AGE OF 18 YEARS)

Study Title: "Mothers' Satisfaction with Immediate Postnatal Care provided at Ndola Central Hospital

Investigator: Mutinke Zulu

We are conducting a study about mothers and the care they receive during their stay on this ward. All mothers who have just been discharged from this ward will be asked some questions if they are willing to participate. If you agree to take part in this study, we are going to ask you some questions about the care that you and your baby received during your stay on this ward. We want to know if the things we are asking were done for you and your baby or not. For example, we will ask if your temperature and that of your baby was checked or not.

Your (parent/ guardian) says it is okay for you to be in this study. You are free to ask questions about this study at any time. You should feel free and please answer all questions as truthfully as possible. You do not have to be in this study if you do not want to and you do not have to answer questions you feel you do not want to. If you decide to stop after we begin, that's okay too. Your name will not appear on your answers and no one will question you about the manner you are going to answer to these questions. When results of this study are published, we will not use any information that identifies you.

If you sign this paper, it means that you have understood what has been explained to you and you want to be part of the study. If you don't want to be part of the study, do not sign this paper.

Participant' Signature:_____ Date _____

Participant' Name: _____Date _____

Participant' Right Thumb Print_____ Date: _____

Signature of person obtaining Assent_____ Date _____

Name of person obtaining Assent_____ Date_____

APPENDIX E: STRUCTURED INTERVIEW SCHEDULE

The University of Zambia

School of Medicine

Department of Nursing Sciences

Mothers' Satisfaction with Immediate Postnatal Care provided at Ndola Central Hospital, Zambia.

Form Number: _____

Date of Interview: _____

Place (ward) of Interview: _____

Name of Interviewer: _____

Instructions to the Interviewer

1. Introduce yourself to the participant
2. Explain the contents of the participant information sheet to the participant
3. Get written consent from the participant
4. Reassure the participant that all responses will be held in strict confidence
5. Individual names and addresses should not appear on the interview schedule form
6. Ensure that all questions are answered and indicate response by ticking or writing the response in the appropriate space provided
7. Thank the participant at the end of each interview.

SECTION A: SOCIO-DEMOGRAPHIC AND OBSTETRIC CHARACTERISTICS			
1.	How old are you? (last birthday)	(Years)	____
2.	What is your marital Status?	Single Married (Separated, Widowed or Divorced)	1 2 3
3.	What is your highest level of education?	None Primary Secondary Tertiary	1 2 3 4
4.	What is your employment status?	Employed Unemployed	1 2
5.	How many children do you have?	(Number)	____
6.	How much time have you spent on the ward from admission?	(In hours)	____
7.	What was the mode of delivery?	Spontaneous Vaginal delivery Interventional	1 2
8	At what gestation age was your baby delivered?	Term Preterm	1 2
9	What was the baby' condition at birth	Good (A/S≥ 5) Poor (A/S ≤ 4)	1 2
10.	What was your (Mothers') condition after delivery?	Good Had problems	1 2

SECTION B: SATISFACTION WITH IMMEDIATE PNC

BASED ON YOUR EXPERIENCE AS A PATIENT IN THIS HOSPITAL, PLEASE INDICTE WHETHER YOU WERE;

- **5 = FULLY SATISFIED (FS),**
- **4 = MODERATELY SATISFIED (MS)**
- **3 = MINIMALLY SATISFIED (MnS)**
- **2 = SATISFIED (S)**
- **1 = NOT SATISFIED (NS).**

No.	ITEM	SATISFACTION SCALE				
	ORIENTATION	**FS**	**MS**	**MnS**	**S**	**NS**
11.	You were given a warm welcome and made comfortable on admission	**5**	**4**	**3**	**2**	**1**
12.	You were oriented to the members of staff: health team members.	**5**	**4**	**3**	**2**	**1**
13.	You were oriented to the ward environment: toilet, bathroom, washing area and availability of safe drinking water	**5**	**4**	**3**	**2**	**1**
	INFORMATION	**FS**	**MS**	**MnS**	**S**	**NS**
14.	You were informed about ward routines including Doctors rounds	**5**	**4**	**3**	**2**	**1**
15.	You were informed regarding rules & regulations of the hospital.	**5**	**4**	**3**	**2**	**1**
16.	Nurses conveyed messages which you hesitated to ask the doctor	**5**	**4**	**3**	**2**	**1**
17.	Nurses explained each procedure before they performed it	**5**	**4**	**3**	**2**	**1**
	COMMUNICATION	**FS**	**MS**	**MnS**	**S**	**NS**
18	All your questions were answered promptly with positive attitude	**5**	**4**	**3**	**2**	**1**
19.	Nurses maintained a good interpersonal relationship with you and your relatives	**5**	**4**	**3**	**2**	**1**
20.	Nurses communicated to you in common and simple language	**5**	**4**	**3**	**2**	**1**
21.	Nurses answered all your doubts asked concerning your treatment, results and prognosis	**5**	**4**	**3**	**2**	**1**

	COMFORT AND CARE	FS	MS	MnS	S	NS
22.	You got help when you needed it	**5**	**4**	**3**	**2**	**1**
23.	Nurses were calm and approachable	**5**	**4**	**3**	**2**	**1**
24.	Nurses assisted you in keeping yourself clean and groomed	**5**	**4**	**3**	**2**	**1**
25.	You felt safe and secure throughout hospital stay	**5**	**4**	**3**	**2**	**1**
26.	The ward was free from noise	**5**	**4**	**3**	**2**	**1**
	SPECIFIC TO POSTNATAL CARE	**FS**	**MS**	**MnS**	**S**	**NS**
27.	You were assisted to go to toilet and got information regarding personal hygiene during postnatal period.	**5**	**4**	**3**	**2**	**1**
28.	You were assisted with perineal toilet and informed regarding how to keep the perineum clean by changing pads whenever soiled	**5**	**4**	**3**	**2**	**1**
29.	You were assisted and encouraged with early ambulation	**5**	**4**	**3**	**2**	**1**
30.	Nurses checked your vital signs regularly	**5**	**4**	**3**	**2**	**1**
31.	You received meals at appropriate times	**5**	**4**	**3**	**2**	**1**
32.	You received medication / treatment at proper timings	**5**	**4**	**3**	**2**	**1**
33.	Nurses taught you about involution/ contraction of the uterus	**5**	**4**	**3**	**2**	**1**
34.	You were given information regarding lochia/blood flow and how to detect excessive bleeding during the postnatal period	**5**	**4**	**3**	**2**	**1**
35.	You were informed about breast care, minor breast problems and how to manage them	**5**	**4**	**3**	**2**	**1**
36.	You received information regarding nutrition and importance of having a well-mixed diet.	**5**	**4**	**3**	**2**	**1**
37.	You received information regarding sleep and rest in postnatal period.	**5**	**4**	**3**	**2**	**1**
38.	You were advised about postnatal exercise.	**5**	**4**	**3**	**2**	**1**

39.	You were informed about the methods & importance of family planning and postnatal follow up visits.	**5**	**4**	**3**	**2**	**1**
40.	Nurses assisted you with giving baby bath, nappy/diaper care, cord and eye care.	**5**	**4**	**3**	**2**	**1**
41.	You were taught about the importance of colostrum (first breast milk), exclusive breast feeding and weaning of the baby.	**5**	**4**	**3**	**2**	**1**
42.	You were assisted to position the baby during and after feeding and how to burp/wind the baby after breast feeding	**5**	**4**	**3**	**2**	**1**
43.	Nurses taught you how to detect signs and symptoms of neonatal conditions.	**5**	**4**	**3**	**2**	**1**
44.	You were taught about rooming in, bonding and attachment.	**5**	**4**	**3**	**2**	**1**
45.	You were educated about subsequent PNC visits and immunization for your baby.	**5**	**4**	**3**	**2**	**1**
	VALUES AND PREFERENCES FOR POSTNATAL MOTHERS	**FS**	**MS**	**MnS**	**S**	**NS**
46.	Nurse treated you with dignity and respect.	**5**	**4**	**3**	**2**	**1**
47.	Nurses talked to you to find your values and preference for care.	**5**	**4**	**3**	**2**	**1**
48.	You would prefer this hospital in future if there is need for maternity care	**5**	**4**	**3**	**2**	**1**
49.	Would you recommend this hospital to your friends and relatives for maternity care	**5**	**4**	**3**	**2**	**1**

THANK YOU FOR YOUR TIME AND FOR PARTICIPATING IN THE STUDY.

APPENDIX F: ETHICAL CLEARANCE

ERES CONVERGE

33 Joseph Mwilwa Road
Rhodes Park, Lusaka
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Email: eresconverge@yahoo.co.uk

I.R.B. No. 00005948
F.W.A. No. 00011697

10th November, 2014

Ref. No. 2014-Aug-017

The Principal Investigator
Ms. Mutinke Zulu
The University of Zambia
Department of Nursing Sciences
P.O. Box 50110,
LUSAKA.

Dear Ms. Zulu,

RE: MOTHERS' SATISFACTION WITH IMMEDIATE POSTNATAL NURSING CARE PROVIDED AT NDOLA CENTRAL HOSPITAL.

Reference is made to your corrections dated 3rd November, 2014. The IRB resolved to approve this study and your participation as principal investigator for a period of one year.

Review Type	Ordinary	Approval No. **2014-Aug-017**
Approval and Expiry Date	Approval Date: 10th November, 2014	Expiry Date: 9th November, 2015
Protocol Version and Date	Version-Nil	9th November, 2015
Information Sheet, Consent Forms and Dates	• English.	9th November, 2015
Consent form ID and Date	Version-Nil	9th November, 2015
Recruitment Materials	Nil	9th November, 2015
Other Study Documents	Structured Interview Schedule.	9th November, 2015
Number of participants approved for study	201	9th November, 2015

Specific conditions will apply to this approval. As Principal Investigator it is your responsibility to ensure that the contents of this letter are adhered to. If these are not adhered to, the approval may be suspended. Should the study be suspended, study sponsors and other regulatory authorities will be informed.

Conditions of Approval

- No participant may be involved in any study procedure prior to the study approval or after the expiration date.
- All unanticipated or Serious Adverse Events (SAEs) must be reported to the IRB within 5 days.
- All protocol modifications must be IRB approved prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address.
- All protocol deviations must be reported to the IRB within 5 working days.
- All recruitment materials must be approved by the IRB prior to being used.
- Principal investigators are responsible for initiating Continuing Review proceedings. Documents must be received by the IRB at least 30 days before the expiry date. This is for the purpose of facilitating the review process. Any documents received less than 30 days before expiry will be labelled "late submissions" and will incur a penalty.
- Every 6 (six) months a progress report form supplied by ERES IRB must be filled in and submitted to us.
- ERES Converge IRB does not "stamp" approval letters, consent forms or study documents unless requested for in writing. This is because the approval letter clearly indicates the documents approved by the IRB as well as other elements and conditions of approval.

Should you have any questions regarding anything indicated in this letter, please do not hesitate to get in touch with us at the above indicated address.

On behalf of ERES Converge IRB, we would like to wish you all the success as you carry out your study.

Yours faithfully,
ERES CONVERGE IRB

Dr. E. Munalula-Nkandu
BSc (Hons), MSc, MA Bioethics, PgD R/Ethics, PhD
CHAIRPERSON

APPENDIX G: AUTHORITY FROM NDOLA CENTRAL HOSPITAL

REPUBLIC OF ZAMBIA

All correspondence should be addressed to the
Senior Medical Superintendent
Ndola Central Hospital
Postal Agency
NDOLA

Telephone: 611585-9
Fax: 612204
E-mail: *nch @ zammet.zm*

MINISTRY OF HEALTH

NDOLA CENTRAL HOSPITAL

NCH/53/9//3

25th November 2014

Ms. Mutinke Zulu
University of Zambia
Department of Nursing Sciences
P.O Box 50110
LUSAKA

Dear Sir

RE: **PERMISSION TO CONDUCT A STUDY AT NDOLA CENTRAL HOSPITAL POSTNATAL WARDS**

I refer to your letter dated 17th November 2014 in which you requested to come and conduct a study at Ndola Central Hospital, Postnatal Wards on ``***Mothers' Satisfaction with immediate Postnatal Care Provided at Ndola Central Hospital***''.

Management has no objection for you to come and conduct a study on the above mentioned topic in Postnatal Wards.

Yours faithfully
NDOLA CENTRAL HOSPITAL

Chipo C. S. Sike (Mrs)
Senior Human Resource Management Officer
For/SENIOR MEDICAL SUPERINTENDENT

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
26 NOV 2014
SNR. H. R. MANAGEMENT OFFICER
NDOLA CENTRAL HOSPITAL

cc: Senior Medical Superintendent
cc: Human Resource Development Officer
cc: In - charge – Postnatal Wards

APPENDIX H: REQUEST TO NDOLA CENTRAL HOSPITAL

The University of Zambia
School of Medicine
Department of Nursing Sciences
P.O Box 50110
Lusaka.

The Medical Superintendent
Ndola Central Hospital
Postal Agency
Ndola.

18th August, 2014.

Dear Sir

RE: PERMISSION TO CONDUCT A STUDY AT NDOLA CENTRAL HOSPITAL.

I am a postgraduate student pursuing a Master of Science Degree in Nursing, majoring in Maternal and Child Health at the University of Zambia.
In partial fulfillment of the requirements for the award of this degree, I am required to conduct a study. I am therefore requesting for permission to undertake a study entitled **"Mothers' Satisfaction with Immediate Postnatal Care Provided at Ndola Central Hospital."** I intend to conduct this study in October, 2014 after I obtain clearance from Research and Ethics Committee.

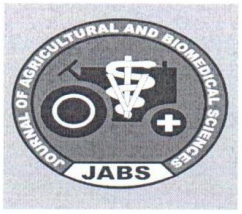
The results of this study will assists in identifying good practices, efficiency of nursing care and suggest areas that require improvement in the provision of quality postnatal care to mothers and their babies.
Your consideration will be highly appreciated.

Yours Sincerely

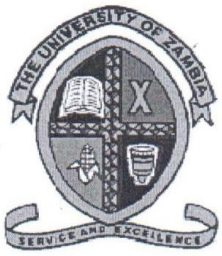
Mutinke Zulu.

Email: zulumutinke@gmail.com Cell: 0976726588

APPENDIX I: ARTICLE PUBLICATION



UNIVERSITY OF ZAMBIA



JOURNAL OF AGRICULTURAL AND BIOMEDICAL SCIENCES

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C/O Assistant Dean Research
UNZA School of Medicine
P.O. Box 50110
Lusaka, Zambia

Cell No. 0955766223
Your Ref:
Our Ref:

11 June, 2015

Ms. Mutinke Zulu
UNZA, School of Medicine
Department of Nursing Sciences
Lusaka

Dear Ms. Zulu

RE: RECEIPT OF YOUR MANUSCRIPTS: JOURNAL OF AGRICULTURAL AND BIOMEDICAL SCIENCES- JABS-06-015-001

With respect to the above manuscript entitled ***"Mothers' satisfaction with immediate postnatal care provided at Ndola Central Hospital, Zambia."*** we hereby acknowledge receipt of your manuscript to the UNZA Journal of Agricultural and Biomedical Sciences (UNZA-JABS). On behalf of JABS editorial I hereby notify you that your manuscripts are now been sent for review. Once a decision is made you shall be informed. For any further information on these submitted please refer to manuscript number, **JABS-06-015-001**, that has been assigned to your submitted manuscripts.

Thank you for considering publishing with JABS.

Yours faithfully

Dr. J. Chipeta
CHIEF EDITOR-UNZA JABS