

**Research article****Mothers' satisfaction with immediate postnatal care provided at Ndola central hospital, Zambia****Mutinke Zulu \*, Dorothy Chanda**

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**Abstract**

**Background:** Many mothers and their babies do not receive the recommended immediate Postnatal Care. This results in dissatisfaction among mothers and increased neonatal and maternal mortality. At Ndola Central Hospital, mothers complain of poor care. Between January 2011 and December 2013, a total of 265 and 47 cases of neonatal and maternal mortality were recorded. The objective of this study was to determine the mothers' satisfaction with the immediate Postnatal Care provided at Ndola Central Hospital. **Methods:** This was a hospital-based cross-sectional study comprising of 202 purposively selected mothers in the immediate postnatal period. A structured interview schedule was used for data collection. It 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 was used for data analysis. Spearman's correlation coefficient ( $r$ ) was applied to investigate the association between variables. Linear regression modelling was done to test the significance of the association. **Results:** Only 26.2% of the mothers were fully satisfied with the immediate Postnatal Care. Most mothers were not satisfied with the information they received. The mothers' employment status and the baby's condition at birth had statistically significant association with satisfaction. **Conclusion:** Mothers were not fully satisfied with the Care. Periodic evaluation of the Postnatal Care must be done in order to improve the quality of care delivered, reduce neonatal and maternal mortality and satisfy the mothers.

**Key words:** Immediate Postnatal Care, Mothers, Satisfaction.

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**1. Introduction****Background**

Maternal and Neonatal mortality is the traditional clinical measures of the quality of care. To complement them, a patient-centered measure such as measuring levels of mother's satisfaction with the care is required [1].

Postnatal care is the individualized care provided to meet the needs of the woman and her baby following child birth [2]. After delivery, the mother is expected to recover from labor, adapt to her new role as a mother and revert physically and psychologically to her pre-gravid state. The baby is equally expected to adapt to extrauterine life. Postnatal Care is an important intervention to ensure this maternal adjustment and neonatal adaptation [3].

However, many mothers and their babies do not receive the recommended immediate Postnatal Care despite the fact that they deliver from the hospital. This leads to dissatisfaction among mothers and increases the neonatal and maternal morbidity and mortality rates. For instance, records at Ndola Central Hospital revealed that a total of 265 and 47 cases of neonatal and maternal mortality respectively were recorded between 2011 and 2013 [4] (Table 1).

Postnatal care is a cardinal intervention towards the reduction of the maternal and neonatal morbidity and mortality associated with the period following delivery. It also offers an important opportunity to assess the mother's knowledge, address all identified needs and educate her on available health services including appropriate skills in safeguarding her health and that of her baby [5]. It has been estimated that if routine

Postnatal Care reached 90% of mothers and their babies, 10- 70% of deaths could be prevented [5].

Table No 1: Neonatal and Maternal deaths at Ndola Central Hospital

Year	Neonatal Mortality	Maternal Mortality
2011	52	13
2012	72	18
2013	141	16
Total	265	47

#### **Ndola central hospital registers, (2011-2013)**

Table 1 shows that a total of 265 and 47 neonatal and maternal mortality respectively was recorded between January 2011 and December, 2013.

The World Health Organization (WHO) recommends that mothers and newborns should receive Postnatal Care in the facility for at least 24 hours after birth if the delivery was conducted in a health facility [6].

If the delivery was at home, the first postnatal contact should be as early as possible within 24 hours of birth. It also recommends that at least three additional postnatal contacts should be made for all mothers and newborns, on day 3 and between days 6–14 after birth and 6 weeks after birth [6].

The care provided during the immediate postnatal period 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 checked to detect any abnormality [6].

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 exercise gently and to rest adequately during the postnatal period. Physical assessment of the baby is done to note any abnormalities such as signs of infection, jaundice or hypothermia. Information, education, and communication are provided on topics such as nutrition, hygiene, birth spacing, safer sex, prevention of malaria, baby care and importance of subsequent postnatal clinic visits [7].

The Central Statistical Office of Zambia reports that there is a high risk of morbidity and mortality for both the mother and the baby during the immediate postnatal period [8]. More than a third of these deaths 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 [9]. It is

the ideal time to deliver prompt and adequate interventions to the satisfaction of the mothers.

High satisfactory experience during the immediate postnatal period improves mothers' compliance with health teaching and use of subsequent recommended care [10]. Satisfied clients also have better outcomes and show different reactions in comparison to the unsatisfied ones. Clients' opinions regarding their satisfaction with Postnatal Care can also 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.

However, despite the recognized importance of the immediate postnatal period, Postnatal Care is said to be among the weakest and the most neglected areas of all reproductive and child health programs and is reported to be the area where clients are least satisfied[5,11]. Unsatisfactory care during the immediate postnatal period can negatively influence other Maternal and Child Health programs along the continuum of care [5]. For instance, lack of support for healthy home behaviours such as exclusive breastfeeding can lead to malnutrition in children. Additionally, mothers and babies may be lost to follow up for prevention of mother to child transmission of Human Immunodeficiency Virus including missing immunization against preventable childhood diseases [5].

It is the responsibility of the midwives to provide quality Postnatal Care to the mothers and their babies. However, midwives tend to give clients the care which they think is worth giving and not necessarily what is required of them [12]. This could be due to factors such as inadequate time to take care of the mothers and their babies, workload, changing shifts and improper nurse-client ratio [13]. With hospital length of stay after a delivery that has gradually 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.

## **2. Methodology**

### **Study design and setting**

This was a hospital-based cross-sectional study. Data was collected from the postnatal mothers between November and December 2014. The study was conducted at Ndola Central Hospital, high cost, and low-cost postnatal wards. Ndola Central Hospital is one of the central hospitals in Zambia located in Ndola District, about 320kilometers north of Lusaka, the capital city of Zambia. 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 Postnatal Care to clients who had spontaneous vaginal deliveries as well as to those who had complicated

deliveries such as Caesarean sections and instrumental deliveries.

### **Sample size and sampling method**

The study comprised of 202 postnatal mothers. The sample size was calculated after estimating the study population size of 420 mothers to be discharged in a period of one month. The sample size was then computed at 202 participants using Open Epi-Epidemiological calculator version 2.

Purposive sampling method was used when selecting participants amongst postnatal mothers who were discharged each weekday during the period of data collection. All postnatal mothers who were above the age of 18 years and were willing to give consent to participate in the study were included in the sample. Postnatal mothers under the age of 18 years, willing to participate in the study and whose parent/ guardian was available to give consent were also included in the study. The mothers and their babies were in good health condition and had just been discharged from the postnatal wards.

### **Data collection tool and technique**

A structured interview schedule was used for data collection. It was adopted 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. The tool had six satisfaction subscales namely orientation, information, communication, comfort and care, value and preference and care specific to postnatal. In addition, it had 11 items on socio-demographic and obstetric variables. These 11 items socio-demographic and obstetric variables 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.

Face-to-face exit interviews were conducted with each postnatal mother. The interviewer greeted the respondent and introduced herself. The interviewer then asked for the respondents' name. The interviewer explained to the participant that participation in the study was on a voluntary basis and that the participants had rights to withdraw from the study at any point without fear of receiving punishment. The participant was also assured of confidentiality and that no risks were anticipated as a result of participating in the study. After the interview, the researcher thanked the respondent for participating in the study.

### **Data management and analysis**

The interview schedule had pre-coded responses. During data collection, the researcher ensured completeness, legibility, and accuracy of the data. The six satisfaction sub-scales namely orientation, information, communication, comfort, and care, specific to postnatal

care and value and preference had 39 items gauged on a one to five-point Likert scale. In this scale, one indicated the lowest while five 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. The mother's score on each of the six sub-scales was standardized on the percent scale (out of 100-ton permit) comparison of mean scores across subscales on a theoretical range of 0-100. Since there were a total of 39 items in the mother's satisfaction framework, each mother could score a maximum of 195 scores. Each mother was then categorized into a percentage bracket that was used to grade satisfaction according to Jipi's framework. Epidata data management software running on Windows 7 was used for designing the database, data entry, and validation.

Frequency tables, graphs and cross-tabulations were generated. 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 modelling was done to test the significance of the association and 95% confidence interval with a p-value of 0.05 was set.

### **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 the study at the institution. Written informed consent was obtained from each participant. The consent was obtained from parents or guardians to mothers who were below the age of 18 years. 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 that no risks were anticipated.

## **3. Result and Discussion**

### **Socio-demographic and obstetric characteristics**

Forty-six percent of the mothers were aged between 20-30 years old with the mean age of 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. The majority of the mothers (84.2%) were married and another majority (77.7%) were unemployed.

About a quarter (25.2%) of the mothers were admitted to the high-cost postnatal ward while 75% of the admissions were from the low-cost postnatal ward. Most mothers (46.1%) were multifarious with two to four children and a mean parity of 2.6 children. The majority of the mothers (69.3%) were discharged within 2 days of admission. Majority of the deliveries (73.8%) were spontaneous vaginal deliveries without any intervention. About 20.8% of the babies were born preterm while a few (16.8%) of the babies had a poor condition at birth and the majority (93.1%) of the mothers had no health problems after delivery (Table 2).

Table No 2: Mothers' Socio-demographic and Obstetric Characteristics (n=202)

Mothers' demographics Characteristics	Proportion of study population	
	n	%
<b>Age Group (yrs.)</b>		
15-19	46	22.8
20-30	93	46.0
31-45	63	31.2
<b>Education</b>		
None	13	6.4
Primary	49	24.3
Secondary	100	49.5
Tertiary	40	19.8
<b>Marital status</b>		
Single	32	15.8
Married	170	84.2
<b>Employment</b>		
Employed	45	22.3
Unemployed	157	77.7
Mothers' demographics Characteristics	Proportion of study population	
	n	%
<b>Ward</b>		
High cost	51	25.2
Low cost	151	74.8
<b>Parity(Children)</b>		
1	77	38.1
2-4	93	46.1
>5	32	15.8
<b>Admission (days)</b>		
0-2	140	69.3
3-5	46	22.8
6-12	16	7.9
<b>Mode of Delivery</b>		
Spontaneous	149	73.8
Intervention	53	26.2
<b>Gestation</b>		
Term	160	79.2
Preterm	42	20.8
<b>Baby's condition</b>		
Good	168	83.2
Poor	34	16.8
<b>Mothers Condition</b>		
Good	188	93.1
Poor	14	6.9
Total	202	100

Table 2 shows that most (46.0%) mothers were aged between 20-30 years old. Only a few (6.4%) had never been to school. The majority (73.8%) of the mothers had spontaneous vaginal deliveries. About 20.8% of the babies were born preterm and 16.8% of the babies had a poor condition at birth. The table also shows that majority (93.1%) of the mothers had no health problems after delivery.

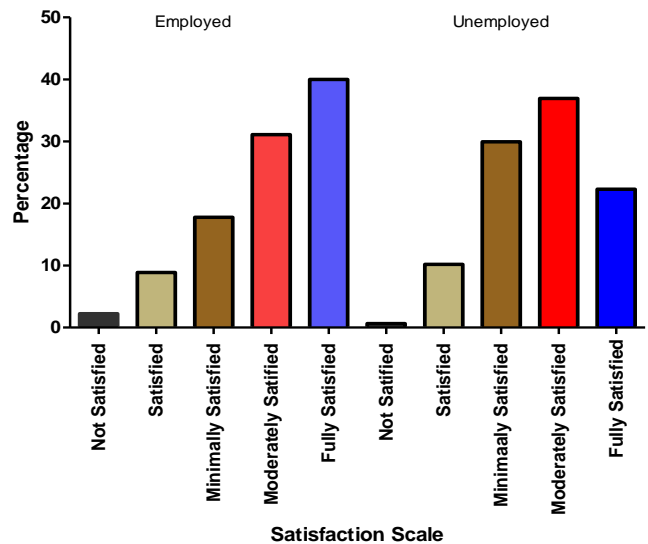


Figure 1 shows that more unemployed mothers (40%) were fully satisfied than those who were employed (22.29%).

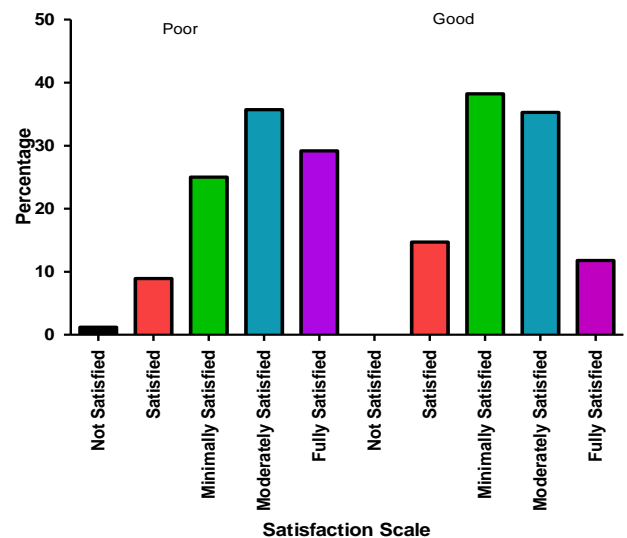


Figure No 2: Mothers' Satisfaction in relation with baby's Condition at Birth (n=202)

Figure 2 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 Postnatal Care.

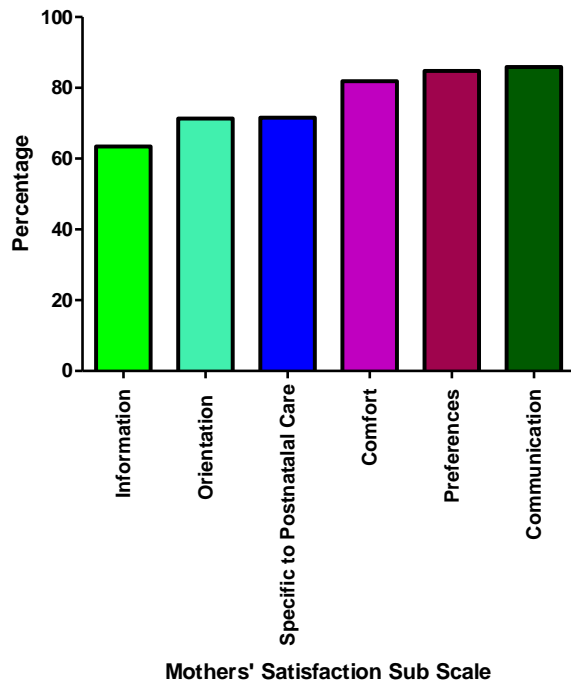


Figure No 3: Mothers' Satisfaction Scores on the Six PNC Satisfaction Sub-Scales (n=202)

Figure 3 shows that information scored the lowest (63.4%) among the satisfaction subscale while communication scored the highest (85.9%)

Overall, 26.2% of the mothers were fully satisfied, 35.6% of mothers were moderately satisfied, 27.2% were minimally satisfied while 9.9% were satisfied and 1% of the mothers were not satisfied with Postnatal Care provided at Ndola Central Hospital (figure 4).

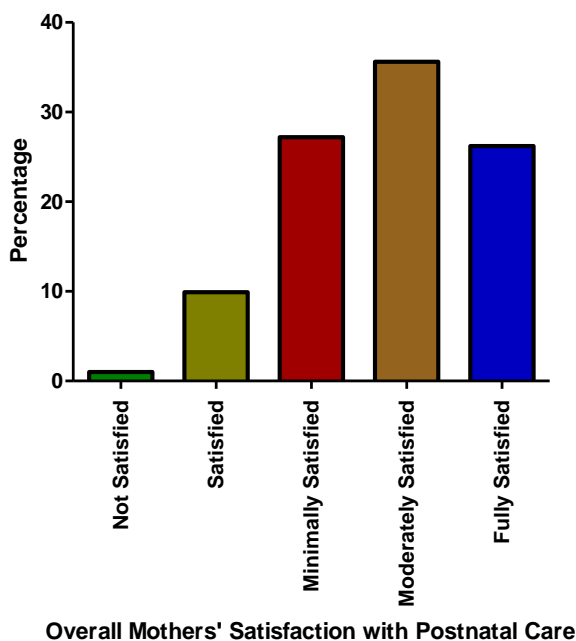


Figure No 4: Overall Mothers' Satisfaction with immediate Postnatal Care provided at Ndola Central Hospital (n=202)

Figure 4, shows that overall, slightly over a quarter (35.6%) of mothers were moderately satisfied with the immediate Postnatal Care and only 1% of the mothers were not satisfied with PNC provided at Ndola Central Hospital.

Table No 3: Mean Age, Duration of Stay in hospital and Parity

Characteristics	Mean	95% CI	
Age (years)	26.6	(25.5	27.6)
Duration in Hospital (hours)	53.5	(44.4	62.6)
Parity	2.6	(2.4	2.9)

Table 3 shows that the mean age for the postnatal mothers was about 26 years, the mean duration of stay in hospital was 2½ days (53 hours) and most postnatal mothers had about 2 children

#### Test of association between variables

The correlation coefficient represented the degree of linear association between Satisfaction and socio-demographic and obstetric 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 Postnatal Care. All these relationships were inverse or negative. The strength of these relationships was <-0.35 in all cases and hence very weak association (table 4).

Table No 4: Spearman's Correlation Coefficients between Mothers' Satisfaction with immediate PNC with Obstetric and Demographic Variables

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 presents the correlation coefficient representing the degree of linear association between Satisfaction and other variables. Only the mother's employment status, gestation at delivery, and the baby's conditions were inversely correlated with the mothers' levels of satisfaction with immediate Postnatal Care. The strength of these relationships was  $<-0.35$  in all cases and hence very weak association.

### Test of Significance between variables

Linear regression modelling was done and showed that after adjusting for the confounding effects of mother's age, marital status, education, parity, duration of admission, delivery mode, gestation length and ward of admission, only the babies' condition at birth and mother's employment status had statistically significant association with satisfaction (table 5).

Table No 5: Linear regression model

Socio-demographic Characteristics	Regression Coefficient	95% Confidence interval		*t-test statistic	p value
Age	-0.31	-0.81	0.17	-1.26	0.209
Married	-4.83	-11.50	1.84	-1.43	0.155
Education	-2.35	-5.60	0.89	-1.43	0.155
Employment	-7.02	-13.13	-0.91	-2.27	0.024
Parity	0.73	-1.21	2.67	0.74	0.458
Length of Admission time	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 state	-6.56	-12.74	-0.39	-2.1	0.037
Mothers' state	1.54	-7.04	10.13	0.35	0.724
Ward type	-4.32	-9.73	1.08	-1.58	0.116

The mean duration of hospital stay after delivery was about 2½ days. This is because most mothers who deliver at Ndola Central Hospital are referred from the local health centers due to complications of pregnancy and labor and require more time for observation and care. The mothers and babies would also stabilize and gain the necessary knowledge and confidence on baby and self-care and therefore feel more satisfied with the care they received. Other studies [6, 17] in Jos state Nigeria and western India respectively, also report that clients express concern with shortened hospital stay after delivery and recommend that postnatal stay needs to be extended to at least 48 hours.

This study showed that almost half (49.5%) of the respondents went up to 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 a long distance away. This finding is supported by the

Zambia Demographic Health Study report that women in urban areas are 6 times as likely as those in rural areas to have a secondary education or higher [15].

The majority of the mothers (84.2%) were married. Most women in Zambia get married by the age of 20 years and about 60% of women in Zambia aged 15-49 are currently married [15]. This could indicate that the mothers had social and moral support throughout pregnancy, delivery and the postnatal period which improves health outcomes for the mothers and the babies. It also helps the mother to have a satisfactory experience with childbearing.

### Discussion of findings

#### Socio-demographic and obstetric variables

This study showed that most mothers were aged between 20-30 years with the mean age of 26.6 years (Table 2) and a mean parity of 2.6 (Table 3). The results are similar to findings by Varghese [16] and National Health Society [17] who state that most women have babies between the ages of 25-34 years. This is the peak childbearing age among women. Pregnancy and delivery are safer for this age group than younger or older age. This study also showed that most mothers stayed longer in the hospital than the recommended minimum of six hours hospital stay after delivery.

The study showed that the majority (77.7%), of mothers, were housewives. This means that they depended on their husbands for financial support. This is similar to study findings by Faride, who documents that most (80%) participants in their study are housewives [19]. 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. Some girls would have obtained good grades in school but they lacked sponsorship for higher education and employment opportunities and therefore end up in marriage.

In this study, most mothers had spontaneous vaginal deliveries and did not suffer any complications after delivery. This is similar to findings by Venkatesh who reports that most babies are born by Spontaneous Vaginal Delivery. This has long been considered the preferred outcome for pregnancy because of the associated health, economic and social benefits [9].

This study further showed that about 20.8% of the babies were born preterm while 16.8% of the babies were in a poor condition at birth. According to the World Health Organisation, an estimated 15 million babies are born preterm every year [20]. This 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.

### Mothers' satisfaction with immediate postnatal care

Postnatal mothers have unique nursing care and educational needs. The midwife has an obligation to teach new mothers how to care for themselves and their new-born [21]. Healthcare communication and measures of communication, such as time spent discussing problems has been shown to impact on levels of patient satisfaction. The provision of competent and positive experiences and development of mentoring relationships between midwives and mothers are essential to Postnatal Care. They contribute to both maternal and neonatal health outcomes and satisfaction [22].

This study showed that most mothers (63.4%) were least satisfied with the information they received during hospitalization (Figure 1).

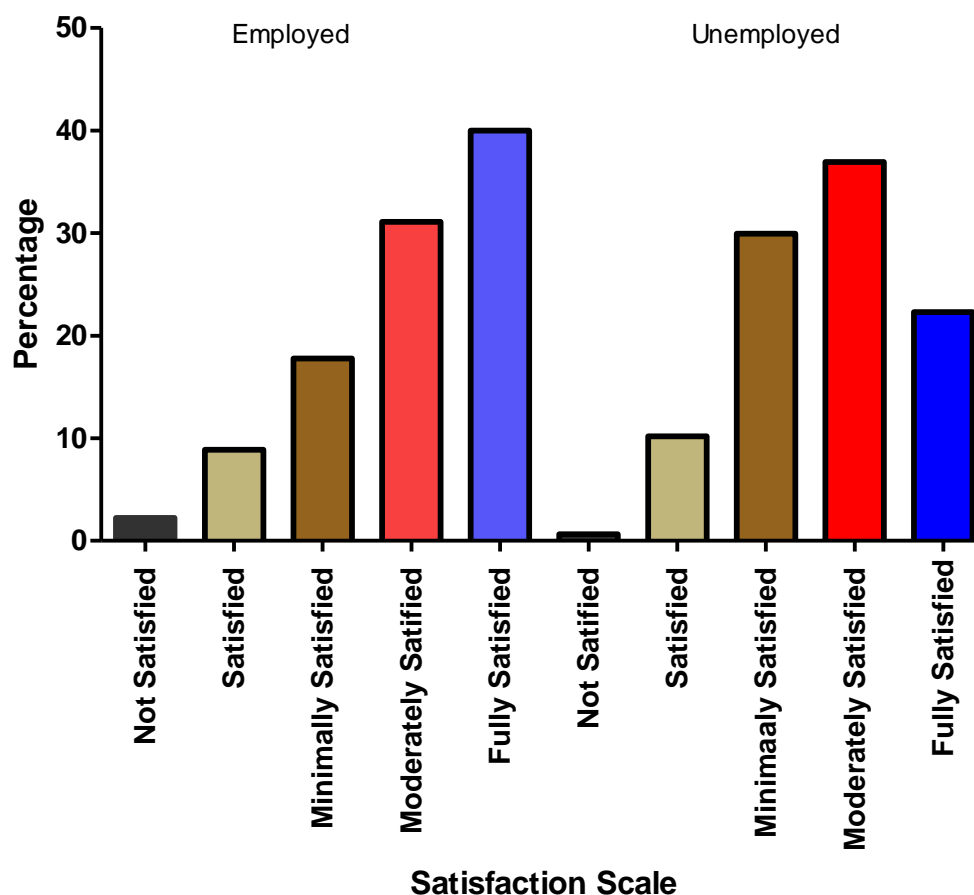


Figure No 1: Mothers' Satisfaction in relation to Mothers' Employment Status (n=202)

This finding is similar to that by Faride who documents that most mothers consider the midwives' performance to be desirable when it comes to giving information [19]. Women should be informed with evidence-based information tailored to the needs of the individual mother.

Similarly, the National Health Society reports that women in London do not always feel that maternity service providers communicate with them effectively. This leaves them to feel unsupported and feel they do not interact sufficiently with the health care providers [17]. On the contrary, a study done in Malawi reports that almost all (99.1%) respondents found their

interaction with the healthcare providers very good and 97.3% of the women interviewed were very satisfied with the care that they received [23].

This study showed that overall; most (35.6%) mothers were moderately satisfied with the immediate postnatal care provided at Ndola Central Hospital (Figure 4). This finding is consistent with findings of studies conducted in India and China where mothers report to be moderately satisfied with Postnatal Care [2, 24, and 25]. Another study in India also reports that more (60%) mothers are minimally satisfied and only 1% of the mothers are fully satisfied with the postnatal care [16]. In another study conducted in Egypt, the majority (71.0%) of the mothers were not satisfied with the postnatal care provided to them [16]. Low levels of satisfaction among mothers mean that the mothers and their babies do not receive adequate care during the immediate postnatal period. It could also mean that mothers have higher expectations which are not well met. Satisfied clients have better outcomes and show different reactions in comparison to the unsatisfied ones. Mothers' satisfaction with the immediate postnatal care can determine the use of subsequent health care services.

#### **Association between variables**

This study showed that employment status, gestational age and the baby's conditions at birth were inversely correlated with the mothers' levels of satisfaction with immediate postnatal care (table 4). After linear regression modeling, only employment status and the baby's condition at birth had statistically significant associations with the levels of mother's satisfaction with the immediate postnatal care (table 5). Mothers who were in employment scored 7.0% less on the satisfaction scale than those who were unemployed.

Mothers in employment understand and are more critical with standards of care and conditions expected from the healthcare providers. They are more sensitive to any negative or poor service than those who are unemployed. This study also revealed that mothers whose babies were in good condition at birth had satisfaction scores that were 6.6% less than mothers whose babies were in poor condition (table 5). If the baby's condition at birth is poor, it will attract more attention from the midwives in order to stabilize it and save a life. The baby would receive preferential treatment and these results in higher satisfaction levels among their mothers. 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 postnatal care they received.

Contrary to findings of this study that never established a statistically significant association between gestational age at delivery and levels of satisfaction with care, Venkatesh reports that mothers who deliver preterm

babies are more satisfied with postnatal care compared to mothers with babies born at full term [20].

This means that midwives pay more attention to the preterm babies because of high risks of morbidity and mortality associated with the preterm babies than to full term born babies. Venkatesh reports also that mothers who deliver by Caesarean Section are more satisfied with postnatal care compared to those who deliver spontaneously [20]. The Caesarean Section incision is painful and mothers frequently ask for help from midwives. Due to the pressure of work on the midwives, vital sign check is omitted on mothers that deliver normally and is only performed on those that present with a risk factor or complaint [11]. 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.

This study did not establish any significant difference in the overall satisfaction scores for other characteristics such as ward of admission, age, marital status, parity or level of education. This is contrary to the findings of a study in India which reports that multiparous mothers are less satisfied with the care they receive than the primiparous [20]. This could be due to the fact that more attention tends to be given to primiparous than the multiparous in order to detect and attend to any complications without delay.

Women having babies for the first time lack experience with the postnatal care and are therefore less critical compared to the multiparous who know their expectations during the postnatal period. This is contrary to other study findings in Mozambique and India, which report that adolescents or younger mothers are less satisfied with the postnatal care they receive, compared to older mothers [10, 24]. This could be due to the fact that adolescent mothers may not be familiar with postnatal care while the multiparous mothers, having visited the health facility more frequently, become more accustomed to it and are more satisfied with the postnatal care they receive.

Mothers who are older, those with low levels of education, housewives and those who have high parity are more satisfied with the postnatal care [26]. In another study, all the illiterate mothers consider the quality of postnatal care services to be satisfactory or good whereas graduate mothers consider the care as very poor and non-satisfactory [27]. With increasing education levels, one's expectations increase and one becomes more critical of issues, which may explain the low levels of satisfaction among the highly educated mothers.

#### **Conclusion**

This study revealed that mothers are not fully satisfied with the immediate postnatal care provided at Ndola



Central Hospital. Individualized postnatal care must be provided. Support supervision to midwives must be strengthened in order to improve the quality of postnatal care to the satisfaction of mothers.

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**Conflict-of-Interest Notification:** We declare that we have no competing interest.

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