MIDWIVES INTERVENTIONS TO MOTHERS WITH PRENATAL LOSS OR NEONATAL DEATH OCCURRING IN NNAMDI AZIKIWE UNIVERSITY TEACHING HOSPITAL NNEWI

ABSTRACT

The death of a baby during pregnancy, birth or postpartum is a traumatic experience to a woman and her family, however it may also be a traumatic experience to the attending healthcare workers. Many women experiences prenatal loss while to some is neonatal death. The study aimed to investigate midwives and doctors' intervention towards prenatal loss and neonatal death in Nnamdi Azikiwe University Teaching Hospital Nnewi. Descriptive cross sectional study was adopted for this research work. Instrument for collection of data was a questionnaire formulated in a 4-point Likert scale. A reliability coefficient of 0.82 was established proving the instrument reliable. Healthcare providers from the study areas made up the population, all of them were used for the study as the population was of manageable size. Data were analyzed with SPSS using mean, percentage and Pearson's Chi-square.The result revealed that majority (85%) of participants were female and 40% were within the age range of 5 – 40 years. 88.3% and 90.0% of midwives and 50 (50.0%) and 6(60.0%) of the doctors possess good responses toward the psycho-social and physical intervention utilized toward prenatal loss and neonatal death respectively. The study concluded that most of the participants displayed good responses on psycho-social and physical interventions toward prenatal loss and neonatal death, but majority of them encounters challenges in during interventions toward the bereaved family. Prenatal loss or neonatal death is a severe loss, and it is important to acknowledge families' appropriate need to grieve for their babies. There is need to establish a meaningful and appropriate way of caring for parents and families after the death of their infant.Also, physicians and midwives should play an important role in the mother's transition throughout the grief process.

Keywords: Midwives, doctors, intervention, prenatal loss, neonatal death.

INTRODUCTION

For many couples, getting pregnant does not only mean carrying a baby, but also having a child. For families that have made so many plans and has many expectations towards the unborn child, suddenly losing the child becomes a very painful experience. The death of a baby during pregnancy, birth or postpartum is a traumatic experience to a woman and her family, however it may also be a traumatic experience to the attending health care workers (Salgado, Andreucci, Gomes & Souza, 2021). Many women experiences prenatal loss while to some is neonatal death.

It is estimated that out of 8.8 million under-five child deaths that occurs globally, 40% of them take place during the neonatal period (first 4 weeks of life)and about 2.6 million prenatal loss (fetal deaths before 20 weeks of gestation) occur each year (Becker, Abeysekera, Moir, Gray, Shimwela & Oprescu, 2023).

Prenatal loss and neonatal death is one of the most tormenting and painful source of grief to many. According to Rahman, Moran, Pervin, Rahman, Yeasmin, and Begum, (2021) prenatal loss has similar impact on the woman and the family members as neonatal death. The death affects the parents' mental health and may trigger depressive symptoms, anxiety, posttraumatic stress disorders, suicidal ideation, panic and phobias and in some cases can also affect their health physiologically (Salgado, Andreucci, Gomes & Souza, 2021). But when these bereaved families experience congruence between the care they expect and the care they actually received, the intensity of their grief is lowered (Qian, Chen, Jevitt, Sun, Wang & Yu, 2023). According to Rahman et al., (2021) many women and their partners reported that their hospital experience played a key role in their journey of emotional recovery from pregnancy loss. Couples' emotional wellbeing after the loss can be can be aggravated by their interactions with healthcare professionals (Galeotti, Heaney, Robinson & Aventin, 2023).

Grief experienced as a result of prenatal loss and neonatal death is a reality, and the care patients and their families receive from the midwives and doctors after this loss have far-reaching effects not only on the bereaved mental health, but also on the healthcare workers providing the support (Galeotti et al., 2023). Doctors and midwives working in the obstetrics and gynaecological unit as an important part of their duty supposed to provide care to the couples and families that have experienced prenatal loss or neonatal death **(**Wallbank & Robertson, 2019). These doctors and midwives supposed to play an important role in providing care, education, assistance, and

treatment options to these women and families who experience prenatal loss or neonatal death. It is very important for the health care providers caring for these parents to provide best-practice bereavement care to fully support the bereaved couple so as to avoid the occurrence of any complication such post-traumatic stress disorder (PTSD) (Qian et al., 2023).

In their interventions, healthcare providers tend utilize psycho-education, psychotherapies, physical activity, and group sessions to improve women's emotion and response toward the bereavement. Fernández-Férez et al. (2021) noted that psychological support and psychosocial interventions are effective in improving depression, anxiety, and grief amongst parents with prenatal loss or neonatal death. According to Becker et al., (2023) educating women, spouses and extended family about prenatal loss or neonatal death and grief is a good way to improve the grieving process. Health education could be useful in places where the education level of the population is lower, but in other more technologically advanced contexts, where this knowledge can be accessed more easily, face-to-face (patient–therapist) psychotherapy interventions are more effective for grief symptoms. Fernández-Férez et al., (2021) mentioned that involving the family or the spouse in the interventions in most cases are not beneficial as the relatives have insufficient knowledge or skills and resort to avoidance of the topic, which leads to increased anxiety.

Prenatal loss and neonatal death also have consequences in the social and economic spheres, with family crises and occupational difficulties. The belief that prenatal loss and neonatal death would be less difficult to deal with compared to the death of an older child is not true. The main difference between these two situations is that society does not acknowledge prenatal losses and neonatal death, they minimizes the impact to the bereaved, makes it invisible and neglect the experience that the families are going through (Salgado et al., 2021). This kind of grief that

cannot be openly acknowledged, publicly mourned, or socially supported is traumatizing to the bereaved. Most of the time, women who had a prenatal loss or neonatal death may express guilt and question their competence of bearing a healthy baby. This grieving process in some of them may last for months or years and might even impact on subsequent pregnancies (Qian et al., 2023).

Due to the importance of maintaining the physical and mental health of women experiencing the grief of bereavement, midwives and doctors working in the obstetrics and gynaecological unit suppose to be knowledgeable in the interventions that will help the women and families to cope with the loss, relieve negative emotions and reduce their suffering (Fernández-Férez et al., 2021). However, none of the interventions utilized have been reported to have a conclusive efficacy of achieving the desired result. Inevitably, many researches raises different questions such as: What do mothers and parents need? How do they prefer to cope with their loss? How much privacy should they be given? Do we care for them on the postnatal ward with other mothers and healthy babies? To offer very good bereavement care, these are questions that any professional would ask, and they are difficult to answer without input from the grieving parents. Fernández-Férez et al., (2021) mentioned that in order to achieve good outcome from the interventions, it is essential to create a link with parents and facilitate communication between health care providers and the patient in order to know their needs.

Taking care of women who are women suffering from prenatal loss or neonatal death can pose an enormous challenge, considering so many factors and personal uniqueness of each one of them (Salgado et al., 2021). Yet midwives and doctor providing care to these individuals are expected to remain emotionally engaged with their patients, remain empathic, and provide the necessary medical and psychological care in order to facilitate the beginning of a healthy

grieving process for the family **(**Wallbank & Robertson, 2019). Based on thisresearcher seeks toinvtestigate themidwives and doctors intervention to mothers and families with prenatal loss or neonatal death occurring in Nnamdi Azikiwe University Teaching Hospital Nnewi.

Aims and Objectives

The main purpose of the study was to assess midwives intervention to mothers and families with prenatal loss or neonatal death occurring in Nnamdi Azikiwe University Teaching Hospital Nnewi. Specifically, the study was guided by the following objectives:

1. To determine the psycho-social interventions the midwives offer to mothers with prenatal loss or neonatal death
2. To determine the physical interventions used by the midwives to mothers with prenatal loss or neonatal death

Hypotheses

The following null hypotheses were tested at significance level of 0.05

1. There is no significant association between years of practice and midwives intervention toward prenatal loss and neonatal death.
2. There is no significant association between physical measures utilized by the midwives in their intervention toward prenatal loss and neonatal death and the women's responses.

METHODOLOGY

This was a descriptive cross sectional study meant to assess midwives and doctors intervention towards prenatal loss and neonatal death in Nnamdi Azikiwe University Teaching Hospital Nnewi.

Study Population

The population of the study comprised of all the midwives and doctors working in the obstetrics and gynaecological unit in Nnamdi Azikiwe University Teaching Hospital Nnewi. Ninety (90) midwives and ten (10) doctors working in this unit during the time of the study were used as the study population. Total population of the midwives and doctors who work in the obstetrics and gynaecological unit were engaged in the study to allow for better representativeness. Census sampling technique was used to select the study participants. This method was adopted because the population was of manageable size. Using this sampling technique, the researcher included all the participants who meet the inclusion criteria and were willing to participate in the study. The researcher used primary data because she collected the data directly from the midwives and doctors that meet the inclusion criteria. Data were collected using interview and structured questionnaire titled "midwives and doctors intervention towards prenatal loss and neonatal death (MDIPNDQ)". The questionnaire was divided into sections. Section A contained the collected socio-demographic characteristics of the respondents, section B to G contained structured questions on items that were used to answer the research questions on the psycho-social responses of the midwives toward prenatal loss and neonatal death, physical measures utilized by the midwives in their intervention toward prenatal loss and neonatal death, challenges faced by the midwives in their intervention toward prenatal loss and neonatal death, the psycho-social responses of the doctors toward prenatal loss and neonatal death, physical measures utilized by the doctors in their intervention toward prenatal loss and neonatal death and challenges faced by

the doctors in their intervention toward prenatal loss and neonatal death respectively.Sections B to G were structured in a 4-point modified Likert scale format. The response mode used in the 4-point scale wasStrongly Agreed (SA) which was rated as (4points), agreed (A) 3 points, disagree (D) 2 points and strongly disagreed (SD) 1point. And the criterion mean is set at 2.4.Section H containedthe questions which were used to collect data from the participants using interview method of data collection.

Direct delivery and retrieval method was used in the administration of the instrument to the respondents to ensure high return. Instrument was distributed in the hospital with the help of two assistants. These two (2) people werebriefed on how to select the participants and interpret the research questions. Informed and voluntary consent was obtained from the selected participants before administration of the questionnaire. Those that were willing participated in the study voluntarily without coercion.Total of one hundred (100) copies of the study instrument (questionnaire) were administered to the respondents over a period of four days in the hospital. It took about 6 - 12 minutes for each of the participants to complete a questionnaire.The administered questionnaires were collected immediately they were completed and this helped to ensure high return rate, as all the 100 copies were retrieved making 100% return rate.

To ensure detailed collection of data, some of the participants were interviewed. Interview with the participantswas conducted in the hospital, in a quiet and comfortable room, and it took about 10 - 15 minutes. The interviews were recorded using a sound recording device.The filled questionnaires after the analysis were stored locked-up out of reach of people to ensure safe keeping and confidentiality. According to the school policy, it can be stored till there is no need for it or for five years maximum. Data collected were encoded and analyzed using SPSS version 21.0. Socio-demographic characteristics of the study participants and the questions covering the

research questions were presented in a frequency table and analyzed using the descriptive statistics such as frequencies, percentages and mean. For the qualitative analysis, the themes were determined and inductive method used in the analysis of the data. Pearson's Chi-square was used for testing the hypotheses and P-value < 0.05 was considered statistically significant.

RESULTS AND DISCUSSION

This chapter contains data analysis and discussion of the findings**.** The data for the study was collected from ninety midwives and ten doctors working in obstetric and gynaecological unit in Nnamdi Azikiwe University Teaching Hospital Nnewi with the aim of assessing their intervention towards with prenatal loss or neonatal death. The results were presented in the tables and charts below.

Table 1: Socio-demographic Characteristics of the Respondents

Variable	Frequency (n=100)	Percentage
Gender		
Male	15	15.0
Female	85	85.0
Age at last birthday		
24-34 years	27	27.0
35-45 years	40	40.0
46-56 years	29	29.0
57 years and above	4	4.0
Marital status		
Single	18	18.0
Married	68	68.0
Widowed	11	11.0
Divorced	2	2.0
Separated	1	1.0
Religion		
Christianity	98	98.0
Traditionalist	2	2.0
Others specify	-	-
Professional qualification		
Medical doctors	10	10.0
Nurse-midwives	29.0	29.0
Registered nurse/midwife	34	34.0
BNSc	24.0	24.0
Ph.D	2	2.0
Total years of experience		
0 - 10	63	63.0

11 - 20	22	22.0
21 - 30	15	15.0
Number of years practiced in the unit		
0-5	68	68.0
6 – 10	5	5.0
11 – 15	27	27.0
Total	**100**	**100.0**

The results from table 1 showed that 85.0% of the study participants were females while 15% were males. 40 (40%) were between 35-45 years and the others 27(27.0%), 29(29.0%) and (4.05%) within the age categories 24-34 years, 46-56 years, 57years and above respectively. Majority (68.0%) were married, 18(18.0%) single, 11(11.0%) widowed, 2(2.0%) divorced and 1(1.0%) separated. 98% were Christians and 2(2.0%) traditionalists. For their professional qualification 10(10.0%) were doctors, 29(29.0%) nurse-midwives, 34(34.0%) registered nurse/midwife, 24(24.0%) BNSc and 2(2.0%) Ph.D. 63(63.0%) have 0 – 10 years of work experience, 22(22.0%) 11 – 20years and 15(15.0%) 21 – 30years. 68(68.0%) have practiced in the unit for 0-5years, 5(5.0%) 6 – 10years and 27(27.0%) 11 – 15years.

Table 2: Psycho-social interventions midwives offer to mothers with prenatal loss or neonatal death

Variables	**LIKERT SCALE(n = 89)**				**Mean score**	**Standard deviation**	**Remark**
	SA(4)	**A(3)**	**D(2)**	**SD(1)**			
Provision of adequate care and concern to prevent the feeling of depression and/or anxiety	73 (80.9)	16 (18.0)	1 (1.1)	-	3.38	0.71	Accepted
Providing counseling on emotional adaptation or meeting with social worker	57 (64.0)	31 (33.7)	2 (2.3)	-	3.22	0.68	Accepted
Allow the couple to stay together	47 (51.7)	41 (46.1)	2 (2.3)	-	3.11	0.63	Accepted

Encourage them to interact with people and be open about the loss	29 (32.6)	53 (58.4)	6 (6.7)	2 (2.3)	2.84	0.51	Accepted
Listen to them with empathy	56 (61.8)	33 (37.1)	1 (1.1)	-	3.21	0.58	Accepted
Parent were allowed to see and hold the deceased baby	27 (30.0)	37 (40.5)	23 (25.8)	3 (3.4)	2.62	0.50	Accepted
Immediately take the baby away if the parents do not want to see it	27 (29.2)	48 (53.9)	10 (11.2)	5 (5.6)	2.68	0.62	Accepted
Allow parent to create memory with the baby e.g. taking photograph	23 (25.8)	27 (30.3)	34 (37.1)	6 (6.7)	2.39	0.53	Rejected
Grand mean					**3.12**	**0.77**	

Using 2.4 mean cutoff (>2.4 = rejected)

Using criterion mean of 2.4 as the mean cut off, the items in results above; provision of adequate care and concern to prevent the feeling of depression and/or anxiety, providing counseling on emotional adaptation or meeting with social worker, allow the couple to stay together, encourage them to interact with people and be open about the loss, listen to them with empathy, parent were allowed to see and hold the deceased baby and immediately take the baby away if the parents do not want to see it were accepted as psycho-social factors that affect midwives' response toward mothers with prenatal loss or neonatal death as their mean values were above 2.4. But the item "allow parent to create memory with the baby e.g. taking photograph" was rejected as the psycho-social factors that affect midwives' response toward mothers with prenatal loss or neonatal death as their mean value was below 2.4. In drawing conclusion, since the grand mean 3.12 is above the criterion mean of 3.0, it can be said that the psycho-social interventions the midwives offer to mothers with prenatal loss or neonatal death is accepted.

Table 3: Degree of psycho-social interventions the midwives offer to mothers with prenatal loss or neonatal death

Variables	Frequency	Percentage
Poor responses	9	10.1
Good responses	80	89.9
Total	89	100

/0%-60% poor responses, 61%-100% good responses/

Results from above table showed that 80(89.9%) of the respondents showed good response on the psycho-social interventions used on mothers with prenatal loss and neonatal death, while 9(10.1%) have poor response. It can be concluded that the psycho-social interventions the midwives offer to mothers with prenatal loss or neonatal death were good.

Table 4: Physical interventions used by the midwives to mothers with prenatal loss or neonatal death

Variables	LIKERT SCALE (n = 89)				Mean score	Std dev.	Remark
	SA(4)	A(3)	D(2)	SD(1)			
Provides adequate health care to the client	82 (91.0)	8 (9.0)	-	-	3.48	0.69	Accepted
Maintenance of personal hygiene and grooming	41 (46.1)	48 (52.8)	1(1.12)	-	3.07	0.71	Accepted
Ensures that the client have enough rest	59 (65.2)	31 (34.8)	-	-	3.25	0.68	Accepted
Ensures intake of adequate nutrition and fluid	48 (52.8)	40 (44.9)	2 (2.3)	-	3.12	0.63	Accepted
Encourage visit from relatives	30 (32.6)	59 (66.3)	1(1.1)	-	2.95	0.51	Accepted
Breast care	45 (49.4)	39 (43.8)	3 (3.4)	3 (3.4)	3.02	0.64	Accepted
Provides calm, peaceful and soothing environment	63 (70.8)	24 (27.0)	-	2 (2.3)	3.26	0.74	Accepted
Grand mean					**3.18**	**0.73**	

Using 2.4 mean cutoff (>2.4 = rejected)

Results from the table above showed that all the items for physical measures utilized by the midwives in their intervention toward prenatal loss and neonatal death; provides adequate health care to the client, maintenance of personal hygiene and grooming, ensures that the client have enough rest, ensures intake of adequate nutrition and fluid, encourage visit from relatives,

provides breast care, provides calm, peaceful and soothing environment have mean score above were accepted by the participants. No item was rejected or disagreed with. In drawing conclusion, since the grand mean 3.18 is above the criterion mean of 3.0, it can be said that the physical interventions used by the midwives to mothers with prenatal loss or neonatal death is accepted.

Table 5: Degree of physical interventions used by the midwives to mothers with prenatal loss or neonatal death

Variables	Frequency	Percentage
Poor measures	1	1.1
Good measures	88	98.9
Total	89	100

/0%-60% Bad measures, 61%-100% good measures/

Results from above table showed that 88(98.9%) of the midwives showed a good response on the physical intervention used on mothers with prenatal loss and neonatal death, while 1(1.1%) showed poor response. It can be concluded that the physical interventions used by the midwives to mothers with prenatal loss or neonatal death were good

Test of Hypotheses

Hypothesis one: There is no significant association between physical measures utilized by the midwives in their intervention toward prenatal loss and neonatal death and the women's responses.

Table 6: Chi-square result for test of hypothesis one

Variables	Women Responses		X^2 value	P-value
physical measures utilized by the midwives	**Poor responses**	**Good responses**		

Poor measures	0 (0.0)	1 (1.23)		
Good measures	9 (100.0)	80 (98.7)	0.112	0.737

According to the above result, the p- value obtained was greater than 0.05, this showed that there was no significant association between physical measures utilized by the midwives in their intervention toward prenatal loss or neonatal death and the women's responses. Therefore, the null hypothesis is accepted.

Hypothesis two: There is no significant association between the challenges faced by the midwives during their intervention toward prenatal loss and neonatal death and the outcome of the intervention.

Table 7: Chi-square result for test of hypothesis two

Variables	**Outcome of intervention**		**X^2 value**	**P-value**
Challenges faced by women	**Poor Intervention**	**Good intervention**		
Faced challenge	1 (100.0)	31 (34.8)		
No challenge	1 (100.0)	58 (100.0)	0.531	0.466

According to the result, the p- value obtained was greater than 0.05, this showed that there is no significant association between the challenges faced by the midwives during their intervention to mothers with prenatal loss or neonatal death and the outcome of the intervention. Therefore, the null hypothesis is accepted.

4.2 Discussion

Here, findings in the previous chapters were discussed in detail. The section also shows the relationship between the findings and literature review to affirm or disprove the previous views.

The result showed that majority of the study participants were females, greater percentage were between 35-45 years, most of them were married. For their professional qualification majority were nurse-midwives while smaller percentage was doctors. Most of them have practiced for five years and above. The result is consistent with the study conducted by Kalanlar (2020) where

most of the participants were midwives and nurses and their average professional years of experience was17.83 ± 15.11 years for physicians and 14.69 ± 10.49 years midwives and nurses. It is also in line with the study done by Martínez-Garcíaa et al., (2023) where the result revealed that the majority the respondents were women, with a mean age of 40.9. Most of the respondents were midwives, having average years of work experience of 17.4 years.

Findings showed that the psycho-social interventions the midwives offer to mothers with prenatal loss or neonatal death includes; provision of adequate care and concern to prevent the feeling of depression and/or anxiety, providing counseling on emotional adaptation or meeting with social worker, allow the couple to stay together, encourage them to interact with people, and be open about the loss, listen to them with empathy, parent were allowed to see and hold the deceased baby and allowed to create memory with the baby like taking photograph. This is in line with the study done by Kalanlar (2020) where majority of the respondents reported that parents were encouraged to see the deceased baby, and those who desired it were encouraged to hold the deceased baby, take photos and provide a remembrance pack (e.g., a lock of hair). Their result also reported that most of the respondents mentioned that hospitals provide the opportunity for parents to meet with a social worker. The finding further agreed with Fenstermacher & Hupcey, (2019) where the respondents reported being properly cared for with a kind, caring, and respectful attitude by the midwives and the hospital after prenatal loss or neonatal death. Most of the respondents mentioned that the compassionate care from hospital staff was helpful, as they were all very generous, helpful and very sympathetic. Also in the study conducted by Martínez-Garcíaa et al., (2023) most of the midwives and nurses stated that they help families after prenatal loss or neonatal death by providing a calm and comfortable environment, allowing the

couple to stay together, listen to with empathy and take care of the deceased baby according to the families' request.

Results of the study showed that physical interventions used by the midwives to mothers with prenatal loss or neonatal death were; provides adequate health care to the client, provides calm, peaceful and soothing environment. The result is in agreement with the findings of the study conducted by Fenstermacher & Hupcey, (2019) where most of the bereaved families reported that the people in the hospital were all very sympathetic, generous and helpful. Some of them said that the staff prepared them for what they might experience both emotionally and physically. Most of the respondents further revealed that that they were placed in a quiet and separate room as they reported feelings of jealousy, sadness, and anger when they saw other pregnant women or those who have successful delivery. The result of the study also agreed with Martínez-Garcíaa et al., (2023) where the participants mentioned that they help families by providing a calm and comfortable environment and listening to the families with empathy.

5.3 Conclusions

The study on assessment of midwives and doctors intervention towards prenatal loss and neonatal death in Nnamdi Azikiwe University Teaching Hospital Nnewi, concluded that most of the participants displayed good responses on psycho-social and physical interventions toward prenatal loss and neonatal death, but majority of them encounters challenges in during interventions toward the bereaved family. Prenatal loss or neonatal death is a severe loss, and it is important to acknowledge families' appropriate need to grieve for their babies. There is need to establish a meaningful and appropriate way of caring for parents and families after the death

of their infant. Also, physicians and midwives should play an important role in the mother's transition throughout the grief process.

5.4 Recommendations

The recommendations made include:

1. There is need to improved education and training programs for healthcare professionals, including doctors and midwives, focusing on effective communication skills, empathy, and bereavement support for families experiencing prenatal loss and neonatal death.
2. Need to develop standardized protocols and guidelines for the management of prenatal loss and neonatal death, ensuring consistency in care delivery across different healthcare settings.
3. Promotion of interdisciplinary collaboration between doctors, midwives, counselors, social workers, and other healthcare professionals to provide comprehensive support to families throughout the grieving process.
4. Adoption of holistic care approach that addresses the physical, emotional, and psychological needs of bereaved parents, including access to counseling services and support groups.
5. Recognize and respect cultural differences in grieving practices and beliefs, and tailor support services accordingly to meet the diverse needs of bereaved families.

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