Assessing Nurses’ Knowledge on the Management of Women Presenting with Still-Birth at the Bota District Hospital, Cameroon

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Abstract: Stillbirth refers to the delivery of an infant who died in the uterus. And also stillbirth can also be referred to as intrauterine fetal death (IUFD). Stillbirth is one of the most common serious complications of pregnancy, affecting approximately 0.5% of pregnancies in the developed world and much greater portions of the pregnancies in the developing world. The study was a cross descriptive survey design. The study population includes the entire nurses in the maternity employed at the time of the study. A random sampling technique was used to select nurses in the reproductive block. A sample size of 17 nurses was used in the study. Data was collected by means of well structured questionnaires which was shared and filled by the nurses, using a pen, or a pencil. All (100%) of the nurses’ defined stillbirth as the birth of an infant who died in the uterus, knowledge on the signs and symptoms of stillbirth, 41.1% said absence of fetal heart rate, 29.4% said mother complains of reduce fetal movement, 17.4% said restlessness and 11.7% said Nausea. From the data obtained, most of the nurses with a relative frequency of 35.29% said identifying signs and symptoms of depression are some of the management strategies used by nurses at the Bota D.H. The nurses in the Bota District Hospital are able to define stillbirth, identify its signs and symptoms, manage and provide care for women with stillbirth. Those with longer years of working experience turn to have more knowledge on how to better manage and care for stillbirth women.

Keywords: Knowledge, Management, Women, Stillbirth, Cameroon

1. Introduction

Stillbirth refers to the delivery of an infant who died in the uterus. [1] And also stillbirth can also be referred to as intrauterine fetal death (IUFD). [1, 2] According to the Births and Deaths register of the United Kingdom, Stillbirth shall be applied to any child which has issued forth from its mother after the twenty weeks of pregnancy and which did not at any time after being completely expelled from its mother, breathe or show any sign of life. [2, 3] It is important to distinguish between a stillbirth and other words that describe the unintentional end of a pregnancy. [1]

Stillbirth is one of the most common serious complications of pregnancy, affecting approximately 0.5% of pregnancies in the developed world and much greater portions of the pregnancies in the developing world. [4, 5] It is the endpoint of diverse processes, ranging from congenital abnormality, maternal medical disorders through the significance proportion of cases where no clear cause is established. [6] The subject, once neglected, is that the annual worldwide
loss of an estimated 3 million babies, which cannot continue to be ignored. [1, 3, 7]

There are no known causes of stillbirth, but there are several conditions which may lead to stillbirth, such as; Placenta Issues, birth defects, poor fetal growth, infections and more. [8] The death of the fetus within the uterus usually does not jeopardize the mother's health though uncommonly, death of the fetus may cause abnormalities of the mother's blood clotting system, but only after the fetus has been dead for several weeks. [7, 8] Working as a nurse in the field of obstetrics can be rewarding but also may subject you to times in which you experience life changing, and traumatizing, events for women. [4, 7] While pregnancy, labor and delivery are often a relatively exciting time for expectant moms, there are some women who experience traumatic and depressive experiences - especially when faced with the stillbirth of an infant. [2, 7, 8] If you are a nurse, or considering a career in nursing, it is important to understand the long term implications of stillbirth and how a mother can be best assisted in managing the long term impact. [7, 9]

Grief theory suggests that perinatal loss and the death of a child, including stillbirth, meets the criterion for complicated mourning. [10] In addition, empirical studies have demonstrated that 48% to 51% of women were clinically depressed 1-3 months following a miscarriage and that perinatal loss has a lasting component much longer than merely the initial few months following the loss. [10, 11] By its nature, perinatal loss appears to produce increased depression, anxiety, and trauma. [7] This may be heightened by social isolation, stress, and factors intrinsic to maternal bonding during pregnancy, unique within each relationship and situation. [12] These same factors may significantly impact the parents' immediate wishes to or not to hold, see, or memorialize following a stillbirth. [8-10]

While the underpinnings of prematurity have attracted a healthy share of research dollars, Silver says stillbirth hasn’t been studied much. As a result, efforts to decrease stillbirth have been pretty minimal. Stillbirth rates dropped in the first half of the 20th century but have plateaued over the last few decades. [2, 5, 9] The U.S. rate is 6.2 stillbirths per 1,000 births, 59% higher than a public-health goal set for 2010. “Our rate is much higher than a lot of other developed countries,” says Silver. [6, 12]

However, the obstacle to reducing rates of stillbirth in the developing world relates to the difficulties in providing basic obstetrical care. [6] Fetal death rates have failed to show any reduction for more than a decade. [6, 7] The wide variation in the reported contribution of unexplained stillbirths from 15% to 71% has been attributed to classification systems used thoroughness of the investigation of deaths and the definition of stillbirth used. [1] The large proportion of unexplained ante-partum stillbirths is a major barrier to reduction of stillbirth and perinatal mortality rates. [1-3] The majority of these unexplained deaths occur in late gestation in approximately healthy pregnancies. [1, 3]

Working as a nurse in the field of obstetrics can be rewarding but also may subject one to times in which one experiences life changing, and traumatizing, events for women. While pregnancy, labor and delivery are often a relatively exciting time for expectant moms, there are some women who experience traumatic and depressive experiences - especially when faced with the stillbirth of an infant. As a nurse, knowledge on the cause, predisposing factors, as well as the long term implications of stillbirth and how a mother can be best deal with the long term impact is very important. Many nurses however seem to lack sufficient knowledge on the care of mothers before and after a stillbirth. It is against this background that the researcher set out on this study.

Some questions asked in this study are:
- What do nurses know about the causes of stillbirth?
- How much knowledge do nurses have on the diagnoses of a stillborn?
- How are women presenting with stillbirth being managed by nurses?

The Objective was to assess nurses’ knowledge on the management of women presenting with still birth at the Bota district hospital.

This study was carried out, in order to improve nurses knowledge in the possible causes and early diagnoses which will aid in the reduction of the number of suffering mothers, equally improve the general health and nursing science as a whole.

2. Methods and Materials

2.1. Research Design

The study was a cross descriptive survey design which explored nurses’ knowledge on the cause of stillbirth, the diagnosis and on the management of women presenting with stillbirth.

2.2. Study Area and Study Population

The study was carried at the Bota District Hospital Limbe. It falls within the coastal region of Cameroon and it has two seasons, that is, the rainy and the dry season. Limbe is a beautiful and very fascinating with many touristic attractions like the botanic Garden and the Zoo accounting for the high population during weekends. The study was carried out in Limbe sub-division at the Bota District Hospital, which is situated at Bota middle farms and located approximately 800 meters away from the main town (half mile). This hospital falls under the first referral level and under the Limbe health area. It receives and average of 50 patients per day. It has a beddng capacity of about 200 beds and has about 100 nurses including volunteers and interns.

The study population includes the entire nurses in the maternity employed at the time of the study.

2.3. Sampling Technique

A random sampling technique was used to select nurses in the reproductive block of the Bota District Hospital, Limbe
2.4. Sample Size
A sample size of 17 nurses was used in the study.

2.5. Instruments of Data Collection
Data was collected by means of well structured questionnaires which was shared and filled by the nurses, using a pen, or a pencil.

2.6. Method of Data Collection
Questionnaire was formulated, pre-tested and then administered to the nurses. Explanation was given prior to filling in order to help the nurses answer the questions.

2.7. Data Analysis
Data was analyzed manually into frequency tables according to objectives and was later transferred to Microsoft Excel version 7 to obtain Pie Charts.

2.8. Study Period
This work was carried out from the month of July 2012 to the month of March 2013.

2.9. Administrative Permission and Ethical Consideration
A letter of authorization was given by the school which was taken to the director of the Bota District Hospital, Limbe, with a hand written letter including a sample questionnaire. The purpose of the study was explained and the permission was granted for me to carry out my research with the nurses of the Bota District Hospital, Limbe.

2.10 Limitation of Study
Some nurses were not cooperative; some refused answering the questionnaires with the pretext of not having enough time. Some were even asking for motivation, such as a plate of food before answering the questionnaire.

2.11. Operational Definition of Terms
2.11.1. Stillbirth
This is a baby that is born after 24 weeks with no sign of life.

2.11.2. Nurse
A person whose job is to take care of sick or injured people, usually in a hospital.

2.11.3. Pregnancy
This is the state of having a baby developing inside someone’s body.

2.11.4. Congenital Abnormality
Medical disorder existing before birth.

2.11.5. Diagnosis
This is a conclusion reached through the identification of a disease by the examination of signs and symptoms and by other investigations.

2.11.6. Challenges
These are new and difficult task that test somebody’s ability and skills.

2.11.7. Fetus
This is a young human before birth, especially more than eight weeks after fertilization.

2.11.8. Miscarriage
Process of giving birth to a baby before it is fully developed.

3. Results
25 Questionnaires were given out and 17 received, given a percentage of 68%. Majorities (94%) of the nurses were female and (6%) represents the male, as seen in figure 1.

![Figure 1. Gender of nurses.](image)

Some (41.11%) of the nurses where in the age range of 25-34 years old, (23%) are between 35-44 years old and (17.65%) for 44-55 and 15-24 years old, as seen below in figure 2.

![Figure 2. Age range of nurses.](image)

The figure 3 below distributes the nurses’ status, as followed, out of 17 nurses, 64.7% are single, 29.4% are married, and 5.8% are separated, with no percentage for divorce.

![Figure 3. Respondent's marital status.](image)
Out of 17 nurses, 52.9% were Nursing Aid, 29.4% were SRN, 17.6% were Post graduates and 5.8% were HND nurses, as seen below in figure 4.

![Figure 4. Level of education.](image)

The following figure (5), illustrates the working experience of the nurses,(47.1%) have been working for a period of 1-3 years, (23.4%) have been working for a period of 4-6 years and 7-9 years, and 5.8% have been working for more than 10 years.

![Figure 5. Distribution in relation to duration in service.](image)

### 3.1. Knowledge on the Causes, Signs and Symptoms of Stillbirth

100% of the nurses’ defined stillbirth as the birth of an infant who died in the uterus. Among the data obtained, (29.4%) of respondents said placenta issues and problems like toxemia is the main cause of stillbirth, as illustrated by the figure below.

![Figure 6. Nurses Knowledge on the Causes of Stillbirth.](image)

Figure 7: Illustrates knowledge on the signs and symptoms of stillbirth, 41.1% said absence of fetal heart rate, 29.4% said mother complains of reduce fetal movement, 17.4% said restlessness and 11.7% said Nausea.

### 3.2. Knowledge on the Diagnosis of Stillbirth

41.1% diagnose gestational age of stillborn infants to be between 21-28 weeks of gestation, 29.4% between 29-38 weeks of gestation, 17.4% at 20 weeks of gestation, and 11.7% above 38 weeks of gestation as shown below.

<table>
<thead>
<tr>
<th>GESTATIONAL AGE</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 weeks</td>
<td>3</td>
<td>17.4%</td>
</tr>
<tr>
<td>21-28 weeks</td>
<td>7</td>
<td>41.1%</td>
</tr>
<tr>
<td>29-38 weeks</td>
<td>5</td>
<td>29.4%</td>
</tr>
<tr>
<td>Above 38 weeks</td>
<td>2</td>
<td>11.7%</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>100%</td>
</tr>
</tbody>
</table>

Out of 17 respondents, 41.1% said monitoring of fetal heart rate is a diagnostic measure for, 35% said through an Echography, 17.4% said through ultrasound and 5.8% for auscultation as seen in table 2: below.

<table>
<thead>
<tr>
<th>Diagnostic measures</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auscultation</td>
<td>1</td>
<td>5.8%</td>
</tr>
<tr>
<td>Echography</td>
<td>6</td>
<td>35.4%</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>3</td>
<td>17.4%</td>
</tr>
<tr>
<td>Monitoring of fetal heart rate</td>
<td>7</td>
<td>41.1%</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>100%</td>
</tr>
</tbody>
</table>

### 3.3. Knowledge on the Management of Women with Stillbirth

From the data obtained, most of the nurses with a relative frequency of 35.29% said identifying signs and symptoms of depression are some of the management strategies used by nurses at the Bota D.H as shown in the figure below.

![Figure 8. Distribution on the management strategies used by nurses.](image)

From the data obtained, 52.94% of nurses identified identification of the present cause of stillbirth as the best
action taken by nurses to prevent further reoccurrence of still birth. This is illustrated in the figure below.

![Figure 9. Distribution with respect to action taken to prevent further reoccurrence of still birth.](image)

From the data obtained, 41% of the nurses encourage clients to verbalize worries to improve the condition of a mother after stillbirth as seen in fig 10.

![Figure 10. Distribution with respect to actions taken by nurses to improve on the condition of a traumatize mother after birth.](image)

4. Discussion

4.1. Knowledge on the Causes of Stillbirth

With respect to the definition of still birth, 100% of the nurses defined still birth as delivery of an infant who died in the uterus which goes according to the Medical Dictionary which says that stillbirth is the delivery of an infant who died in the uterus. [1]

From the data obtained, (29.4%) of respondents said congenital abnormalities of the birth canal is the main cause of still birth, which is in line with Women health and Education center which states that, the primary cause of stillbirth is interruption of the mother to the fetus through the placenta and umbilical cord.

4.2. Knowledge on the Diagnosis of Stillbirth

Looking at figure 9, 41.1% of respondents identified the absence of a fetal heart rate as the best diagnostic measure for stillbirth. Regarding leisher and Smith, who said if the doctor fail to detect a fetal heart beat, the confirmation is sought with either an electronic heart beat monitor or ultrasound. [4, 5] Here the author is talking about the absence of a fetal heart beat. This is in line with the answers of the respondents.

4.3. Knowledge on the Management of Women with Stillbirth

In figure 10, 35.29% of the nurses said identification of signs and symptoms of depression, 23.53% said allay anxiety, and 17.65% went for all the management procedures, 5.88% embarked on an emotional recovery. This goes in line with Contag and Cheong, who said there are intense emotions surrounding pregnancy loss, including depression, anger, anxiety, confusion and jealousy. [9, 12] In relation to qualification most of the nurses who said identify signs and symptoms of depression had SRN/Degree qualification.

41% of the nurses indicated that the best management is to encourage the client to verbalize her worries, 24% said administration of medication as prescribed, 24% offered different management procedures and 12% went for weight loss therapy.

In relation to working experience, majority of the nurses indicated encouragement of verbalization of worries no matter their working experience. [3, 7, 8] The only nurse who went for weight loss had just months of practice. This goes in line with Karla. L. Luxnar, who, in her book: Delmar’s maternal Nursing Care Plans, in her proposed care plan for management of stillbirth mothers, encourages verbalization,
for it provides permission to grief together. [13]

5. Conclusion

From this study, we can conclude that the nurses in the Bota District Hospital are able to define stillbirth, identify its signs and symptoms, manage and provide care for women with stillbirth. Those with longer years of working experience turn to have more knowledge on how to better manage and care for stillbirth women. Due to proper education during maternal visits and the awareness of stillbirth by the nurses, stillbirths seem not to be so frequent in Bota District Hospital.

Recommendations

The following recommendation can be made from this study:
- Nurses should increase their knowledge on stillbirth by reading more medical books, visits internet and get the necessary information concerning stillbirth for new discovery keeps coming up.
- Hospital authorities should be organizing seminars under the supervision of the nurse in charge every three months or even as soon as an update concerning the medical sector is up.
- Hospital should put every personnel informed on the importance of proper management procedures and it results toward the patients and clients.
- A standardized nursing care plan should be established and pasted at maternity unit for efficient management of women presenting with stillbirth.

References