

# **Examining the Impact of Perinatal Deaths on the Mothers in the Tamale Metropolis, Northern Ghana**

## **Abstract**

*Perinatal loss has serious implications on the lives of the affected women and sometimes on the family. However, not much is known in the empirical literature, especially in the Tamale Metropolitan area. This paper sets out to examine the impact of neonatal deaths on women. The study was conducted in three major hospitals in Tamale and involved 384 women and 10 medical officers. The study employed mainly interviews, questionnaires and a review of secondary data including hospital records. The study found that, apart from the emotional trauma, affected women sometimes suffer stigma and are subjected to traditional rituals in order to 'cleans' them. The women also entertained the fear of getting a miscarriage or suffering from perinatal death in the future, the study recommends counseling and sensitization for pregnant women to avoid future perinatal deaths.*

**Keywords: Perinatal death, mothers, psychosocial, emotional, environmental.**

## **1. Introduction**

In Ghana, marriage and childbearing are very dear to the hearts of not only the couple but also to the families of both the man and the woman. Childbearing is a significant milestone, in the lives of individuals who are expected to procreate to sustain the continuity of their families. Therefore, conception and childbearing are marked with rituals and celebrations in most societies in Ghana. When a woman conceives, usually the couple is prepared for safe delivery and to welcome the new baby into the family. The expectations and the anxiety are even more intense for couples who have waited several years to get a baby. When a misfortune such as miscarriage, stillbirth or perinatal death occurs, it is a misnomer and deals a devastating blow to the family generally. It shatters the hopes of the couples and when it occurs in succession, it could lead to divorce. Perinatal losses are 'monsters' to the couple and the entire family in general. Perinatal mortalities

are deaths such as stillbirth or fetal death, early perinatal death, or death of live newborns before the age of seven completed days that occur in the perinatal period [1].

Perinatal loss causes negative psychological impacts on parents who experienced it [2]. Therefore, health workers should intervene as early as possible. Perinatal deaths can lead to serious negative health outcomes that can affect their mental health and other aspects of their life. As stated by [3] and [4] that parents whose babies die encounter a lot of challenges and struggle to overcome grief and most of the time have a reduced capacity to understand information. They further stated that in poor couples who suffered prenatal death some time faces the challenge of having a prolonged grieving period. They established that close relationship between poverty, education of women and disempowerment of women who have lost babies and vulnerability.

The stigma associated with perinatal death is common in many societies and contributes to social and economic isolation, feelings of shame, and guilt and could worsen the support available to grieving mothers [4]. They further revealed that, in the regions of the world where most deaths occur, maternal grief may be compounded by social stigma, blame and marginalization. High levels of distress are part of the grieving process following the death of a baby and some parents could develop mental health problems [4].

Similarly, [2] revealed that mothers who lost their babies go through social and economic consequences such as isolation from friends, and extended families, isolation from doing business or engaging in economic ventures making them more vulnerable to emotions and economic hardships. Their studies further revealed an increase in the incidence of depressive symptoms, guilt, prolonged grieving and feeling of loss of control among parents after perinatal loss. Sidebottom et al., [5] also found that almost half of all women who experience perinatal death show symptoms of depression, especially in the postnatal period. This is more profound among poor and vulnerable women who have no family support.

Perinatal loss is a difficult experience that may characterize by major emotional and psychosocial problems and could impede the adjustment of the bereavement women. The study further revealed that the feeling of unpreparedness to face the painful reality of the loss and the feeling of the world no longer makes sense as mostly expressed by mothers [6].

Women who are bereaved have a higher frequency of reporting worsening relationships with their husbands than women with live babies. They also proposed that bereaved mothers are also less valued by their marital families than women with live babies and that a substantial among of women with perinatal deaths reported feelings of guilt compared to women with live babies [7].

Most women also reported severe emotional effects resulting from the loss of their babies. Yirgu et al., [7] perinatal mortality can have a major emotional effect on mothers and their families and that perinatal death was an eminent predictor of postnatal depression; they concluded that mothers who lose their babies experience less depression at 16 months postpartum. In the same vein, [8] indicated that the loss of a loved one may cause physical symptoms of grief and morning such as dry mouth and skin caused by dehydration from crying, loss of appetite or overeating, sleeplessness, frequent thoughts about the one who died, extreme tiredness, difficulty in maintaining concentration, forgetfulness, feeling confused and increased sensitivity to loud noise. Hawthome, Youngblut & Brooten [9] indicated that a child's death is associated with stress and emotional problems that can make parents difficult to understand information, their study further revealed that the death of a child is a time of high stress when parents, concentration, hearing and information processing diminished.

Perinatal deaths also have psychosocial effects on mothers. Mothers who experience perinatal loss are many times more likely to have negative social circumstances with degenerating relationships and support from members of the marital family and sometimes with their husbands [8]. They further found that women who felt guilty about the results of the last pregnancy outcome continue to be significantly depressed at six months post-partum. Again it was realized that a small proportion of women with perinatal loss persistently suffered from depression.

Pohlkamp, Kreicbergs and Sveen [10] revealed that some bereaved mothers show symptoms of prolonged psychological distress, while others encounter long term consequences including depression in subsequent pregnancies and prolonged grief reactions and mental disharmony that led to separation and divorce [11].

In northern Ghana, studies on perinatal deaths are sketched, especially empirical studies that focus on the impact of perinatal losses on the mothers or the couple. This study is critical in the context of northern Ghana where polygamy is about 35% and childbearing is the centre of all

marriages. This paper intends to critically examine the impact of perinatal losses. The paper attempts to answer the following question. i) How do perinatal deaths affect women in different age groups? ii) how do women of different educational levels cope with perinatal losses? iii) do residential or settlement patterns have any effect on women who suffer perinatal losses? iv) finally, to what extent does perinatal mortality affect women physically, environmentally, and spiritually?

## **2.0 Methodology**

### **2.1 Study design**

The study applied a mixed-method approach and a cross-sectional descriptive study design. This was done by combining elements of quantitative and qualitative data to provide a better understanding of the subject matter and to achieve the study objectives [12]. Furthermore, little is known about the subject matter, therefore the need for the mixed method approach. The primary data provides the bases of the subject matter while the secondary database provides a supporting role in the procedures. Information was compared during the analysis and discussion of the results.

### **2.2 Study population and sample size**

The sample frame covered all women in the Tamale Metropolis who have lost their pregnancy or babies within five years preceding this study. A sample size of 384 mothers who lost their pregnancies or their babies within five years preceding this study in the Tamale Metropolis was the target population.

### **2.3 Sampling Technique**

The metropolis was divided into three zones: Tamale North, Tamale Central and Tamale South. In each zone, we randomly and purposively selected 128 women who have lost their pregnancies or babies in the five years preceding the study. Thus, 384 women respondents were obtained in total.

Apart from these, purposive sampling was used to select three major health facilities in the Tamale Metropolis. These facilities were; Tamale Teaching Hospital (TTH), Tamale West Hospital, and SDA Hospital. In all, 31 health workers who were willing to participate in the

study were selected as follows; 15 from TTH, nine from West Hospital and seven from SDA. We selected 15 from TTH because it is the biggest referral hospital and receives cases across the five northern regions. The health workers particularly gynecologists and nurses in the Neonatal Intensive Care Units (NICUs) were selected based on their willingness to participate in the study. The health workers were selected because they have direct interaction with the pregnant women and their babies right from conception through ANC, labour, child delivery and postnatal child welfare clinics.

#### **2.4 Data collection techniques**

The data collection tools employed in the study included; Interviews, observation and questionnaires. A structured questionnaire guide was developed and used to obtain information from mothers who have lost their babies within five years. The questionnaires were developed in such a way that there were many open-ended questions that were meant to elicit detailed information from the respondents. All the questionnaires were administered face-to-face since most of the women involved could not read and write. This gave us the opportunity to observe the mode, emotions, and facial expressions in the manner in which they respond to questions pertaining to the loss of their pregnancies or children. Interviews were conducted with the health workers.

#### **2.5 Data analysis and presentation**

Quantitative data were checked for accuracy and entered into a Microsoft Excel program for data cleaning and then exported to a computer software Statistical Package for Social Science (SPSS) version 20.0 where all analysis was done. Descriptive analysis, as well as univariate analysis, were done and findings were presented in percentages and frequencies for all variables in tables and charts while central tendency in the form of mean, median and dispersion in the form of standard deviation were done for a continuous variable age. Cross tabulations were done for categorical data, this allowed the researcher to understand the correlation between different variables and how correlations change from one variable grouping to another as well as show the pattern and trends of variables.

The qualitative data was analyzed manually based on the study objectives. The analysis was interested in looking at how individual research participants responded to each question within

the schedule. Interviews were recorded and transcribed verbatim. Transcriptions were carefully read and double checked for accuracy. Manual coding of the data was done systematically and data with the same code was collated.

### **3.0 Results and Discussions**

#### **3.1 The Effects of Perinatal Deaths on the women**

This section focuses on the effects of perinatal deaths on women with specific reference to their biography; age, education and occupation. The idea was to determine the differential effects of perinatal deaths on women.

##### ***3.2 Mothers' Age and Effects of Perinatal Deaths***

The study found that the age of the women has effects on perinatal deaths. Women of different age groups suffered differently from the effects of perinatal mortality. The majority, (73.4%) of the respondents were within the age group of 17-30 and who admitted that they could not cope with the loss of their pregnancy or the death of their children because of persistent thoughts of the loss. Nearly a quarter (24.5%) said they found it difficult to cope due to the stigma of being responsible for the death of their babies, while 1.2% said they felt that they have lost their womanhood. The study found that 69.1% of the women between the ages of 17 to 30 years said they could not concentrate because of the loss experienced, while 30.9% were not able to cope due to fear of the future.

##### **3.2.1 Mothers' educational level and effects of Perinatal Deaths**

The aim was to see whether education has any effect on women's ability to cope with perinatal mortality. The results as depicted in Table 1 indicate that 71.8% of the women without formal education said they could not cope with the loss of their pregnancies/children because of persistent thoughts, 27.4% said they could not cope due to the stigma of being responsible for the death of their babies. With regard to their ability to concentrate, the study found that, for those without formal education, 64.5% and 35.5% indicated that they found it difficult to concentrate due to sadness and fear for the future respectively.

Concerning mothers with non-formal education, the results show that 75.0% of them said they could not cope because of persistent thoughts of the deaths of their babies, 25.0% said could not cope due to the stigma, while 25.0% said they were not able to cope because they felt they lost their womanhood. Similarly, 75% said they lost concentration, while 25.0% said they were deeply sad.

The results further show that mothers with a Senior High School level of education show different coping levels. The majority (79.9%) of them said they could not cope because of persistent thoughts of their dead babies while 23.1% could not cope due to the stigma of being responsible for the death of their babies. Again on their concentration 75.0% and 25.0% of mothers who were at the SHS level found it difficult to concentrate because of sadness and fear for the future respectively.

Again, 76.9% of mothers with vocational school education said they found it difficult to cope because of persistent thoughts of the dead babies, 23.1% said they could not cope due to stigma, while 64.3% and 35.7% respectively said they were not able to concentrate due to sadness and fear for the future.

Results further indicate that mothers with a tertiary level of education also suffer differently from the effects of perinatal deaths. As indicated on Table 1, about 76.3% of the respondents claimed they could not cope because of persistent thoughts of the dead babies, 18.3% could not cope due to the stigma of being responsible for the deaths of their babies while 5.3% of the mothers could not cope as a result of the feeling of losing womanhood. Also among mothers with a tertiary level of education, 54.1% and 45.9% found it difficult to concentrate due to sadness and fear for the future respectively.

**Table 1: Mothers’ educational level and effects of Perinatal Deaths on mothers**

Variable	Difficult coping			Difficult concentration	
	Worries	Stigmatization	Lost of womanhood	Sadness	Fear for the future

Edu. Level	Total	%	%	%	Total	%	%	%
No-formal edu.	252	71.8	27.4	0.8	248	64.5	35.5	35.5
Non- formal /Arabic Edu.	15	75.0	25.0	0	8	75.0	25.0	25.0
Basic school	46	87.0	10.9	2.1	153	78.7	21.3	21.3
Secondary	20	76.9	23.1	0	12	75.0	25.0	23.0
Vocational and college	13	76.9	23.1	0	14	64.3	35.7	35.7
Tertiary	38	76.3	18.4	5.3	37	54.1	45.9	45.9

### 3.3 Mothers' Occupation and effects of Neonatal Deaths on Mothers

The study further sort to determine the effects of perinatal deaths on women engaged in various occupations. The women were not selected based on their occupation but rather based on the fact that they lost their pregnancies or babies. Their occupation was a coincidence. Thus, we discovered that women were engaged in petty trading, farming, nursing and teaching. The results indicate that 68.0% of mothers who were petty traders said they found it very difficult to cope because of persistent thoughts of the death of their babies or loss of their pregnancies, while 30.4% of them found it difficult to cope due to the stigma of being responsible. As many as 91.6% of the women who were petty trade mothers said they could not concentrate because of sadness while 8.4% said they found it difficult to concentrate because of fear of the future occurrence.

As many as 56.5% of the mothers who were farmers said they could not cope because of persistent thoughts of their dead babies while 45.5% were afraid of the stigma. With regards to nurses, 57.1%, 28.6% and 14.3% of them could not cope due to persistent thoughts of the dead babies, the stigma of being responsible for their babies' death and the feeling of losing womanhood respectively. Furthermore, 71.4% also indicated that they could not concentrate because of sadness while 28.6% found it difficult to concentrate as a result of fear of the future.

Results further revealed that 84.6 % and 15.4% of mothers who were teachers could not cope due to persistent thoughts of the dead babies and the stigma of being responsible for their babies'

death respectively. Lastly among mothers who were teachers, 61.5% indicated they lost concentration, while 38.5% found it difficult to concentrate as a result of fear of the future.

The study also found that mothers' employment was not affected after the death of their babies even though they had problems coping and concentrating. This contradicts [13], that social factors such as unemployment, and late reporting to antenatal after 13 weeks were associated with increased risk of stillbirth and perinatal death.

### **3.4 Physical effects of Perinatal Deaths on mothers**

The study further observed that perinatal deaths have what we called physical effects on women. Perhaps, because of persistent worries and pondering over the death of their children or loss of pregnancy, most (99.2%) women found it difficult to sleep after the death of their babies. This was particularly common among women who had lost their previous pregnancy or child and those who had waited for a long time before getting a baby or conception. Only 0.8% indicated the death of their babies or pregnancy did not disturb their sleep. Out of the 99.2% who indicated they were not able to sleep, 49.9% of them attributed that to constant thought of labour pain and the burden of carrying a pregnancy for a long time, 44.6% could not sleep after the death of their babies due to operation and psychological trauma. The rest of the 4.7% of respondents cited delivery and psychological trauma as reasons for their inability to sleep. Similarly, the results show that mothers who lost their babies or pregnancies within six months indicated that they found it difficult to sleep because of the delivery process, the stress of carrying a pregnancy for nine months and psychological pain upon hearing about the death of their babies. In one of our focus group discussions, Madam shared her experiences as follows:

*“I could not sleep because it is not easy when I lie down and think about the delivery process and sometimes you just imagine if the child was to be alive, I would have been breastfeeding.”*

The study further established that 75.8% of respondents admitted that fatigue was a problem to them due to tiredness resulting from a difficult pregnancy or labour and sleepless nights during pregnancy or labour, 19.3 % stated that hospital protocol of making them sleep in the same

wards with mothers with live babies was the reason they experienced fatigue, 19 (4.9%) mothers experienced fatigue due to tiredness resulting from the operation and sleepless nights due to the delivery process. On the part of fatigue, the mothers who lost their babies within six months again evinced that, the majority of them, nine respondents said they experienced fatigue after the death of their babies due to loneliness experienced during the first few days of their babies' death, pains due to operation and the trauma of being admitted together with mothers whose babies were alive. Only one of the mothers claimed she did not experience fatigue after the death of her baby despite all the pain experienced.

On the part of the loss of appetite, 55.6% of the respondents said they experienced appetite problems due to sadness and fatigue, 41.0% stated they lost appetite due to pains after delivery while 12 (3.1%) indicated their poor appetite was due to psychological trauma resulting from the death of their babies. The details are shown on Table 2.

**Table 2: Physical Effects of Perinatal Deaths on mothers**

<b>Sleep disturbance</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	381	99.2
No	3	0.8
Total	384	100.0
<b>Reason for not being able to sleep</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Thought of the delivery process	168	44.6
Operation and psychological trauma	188	49.9
Delivery and psychological trauma	21	5.6
<b>Fatigue experienced</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Operation and sleepless night	19	41.0
Difficult labour and sleepless night	291	75.8
Hospital protocol	74	19.3
Total	384	100.0
<b>Reason for loss of appetite</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Pains after delivery	157	41.0
Sadness and fatigue	213	55.6
Psychological trauma	12	3.1

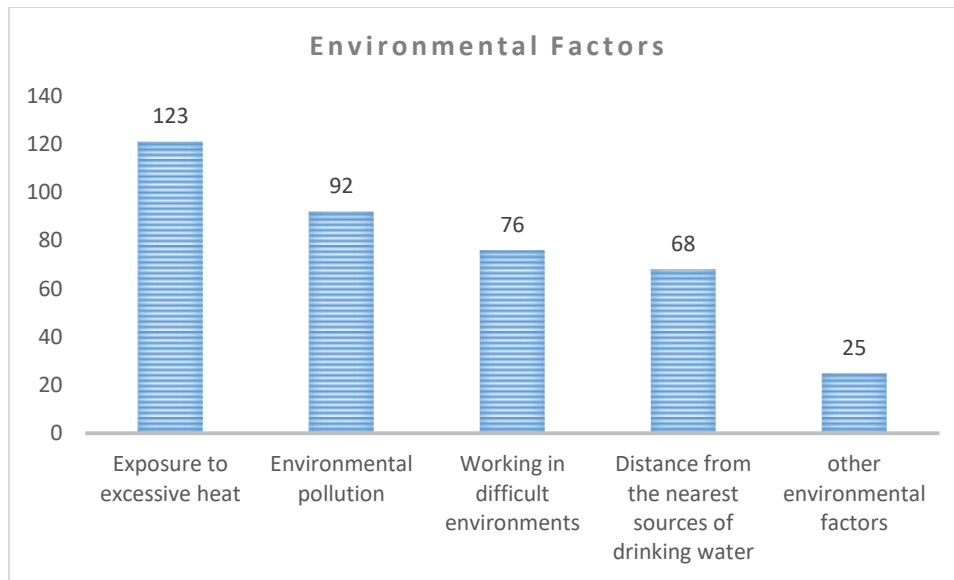
The research findings again showed that the majority of respondents (72.0%) found it difficult to cope because of persistent remembering of the death of their babies. This is in line with study

findings by [14] study revealed that partners who lost their babies experience increased difficulties in supporting each other due to differences in gender and coping. Additionally, the majority of the respondents (62.8%) from the study stated they were not able to concentrate or remember things due to sadness which affected their employment leading to poverty and hardship during the grieving process. This finding is similar to study findings in Tanzania in 2013 which indicated that parents who lost their babies experienced hardship and difficult times during the grieving process and they feel that people at their homes, communities, workplaces and hospitals should acknowledge this and be considerate, sensitive and listen to them and offer the necessary emotional support [14].

The study found that the majority of mothers had concerns for pregnant women for successful delivery and good health and were uncertain about the future as to when they will pick seed again; this indicates that perinatal death can have a psychological impact on affected mothers and relations such as family members and friends. This can make affected mothers stress-up and anxious and can prevent subsequence pregnancies. This is consistent with [4] who elicited that maternal distress from the loss of a baby can exert inter-generational consequences, affecting the family constellation for surviving children as well as carrying over into subsequent pregnancies.

### **3.5 Environmental Effects of Perinatal Deaths on mothers**

The studies further sought to understand whether the environment also has effects on the mothers who lost their babies or pregnancies. In this domain, information on the surroundings and conditions in which the respondents lived was obtained. The environmental factors considered in this study included: i). respondents' exposure to excessive heat during pregnancy, ii). environmental pollution, iii). working in difficult environments during pregnancy, iv). distance from the nearest sources of drinking water, and v). other environmental factors. The details are depicted in Figure 1.



**Figure 1: Environmental Effects of Perinatal Deaths on mothers**

The study found that women who were exposed to excessive heat during their pregnancies suffered from perinatal death. Out of the 384 respondents, 123 indicated that they were exposed to excessive heat during and after delivery and that might affect their health and cause the death of their babies or the loss of their pregnancies. They were those mainly working in restaurants, those engaged in preparing food for sales such as in ‘chop bars’, those frying fish, yam, plantain, and other related activities. The next category of women who suffered from perinatal deaths were those who were exposed to environmental pollution. These included air or smoke, noise and water pollution. Those women who reside close to factories, refuge dams, and lorry stations, were frequently exposed to air and noise pollution, as indicated by 92 out of 384 respondents. The third environmental factor was working in difficult environments during pregnancy as indicated by 76 out of 384 respondents. Examples of such difficult environments are those women working in stone quarries, manual farming, and processing and extraction of shea butter. The fourth environmental factor was the distance from the nearest sources of drinking water as mentioned by 68 out of 384 respondents. Such women were those frequently involved in walking long distances to the nearest sources of water to fetch for their domestic uses. The stress of trekking long distances to fetch and carry water home could contribute to their situation. The last category was those who were exposed to other environmental factors, such as poor housing facilities, and exposure to mosquitoes.

Interviews with doctors and nurses at the maternity wards and Neonatal Intensive Care units (NICUs) at the health facilities in Tamale revealed that most of these categories of women often have miscarriages, some delivered prematurely, while others often deliver underweight with childhood pneumonia.

### **3.6 Spiritual Effects of Perinatal Deaths on Mothers**

The paper found that perinatal deaths have some spiritual effects on the women. In Africa where most people tend to be religious, it was not surprising that most of the women related the loss of their pregnancies or children to spiritual forces. The followings were found:

#### *Draws Closer to God*

Loss of pregnancy or child is a trying moment, not only for the couple but also to the entire family. It is even more devastating for the couple who tries to get a child several years after marriage. Childlessness has a lot of implications in northern Ghana. It creates tension in the marriage, petty squabbles, infidelity, devoice or polygamy. As a result, weddings are often laced with prayers for prosperity and childbearing as an anchor of the marriage and the ‘mother’ of all blessings. In view of the above mentioned, marriage and childbearing have a strong connection with spirituality in northern Ghana.

The study found that almost 62% of the respondents who suffered from perinatal death indicated that they drew closer to God. They explained further that they kept on praying to God for His favor, protection and successful childbirth in the future. As one of the women put it:

*“It is God who gives and he is the one who takes away life. He knows what is best and good for us. The death of my child is the will of God. I and my husband keep on praying and fasting for a child”.*

The above statement of the lady indicates how the perinatal death drew them closer to God. For such category of women, it only when they have faith in God that they can have peace and tranquility. They claimed that it is only God who knows the child who will be beneficial to the parents and society. For them, the loss of their pregnancies/children was part of their destiny.

#### *Reduction in faith*

Contrary to those who rather drew closer to God as a result of loss of their pregnancies/children, this category of respondents expressed disappointment in the loss. As shown on Figure 2, 18.48% of the respondents felt the loss of their pregnancies/children was not entirely the work of God. The majority of these people were those who lost their pregnancies/children in two or more succession or waited for long before getting pregnant. As stated by one of the respondents' ladies:

“I have not wronged God to deserve this. This is the third time I lost my pregnancy in succession. Sometimes, people can also make life difficult for their fellow human beings. I am beginning to think that what is happening to me is not the work of God”.

The above statement shows that perinatal mortality, especially when it occurs in succession could reduce the faith of some people. Attributing the loss of their pregnancies/children to other forces than God is an indication of a lack of faith in God.

#### *Resort to superstition*

The third category of women was those who resorted to all manner of superstition to either overcome or avert the loss of their pregnancies/children. The study reveals that 13.28% of the respondents said they resorted to spiritual measures to avert the trend of losing their children. They frequently mentioned that they discovered their problem through divination and advice by witch doctors. They added that they often try to avert this trend by resorting to making ritual sacrifices, giving alms to beggars, children, poor people, and also by avoiding eating certain foods as prescribed by witch doctors, and mallams or avoiding interacting with some people believed to be the cause of their predicament.

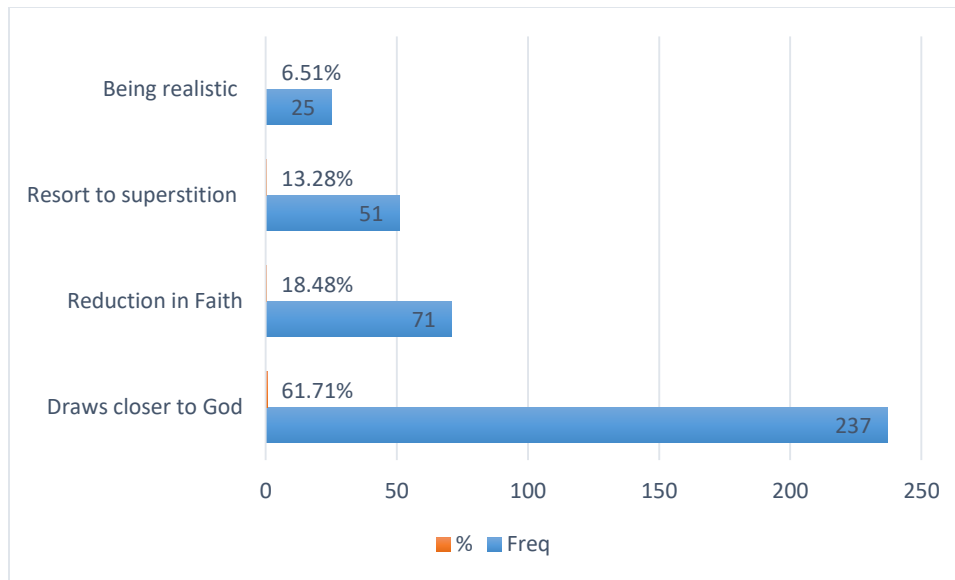
*“I would not sit down and allow wicked people to destroy my life. This is the third time I lost my pregnancy. It is the work of my enemies. I got to know this through divination. I am also countering it through spiritual means such as sacrifices, almsgiving, and by avoiding some people. I plan to stay away from this community during my next pregnancy to avoid another miscarriage”.*

### *The realists*

The last category of respondents were those whom we term as the realist. They were those who attributed the loss of their pregnancies/children to natural causes rather than supernatural. They constituted only 6.51%. They mentioned that their pregnancies were characterized by heavy blood flow from the initial stages, terrible hyperemesis and malaria. In the last stages of their pregnancies, they had anemia, pneumonia, and high blood pressure. One of the women captures her experiences as follows:

*“My pregnancy was characterized by hyperemesis from the beginning. I was always feeling nausea and vomiting. I could not eat anything. The doctors told me I had hyperemesis. That was the first time I heard this medical term. The doctor prescribed some medicine called metoclopramide for me. I was always admitted to the hospital because I felt dizzy, weak, anemic and lost of appetite. I, later on, developed BP. It was so severe that I was constantly admitted for medical attention. Finally, I had a miscarriage. I knew my pregnancy was not going to be easy. It was a matter of life or death”.*

The above statement indicates that the respondent assessed her condition realistically and did not attribute the loss of her pregnancy to supernatural forces. Such people are prepared to medically deal with the situation in their pregnancy rather than resorting to superstition.



**Figure 2: Spiritual Effects of Perinatal Deaths on Mothers**

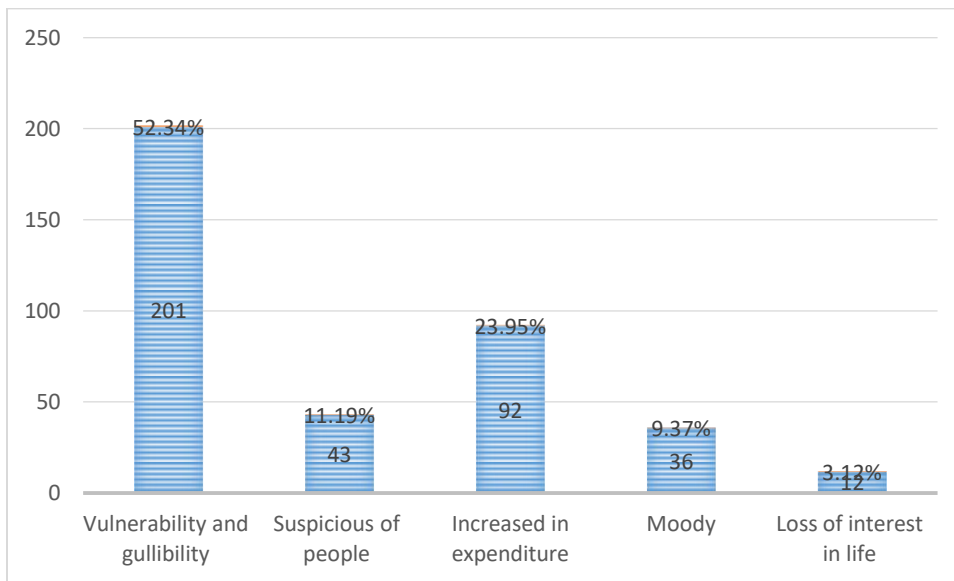
### 3.7 Psychosocial effects

The study also found that women who suffered perinatal mortalities exhibited some psychosocial symptoms. It is also found that social outcomes between these women and their families tend to be addressed by consolations, prayers and best wishes next time. However, understanding the degree of family functioning, particularly its concordance and correlates between victims of perinatal mortalities and the care and role of their immediate and extended family members, can serve as a platform for achieving comprehensive care for women. The psychosocial effects the study found included; vulnerability and gullibility, suspicion, an increase in expenditure to find solutions to their problems, moodiness and hopelessness.

The results further indicate that the majority of the mothers had hope for the future because they believed and trusted in God that they will get children in the future. Additionally, perinatal deaths among women revealed that all the categories of women experienced psychological problems with coping and concentration as a result of persistent thoughts of their babies' death and the sadness experienced. This is consistent with [4] findings that parents who lost their babies have a diminished capacity to absorb and retain information. Similarly, [9] in their study

attested that child's death is associated with stress and emotional problems that can make parents difficult to understand information, which further revealed that the death of a child is a time of high stress when parents, concentration, hearing and information processing diminished. Figure 3 presents a summary of the results.

Fig 3: Bar graph showing Emotional aspect ratio



#### *Vulnerability and gullibility*

The study found that, more than half of the respondents (52.34%) who loss of their pregnancies/children were vulnerable and gullible. They were easily persuaded to believe and accept anything they could do to have successful childbirth. They indicated that, they tried many things they thought could give them successful delivery. Some of them went to mallams, spiritualists, diviners, gynecologists and herbalists.

I was married for over five years before I conceived. We spent a lot of money on medicine from mallams, herbalists, and many other sources. My husband claimed it was not his fault because he was fertile. His parents started pressurising him to marry a second wife or else he will remain a childless man. There was tension in my marriage at this point because my husband started

dating ladies. He eventually married a second wife and that lady got pregnant and delivered. I loved my husband and did not want to divorce. The only option left for me to stay in my matrimonial home was to get a child. At this point, I became vulnerable and gullible to anything they told me could help me. I visited prayer camps and went to mallams and herbalists. Eventually, I got pregnant and delivered and the child died after two weeks.”

The above experiences show how vulnerable and gullible the women were. Some of the women indicated that, at some point, they went on their own to look for means to either get conceived or prevent their children from dying because their husbands were fed up with the efforts and money spent on this venture. Their vulnerability and gullibility were compounded by their fear that their husbands could marry second women or divorce them.

Muslims are predominant in the Tamale Metropolis where the study was conducted and since Muslims can marry up to four women, a woman without a child cannot guarantee the stability of her marriage. Another factor that compounded their vulnerability and gullibility was the fact that the majority of them had little or no formal education. Out of the 384 respondents, only 38 (9.89%) had tertiary education. The rest, 13 (3.38%), 20(5.20%), 46 (11.97%), 15 (3.90%) and 252 (65.62%) had vocational education, Senior High School education, Basic education, None formal or Arabic education, and No formal education respectively. Their low level of education also makes them financially weak since they lack the necessary skills to be engaged in the formal sector and get a regular income.

#### *Suspicious of people*

For those respondents who felt the loss of their pregnancies/children was not natural were suspicious of people they thought were responsible for their predicament. Generally, 11.19% of the respondents harbored some kind of suspicion or resentment against doctors or nurses, their neighbors or relatives. More than half of the respondents in this category 27 out of 43 (62.79%) suspected doctors and other health workers and their families of the loss of their pregnancies/children. For those who suspected their families, they claimed their families did not rush them to the hospital early enough for medical attention when they were in labour. Most of

them struggled in labour for many days. As indicated by [15] for sociocultural reasons, women are expected to deliver at home as proof of their fidelity and loyalty to their husbands and to showcase that the pregnancy is really that of their husbands. Under such circumstances, women in labour are not rash to the hospital but left at home to deliver. For those who suspected the doctors, they claimed they were neglected by the health workers after they were sent to the hospital for delivery.

#### *Increased in expenditure*

Women who suffered perinatal deaths also reported spending a lot of resources, energy and time. Nealy 24% of the respondents claimed that they spent resources on traveling far and near to seek medical attention, consult herbalists, diviners, and mallams, and also to buy consult doctors to find solutions to their problems.

#### *Moodiness*

The respondents also reported having spent countless hours reflecting on the loss or their pregnancy or children. As a result, they become moody as indicated by 9.37% of the respondents. Some of them reported taking to alcohol and drugs to enable them to overcome or forget about the losses. However, the findings further explicated that majority of mothers who lost their babies were never isolated and for that matter not depressed, this contradicts a study by [ 8] indicated that mothers who lost their babies go through social consequences such as isolation from friends and extended families.

#### *Loss of interest in life*

Loss of interest in life or feeling of hopelessness and despair also characterize the feeling of the women who suffered perinatal mortality. This acute feeling was experienced by 3.12% of the respondents. The study observed that this category of respondents was those who lose their pregnancies or children in two or three successions. These findings are consistent with a study finding by [8] who established that people who lost their loved ones such as children experience physical symptoms such as stomach pain, loss of appetite, intestinal upsets, sleep disorder,

emotional and psychological problems such as anxiety attacks, chronic fatigue, depression and thought of suicide.

#### **4. Conclusion and Recommendation**

Perinatal deaths have debilitating consequences on women. It has serious physical, environmental, spiritual, and psychosocial effects on mothers and can lead to subsequent mental disorders if not addressed properly. Therefore, mothers who lost their babies should be given psychosocial support such as counseling, a show of love, support and encouragement. Families, especially husbands need to encourage and provide emotional and financial support to the women. Families do away with the old sociocultural beliefs of detaining women in labour to deliver at the husbands' houses to prove their fidelity. Doctors should take proactive steps to attend to women in labour immediately.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

#### **Consent**

As per international standard or university standard, Participants' written consent has been collected and preserved by the author(s).

#### **Ethical Approval:**

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

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