# Family Relationship and Gender as Correlates of Post-Traumatic Growth among Parents of Neonatal Death

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## **Abstract**

The study investigated the family relation and gender as correlates of post traumatic growth among 40 (15 males and 25 females) parents of neonatal death. Participants were drawn from health facility in Eastern Nigerian. Cross-sectional design was used. Two instruments were used: Index of family relations Scale and Posttraumatic Growth Inventory. Multiple regression result shows that appropriate family relationship is a significant factor in posttraumatic growth among parents of neonatal death. The result indicated that gender is a significant predictor in posttraumatic growth among parents of neonatal death. Discussions and the implications were emphasized and suggestions were made for further studies.

**Keywords:** Family relationship; Post-traumatic growth; Gender

# 1. Introduction

Pregnancy and child birth generally seems to be a time of joy for parents and families, but the death that follows the birth of a baby brings about a devastating experience to parents and other family members. During child death, the personal identity of each parent, which was tied to their child was changed as well as their behaviour and lifestyle. Parents may feel they lost a part of their future and/or their posterity, may tend to feel a great sense of remorse and guilt over not protecting their child from death. When the death of a child occurs, parents tend to go into grief and this has great impact on their psycho-social well-being. Parental reactions and intensity of feelings may differ. Typical reactions include the following: Crying, loneliness, feeling of isolation, a need to talk about the death and

the details of what happened [1]. Others include feelings of hopelessness, helplessness, depression, anger, guilt, blame, Loss of appetite, overeating, sleeplessness, irritability, Inability to concentrate, comprehend, or remember. Loss of goals and aims in life, a sense of despair about the future, aching arms and frequent sighing. McCarthy posits that women may feel disentranced from the social groups to which they belong prior to the baby's death. Also, neonatal death has an impact on marital closeness either by bringing parents so close or driven them apart by their loss.

Across the board, Nigeria rates second after India with the greatest figure in neonatal deaths, with greatest report figure in Africa (Inter-Agency Group for Child Mortality Estimation [2]. Every year in Nigeria, Millions of neonates dies, which indicates that about 700 neonates dies every day in Nigeria [2]. Neonatal death remains alarming in Nigeria, regardless of notable drop in other parts of the developing world like Sub Sahara African countries like Ghana and Uganda [3]. United Nation (UN) statistics on childhood death indicated that for the past twenty years that Nigeria neonatal death rate reduced by 20.4%, which is 49 deaths per 1000 live births in 1990 to 39 deaths in 2011. Similarly, statistics from the Nigeria Demographic and Health Survey (NDHS) further shows a significant reduction of 4.8% (42 death /1000 lives in 1990 to forty (40) in 2008. National Population commission [4] corroborated with the 39 and 40 neonatal deaths accounted for by the UN and NDHS respectively. These accounts may be translated roughly to one in every 25 neonates born in Nigeria died in their first month of life.

Precipitating, and predisposing factors of neonatal death have been identified. Bonanno [1] pointed out babies born with a serious birth defect, born too small and too early (preterm birth; birth before 37 weeks gestation), victims of Sudden Infant Death Syndrome (SIDS), affected by maternal complications of pregnancy, victims of injuries (like suffocation, certain abnormalities of the uterus or cervix, multiples (twins, triplets) complications with the placenta, umbilical cord or membranes, lack of oxygen before or during birth. Medical conditions were also pointed out as factors which include diabetes, clotting disorders, being underweight or obese during pregnancy, high blood pressure, maternal infections and cigarette smoking, alcohol intake, use of recreational substances not prescribe for use in pregnancy. Neonatal death, according to World Health Organization is the death of a live newborn during the first 28 days. It could be defined as live births that result in death within 28 days. Infant deaths are further subdivided as early neonatal (less than 7 days), late neonatal (7-27 days), neonatal (less than 28 days).

Studies have linked the death to the development of posttraumatic growth. Lohan et al. found that, compared to other parents, bereaved parents experience more emotional distress and more hostility experienced increased psychiatric hospital visits, an increased rate of cancers, and increased mortality rate when compared with non-bereaved parents. Researches have indicated that bereavement may cause significant distress on marital relationship that exist among parents and has been related to increased rates of divorce [5]. However, other studies have indicated that marital discord could be likely to occur to bereaved parents than other parents [6]. Furthermore, a number of parents have indicated that passing through grief together as a couple has increased their marital bond [7].

Post-Traumatic Growth (PTG) is a concept that defines the positive changes occurring in an individual after experiencing a high level of stress in their life. Posttraumatic Growth indicates that the individual has passed through changes that are seen as vital and has gone beyond what was the previous status quo. PTG consists of five factors, these factors included (i). Relating to other individuals (having higher intimacy and compassion for others), (ii). New possibilities (new roles and new people), (iii). Personal strength (feeling personally stronger), (iv). Spiritual change (being more connected spiritually) and (v) A Deeper appreciation of life.

Some factors have been put forward to be related to PTG, Personality characteristics and one's state of mind, like extraversion, optimism, having a positive affect and being open to experience are been positively related with PTG. These traits may play a cardinal role on how one manages the interruption of one's life goals and plans through a personal crisis or a trauma. Other factors such as having a sense of meaning and purpose are predictors of Posttraumatic Growth. Social support, activities like being involved in work, having new and stable relationships, having a shift toward spiritual values, and less severe disability is also related to PTG [8].

Family relationship is one of the variables of interest the researcher considered of great importance in this study. As a concept, it is how the couple interacts with each other and other members of their family. Literature has indicated neonatal death to affect family relationships [9]. Neonatal death has been indicated as an endangering aspect for relationship failure [10, 11]. Gold [12] found that the stillbirth cause rise in chances of parental separation by 40%. In addition, Shreffler indicated that women who had passed through stillbirth had a noticeable rise in chances of post-loss divorce). Another study shows that couples with past stillbirth, the chances of their relationship breakdown was four times higher when compared with couples with no history of stillbirth [13]. Sevetina et al. [14] in their study on family relationship and post traumatic growth in breast cancer found that family relation predicted unique proportion of variance on PTG. Also, their result indicated that coping strategies were found to predict PTG.

Another variable of interest to consider in this study is Gender. Tolin et al. noted that gender plays a vital role in post-traumatic growth. Gender as a variable has been studied extensively within the field of trauma and its health related issues. In a meta-analysis that investigated on gender disparities in post-traumatic stress disorder, Tolin et al. found that men are more probable to have pass through traumatic events while women that had a feel of Potentially Traumatic Events (PTE) are more probable to meet criteria for PTSD. In some incidents, like non sexual assault, women are more probable to manifest PTSD. Women reported higher symptom manifestation of PTSD. For certain types of events, like nonsexual assault, women were more likely to develop PTSD, and also report greater severity of these symptoms. In cases like adult sexual assaults or child sexual abuse, there were no significant gender differences in PTSD. These findings indicate that the magnitude of gender differences differs in PTG and it is dependent on events that are traumatic. In addition, women are continually indicated to meet up with the yardstick for PTSD when compared with men who experienced the same PTE. Findings of Tolin et al. posit that female's rise in danger for PTSD is not due to higher increase in exposure to some forms of trauma but also to some other indicators like disparities that exist in cognitive or affective processing of traumatic events. Olff et al. posit that gender differences in PTSD are a result of differences not only in cognitive appraisal, but also in acute reactions to

trauma. Olff et al. postulate from the extant literature that women are more likely than men to perceive a situation as threatening, rate events as significantly more stressful, and endorse more loss of personal control. Considering these, they asserted that increased prevalence of PTSD in women are invariable to increased view of threat and control loss.

Furthermore, women are probable to undergo severe psychological and biological response to trauma which includes higher levels of fear, withdrawal, ruminating thoughts, panic and anxiety. Helgeson et al. meta-analysis investigated gender and other variables that are likely related to post-traumatic growth. The findings indicated a slight significant gender difference on these variables, indicating that women reported slightly more posttraumatic growth indices than men.

Again, Frazier et al. and Ransom et al. meta-analysis study on assessing the dependability of results supporting gender disparities in self-reported PTG and identifiable variables that moderates this relationship, the finding revealed that other positive mental outcomes like lower rates of depression and positive well-being are related to PTG. In addition, survival after cancer and recovery from chemotherapy were also related to PTG. Studies further linked gender to be a factor in predicting growth after trauma. Although not all studies have reported a relationship between these variables, many studies have shown that females, as compared to males, are more likely to report benefit and growth following a traumatic event, and meta-analysis supports this conclusion.

## 1.1 Hypotheses

The following hypotheses were tested in this work

Family relationship will not significantly predict post traumatic growth among parents of neonatal death Gender will not significantly predict post traumatic growth among parents of neonatal death.

# 2. Method

## 2.1 Participants

Participants were forty parents (80% females and 20% females; age 21-45 years,  $M_{age} = 33.6$  years) drawn from a University Medical Centre in eastern Nigeria, using a purposive sampling technique. Questionnaires were used to collect data.

## 2.2 Instruments

**2.2.1 Posttraumatic growth inventory (PTGI):** This scale was developed by Tedeschi et al. It measures the degree to which numerous positive changes in attitude and life view are believed by the participant to be the result of some traumatic event. It consist of 21 items and five subscales that measures new possibilities, relating to others, personal strength, spiritual change and appreciation of life. In PTGI, 6-point likert type scale ranging from 0 (I did not experience this change as a result of trauma) to 5 (I experienced this change to a very great extend) is used. The reliabilities of these subscales are as follows: new possibilities (Cronbach alpha=0.84), relating to others (Cronbach

alpha=0.85), Personal strength (Cronbach alpha=0.07), spiritual change (Cronbach's alpha=0.85), and appreciation of life (Cronbach alpha=0.67). The total PTGI score has a reliability of 0.09.

**2.2.2 Index of family relations:** This scale was developed by Hudson and adapted in Nigeria by Omouluabi. The Nigeria adapted version by Omouluabi was used for this study. It measures the problems of interpersonal relationship in the family. It consist of 25 items with a 5-point likert type scale ranging from 1 (Rarely or none of the time to 5 (Most or all of the time). Some items in the instrument include "I really enjoy my family", "I think my family is terrific". In reliability of this scale, Hudson reported Cronbach alpha of 0.95.

## 2.3 Procedure

In the hospital, the researchers sought and obtained permission from the ethical board of the hospital. Hospital record was used to identify parents with neonatal death, their home address and telephone numbers. The researchers contacted them through their home address and telephone number. Parents who gave their informed consent were recruited for the study and responded to the questionnaires. Non-literate participants were assisted by the researchers. It took approximately 10 mins to answer the questionnaire.

## 2.4 Design and statistics

The design for the study is a cross sectional design. Multiple Regression analysis is the statistics used to analyze the data.

## 3. Result

Variables	Mean	SD	1	2	3	4	5
PTG	56.95	12.9	1	-	-	-	-
Approp. Fam. Relat.	26.80	2.42	0.060*	1	-	-	-
Poor Fam. Relat.	24.15	3.60	-0.431**	0.072	1	-	-
Males	1.62	0.490	0.218*	0.214	0.210**	1	-
Females	2.73	3.60	-0.006**	0.358	0.315	0.224	1

<sup>\*\*</sup>P<0.01; \*P<0.001

**Table 1:** Descriptive statistics and correlation matrix for appropriate/poor family relationship and gender on Posttraumatic Growth.

Table 1 indicated that appropriate family relationship is positively related to posttraumatic growth (r=0.060, p<0.01) and poor family relationship is negatively related to post traumatic growth (r=-0.431, p<0.001). This indicated that the more appropriate family relationship of neonatal parents are the more posttraumatic growth they may experience and more poor family relationship they have the less posttraumatic growth they may experience. The result further shows that males have a positive relationship with posttraumatic growth (r=0.218, p<0.01) and a negative

relationship with females (r=-0.006, p<0.01). This indicates that as participants tend to be a male more posttraumatic growth will be experienced but female parents reported to experience lesser posttraumatic growth.

Model	В	Std. Error	Beta (β)	t
Approp. Fam. Relat.	1.629	0.766	0.304	2.127*
Poor Fam. Relat.	2.34	0.542	2.20	1.31
Males	10.40	2.630	3.221	2.01
Females	11.67	3.785	0.441	3.08**

Note \*=P<0.001; \*\*=P<0.01

**Table 2:** Standardized coefficients of the multiple regression analysis of Appropriate/ poor family relationship and gender on Posttraumatic Growth.

Table 2 indicated that appropriate family relationship was a significant predictor of post traumatic growth among parents of neonatal death ( $\beta$ =0.30, P<0.001). The result of the present study also portrayed females to be a significant predictor of post traumatic growth among parents of neonatal death ( $\beta$ =0.44, P<0.01).

## 4. Discussion

The study showed in table 1 that appropriate family relationship has a positive relationship with post traumatic growth, while poor family relationship has a negative relationship with post traumatic growth. Table 1 indicated gender also to be significantly related to posttraumatic growth with females, indicating a negative relationship with post traumatic growth. The findings of this study failed to support the first hypothesis which states that family relationship will not significantly predict post traumatic growth among parents of neonatal death. It indicates that family relationship (appropriate family relationship and poor family relationship) had some relationship with posttraumatic growth. The result of the study indicates that the more neonatal parents experience an appropriate family relationship, the more they will experience post traumatic growth (Table 1). On the other hand, the more poor family relationship parents of neonatal death experience the less posttraumatic growth they may have (Table 1). This study is in line with the findings of Seventina et al. that found family relation to be significant predictors of PTG among breast cancer patients. Furthermore, the result shows that gender significantly predicted posttraumatic growth among parents of neonatal death with females, indicating a negative relationship with post traumatic growth. The results failed to support the hypothesis which states that gender (male and female) will not be a significant predictor of post traumatic growth among parents of neonatal death. The result of this study indicates that as neonatal parents tend to be female lesser post traumatic growth they will experience. This finding concurred with previous studies who postulates that women are more likely than men to perceive a situation as threatening, rate events as significantly more stressful, and endorse more loss of personal control than men. Also, the study supports findings on a gender difference in self-reported PTG to relate with other positive mental health outcomes. Studies on gender to be a significant predictor of growth following trauma.

# **5. Implications of Findings**

The findings have both theoretical and practical implications. Firstly, in theoretical terms, the findings relating to family relationship and post traumatic growth indicate that when individuals respond to situations, there are factors that may act as a cushion to the effects of the situation experienced and how an individual relate with other members of the family is among these factors. Thus, to have a balanced psychological functioning and a balanced posttraumatic growth assessment of the family relationship of parents may be critical in understanding strategies that can help in improving their posttraumatic growth and their psychological well-being. Those found to be emotionally unstable can be helped by the clinicians through social skill training. Social skill training is a behaviour therapy procedure for teaching socially inadequate individuals how to express their feelings and improve their relationship with others [15].

Secondly, the findings relating to gender and posttraumatic growth indicate that females experiences posttraumatic growth less. Thus, clinicians and other mental health professionals should endeavor to conduct counseling and/or psychological therapy for parents of neonatal death.

## **Conflict of Interest**

The authors do not have any conflict of interest.

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