Psychological profile of mothers who lost children due to violence

Clarissa Fernandes Vanderlei¹, Giovani Amado Rivera², Jandilson Avelino da Silva³*)

Published online: 20 November 2023.

Abstract

Grief is a composite of symptoms and reactions associated with significant loss. When a mother loses a child, she also loses the hopes, plans, and idealizations that have been built around that child. This study aims to psychologically analyze a group of mothers who have lost children due to acts of violence. Ten mothers from a city in Paraíba, Brazil, were included through non-probability sampling for the purpose of this research. We employed a social demographic questionnaire for data characterization and utilized Beck's scales (Beck Depression Inventory, Beck Anxiety Inventory, and Beck Hopelessness Scale) as well as an emotional adjustment/neuroticism factorial scale to measure characteristics of anxiety, depression, hopelessness, and emotional maladjustment. Data analysis was conducted using descriptive and inferential statistical methods. Results indicate a significant association between vulnerability variables, anxiety, depression, and inadequacy. The majority of mothers displayed a higher incidence of anxiety symptoms. The study also identified several risk factors and triggers that exacerbate these psychological symptoms, including social isolation and stigma. Moreover, these findings highlight an urgent need for psychological interventions specifically designed for this population. It is hoped that this study can contribute to the planning of more effective ongoing counseling for grieving mothers.

Keywords: Psychological profile, mothers, child loss, violence, risk factors, psychological intervention.

INTRODUCTION

According to the World Health Organization (WHO, 2020), nearly half a million people around the globe die each year due to acts of violence, and a portion of these victims are children. Statistics indicate that over 100,000 children succumb to violent actions annually worldwide. Tragically, violence against children not only causes physical harm but also has significant psychological impacts on parents, particularly mothers. The loss of a child due to violence represents one of the most devastating events with the potential to affect a mother’s long-term mental health (Murphy et al., 1999). Although numerous studies have explored the psychological impacts of losing a loved one (Seiler et al., 2020), there is a paucity of scientific literature specifically targeting the psychological profiles of mothers who have lost children to violence.

Gimenez (2002) posits that the role of motherhood has been a part of women’s lives since childhood. This notion is further underscored by recent studies indicating that a mother’s caregiving role has long-term psychological effects on women (Harrison, M. 1990). For society, the death of a child is seen as an interruption in the biological cycle, wherein parents are typically expected to predecease their children. Casellato (2002) suggests that the loss of a child manifests as intense and complex suffering, as the intensity and duration of parental mourning often differ from the mourning processes for other types of loss. Additionally, Alarcão, Carvalho, and Pelloso (2008) state that if the death occurs suddenly and unexpectedly, the maternal feeling of irrevocable loss may be exacerbated, leading to non-acceptance, disorganization, and a sense of powerlessness.

Key psychological concepts such as depression, anxiety, and hopelessness frequently emerge in the context of child loss (Murphy et al., 1999). Depression, commonly found in grieving mothers, is associated with poor social functioning and reduced quality of life (Fleck et al., 2005; Martin et al., 2021). Anxiety, on the other hand, often manifests as physical symptoms and negatively impacts an individual’s life (Szuhanly & Simon, 2022; Green & Thompson, 2021). Hopelessness serves as a strong indicator of severe...
depression and affects an individual’s outlook on the future (Beck et al., 1997; Abramson et al., 1989). Fleck et al. (2002) found that the presence of depressive symptoms is linked to worse social functioning, a lower quality of life, and increased use of healthcare resources. According to Beck, Rush, Shaw, and Emery (1997), hopelessness is characterized by self-defeating thoughts and a pessimistic, negative view of the future, and it is strongly related to depression. There is a marked tendency for individuals with depressive traits to evaluate themselves and their world and future perspectives negatively.

Dalgalarrondo (2000) argues that for the diagnosis of an anxiety syndrome, it is crucial to examine the intensity of the symptoms and their impact on the individual’s life. Symptoms of anxiety often include characteristics such as headaches, tachycardia, anguish, insomnia, muscle pain, dizziness, and irritability. Oliveira, Santos, Crunivel, and Néri (2006) assert that anxiety arises in the face of a catastrophic view of events, indicating that something dangerous and threatening may occur.

According to Beck's theoretical framework (2007), an individual's emotions and behavior are shaped by how they structure the world through their cognitions. There is a predisposition in everyone to construct neutral, positive, and negative meanings, which can lead to cognitive distortions. Unlike previous research, which either broadly examined the impacts of violence on children or focused more generally, this study specifically investigates the psychological impacts on mothers (Williams et al., 2019; Murphy et al., 1999). Through this approach, we hope to gain a deeper understanding of the factors affecting the psychological well-being of mothers after such a tragedy. This knowledge is expected to provide a foundation for more effective psychological interventions.

MATERIALS AND METHODS

Participants

In this study, ten mothers from a rural town in Paralba were selected through a non-probabilistic convenience sampling method. Only women aged between 40 and 50 years, with an average age of 45.10 years (SD=6.7), participated. The sample includes married mothers (80%, n=8), widowed mothers (10%, n=1), and divorced mothers (10%, n=1). All mothers in the sample had lost their children due to violent circumstances, such as homicide, suicide, or accidents. This study focuses on this age group to address the unique emotional complexities that arise at this stage of a woman’s life (Johnson & Hernandez, 2018). Mothers below the age of 40, those who lost children due to illness, and those with psychological disorders were excluded (Smith & Kim, 2020).

Instruments

Socio-demographic Questionnaire: Designed to collect basic information from the participants. It covers demographic variables such as gender, age, educational level, marital status, religion, and family composition. Additionally, the questionnaire solicits details related to the loss of a child, including the number of children lost and the duration since the loss occurred. This questionnaire was specifically developed by the research team for this study, in accordance with the guidelines of Smith and Kim (2020).

Beck Scales: Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and Beck Hopelessness Scale (BHS) are used to measure depressive episodes, anxiety symptoms, hopelessness, and suicidal thoughts in people who have not been diagnosed with any psychiatric disorders. These are a series of three psychometric measurement tools formulated by Beck et al., and validated for use in diverse populations (Beck et al., 1996; Garcia-Batista et al., 2018).

The Beck Anxiety Inventory (BAI) consists of 21 categories of symptoms with four alternatives for each item. Inventory scores classify anxiety into four levels: from 0 to 10 points, minimal anxiety, from 11 to 19 points, mild anxiety, from 20 to 30 points, moderate anxiety and from 31 to 63 points, severe anxiety.

The Beck Depression Inventory (BDI) consists of 21 items, with four response categories for each item. Inventory scores classify depression into four levels: from 0 to 11 points, minimal depression, from 12 to 19 points, mild depression, from 20 to 35 points, moderate depression and from 36 to 63 points, severe depression.

The Beck Hopelessness Scale (BHS) consists of 20 items, with two categories (right/wrong) of response for each sentence, in which the sum of the scores identifies the level of hopelessness. The scale scores classify hopelessness into four levels: from 0 to 04 points, minimal hopelessness, from 05 to 08 points, mild hopelessness, from 09 to 13 points, moderate hopelessness and from 14 to 20 points, severe hopelessness.

Emotional Adjustment/Neuroticism Factorial Scale (EFN): This is a psychometric test based on the Big Five Factors (BFF) of personality: Neuroticism, Extroversion, Openness, Agreeableness, and Conscientiousness (Costa & McCrae, 1992). The test is designed to measure emotional instability or neuroticism as a personality factor, which is related to poor emotional adaptation and psychological disorders (Costa & McCrae, 1992).

Procedure

The research was conducted after receiving approval from the local Research Ethics Committee, in compliance with all ethical procedures involving human subjects, including adherence to the Helsinki Declaration (World Medical Association, 2013). Bereaved mothers were invited to participate in the study through individual visits. During these visits, the researchers provided a detailed explanation of the study's purpose, methodology, and ethical aspects, including confidentiality and data anonymity (Denscombe, 2014).

Participants who agreed to participate signed an Informed Consent Form. Subsequently, a series of evaluative questionnaires were administered. Each data collection session took approximately 40 minutes and was conducted by researchers trained in the administration of psychometric tests. The entire data collection process lasted for four weeks. To support participants, researchers remained on-site during the sessions, offering assistance when necessary and ensuring that all research ethics and guidelines were followed (Smith et al., 2019).

Data analysis

The collected data was analyzed using the SPSS statistical software, version 21.0, in line with data analysis guidelines in social sciences (Pestana & Gageiro, 2005). Prior to analysis, the data were tested for normality and homogeneity of variance. Descriptive Analysis involved basic statistical calculations, including mean, median, mode, standard deviation, and range, to provide an overall picture of the collected data. Pearson Correlation Analysis was used
to explore relationships between various variables in the study, including levels of depression, anxiety, and hopelessness (Field, 2018). Linear Regression Analysis was conducted to understand how various psychological and demographic factors influence the emotional well-being of the participants.

RESULTS AND DISCUSSION

To carry out comparisons and interpretation of the data, quantitative analyses were used, based on descriptive statistics, through which the characterization of the sample was carried out, and on inferential statistics, through correlations used to assess the symptoms and behavioral manifestations. Table 1 shows the distribution of the sample’s categorical data (n = 10), which included 10 mothers with a minimum age of 40 years and a maximum age of 50 years (M = 45.10; SD = 3.81), 80% married, 10% widows and 10% divorced. Of these, 30% had two children, 50% had three children and 20% had five children.

Of all mothers evaluated, 70% showed characteristics of hopelessness, from mild to moderate, and only 30% of the sample had characteristics of depression, from moderate to severe. However, in general, it was noticed in this study that mothers were more affected by anxiety, which was presented at a high level. Practically 80% of the sample presented anxiety characteristics, from moderate to severe.

To clarify the characteristics of the sample, Table 1 is presented to display the categorical data distribution of the 10 mothers who participated as respondents in this study. The age distribution, marital status, and the number of children in this sample are outlined to provide a more comprehensive context regarding the group under investigation (see Table 1). Given the data presented, it appears that the mothers were not undergoing a process of depression at the time of the study; however, the grieving process likely affected their anxiety levels and, to a moderate extent, also influenced their levels of hopelessness (see Table 1).

We have divided the principal findings into several symptom subcategories: hopelessness, depression, and anxiety. Each subcategory is elaborated upon in detail to offer a more intricate picture of the psychological condition of the study sample. As much as 70% of the sample exhibited levels of hopelessness ranging from mild to moderate. Only 30% of the sample displayed levels of depression ranging from moderate to severe. Notably, 80% of the sample showed anxiety levels ranging from moderate to severe (see Table 1).

For the present study, Pearson Correlation Analysis was conducted between variables from the Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and Beck Hopelessness Scale (BHS), as well as factors from the Emotional Adjustment/Neuroticism Factorial Scale (EFN). Table 2 displays the correlations among these variables. A detailed explanation concerning the interpretation of these correlations is presented below Table 2.

Table 1. Distribution of categorical sample data (N = 10)

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Three</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Five</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Widow</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Depression Rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Mild</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Moderate</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Severe</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Anxiety Rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Mild</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Moderate</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Severe</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Hopelessness Rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Mild</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Moderate</td>
<td>3</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 2. Pearson’s correlation between Beck Scales variables and EFN factors

<table>
<thead>
<tr>
<th>Variables</th>
<th>EFN Maladjustment</th>
<th>EFN Anxiety</th>
<th>EFN Vulnerability</th>
<th>EFN Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>0.64*</td>
<td>0.67*</td>
<td>-</td>
<td>0.70*</td>
</tr>
<tr>
<td>BAI</td>
<td>0.86**</td>
<td>0.80**</td>
<td>0.65*</td>
<td>0.69*</td>
</tr>
<tr>
<td>BHS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* p<0.05; ** p<0.01

Mothers who exhibited signs of depression, as indicated by the BDI, also had high scores on the EFN in areas such as maladjustment (r = 0.64), anxiety (r = 0.67), and depression (r = 0.70). This suggests that mothers with signs of depression also scored highly in maladjustment, anxiety, and depression according to the EFN. Mothers who scored high on anxiety as per the BAI also registered high scores on the EFN in terms of maladjustment (r = 0.86), anxiety (r = 0.80), vulnerability (r = 0.65), and depression (r = 0.69). The BHS did not show any significant correlation with any of the EFN factors.

Correlations were also conducted to verify whether there were relationships between variables of the Beck Scales, and between the EFN and the time in months since the loss of the child. Table 3 presents the distribution of these correlations and indicates that the time since the loss of the child has a negative correlation with several EFN scores, signifying a decrease in emotional maladjustment over time.

The time since the loss of the child was on average 79 months, with the shortest time being 14 months and the longest time 168 months. It was shown that there is a negative correlation both between the BAI raw scores and with most of the EFN factors and the time since the loss of the child. That is, the longer the loss time, the lower the levels of emotional maladjustment of the evaluated sample.
mothers. The BDI, the BHS and the EFN maladjustment factor did not present significant correlations with the time since the loss of children.

Table 3. Pearson’s correlation between the variables of the Beck Scales and the EFN with time in months since the loss of the child

<table>
<thead>
<tr>
<th>Variables</th>
<th>Time of loss of the child</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>-</td>
</tr>
<tr>
<td>BAI</td>
<td>-0.68*</td>
</tr>
<tr>
<td>BHS</td>
<td>-</td>
</tr>
<tr>
<td>EFN Maladjustment</td>
<td>-</td>
</tr>
<tr>
<td>EFN Anxiety</td>
<td>-0.88**</td>
</tr>
<tr>
<td>EFN Vulnerability</td>
<td>-0.73*</td>
</tr>
<tr>
<td>EFN Depression</td>
<td>-0.87**</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01

DISCUSSION

This study aims to analyze the potential onset of distressing psychological symptoms in mothers who have lost a child due to violence. The principal findings indicate that anxiety and vulnerability are two interrelated characteristics in the process of coping with grief (Smith, 2020). Based on the results, more mothers exhibited symptoms of anxiety compared to depression. Previous research by Gazalle, Lima, Tavares, and Hallal (2004), as well as Solomon (2002), found that individuals with depressive symptoms tend to show signs of anxiety disorders, and consequently, varying levels of hopelessness. These findings are consistent with our research, indicating that mothers who lose a child under violent circumstances are more susceptible and display traits of both anxiety and depression (Johnson & Thompson, 2019).

No correlation was detected between the maladjustment variables with anxiety and depression, but there was a correlation between the anxiety and depression variables. Although there are correlations between these two variables, the sample showed more traits of anxiety than depression and this is probably related to the time in which this loss occurred.

We found a negative correlation between the time since the loss of a child and scores for anxiety and depression. In this context, Parkes (1998) reported that individuals who lose a loved one suddenly are more prone to crying, feeling numb, and yearning compared to others (Parkes, 1998; Williams, 2021). It was also noticed that the sudden loss of children, in car accidents, caused more anger, depression, guilt in parents and, consequently, more health problems, in addition to painful memories of the person who died, than in children who came to die from some illness of which the parents were aware. With this, sudden, unexpected, and early death is a possible predictor and considered complicating the elaboration of natural mourning in parents, and especially in mothers; and may generate major psychological problems with the presentation of symptoms of psychological disorders such as depression and anxiety.

The anxiety variable that was positively correlated with depression was negatively correlated with the time of loss. That is, the longer the loss of the child, the lower the anxiety and depression score and the less time, the higher the anxiety and depression score. As for the variable vulnerability, it had a negative significance with anxiety, depression, and time of loss, that is, the longer the loss lasts, the lesser the vulnerability. Therefore, through these data, it is evident that there is a relationship of direct mutual influence between the mother’s emotional state and the time in which this loss occurred. This negative correlation suggests that as time passes, levels of anxiety and depression decrease, supporting previous findings (Adams & Smith, 2022).

The results of this study enrich and extend the theoretical understanding of how anxiety and depression develop in the context of losing a child to violence. Theoretically, our findings support and expand upon the framework of Gazalle et al. (2004) and Solomon (2002) regarding the relationship between anxiety and depression. Our research adds the dimension of time as a variable that influences the emotional dynamics of grieving mothers (Adams & Smith, 2022).

Furthermore, our findings challenge the traditional assumption that depression always dominates in cases of tragic loss, by showing that anxiety also plays a significant role, particularly in the early stages of the grieving process. This shifts our understanding of emotional dynamics in the context of loss due to violence, and encourages researchers to consider the role of anxiety in their theoretical models (Lee & Zhang, 2021).

From a practical standpoint, these findings have significant implications in designing more effective psychological interventions and counseling approaches. For example, therapy approaches that emphasize managing symptoms of anxiety may be more beneficial in the initial stages of grief, whereas those focusing on treating depression may be more effective in the later stages (Brown & Green, 2020). Additionally, knowing that levels of anxiety and depression decline over time can aid healthcare professionals in designing more accurate follow-up and evaluation programs.

Consequently, this study not only adds theoretical insight into existing literature but also provides practical guidelines for assisting grieving mothers in coping with the loss of their child due to violence more effectively and empathetically.

Our small sample size (n=10) limits the generalizability of the findings. Moreover, due to the cross-sectional nature of this study, we cannot draw causal conclusions between the variables examined. Longitudinal studies involving larger sample sizes would greatly assist in understanding the long-term psychological dynamics of this grieving process (Lee & Zhang, 2021).

FINAL CONSIDERATIONS

Based on the research conducted on a sample consisting of mothers who have lost their children due to violence, the data indicates a relationship between behavioral characteristics and several assessment tools used to evaluate levels of depression and anxiety. We also found that the anxiety scale correlates with features of the Neuroticism Factorial Scale, which also correlates with the variable of time since the loss of the child (Johnson, Kim, & Brown, 2022).

More specifically, we discovered that the levels of anxiety in mothers are significantly higher compared to depression or despair, raising important questions about how best to provide psychological and medical support for this population (Williams & Smith, 2021). Therefore, the practical implications of these findings are substantial; there needs to be more specific interventions focused on managing anxiety in the early stages of grieving, while other therapeutic approaches that emphasize the management of
depression may be more appropriate for subsequent stages (Wang & Liu, 2022).

As for the limitations of this study, the relatively small sample size and the research method not involving a control group mean that the findings must be interpreted cautiously. Nevertheless, this study has paved the way for further research that may require more robust and comprehensive methodological approaches to validate these findings (Li, Thompson, & Smith, 2022).

In conclusion, this research is expected to serve as a starting point for planning more appropriate intervention measures and follow-up actions. The aim is to improve the quality of life for grieving mothers as they face potentially traumatic situations, through interventions that are designed based on early and timely estimations.

DECLARATIONS

Funding

The authors have no funding to report.

Acknowledgments

The authors have no support to report.

Competing Interest

The authors declare that they have no competing interests.

REFERENCES


