Rellationship between Problem Solving Orientation, Intimate Partner Violence and Postpartum Depression among Postpartum Abused Women in Bauchi Metropolitan Nigeria.

*Mahmood Danasabe¹, Mohammed Ibrahim Bello²

¹Nursing and Midwifery, State College of Nursing and Midwifery, Bauchi, Nigeria
²College of Nursing and Midwifery, Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria

Corresponding Author: Mahmood Danasabe¹

Abstract: Intimate partner violence is a public health concern that leads to numerous mental health consequences, like depression. Although several reasons have been recognized as antecedents and consequences of both depression and family abuse, but the role of problem solving orientation on postpartum depressed women subjected to family violence is not evidently implicit. Depression weaken individuals problem solving orientation. Abused women were reported to be more depressed after childbirth. To date studies are lacking on the role of problem solving orientation and postpartum depression among abused postpartum women. This research is uniquely looking at the relationship between problem solving orientation, intimate partner violence and postpartum depression among postpartum abused women. 75 postpartum abused mothers responded to three sets of self-report questionnaires that measured postpartum depression, problem solving orientation and intimate partner violence. Systematic random sampling was used for data collection. Descriptive statistic and multiple regression were used via SPSS for analysis. Results of the study revealed a negative relationship between positive problem solving orientation and postpartum depression. While, positive relationship was obtained between negative problem solving orientation, intimate partner violence and postpartum depression. The study is significant to health policy makers, practitioners and health institutions.

Keywords: Intimate partner violence, Negative problem orientation, Positive problem orientation and postpartum depression.

I. INTRODUCTION

Problem orientation is the person’s mental, emotional, and reactions that are motivational in a difficult situation. In this situation individual response to a problem in a manner that includes emotional reaction, his general beliefs about the problem, his evaluations to a problem and his perception to the ability to improve or resolve a problem.Problem solving orientation consists of positive problem solving orientation and negative problem solving orientation that individual utilizes when confronted with problem. The positive problem orientation believed to increase resilience and negatively associated with depression, while the negative aspect increase the likelihood of developing emotional problem and is said to be positively associated with depression (APA, 2013; Sampson et al., 2014). Depression weaken problem solving orientation (Yen et al., 2011). Postpartum depression is a depression after childbirth accompanied by unpleasant symptoms of withdrawal from people, extreme sadness and loss of interest in pleasurable activities as well as infanticide and suicidal tendency (Tissot et al., 2013). Numerous studies have indicated that postpartum depression is associated with intimate partner violence (Lobato et al., 2012; Wu, Lin, Xu & Xu, 2012; Zlotnick, Nicole & Parker, 2010; Tissot et al., 2013). It is believed that abused postpartum mother in addition to the stress and task of care of the baby are more exposed to emotional problem like depression if their problem solving orientation is weak. Studies for more understanding of the problem solving orientation of the abused mothers after childbirth in confronting and resolving their emotional problem is very necessary, especially in the developing countries like Nigeria. To date clear empirical study has not been extended on relationship between problems solving orientation, intimate partner violence and postpartum depression combined together.

II. LITERATURE REVIEW

Problem Solving Orientation

Problem-solving has been explained as a stage by stage behavioral process by which persons discovered a variety of answers to a given problem, which in turn increases the possibility of choosing an effective solution to the problem. Problem-solving orientation is a cognitive dimension of problem solving.
which is constructively, positive, or destructively, negative cognitive-motivational parts of a person when faced a problems (D’Zurilla & Nezu, 2010; D’Zurilla & Goldfried, 1971). It consists of positive problem orientation and negative problem orientation.

**Positive problem orientation (PPO)** involves a general tendency to perceive problems as a challenge, and a belief that problems can be solved. It is an optimistic and encouraging dimension which is an adaptive reaction to problem solving. It entails individual’s appraisal of a problem as a challenge not a threat. Such persons in this category believe that problems are solvable with hope and confidence, they believe in their personal capability and ability to resolve conflicts or difficulties without failure. They are also patient and certain that success in problem resolution is not immediate, it needs effort and commitment in approaching difficulties rather than avoiding problem. Studies have indicated that positive problem orientation is inversely associated with depression (Emam, 2013; D’Zurilla & Nezu, 2010; Pech & O’Kearney, 2013; Hasegawa et al., 2015).

**Negative problem orientation (NPO)** is a dysfunctional or inhibitive cognitive-motivational skill which involves a tendency to see problems as a threat to one’s own wellbeing, doubting the abilities to overcome problems successfully. Individual with negative problem orientation give up and easily become frustrated and upset when confronted with problems (Pech & O’Kearney, 2013; Emam, 2013; Yen et al., 2011). Literatures have indicated that positive problem orientation decreases the likelihood of developing depression, while negative problem solving orientation increases the chance of the development of depression (Pech & O’Kearney, 2013; Maddoux et al., 2014; Emam, 2013; Yen et al., 2011; Yen et al., 2011; Vasilevskaia, 2010; McCabe, 1999; Sampson et al., 2014; Chibanda et al., 2014; Hagasewa et al., 2015). One of the most common reproductive mood disorder like postpartum depression is a consequences of intimate partner violent (Rees et al. 2011; Trabold, 2007; Valentine, Rodrigue, Lapeyrouse & Zhang, 2011; Lobato et al., 2012; Tissot et al., 2013).

**Intimate Partner Violence**

Intimate partner violence can be called spouse abuse or battering or domestic violence. It is a global problem which becomes a psychosocial topical health issues from the late 1960s and 1970s and was gingered up by feminist movement. Violence against Women Act (VAWA) is a feminist movement program aimed at improving justice interventions for those suffered partner violence (Trabold, 2007). Nowadays almost 5.3 million women are victims of violent victimizations by an intimate partner annually. Roughly 1.5 million of these abuses are rapes or physical battering. Approximately 2 million injuries and 1, 300 deaths occur annually due to partner violence. The incidence has been reported higher among black impoverished women with age ranges from 20-24 (National Center for Injury Prevention & Control, 2003; 2006 cited from Trabold, 2007). It is estimated from one of the study carried out in Nigeria that one in every five women faces some form of violence during her lifetime (Abama, 2009).

Violence against women takes many forms, from the simple to complex. Intimate partner violence can be physical, psychological, emotional or sexual violence. Physical violence involves a woman being slapped, or had something thrown at her; pushed, shoved, or had her hair pulled; hitting her with a fist or something else that could hurt; choked or burnt her. It also involves threatened with or using weapon against her. Sexual violence on the other hand implies physically enforcing woman to have sexual intercourse against her wishes or having sexual intercourse because she was afraid of what her partner might do to her; or forced her to do something sexually degrading or humiliating. Another common forms of violence in Nigeria is emotional violence like (being humiliated or belittled; being scared or intimidated) (Abama, 2009).

In Nigeria, more than half of the women suffers family violence ranging from physical, sexual, psychological and even financially. Every day two-third of women in Nigeria are beating, sexually abused and even killed by family member for simple excuses such as delay in meal preparation, visiting other family members without permission from their husbands. Sympathetically, the federal and state government were reluctant to stem this abuse, thus jeopardizing millions of women at a risk violence as reported by Amnesty International (Oluremi, 2015). Most of the common causes of women violence in Nigeria are cultural or societal factors, husband power and control of resources, political factors, drug addiction, alcoholic, ethnic factors, religion ignorance, social learning, low level of education and patriarchal type of culture, as well as jealousy and stress (Oluremi, 2015; Abama, 2009).

According to a postpartum mother of a child in one study in Nigeria reported that her husband whenever he drunk hits and beats her regularly leading her to miscarriage two months pregnancy (Agbo & Choji, 2014). Similarly, in the same study reported that a woman was seriously battered by her husband leading to having 26 stiches in her face just because of taking a piece of fish from the pot she has cooked to break her fasting. In another survey in 2013 revealed by the same source indicated that 1 in every 3 participants disclosed to be a victim of intimate partner violence and the rate of this violence increases nationwide from the previous three years from 21% in 2011 to 30% in 2013 (Agbo & Choji, 2014).
Intimate partner violence is strongly associated with complex social conditions such as poverty, lack of education, gender inequality, child mortality, maternal ill-health and HIV/AIDS. Poverty and hunger forced many women to migrate as a survival strategy. In many countries, women migrants working in domestic service or factories are at high risk of experiencing abuse by employers including confinement, slave-like conditions, and physical and sexual assault. Some women may resort to transactional or commercial sex in order to survive, or fall into the hands of traffickers (Heise et al. 2000).

Postpartum Depression

Postpartum depression is a mood disorder that occurs from two weeks after delivery by a woman, characterized by intense sadness, loss of interest from social and sexual activities, negative attitude and poor child care with suicide tendency if neglected (Chibanda et al., 2014). Prenatal family violence is highly associated with postnatal intimate violence (Martin et al. 2001). Approximately ninety per cent of antenatal women battered were also victims of abused within three months after delivery, and fifty two per cent were reported in need of clinical treatment for the injuries they sustained due to the violence (Stewart, 1994). The incidences of family violence are highest among women during their peak of reproductive ages (Bachman & Saltzman 1995; Martin et al. 2001). Postpartum depression was reported to be a common complication of the reproductive mood disorder (APA, 2013).

Studies have shown that women who experience partner abuse uniquely are more likely to develop depression (Mechanic, Weaver & Resick 2008; Romano & Grassi 2007). Based on a nationally representative sample of 1218 Australian women who had experienced gender-based violence, it was reported that women who suffered violence are more likely to experience mental illness during their lifetime, with a risk rate of fifty two percent for mood disorder (Rees et al. 2011). Postpartum depression is more common among women that are expose to intimate partner violence and numerous studies have reported the relationship between intimate partner violence and postpartum depression (Rodrique, Lapeyrouse & Zhang, 2011; Lobato et al., 2012; Kendal-Tackett, 2007; Wu et al., 2012; Zlotnick, Nicole & Parker, 2010; Tissot et al., 2013; Beydoun et al., 2010).

However, none of these studies examined the role of problem solving orientation, intimate partner violence and postpartum depression among abused postpartum depressed women.

Given the pervasiveness of violence against women, especially among women during their child bearing years who live in poverty and coupled with the negative effects the violence has on the mental health and general wellbeing of women it is imperative to fully understand the role played by the women problem solving orientation toward resolving mood disturbances like depression as a result of intimate partner violence. Therefore, this study is aimed to:

- To find out the presence of postpartum depression (PPD) among abused postpartum women
- To examine the relationship between positive problem orientation (PPO) and postpartum depression.
- To find out the relationship between negative problem orientation (NPO) and postpartum depression
- To examine the relationship between intimate partner violence (IPV) and postpartum depression among abused postpartum women.

III. METHODOLOGY

Population and procedure

The population of this study involve postpartum mothers from four weeks to one year who were exposed to any form of intimate partner violence. The population was gathered from the hospital records, police stations records, court records, social welfare records and religious gathering or worship places. The age of the participants ranges from 18 to 40 years that were married, divorced or widowed. The participants involved both Muslims and Christian that were mostly in low and middle socio-economic class. The total number of the population before screening for postpartum depression were 151. Out of the 151 populations of the abused mothers, 75 were screened for having postpartum depression using Edinburgh Postnatal depression scale and these number met the study criteria after screening for postpartum depression were 75 whose questionnaires were returned and usable. The samples were collected through three sets of self-report questionnaires through systematic random sampling.

Study Instruments

Edinburgh postnatal depression scale was used to measure postpartum depression (PPD). The Edinburgh Postnatal Depression Scale (Cox et al., 1987) consist of 10 items and each was scored from 0-3 points. It contains items that correspond to the many features of clinical depression. The total scores is determined by summing up together the scores for each of the 10 items. Scores from 10 and above indicates the present of depression and the higher scores indicates more depression. The questionnaires were answered in the clinic or at home. Previous study reported a Cronbach’s alpha reliability of .80 (Vasilevskaia, 2010). The Cronbach alpha reliability of this study is .89.
Social problem solving inventory revise short form (SPSI-R-SF: D’Zurilla et al., 2002) was used for the measurement of the two components of PPO and NPO. Each component has five items and 5-Likert scale from 0 not true of me to 4 extremely true of me. Increase in the score indicated the increase in the variable. Previous studies reported a Cronbach’s alpha reliability of PPO = .80 (Vasilevskaia, 2010), NPO = .83 (Robichaud, 2005; Vasilevskaia, 2010). In this study, the Cronbach alpha reliability is .89. The details of the Cronbach’s alpha reliability of the three constructs of this study can be seen in table 3.1 below.

Revised Conflict Tactic Scale (CTS2; Straus et al. 1996) is a revised version of the CTS which has been widely used in assessing physical, psychological, and sexual attacks on a partner in a marital, cohabitating, or dating relationship. The CTS2 has demonstrated excellent reliability and validity (Straus et al. 1996). In this study intimate partner violence (IPV) after childbirth was measured through the Revised Conflict Tactics Scale. This study give more emphasis on physical violence. This specific subscale covers 10 dichotomous items and the participants were asked on yes or no questions on physical violence in the preceding 12 months. No was scored 1, while yes carried 2 scores on the questionnaire. The total scores of the items for each participant were summing up range from 1 to 20. High score indicated more abused. The Cronbach’s alpha reliability of this instrument in this study is .70.

### Table 3.1 Study Scales, Constructs and their Reliability results

<table>
<thead>
<tr>
<th>Scales</th>
<th>Constructs</th>
<th>Cronbach Alpha reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDS</td>
<td>Postpartum depression (PPD)</td>
<td>.89</td>
</tr>
<tr>
<td>SPSI-R-SF</td>
<td>Positive problem orientation (PPO)</td>
<td>.80</td>
</tr>
<tr>
<td>SPSI-R-SF</td>
<td>Negative problem orientation (NPO)</td>
<td>.84</td>
</tr>
<tr>
<td>RCTS2</td>
<td>Intimate partner violence (IPV)</td>
<td>.70</td>
</tr>
</tbody>
</table>

### Analysis

Descriptive statistics and regression analysis via SPSS were used for this study analysis. Descriptive was used for the analysis of demographic data and regression was used for sorting out the relationship between the constructs.

### IV. RESULTS AND DISCUSSION

The current study examined the role of problem solving orientation and intimate partner violence as a predictor to postpartum depression among abused postpartum depressed women. Out of the 151 abused postpartum women from four weeks after delivery that were screened for postpartum depression using EPDS, 75 scored 10 and above from the scale. This indicated that 75 were depressed after childbirth using cut off scores of 10 and above of the Edinburgh Postnatal Depression Scale. These 75 respondents were further used for descriptive and regression analysis. Therefore, based on this study outcomes, postpartum depression was present among postpartum abused mothers in Bauchi metropolitan as can be seen in the table 1 below. 42 (56%) of the participants scored 10 indicating mild depression, 21 (28%) scored 12 cut off point indicating moderate depression and 12 (16%) have severe depression with 13 and above cut off point as can be seen in table 4.1 below.

### Table 4.1 Screening outcome for PPD at different cut off scores

<table>
<thead>
<tr>
<th>EPDS Scores</th>
<th>Depressed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 10</td>
<td>42</td>
<td>56</td>
</tr>
<tr>
<td>≥ 12</td>
<td>21</td>
<td>28</td>
</tr>
<tr>
<td>≥ 13</td>
<td>12</td>
<td>16</td>
</tr>
</tbody>
</table>

### Table 4.2 Constructs and their statistical mean and standard deviation

<table>
<thead>
<tr>
<th>Scales</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPD</td>
<td>1.90</td>
<td>.484</td>
<td>75</td>
</tr>
<tr>
<td>PPO</td>
<td>1.98</td>
<td>.763</td>
<td>75</td>
</tr>
<tr>
<td>NPO</td>
<td>2.38</td>
<td>.874</td>
<td>75</td>
</tr>
<tr>
<td>IPV</td>
<td>1.65</td>
<td>.232</td>
<td>75</td>
</tr>
</tbody>
</table>

Table 4.2 shows the negative problem orientation (NPO) mean score for abused postpartum mothers was higher (2.38) as compared to the positive problem orientation (PPO) mean score of (1.98). It also revealed that the mean score for negative problem solving orientation for the battered postpartum depressed mothers was higher than the mean score of the intimate partner violence (1.69). This result indicated that mothers who were abused has a weak positive orientation and strong negative orientation to problem solving. The same table indicates that the mean score for postpartum depression (1.90) is higher compared to the mean score of the intimate partner violence (1.65). This shows that all of the postpartum women exposed to violence are depressed in this study. Out of the 151 total number of the study population (abused postpartum women), 49.7% were all depressed. This has indicated that postpartum abused mothers in this study were more likely exposed to postpartum depression.
Table 4.3 Multiple regression results between PPD, PPO, NPO and IPV.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Unstandardized coefficient B</th>
<th>Standardized coefficient Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postpartum depression (DV)</td>
<td>-.225</td>
<td>-.355</td>
<td>-3.484</td>
<td>.001</td>
</tr>
<tr>
<td>Positive problem orientation</td>
<td>-1.17</td>
<td>-1.211</td>
<td>-2.063</td>
<td>.043</td>
</tr>
<tr>
<td>Negative problem orientation</td>
<td>.499</td>
<td>2.39</td>
<td>2.333</td>
<td>.022</td>
</tr>
<tr>
<td>Intimate partner violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>.529</td>
<td>.280</td>
<td>.249</td>
<td>9.189</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>Adj. R²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² Change</td>
<td></td>
<td>F-Change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df1 = 2, df2 = 50. Durbin Watson = 1.782

Table 4.3 revealed that there exist a significant negative relationship between positive problem orientation (PPO) and postpartum depression (PPD), while significant positive relationship exit between negative problem orientation (NPO), intimate partner violence (IPV) and postpartum depression. The correlation coefficient between postpartum depression and positive problem orientation is 0.001. The obtained correlation coefficient is significant at the 0.01 level of significance. So, as the level of positive problem orientation increases the level of postpartum depression decreases among abused postpartum women. High level of positive problem orientation (PPO) is related with low level of postpartum depression (PPD). Abused postpartum women with high level of postpartum depression has low positive problem orientation toward problem solving as shown by this study. However, the research showed a significant positive relationship between negative problem solving orientation (NPO) and postpartum depression. The correlation coefficient between negative problem orientation (NPO) and postpartum depression is 0.043. The obtained correlation coefficient of significance at the 0.05. Therefore, as the level of NPO increases so as postpartum depression increases among abused postpartum depressed women. High level of NPO is related with high level of postpartum depression as well. A postpartum woman with high level of postpartum depression has a high negative problem solving orientation as shown by this study. More also, a positive significant relationship between intimate partner violence and postpartum depression was obtained. The correlation coefficient between intimate partner violence (IPV) and postpartum depression is 0.022. The obtained correlation of coefficient is significant at the 0.05 level of significance. This study indicates that women that were abused by their partner were more likely to suffer from postpartum depression. As the level of intimate partner violence increases so as the postpartum depression increases also.

Multiple regression analysis was conducted in determining the relationship between positive problem orientation, negative problem orientation, intimate partner violence and postpartum depression. The results as indicated in table 4.3 with predictors that were significant (0.000), R = .529, R² = .280, Adj. R² = .249, F-Change = 9.189. The multiple correlation coefficients between the predictors and the criterion variable was .529. predictor accounted for 28.0% of the variance in depression. Based on the Cohen (1988) classification of R², this study has amoderately value of R² 28.0%. The significant F-test shows that the relationship (9.189, p<0.001) signified the overall significant prediction of independent variables to the dependent variable. Among the two predicting variables PPO is the variable that best predict the criterion with the value (ß = -.355, t = -3.484, p<0.001), then the IPV with a value (ß = .239, t = 2.333, p<0.022). In line with other studies, our results show that patients with high negative problem solving orientation are more likely to develop postpartum depression and postpartum women that were abused are also more likely to suffer depression. However, high positive problem solving orientation is associated with low postpartum depression and abused postpartum depressed women with high positive problem solving orientation are less likely to develop depression after delivery.

Intimate partner violence contributes immensely to the disease burden and emotional disorders, especially depression (VicHealth, 2004, p. 25; Chibanda et al., 2014; Sampson et al., 2014). This contributes to the higher mean score in the negative problem solving orientation and lower mean score in the positive problem solving orientation leading to the overall weakening of the problem solving orientation of the participants of this study which justified their depression after delivery. This study finding is congruent to the finding that depression weakened problem solving ability (Pech & O’Kearney, 2013; Emam, 2013; Yen et al., 2011; Yen et al., 2011; Vasilevskaia, 2010; McCabe, 1999).

This research has encountered with some limitations and suggestions for further studies to fill in the limitations were given. The current study examined the role of problem-solving orientation only and intimate partner violence in predicting postpartum depression excluding the other components of the social problem solving ability. Further studies need to be conducted to include the other components (rational problem solving, impulsive careless and avoidance problem solving). This research has also been limited to only physical form of violence and there is need for including others forms of violence as predictors to postpartum depression. More also, longitudinal studies are also crucial in knowing the situation of the problem solving orientation of the postpartum depressed mothers as a resilience to the development of maternal depression among abused postpartum mothers.

www.ijhssi.org
V. RECOMMENDATION AND CONCLUSION

Firstly, health policy makers and practitioners need to be familiar to the harmful mental health impacts of women violence for the victims in order to support and help them to address their psychological needs, as well as referring them to an expertize to address their wellbeing and health needs. Their state of problem solving orientation as a resilience against emotional health problem equally need to be monitoring for self-wellbeing and mental illness prevention and protection. Secondly, health facilities and organizations need to be careful of the growing intensities of harm for violence sufferers who may have experienced many violence contacts such as child abuse, sexual, physical violence, child abuse, war or traumatic violence. The public health practitioner also need to pay more attention on the prevention of women violence in an efforts to reduce increasing levels of emotional problems like depression and other mood disorders. In order to eradicate or get women free from violence, there is need for the improvement in the economic condition of the country which may provide more opportunities. Special programs and strategies should be employed on poverty and hunger particularly to empower the woman’s state of economy. This will promote the women’s participation and self-reliance so that they should not be exposed to violence by threatened from the unscrupulous people. This research is of crucial benefit to the national health policy makers, the health institutions and federal and state ministry of women affairs.

REFERENCES


Victorian Health Promotion Foundation (VicHealth) 2004, the health costs of violence: measuring the burden of disease caused by intimate partner violence, Department of Human Services, Melbourne


Yen, Y. C., Rebok, G. W., Gallo, J. J., Jones, R. N., & Tennstedt, S. L. (2011). Depressive symptoms impair everyday problem-solving ability through