Association between Intimate Partner Violence and Mental Health Status During Pregnancy: A Survey among Pregnant Women in Calabar, Nigeria

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Abstract

Human pregnancy should be a safe and rewarding physiological process. However, violence-mediated distress may contribute to adverse fetomaternal effects. This study aimed at assessing relationship between intimate partner violence (IPV) and mental health status of pregnant women in Calabar, Nigeria. Composite Abuse Scale and Hospital Anxiety and Depression Scale questionnaires were used to assess IPV and anxiety and depression, respectively. Of 250 respondents surveyed randomly, 54.8% had at least one of the three types of abuse within the last 12 months, with common combination being psychological abuse only (16.4%), all three types of abuse (15.6%), and psychological and sexual abuse (10.8%). Anxiety and/or depression which was found in 48.0%, was more prevalent among respondents that suffered psychological (57.0% vs. 38.5%), sexual (64.4% vs. 41.2%), and physical (64.2% vs. 42.1%) types of abuse ($p<0.05$). Findings suggest need to redouble effort at integration of gender into reproductive health in developing countries.

Key words: *Intimate Partner Violence, Pregnancy, Anxiety, Depression*

Introduction

Harmful physical, sexual, and psychological behaviour within intimate relationship referred to as Intimate Partner Violence (IPV), is a global public health problem. Females in developing countries are often worse hit, with an estimated one in three women experiencing at least one form of violence by males in their lifetime.[1] This menace is thought to have persisted in many developing countries, due to patriarchal sociocultural beliefs and norms, which support male dominance over women, amidst lack of interventions and weak legal systems.[2] The occurrence of IPV during pregnancy poses further risk of reproductive and mental health consequences to both mother and child.[3] Sexual violence increases risk of unwanted pregnancy, while physical violence increases risk of antepartum hemorrhage, induced abortion, low birth weight, and fetal distress.[4] The presence of these complications in pregnancy, may further worsen the mental health state of anxiety and/or depression.[5]

Meta-analysis of 70 studies most of which were conducted in developed countries, found significant positive relationship between maternal abuse and prenatal depression.[6] A survey among adolescent parturients in New York, USA, found 38.0% prevalence of IPV, with associated two to three-fold increased odds of depression among victims compared with non-victims.[7] Similar study among Vietnamese pregnant women found 50.4% prevalence of emotional form of IPV which was associated with 3.15 times increased odds of post-natal depression.[8] Also, a cross-sectional study in Brazil found significant difference in mental disorders comparing victims and non-victims of IPV (71.0% vs. 33.0%, $p=0.00$).[9] Systematic review of studies in low and medium income countries (LMIC) reported 1.69 to 3.76 times increased odds of antenatal depression among victims compared with non-victims

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of IPV during pregnancy.[10]

Tura et al., in their analysis of secondary data in Mozambique found 47.3% prevalence of IPV among 205 ANC attendees.[11] A cross-sectional study among reproductive-age women (15-49 years) in Ile-Ife, South West Nigeria, found 36.7% lifetime prevalence of IPV, associated with 17 times increased odds of anxiety.[12] Unfortunately, most studies on IPV in developing countries, including Nigeria, were conducted among non-pregnant women, or among pregnant women but without assessment of potential associated adverse outcomes. This study was therefore aimed at assessing burden and mental health impact of IPV among pregnant women in Calabar, Southern Nigeria.

Methods

Study design was cross-sectional descriptive, and study population comprised attendees of antenatal care (ANC) clinics in General Hospital and Police Clinic, as the two key secondary health facilities in Calabar Municipality. ANC attendance registers were used as sampling frame to recruit two hundred and fifty (250) consenting parturients, through systematic random sampling method. A 12-item Composite Abuse Scale – Revised Short Form (CAS_R-SF) questionnaire was used to assess psychological, sexual, and physical forms of intimate partner violence. Hospital Anxiety and Depression Scale (HADS) was used to assess presence of anxiety and depression. These validated instruments were pretested before use for interviewer-assisted quantitative data collection. Data was entered and analyzed using SPSS version 21.0. Pearson chi-square was used as inferential statistic, and p-value was set at 0.05.

Result

Data was obtained from two hundred and fifty (250) respondents with mean age of 29.7 ± 6.1 years, ranging from 18 to 46 years. Most respondents were young adults within 18 to 34 years (74.4%), married (82.4%), had tertiary education (62.0%), and were traders/business women (57.2%). Mean parity was 2.3 ± 1.2 ranging from 1 to 7. Approximately one-tenth had childhood history of sexual abuse (11.6%), and was currently afraid of their spouse (9.2%).

Approximately half of respondents (51.2%) had had at least one form of psychological abuse within the previous 12 months (table 1). Commonly reported psychological abuses were blaming for violent behaviour (32.8%), following someone at home or work (28.0%), and saying one was crazy or stupid (24.0%). Sexual abuse was experienced by 29.2% of respondents. Approximately a quarter of respondents each, reported being made to perform undesirable sexual acts (27.6%), and had sex under duress (23.2%). Sixty-seven respondents (26.8%) had had at least one occurrence of physical abuse. Commonly reported physical abuses were shaking, pushing or grabbing (20.0%), hitting with fist (16.0%), and threatening with knife or weapon (13.2%). A little above half (54.8%) had had at least one of the three types of abuse within the last 12 months. The common combination of abuses was psychological abuse only (16.4%), all three types of abuse (15.6%), and psychological and sexual abuse (10.8%). One hundred and twenty respondents (48.0%) had abnormal mental health status, comprising anxiety only (12.8%), depression only (22.0%), both anxiety and depression (13.2%).

Table 2 shows relationship between type of intimate partner abuse and mental health status. Presence compared with absence of anxiety and/or depression, was significantly more prevalent among respondents that suffered psychological (57.0% vs. 38.5%), sexual (64.4% vs. 41.2%), and physical (64.2% vs. 42.1%) types of abuse ($p<0.05$). Also, prevalence of anxiety and/or depression was significantly higher among respondents that suffered at least one type of abuse compared with those that were not abused (55.5% vs. 38.9%, $p=0.01$).

Table 1: Frequency of intimate partner abuse, anxiety & depression during pregnancy (N=250)

Variable	Frequency (Yes)	Percentage
Psychological abuse		
Blamed me for causing violent behaviour	82	32.8
Tried to turn me against my family, children or friends that I am crazy	32	12.8
Followed me or hung around outside my home or work	70	28.0
Threatened to harm/kill me or someone close to me	30	12.0
Harassed me by phone, text, e-mail or using social media	51	20.4
Told me I was crazy, stupid or not good enough	60	24.0
Kept me from seeing or talking to my family or friends	33	13.2
Kept me from having access to a job, money or financial resources	33	13.2
Had at least one psychological abuse in last 12 months	128	51.2
Sexual abuse		
Made me perform sex acts that I did not want to perform	69	27.6
Forced or tried to force me to have sex	58	23.2
Had at least one sexual abuse in the last 12 months	73	29.2
Physical abuse		
Shook, pushed, grabbed or threw me	50	20.0
Used or threatened to use a knife or gun or other weapon to harm me	33	13.2
Choked me	27	10.8
Hit me with a fist or object, kicked or bit me	40	16.0
Confined or locked me in a room or other space	24	9.6
Had at least one physical abuse in the last 12 months	67	26.8
Had at least one form of abuse in the last 12 months	137	54.8
Number and type of intimate partner abuse		
None	113	45.2
Psychological abuse only	41	16.4
Sexual abuse only	3	1.2
Physical abuse only	2	0.8
Psychological and sexual abuse	27	10.8
Psychological and physical	21	8.4
Sexual and physical	4	1.6
All three forms	39	15.6

Cont... **Table 1: Frequency of intimate partner abuse, anxiety & depression during pregnancy (N=250)**

Mental health status categories		
Normal	130	52.0
Anxiety only	32	12.8
Depression only	55	22.0
Both anxiety and depression	33	13.2
Mental health status category		
Normal	130	52.0
Had anxiety and/or depression	120	48.0

Table 2: Relationship between type of intimate partner violence and mental health status (N=250)

Variable (occurring within last 12 months)	Had anxiety and/or depression			Chi-square (p-value)
	Yes n (%)	No n (%)	Total n (100%)	
Had at least one psychological abuse				
Yes	73 (57.0)	55 (43.0)	128 (100)	8.6
No	47 (38.5)	75 (61.5)	122 (100)	(0.00)
Had at least one sexual abuse				
Yes	47 (64.4)	26 (35.6)	73 (100)	11.1
No	73 (41.2)	104 (58.8)	177 (100)	(0.00)
Had at least one physical abuse				
Yes	43 (64.2)	24 (35.8)	67 (100)	9.6
No	77 (42.1)	106 (57.9)	183 (100)	(0.00)
Had at least one type of abuse				
Yes	76 (55.5)	61 (44.5)	137 (100)	6.8
No	44 (38.9)	69 (61.1)	113 (100)	(0.01)
Abuse category				
None (no abuse)	44 (38.9)	69 (61.1)	113 (100)	17.6
One type of abuse only	19 (42.2)	26 (57.8)	45 (100)	(0.00)
Two types of abuses present	27 (50.9)	26 (49.1)	53 (100)	
All three types of abuses present	30 (76.9)	9 (23.1)	39 (100)	

Discussion

This study found high prevalence of 54.8% of at least one form of IPV among pregnant women, which is towards the upper limit of the range of 9% to 65% reported in a recent systematic review of studies in similar Low and Middle-Income Countries (LMIC).[10] Hence, this prevalence is lower than what was reported in similar studies in Jos, North-Central Nigeria (63.2%)[13], but higher than most other studies including Mozambique (47.3%)[11], Egypt (30.6%)[14], and South Africa (15%)[15]. Variation in prevalence rates may depend on methods of assessment of IPV, and effectiveness of legal system towards women's rights.[2]

In particular, the occurrence of IPV during pregnancy increases risk of fetomaternal morbidity and mortality.[3] Resulting maternal morbidity includes impairment of mental health status, mainly anxiety and/or depression, which were found in 48.0% of respondents in this study. Systematic review of studies in similar settings reported prevalence of antenatal anxiety ranging from 15% to 65%, and depression ranging from 5% to 35%.[10] These mental health effects often get worse or persist even after the abuse ends. Other untoward maternal effects, especially for sexual and physical forms of abuse include genital injuries, unwanted pregnancy, antepartum hemorrhage, pregnancy loss, fetal distress and premature labour.[3]

The main focus of this study was to identify possible association between IPV and mental health status during pregnancy. Presence of anxiety and/or depression was significantly more prevalent among respondents that suffered each of the psychological, sexual, and physical forms of abuse. Adverse childhood experiences (ACE) of respondents may have contributed to high prevalence of IPV, anxiety and depression found in this study.[16] Parturients who may have had low levels of resilience to ACEs during their childhood period, may have had increased risk of IPV and its associated mental health effects. Resilience is thought to enable victims IPV as an effective coping strategy, especially against anxiety and depression.[16] Since maternal mental stability is essential for provision of adequate nursing and child care, high prevalence of IPV-associated impairment in mental health status may potentially impair infant bonding.[17]

In this study, family and socioculturally-driven stigma and discrimination may have led to underreporting of IPV during pregnancy. Respondents may have felt uncomfortable or insecure about sharing their personal experience of violence perpetuated by their intimate partners. On the other hand, perhaps due to the physiological and psychological demand of pregnancy, parturients' threshold for perception of abuse by their partners may be lower compared with their non-pregnant status, potentially leading to overreporting of IPV. Also, causality cannot be established between IPV and mental health status using cross-sectional study design. Assessment of changes in mental health status before, during, and after pregnancy, would have more appropriately identified causal relationship between these variables. Therefore, some amount of caution should be exercised in the interpretation and application of findings from this study.

Conclusion and Recommendation

This is one of few studies assessing burden as well as mental health effects of IPV among pregnant women in a developing country. High prevalence of all forms of violence and their significant association with anxiety and/or depression, may be indicating much unmet reproductive health needs of women in resource-poor settings. Continued neglect of IPV may be making significant contribution to maternal morbidity and mortality in developing countries.

Preventive strategies aimed at minimizing effects of IPV should also be explored. These include training of the girl-child (who are future mothers) to be resilient against their ACEs, since these have been linked to future occurrence of IPV and adverse mental health effects. Healthcare workers in maternity settings should also be trained and retrained to recognize, counsel, and provide linkage support to victims of IPV towards minimizing adverse effects. Further research in other developing country settings, including use of qualitative methods and follow-up studies is also recommended.

Conflict of Interest: There is no conflict of interest to declare

Author Contribution

OO – conceptualized the work, analyzed the data, and wrote the draft manuscript

AA – collected and entered data, reviewed draft

manuscript

NK – collected and entered data, reviewed draft manuscript

OF – reviewed draft manuscript

LA – reviewed draft manuscript

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