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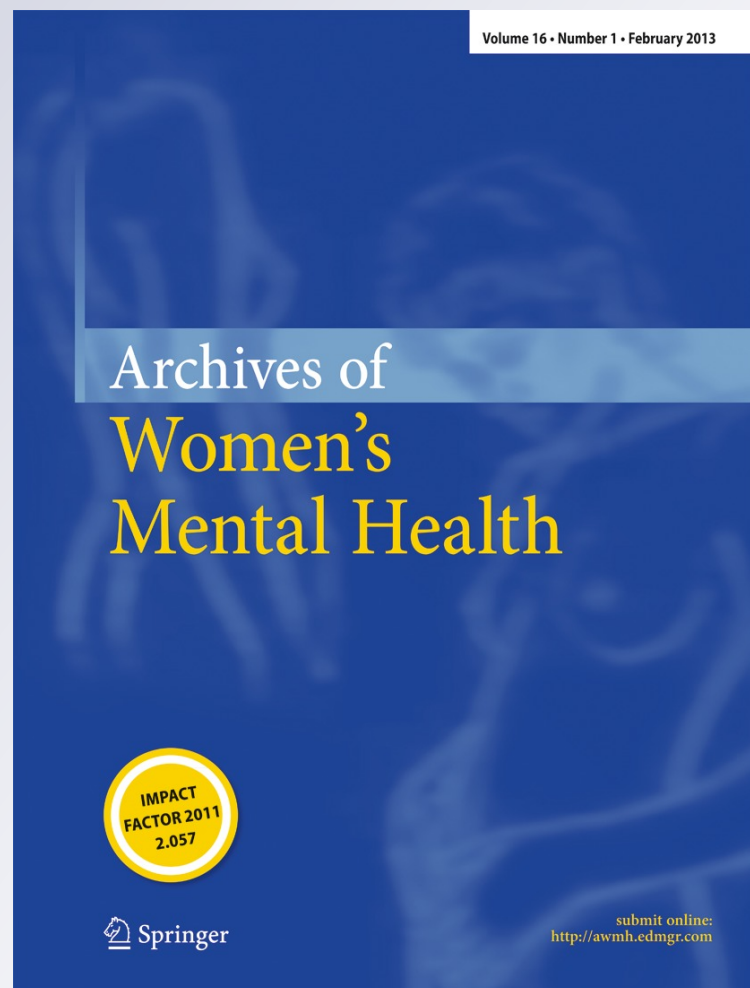
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Archives of Women's Mental Health

Official Journal of the Section on Women's Health of the World Psychiatric Association

ISSN 1434-1816
Volume 16
Number 1

Arch Womens Ment Health (2013)
16:11-18
DOI 10.1007/s00737-012-0307-x



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Impact of intimate partner violence on anxiety and depression amongst women in Ile-Ife, Nigeria

Boladale Mapayi · R. O. A. Makanjuola · S. K. Mosaku ·
O. A. Adewuya · O. Afolabi · O. O. Aloba ·
A. Akinsulore

Received: 7 May 2012 / Accepted: 9 August 2012 / Published online: 31 August 2012
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Abstract Research into intimate partner violence in the Nigerian environment has been limited. The objective of this study was to determine, amongst a sample of women attending the Enuwa Primary Health Care Center, Ile-Ife, the association between intimate partner violence and anxiety/depression. A descriptive cross-sectional study was conducted amongst 373 women who attended the antenatal clinic and welfare units of a primary health centre in Ile-Ife using the Composite Abuse Scale, the Hospital Anxiety and Depression Scale and a socio-demographic scale as instruments. Slightly over a third (36.7 %) reported intimate partner violence within the past year, 5.6 % had anxiety and 15.5 % were depressed. Anxiety and depression in the respondents were significantly associated with intimate partner violence. Women were ten times more likely to report being depressed and 17 times more likely to report anxiety if they were in violent relationships. This research has shown that the magnitude of intimate partner violence within the study population is comparable to those found in the developing countries. There are significant associations between intimate partner violence, anxiety and depression amongst the study population and this

fact undoubtedly has implications for the mental health of the Nigerian woman.

Keywords Intimate partner violence · Anxiety · Depression · Primary health · Ile-Ife

Background

Violence against women has been defined by the United Nations Declaration on the Elimination of Violence Against Women as “any act of gender-based violence that results in or is likely to result in physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life” (United Nations 1993). One of the most common forms of violence against women is that perpetuated by a husband or other intimate male partner—otherwise known as domestic violence or intimate partner violence (IPV). The family violence prevention fund has defined IPV as a pattern of assaultive and coercive behaviour that may include inflicted physical injury, psychological abuse, sexual assault, progressive social isolation, stalking, deprivation, intimidation and threats (Family Violence Prevention Fund 1999).

Globally, at least one in three women has experienced some form of gender-based abuse during her lifetime (Heise 1999). Violence against women occurs in every country amongst all social, cultural, economic and religious groups (Heise 1999) and is most common within cultures where gender roles are strictly defined and enforced, where masculinity is closely associated with toughness, male honour or dominance, where punishment of women is accepted and where violence is a standard way to resolve conflicts (Jewkes 2002).

B. Mapayi (✉) · R. O. A. Makanjuola · S. K. Mosaku ·
O. O. Aloba · A. Akinsulore
Department of Mental Health,
Obafemi Awolowo University,
Ile-Ife, Nigeria
e-mail: daledosu@yahoo.com

O. A. Adewuya
Department of Behavioural Medicine,
Lagos State University College of Medicine,
Lagos, Nigeria

O. Afolabi
Department of Community Health,
Obafemi Awolowo University,
Ile-Ife, Nigeria

In sub-Saharan Africa, 13–49 % of women have been reported to have been hit or otherwise physically assaulted by an intimate partner, with 5–29 % reporting physical violence in the year before the survey (Krug et al. 2002). A World Health Organisation study showed that 31 % of Nigerian women are physically abused by an intimate partner during their life time and that Nigeria is one of the nations where men see the ability to inflict physical punishment on their wives as a right (Krug et al. 2002). Odujirin's study in Lagos, Nigeria revealed a prevalence of 68.1 % for verbal abuse and 31.4 % for both verbal and physical abuse amongst married women (Odujirin 1993).

Another study carried out in the South Western part of Nigeria though on a migrant community, showed that 87 % of women had ever experienced IPV in the 12 months before the study (Owoaje and Olaolorun 2006) while Fatusi and Alatisé (2006) reported that 61.1 % of women experienced psychological abuse, 19.9 % sexual abuse and 7.3 % physical abuse. They found that the affected women reported more symptoms of depression, fear, anxiety and suicidal ideations compared with unaffected women. Cross-cultural comparison using rates from the Nigerian studies above might be difficult because the instruments used to identify IPV were developed by the authors empirically. They did not also examine psychiatric morbidity or any specific mental disorder amongst the women exposed to IPV using standardised instruments.

The causes of IPV are unclear and often disputed. Poverty, patriarchal societies, alcohol abuse, unemployment and other factors have been cited as possible causes of IPV for decades (Jewkes et al. 2002). An ecological framework devised by Heise (2002) describes factors on personal, situational and socio-cultural levels. Examples of factors on the individual level include: experiencing child abuse, growing up with marital violence; family- or relationship-level factors include alcohol consumption and family conflict inspired by male-dominated control of wealth and decision-making; factors occurring at the community level include poverty, unemployment, forced isolation of the woman from friends and family; societal level factors are patriarchal societies and ideals of masculinity associated with dominance and aggression (Jewkes et al. 2002). In sub-Saharan Africa, poverty and gender inequality play definite roles in engendering IPV.

IPV harms women's health in predictable ways—physical, sexual and psychological. These effects on health may be immediate or long term. IPV is also related to an excessive use of services and victims are more likely to have unmet needs for medical care and increased medical costs. IPV has also been linked with a worse patient–provider relationship (Plichta 2004).

Apart from physical health consequences, studies have overwhelmingly shown an association between IPV and mental health consequences (Pico-Alfonso 2005).

Prominent amongst the documented mental health consequences of IPV are: (1) depression (Constantino et al. 2000; Hegarty et al. 2004), (2) anxiety (Sackett and Saunders 1999; Hathaway et al. 2000) and (3) post-traumatic stress disorder (Woods 2000; Bean and Moller 2002).

Women experience depression about twice as much as men. This difference has been explained in terms of women experiencing greater poverty, differing social roles and sex discrimination, more negative life events, violence and abuse (Astbury and Cabral 2000). Depression has been positively linked with IPV but the causation still remains in question though studies have shown some evidence that partner abuse may contribute to depression rather than the opposite (Astbury and Cabral 2000) and when IPV is treated, there is a reduction in depressive symptoms (Kernic et al. 2003).

Research shows that the implications of violence extend beyond women's sexual and reproductive health, to encompass their overall well-being, the welfare of their households and communities and even the economic and social fabric of societies (Ellsberg 2000; Sundar 2001; PAHO 2003). It erodes women's confidence and mental health, hindering their productivity and participation in development activities (Ganny 1996; Nosike 1996; Heise 1999).

In Nigeria, IPV has its root in socially sanctioned male domination of women and women's low social status. Societal factors include cultural acceptance of wife battering and male dominance in every aspect of domestic and community life, including decision-making processes and factors of economic production. The low social status of women is reflected in poor educational development, lower employment and economic opportunities and cultural practices that compromise the health, fulfilment and well-being of females (Fatusi and Oyeledun 2002).

The objective of this study was to determine, amongst a sample of women attending the Enuwa Primary Health Care (PHC) Centre, Ile-Ife, the association between IPV and anxiety/depression.

Justification

Previous studies have focused mainly on the prevalence of IPV amongst women in various parts of Nigeria, but the interplay between IPV and women's mental health has been under explored amongst Nigerian women.

Materials and Methods

Setting

The location of the study was Ile-Ife in Osun state, a city in the south western geographical zone of Nigeria. There are

four local government areas in the Ile-Ife area, namely, Ife Central, Ife East, Ife North and Ife South. Of the four, Ife Central is the most central and encompasses the greater proportion of the town; it was also more accessible to the investigator. Enuwa PHC Centre is the largest of the PHC facilities in the chosen local government area. It serves as the headquarters for primary health activities in the local government and has more qualified personnel and caters to the needs of more women and children than all the other health centres put together; it also acts as a referral centre for the others and so was used as a prototype of PHC in Ile-Ife.

Ethical Considerations

The study protocol was approved by the Research and Ethical Committee of the Obafemi Awolowo University Teaching Hospitals Complex. Permission was also obtained from the office of the Director of the Primary Health Centres to carry out the study. The nature of the study, its aims and objectives were explained to the participants and written consent was obtained. The participants were assured of confidentiality and informed that counselling and related services will be provided or facilitated for those who desired it.

Recruitment

The infant welfare and the antenatal clinics of the Enuwa PHC held every day and the Monday and Tuesday clinics were used. Women attending these clinics were consecutively recruited (all prospective women were selected) once they met the study inclusion criteria until the target study number was achieved. The inclusion criteria included women who were: able to separate themselves from other adults who accompanied them, not in the company of children so ill as to disturb their participation and able to provide informed consent.

The interviews were conducted in a private office; the respondents were put at ease; and rapport was established before administration of the instruments.

Measures

Three instruments were used in this study. One of them, the Socio-demographic Data Interview Schedule, was designed by the author. Amongst the screening tools for IPV, the Composite Abuse Scale (CAS) appears to be one of the most favoured by researchers. It is the instrument recommended as the IPV research assessment tool by The National Centre for Injury Prevention and Control. The Hospital Anxiety and Depression Scale (HADS) was chosen because it has been used in a growing number

of studies across a variety of patient groups and clinical settings (Bjelland et al. 2002).

Socio-demographic Data Interview Schedule

A semi-structured socio-demographic data schedule was purposely designed for this study to elicit information on variables: age, marital status, marriage pattern, educational level and employment status.

Composite Abuse Scale

The CAS is a 30-item validated research instrument. It is based on a concept of IPV that includes coercion and not simply violent acts arising out of conflict. It is recommended as an IPV research assessment tool by the National Centre for Injury Prevention and Control (Thompson et al. 2006) because it has demonstrated a high level of reliability and validity in self-reported prevalence of IPV. The CAS measures four dimensions of abuse: (1) physical abuse, (2) emotional abuse, (3) severe combined abuse and (4) harassment. A preliminary cut-off score of 7 divides respondents into abused and non-abused. It has a reliability score (Cronbach's alpha) of 0.90 or more for each subscale and an all item total score correlation of 0.6 or above (Hegarty et al. 2005). It was selected for its comprehensiveness and strong psychometric properties. It has been validated with a large sample of patients in primary care practice settings (Hegarty et al. 2005). The CAS has not been validated in Nigeria, thus a pilot study was conducted and the CAS showed face validity and good internal consistency with a cronbach's alpha of 0.82. A cut-off score of 7 was adopted for this study in accordance with the findings of Hegarty et al. (2005).

Hospital Anxiety and Depression Scale

The HADS has been used as a screening tool for assessment of anxiety and depression in a wide variety of clinical settings including primary care (Wilkinson and Barczak 1988; Phallant and Bailey 2005). It consists of Anxiety and Depression subscales each containing 7 items making it quick and easy to use in clinical settings (Phallant and Bailey 2005). Since its publication in the early 1980s (Zigmond and Smith 1983), it has been used in a growing number of studies across a variety of patient groups and clinical settings (Bjelland et al. 2002).

The HADS comprises statements which the participants rate based on their experience over the past week. Even-numbered questions relate to depression and odd-numbered ones to anxiety. Each question has four possible responses, scored on a scale of 0 to 3. The maximum score is therefore 21 for depression and 21 for anxiety. A score of 0–7 on

either subscale is regarded as being in the normal range, a score of 11 or higher indicates the probable presence (caseness) of the mood disorder. The two subscales are independent measures (Zigmond and Smith 1983; Herman 1997). The HADS has been validated for use in Nigeria by Abiodun (1994) in a study which included the use of HADS in medical and surgical wards, gynaecological and antenatal clinics and a community sample. The sensitivity for the anxiety subscale ranged from 85 to 92 %, while the sensitivity for the depression subscale ranged from 89.5 to 92.1 %. The specificity for the anxiety subscale ranged from 86.5 to 90.6 %, while specificity for the depression subscale ranged from 86.6 to 91.1 % (Abiodun 1994). A score of 11 or more on each of the subscales was adopted as positive for this study.

Data Analysis

The data was analysed using the Statistical Package for Social Sciences (SPSS 11). The analysis was based on the total number of respondents. For scales and questions with defined categories, frequencies and percentages were calculated for each of the dimensions of IPV, anxiety and depression. The Chi-square test was used to test for the differences in the responses between the groups. Logistic regression was used to test for the relationship between IPV, anxiety and depression. The level of significance was set at 0.05. Odds ratios and 95 % confidence intervals were calculated for significant variables.

Results

Socio-demographic Characteristics of Respondents

Four hundred eligible women who agreed to participate in the study were interviewed. However, 27 questionnaires were excluded from the study because the participants did not provide adequate data on certain aspects of the questionnaire giving a response rate of 93 %. Table 1 presents the demographic characteristics of the 373 women in the sample. The participants were aged 18–37 years; the majority of them (73.8 %) were aged 21–30 years (mean age, 24.9±4.09). Three quarters (73.5 %) were married in a monogamous setting and a little above half (60.1 %) were employed. Around three fourths (74.3 %) had up to secondary school education

Prevalence

One hundred and thirty-seven (36.7 %) of the women admitted having experienced partner violence in the last 12 months. Emotional abuse was the most predominant form

Table 1 Socio-demographic characteristics of respondents

Variable	Frequency (<i>n</i> =373)	Percentage
Age (years)		
≤20	68	18.2
21–25	161	43.2
26–30	114	30.6
≥31	30	8.0
Marital status		
Single	16	4.3
Cohabiting	80	21.4
Married	267	71.6
Separated	10	2.7
Marriage/cohabitation pattern		
Monogamous	273	76.5
Polygamous	84	23.5
Employed		
No	149	39.9
Yes	224	60.1
Level of education		
None	8	2.1
Primary	31	8.3
Secondary	277	74.3
Tertiary	57	15.3

of abuse amongst the respondents, and all the women who reported violence had experienced emotional abuse. Twenty-one (5.6 %) of the participants were anxious on the anxiety subsection of the HADS, and 58 (15.5 %) of the participants were depressed on the depression subsection of the HADS (Table 2).

Bivariate analysis

We found that both anxiety and depression in participants showed statistically significant associations with being in a violent relationship (Table 3). Thirteen per cent of those who had anxiety according to the HADS cut-off point had experienced IPV as opposed to 1.3 % who had anxiety but non-violent relationships ($\chi^2=22.97$, $df=1$, $p<0.001$). Also, 34 % of those who were depressed had experienced IPV as

Table 2 Prevalence of selected variables

Variable	Frequency (<i>n</i> =373)	Percentage
IPV	137	36.7
Anxiety	21	5.6
Depression	58	15.5

Table 3 Relationship between anxiety/depression and the experience of violence

Variable	No violence	Violence	χ^2 value	df	P value
Anxiety					
Negative	233 (98.7)	119 (86.9)	22.97	1	<0.001
Positive	3 (1.3)	18 (13.1)			
Depression					
Negative	224 (94.9)	91 (66.4)	53.59	1	<0.001
Positive	12 (5.1)	46 (33.6)			

opposed to 5.1 % who were depressed but had no experience of violence ($\chi^2=53.59, df=1, p=<0.001$).

Logistic Regression

In the regression model constructed, we found that having depression and anxiety according to the HADS scores led to a 10- and 17-fold increase respectively in the risk of violence in relationships (Table 4). When significant socio-demographic characteristics were controlled for, having depression and anxiety according to the HADS scores still caused a 9- and 21-fold increase respectively in the risk of violence in relationships (Table 5).

Discussion

The demographic distribution of subjects in this study is characteristic of a young population which is a common phenomenon in most low- and middle-income countries of West African sub-region. Our study evaluated the relationship between IPV and some specific characteristics of women and their relationships to provide information about the prevalence of IPV and specifically its relationship with depression and anxiety. We found a high prevalence (36.7 %) of partner

Table 4 Association between IPV, depression and anxiety using binary logistic regression

Variables	Odds ratio	P value	95 % CI for EXP (B)	
			Lower	Upper
Depression				
Not depressed (ref)	1	–	4.57	20.97
Depressed	9.80	<0.001		
Anxiety				
Not anxious (ref)	1	–	3.96	69.99
Anxious	16.65	<0.001		

ref reference point which is the variable to which others are being compared

Table 5 Association between IPV and depression/anxiety using logistic regression (controlling for significant socio-demographic variables)

Variables	Odds ratio	P value	95 % CI
Age (years)			
≤20 (ref)	1	–	
21–25	0.98	0.96	0.35–2.75
26–30	0.85	0.79	0.26–2.82
≥31	0.02	0.001	0.001–0.17
Marital status			
Single (ref)	1	–	
Cohabiting	0.55	<0.38	0.14–2.12
Married	0.31	<0.08	0.08–1.16
Number of children			
None (ref)	1	–	
1 child	0.97	0.94	0.42–2.23
≥2 children	5.90	<0.001	2.46–14.24
Income			
None (ref)	1	–	
1,000–8,000	1.28	0.51	0.61–2.72
>8,000	4.21	0.007	1.47–12.04
Depression			
Not depressed (ref)	1	–	
Depressed	9.25	<0.001	3.9–21.8
Anxiety			
Not anxious (ref)	1	–	
Anxious	21.39	<0.001	4.63–94.6

ref reference point which is the variable to which others are being compared

violence amongst women of childbearing age in the studied area within the past year.

This rate included all forms of abuse by an intimate partner (physical, sexual and emotional/psychological) and falls within the upper limit of annual rates reported in worldwide studies using clinical sample. The slightly higher rates in this study are consistent with other studies in low- and middle-income countries. In a study in a primary care setting in eastern Nigeria, Iliaka et al. (2002) found that 46 % of women admitted to having been abused in the past year. In 48 population-based surveys from around the world, between 3 and 52 % of women reported being physically assaulted by an intimate male partner in the 12-months prior to the study.

In our study, the prevalence of depression was 15.5 %. This is comparable to results by Hegarty et al. (2004) which was 17.9 %, Sartorius et al. (1996) found 10.2 % (both in the United States of America) and Akiskal (1994) found between 10 and 25 %. Karmaliani et al. (2009) in Pakistan found that 18 % of the women were anxious and/or depressed. Amoran et al. (2007) in the south western part of Nigeria found 5.7 % of his respondents had depression while Ohaeri

and Jegede (1991), also in Nigeria found a prevalence of 49 %. The differences may be readily explained by variations in the sample population, sample size and the instruments used.

In this study, the prevalence of anxiety was 5.6 %. This is comparable to results by Blazer et al. (1991) in the USA, which was 3.8 % and Bhagwangee et al. (1998) in South Africa found 3.7 %. In Nigeria, Gureje et al. (2006) found 4.1 % while Adewuya et al. (2006) found 16.3 % amongst non-pregnant women, although the wide disparity in results can be explained by differences in sample populations and instruments used to assess anxiety. Female survivors of IPV are at increased risk for suffering serious mental health problems that can continue years after the abuse has ended (Danielson et al. 1998).

Our study suggests that the presence of IPV is an important risk indicator for depression as the prevalence of depression amongst respondents who had experienced violence was twice as much (33.6 %) as the prevalence in the sample population (15.5 %). This confirmed the findings from other settings of women experiencing current or past abuse by a partner (Golding 1999; Astbury and Cabral 2000; Campbell 2002). Although it is hard to infer causation, there is evidence that partner abuse may contribute to depression rather than the opposite because amongst other reasons, when IPV is dealt with, depressive symptoms improve (Kernic et al. 2003). In treating women who are depressed, doctors should be alert to the possibility of abuse. Ignoring the part partner abuse plays in depression reinforces the hidden nature of this issue for women (Jewkes 2002).

This study also found that the presence of IPV is an important risk indicator for anxiety as the prevalence of anxiety amongst participants who had experienced violence was almost thrice as much (13 %) as the prevalence in the sample population (5.6 %). This finding is comparable to that of Hathaway et al. (2000) who found that women experiencing IPV were approximately twice as likely to have been anxious or not gotten enough sleep for over half of the past month compared with women without a history of IPV. Gelles (1997) found that 46 % of battered women in their sample reported symptoms of anxiety disorder, and Bradley et al. (2002) found 61 % of his respondents who had experienced violence reported anxiety as opposed to 24 % of respondents with anxiety in the sample. Anxiety is more strongly associated with IPV than depression; this finding is supported by Bradley et al. (2002) and may be explained by the fact that IPV is usually associated with the threat of harm rather than loss.

The association between depression and abuse by a partner was significant even after adjustment for social indicators associated with depression like age, marital status and economic/employment status. Our study's odds were 10 for

depression and 17 for anxiety which is quite high though comparable with results elsewhere so it appears that Nigeria is not exempt from the deleterious effect of domestic violence. While Hathaway et al. (2000) got an increase in odds of being in a violent relationship of 3 and 2 for depression and anxiety, respectively, Hegarty et al. (2004) found that the odds of a respondent in an abusive relationship being depressed was 8 and Krantz and Nguyen (2009) found that odd to be 9.

Limitations of the Study

1. The study is subject to both recall and reporting bias because all measures of IPV, anxiety and depression were based on self-report, though it is expected that the estimates derived from this study will be no less reliable than those of other self-report surveys in which self-report is used.
2. The cross-sectional nature of the study limits the ability to determine the temporal nature of the relationships amongst IPV, anxiety, depression and other socio-demographic variables and thus prospective studies are needed to tease out the intricacies in these relationships.
3. In view of the low prevalence of anxiety in this study, the small sample size reduces the validity of the conclusions obtained from the logistic regression model for anxiety.

Conclusions

Having done this study, we have learnt that the magnitude of IPV amongst the study population is comparable to those found in the low- and middle-income countries and high-income countries. The association between IPV and anxiety/depression in the study population was significant. Therefore, any woman with suspected depression should be asked about IPV, as this could be a critical factor in determining treatment options. Developing a treatment plan for depression that includes antidepressants or cognitive behaviour therapy or both without taking into account exposure to violence could reduce the effectiveness of the management strategy (Wathen et al. 2007).

This study like many others has shown that violence by intimate partners is an important public health problem. Resolving it requires the involvement of many sectors working together at community, national and international levels. At each level, responses must include empowering women and girls, reaching out to men, providing for the needs of victims and increasing the penalties for abusers.

This study is one of the first in Nigeria to use standardised instruments in the measurement of IPV and its relationship with anxiety and depression. It is therefore useful in providing part of a data base in our country that may be used for

advocating policy reviews and development to protect the rights of women. It also paves the way for more research into this phenomenon in our society because it is an important public health issue.

References

- Abiodun OA (1994) A validity study of the Hospital Anxiety and Depression Scale in general hospital units and a community sample in Nigeria. *Br J Psychiatry* 165:660–672
- Adewuya AO, Ola BA, Aloba OO, Mapayi BM (2006) Anxiety disorders among Nigerian women in late pregnancy: a controlled study. *Archives of Women's Mental Health* 9(6):325–328
- Akiskal HS (2000) Mood disorders. In: Sadock BJ, Sadock VA (eds) Kaplan & Sadocks comprehensive textbook of psychiatry, vol. 1, 7th edn. Baltimore, Williams and Wilkins, p 1284
- Amoran O, Lawoyin T, Lasebikan V (2007) Prevalence of depression among adults in Oyo State, Nigeria: a comparative study of rural and urban communities. *Aust J Rural Heal* 15 (3):211–215
- Astbury J, Cabral M (2000) Women's mental health: an evidence based review. World Health Organisation, Geneva
- Bean J, Moller AT (2002) Post traumatic stress and depressive symptomatology in a sample of battered women from South Africa. *PsycholRep* 90:750–752
- Bhagwanjee A, Parekh A, Peterson PI et al (1998) Prevalence of minor psychiatric disorders in an adult African rural community in South Africa. *Psychol Med* 28:1137–1147
- Bjelland L, Dahl AA, Hang TT, Neckelmann D (2002) The validity of the hospital anxiety and depression scale. An updated literature review. *J Psychosom Res* 52:69–677
- Blazer DG, Hughes D et al (1991) Generalised anxiety disorder. In: Robbins LN, Regier DA (eds) Psychiatric disorders in America: the epidemiological catchment Area study. Academic, Orlando, pp 180–203
- Bradley F, Smith M, Long J, O'Dowd T (2002) Reported frequency of domestic violence: cross sectional survey of women attending general practice. *Br Med J* 324:1–6
- Campbell JC (2002) Health consequences of intimate partner violence. *Lancet* 359:1331–1336
- Constantino RE, Sekula LK, Rabin B, Stone C (2000) Negative life experience, depression and immune function in abused and non-abused women. *Biol Res Nurs* 1:190–198
- Danielson K, Moffit T, Caspi A, Silva P (1998) Comorbidity between abuse of an adult and DSM-III-R mental disorders: evidence from an epidemiological study. *Am J Psychiatry* 155:131–133
- Ellsberg MC (2000) Candies in hell: women's experience of violence in Nicaragua. *Soc Sci Med* 51:1595–1610
- Family Violence Prevention Fund (1999) Preventing domestic violence: clinical guidelines on routine screening. Family Violence Prevention Fund, San Francisco, CA
- Fatusi AO, Alatisse OI (2006) Intimate partner violence in Ile-Ife, Nigeria: women's experiences and men's perspectives. *Gender & Behaviour* 4(2):764–781
- Fatusi A, Oyeledun B (2002) Gender based violence challenges the public health community. *Northwest Public Health* 18–19
- Ganny M (1996) Domestic violence: the case of wife abuse and its effects on women's contribution to national development. In: Oruwari Y (ed) Women, development and the Nigerian environment. Vintage Publishers, Ibadan, pp 83–89
- Gelles RJ (1997) Intimate violence in families, 3rd edn. Sage, Thousand Oaks, pp 126–127
- Golding JM (1999) Intimate partner violence as a risk factor for mental disorder: a meta analysis. *J Fam Violence* 14:99–132
- Gureje O, Lasebikan VO, Kola L, Makanjuola VA (2006) Lifetime and 12-month prevalence of mental disorders in the Nigerian Survey of Mental Health and Well-Being. *Br J Psychiatry* 188:465–471. doi:10.1192/bjp.188.5.465
- Hathaway JF, Mucci LA, Silverman JG, Brooks DR, Mathews R, Pavlos CA (2000) Health status and health care use of Massachusetts women reporting partner abuse. *Am J Prev Med* 19:303–307
- Hegarty K, Gunn J, Chondros P, Small R (2004) Association between depression and abuse by partners of women attending general practice: descriptive, cross sectional survey. *Br Med J* 328:621–624
- Hegarty K, Bush R, Sheehan M (2005) The Composite Abuse Scale: further development and assessment of reliability and validity of a multidimensional partner abuse measure in clinical settings. *Violence Vict* 20:529–547
- Heise L (1999) Ending violence against women. Population reports, series L, No. 11. Population Information Program, Johns Hopkins University School of Public Health, Baltimore
- Heise L and Garcia-Moreno C (2002). Violence by Intimate Partners. In Krug, E., Dahlberg, LL., Mercy, JA., et al., eds. World Report on Violence and Health. World Health Organization, Geneva: pp 87–121
- Herman C (1997) International experience with the Hospital Anxiety and Depression Scale: a review of validation data and clinical results. *J Psychosom Res* 42:17–41
- Iiaka AI, Okwonkwo PI, Adoju P (2002) Intimate partner violence among women of child bearing age in a primary health centre in Nigeria. *Afr J Reprod Heal* 6(3):53–58
- Jewkes R (2002) Intimate partner violence: causes and prevention. *Lancet* 359(9315):1423–1429
- Jewkes R, Lewin J, Penn-Kekana L (2002) Risk factors for domestic violence: findings from a South African cross sectional study. *Soc Sci Med* 55:1603–1617
- Karmaliani R, Asad N, Bann CM, Moss N, McClure EM, Pasha O, Wright LL (2009) Prevalence of anxiety, depression and associated factors among pregnant women of Hyderabad, Pakistan. *Int J Soc Psychiatry* 55(5):414–424
- Kernic MA, Holt VL, Stoner JA (2003) Resolution of depression among victims of intimate partner violence: is cessation of violence enough? *Violence Vict* 18:115–129
- Krantz G, Nguyen DV (2009) The role of controlling behaviour in intimate partner violence and its health effects: a population based study from rural Vietnam. *BMC Publ Health* 9:143
- Krug GE, Dahlberg LL, Mercy AJ, Zwi B (2002). In: Anthony and Rafael Lazano (eds) World report on violence and health. World Health Organisation, Geneva, pp 90–96
- Nosike AN (1996) Violence against women and sustainable development: a contemporary perspective. In: Oruwari Y (ed) Women, development and the Nigerian environment. Vintage Publishers, Ibadan, pp 53–62
- Odujirin O (1993) Wife battering in Nigeria. *Int J Gynaecol Obstet* 41:159–164
- Ohaeri JU, Jegede RO (1991). Depression and the general medical practitioner in Nigeria. *Medicare* 6:7–11
- Owoaje ET, Olaolorun FM (2006–2007) Intimate partner violence among women in a migrant community in south west Nigeria. *Int Q Community Health Educ* 25(4):337–349
- Pan American Health Organization (2003) Violence against women: the health sector responds. Pan American Health Organization, Washington
- Phallant JF, and Bailey CM (2005) Assessment of the structure of the Hospital Anxiety and Depression Scale in musculoskeletal patients. *Health and quality of life outcomes* 3:82
- Pico-Alfonso MA (2005) Psychological intimate partner violence: The major predictor of Post Traumatic Stress Disorder in abused women. *Neuroscience and Behavioural reviews*. 29:181–193

- Plichta SB (2004) Intimate partner violence and physical health consequences: policy and practice implications. *Journal of Interpersonal Violence* 19 (11):1296–1323
- Sackett LA, Saunders DG (1999) The impact of different forms of psychological abuse on battered women. *Violence Vict* 14:105–117
- Sartorius N, Ustun TB, Lecrubier Y, Wittchen HU (1996) Depression comorbid with anxiety: results from the WHO study on psychological disorders in primary Health Care. *Br J Psychiatry* 168:30–38
- Sundar N (2001) Divining evil: the state and witchcraft in Bastar. *Gend Technol Dev* 5(3):425–448
- Thompson MP, Basile KC, Hertz MF, Sitterle D (2006) Measuring intimate partner violence victimization and perpetration: a compendium of assessment tools. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Atlanta
- United Nations (1993) Declaration on the elimination of violence against women, adopted by the General Assembly on 20 December 1993, UN Doc. A/RES/48/104
- Wathen CN, Jameison E, Wilson M, Daly M, Worster A, Macmillan HL, McMaster University violence against women research group (2007) Risk indicators to identify intimate partner violence in the emergency department. *Open Med* 1:e113–e122
- Wilkinson MJ, Barczak P (1988) Psychiatric screening in General Practice: Comparison of the General Health Questionnaire and the Hospital Anxiety and Depression Scale. *Journal of the Royal College of General Practice* 38 (312):311–313.
- Woods SJ (2000) Prevalence and patterns of posttraumatic stress disorder in abused and postabused women. *Issues Ment Health Nurs* 21:309–324
- Zigmond AS, Smith RP (1983) The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandanavica* 67:361–370