

Original paper

A cross-sectional study of the relationship between mental disorders and dating violence victimisation in university undergraduates

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Abstract

Background

In many climes, dating violence is quite prevalent among young persons, and contemporary research has demonstrated that Nigerian youths are not exempted from this menace. Beyond the physical impact of violence, victims of dating violence could also experience common mental health problems like; depression, anxiety, and suicidality.

Aims

To determine the pattern and magnitude of dating violence victimisation, and the relationship between dating violence victimisation, depression, anxiety, and suicidality among undergraduate students.

Methods

This was a cross-sectional descriptive study of 118 undergraduate students recruited using convenience sampling. The questionnaires used were; the Dating Violence Questionnaire (DVQ), Suicide Behaviour Questionnaire-Revised (SBQ-R), Hospital Anxiety and

Depression Scale (HADS), and a Socio-Demographic Questionnaire.

Results

Humiliation and sexual abuse were the commonest, and least common forms of dating violence victimization respectively. Humiliation was predictive of depression ($P=0.04$) and suicidality ($P=0.04$), physical abuse was predictive of anxiety ($P=0.02$), and sexual abuse was predictive of suicidality ($P=0.03$).

Conclusions

There is a need for better advocacy for prevention programs against dating violence, and scaling up of mental health services for youths suffering from dating violence-related mental health problems.

Keywords: dating violence, anxiety, depression, suicidality, undergraduates

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Introduction

Dating violence (DV) is a form of violence that usually involves insult or assault, and is committed by a person who is in a romantic relationship with the victim (1). It is a dysfunctional relationship dynamic among couples that may exert profound pernicious physical and emotional consequences for its victims, whether male or female.

Dating violence is one of the stressors encountered by undergraduate students nowadays and could manifest as sexual, physical, or psychological violence (1). Sexual violence may be in the form of; non-consensual sex, forced termination of pregnancy, forced contraception, coercion to engage in sexting (sex-texting), or viewing of

pornographic material (1). Physical violence comprises actions like; punching, hitting, kicking, slapping, or strangulation (1). While the psychological equivalent are; name-calling, belittling, humiliation, neglect, and intimidation, among others (1).

Similar to their counterparts around the globe, Nigerian undergraduates are also victims of DV (2,3). The commonest form of DV recognized and reported by most Nigerian victims is physical violence, due to its accompanying obvious physical injuries (4). However, there is gross under-reporting of other forms of DV in Nigerian victims due to ignorance (4). Feelings of shame, guilt, the fear of stigma, and further violence in DV victims

are also implicated in the underreportage of DV (5). This suggests that DV may be higher among Nigerian undergraduates than known.

As observed in most scenarios of intimate partner violence, for victims, DV-related mental health morbidity is broad-spectrum in nature, and could be acute or chronic (6). Mental disorders among undergraduates have increasingly become a cause for concern, as most of them are young adults, thereby falling within an age group linked with heightened susceptibility to psychopathology (7,8). Undoubtedly, the experience of DV victimisation could trigger the onset, and potentiation of mental disorders like; depression, anxiety, and suicidality, in the average undergraduate (6,9,10). These disorders are known to harm the well-being of affected persons.

A perusal of the literature showed sparse research output concerning DV victimisation, and its relationship with psychiatric disorders in Nigerian undergraduates. This study aims to address this void by examining the pattern and magnitude of DV victimisation, and its relationship with depression, anxiety, and suicidality in Nigerian undergraduates.

Methods

Study setting, design, and participants

This was a cross-sectional descriptive study done between June 2023 and July 2023 among undergraduate students of the Lagos State University College of Medicine, Nigeria. Inclusion criteria were; students aged 18 years and above, and those who gave consent for participation. Class Year 1 students and those who did not give consent were excluded. Convenience sampling was used to select 118 participants who met the inclusion criteria from Class Year 2 to Year 6.

Study instruments

Dating Violence Questionnaire (DVQ)

The Dating Violence Questionnaire (DVQ) is a 42-item questionnaire that measures victimization in romantic relationships through eight domains of abuse namely; coercion, physical, humiliation, detachment, emotional punishment, gender-based, sexual, and instrumental violence. Total scores are obtained for each domain of abuse, with higher scores depicting high levels of experienced victimization. The DVQ has an internal consistency of 0.82, (11) but has not been validated in Nigeria.

Hospital anxiety and depression scale (HADS)

The Hospital Anxiety and Depression Scale (HADS) is a 14-item instrument designed to assess anxiety and depression symptoms (12). It has two subscales, for

anxiety (HADS-A) and depression respectively (HADS-D). For each subscale, a total score of ≥ 8 indicates the presence of anxiety or depression, and both subscales have an internal consistency of >0.70 , (13) and have been validated in Nigeria (14).

Suicide Behaviour Questionnaire-Revised (SBQ-R)

The Suicide Behavior Questionnaire-Revised (SBQ-R) is a self-report questionnaire used to screen for suicidality. This four-item instrument is brief, each question addresses a specific risk factor of suicidality. A total score of ≥ 7 indicates a significant risk of suicidal behavior. The SBQ-R has an internal consistency of 0.93 (15) and has been validated in Nigeria (16).

Socio-Demographic Questionnaire

Details concerning the socio-demographic variables of the participants were collected. Clinical information of the participants such as; history of substance use, personal history of mental illness, and family history of mental illness was also documented.

Procedure

A thorough explanation was given to the participants about the study's purpose. Questionnaires were administered, and those identified as having psychopathology were referred to the psychiatry unit of the Lagos State University Teaching Hospital for further mental health evaluation and intervention.

Statistical analysis

The Statistical Package for the Social Sciences Version-23 (SPSS version-23) by IBM was used for the data analysis. Descriptive statistics like; means and standard deviations were used to describe continuous data, and frequencies and percentages for categorical data. Preliminary analysis was done to ensure there was no violation of assumptions of normality, linearity, multicollinearity, and homoscedasticity. A Pearson's correlational analysis of the relationship between the domains of abuse, and depression, anxiety, and suicidality was done. Subsequently, statistically significant variables from the correlation test were entered into a multivariate regression analysis to determine which of the independent variables (domains of abuse) had the strongest predictive relationship with the dependent variables (depression, anxiety, and suicidality). For all the statistical tests, $P < 0.05$ was considered statistically significant.

Ethical consideration

The institutional research review board of the Lagos State University Teaching Hospital, Nigeria, approved the study (Ethical approval number: LREC/06/10/2167).

Written informed consent was also obtained from the participants. All procedures were by the 1964 Helsinki Declaration of 1975, and its later amendments in 2013 on human experimentation and research.

Results

Socio-demographic and clinical characteristics

Most of the participants were female (56%), single (91%), Christian (64%), and from middle-class homes (87%). The age range of the students was 18-32 years, with most being ≥ 25 years of age (58%), and a mean age of $24 (\pm 3)$

years. The majority were presently in a romantic relationship (60%), and half of them had been in a minimum of two previous romantic relationships (Table 1).

Descriptive statistics of the DVQ, HADS, and SBQ-R

The mean scores for anxiety, depression, and suicidality were $10 (\pm 5.4)$, $7 (\pm 4)$, and $9 (\pm 5)$ respectively. For the domains of abuse of the DVQ, humiliation had the highest mean, $11 (\pm 2)$, followed by detachment, $7.3 (\pm 5)$. However, instrumental and sexual abuse had the lowest mean scores of $4 (\pm 2.4)$ and $3 (\pm 2)$ respectively (Table 2).

Table 1. Participant characteristics

Variable	Frequency n (%)	Variable	Frequency n (%)	Mean(sd) range
Gender		Age (years)		
Male	52 (44)	<25	68 (58)	24 (3)
Female	66 (56)	≥ 25	50 (42)	18-32
Marital status		Age at first romantic relationship (years)		
Married	10 (9)	≤ 16	69 (59)	14 (8)
Single	108 (91)	>16	49 (41)	13-26
Religion		Age of current partner (years)		
Islam	43 (36)	≤ 23	65 (57)	16 (13)
Christian	75 (64)	>23	51 (43)	21-36
Class		Number of past relationships		
Year 2	32 (27)	≤ 2	59 (50)	2 (1)
Year 3	22 (19)	>2	59 (50)	0-8
Year 4	23 (20)			
Year 5	20 (16)			
Year 6	21 (18)			
Family socio-economic status		Longest duration of romantic relationship (months)		
Low	0 (0)	≤ 12	69 (58)	21 (9)
Middle	103 (87)	>12	49 (42)	1-108
High	15 (13)			
Currently in relationship		Shortest duration of romantic relationship (months)		
Yes	71 (60)	≤ 1	66 (56)	3 (1)
No	47 (40)	>1	52 (44)	0.5-36

SD = Standard Deviation

Table 2. Descriptive statistics of the dating violence questionnaire, suicide behaviour questionnaire, and hospital anxiety and depression scale

Variable	Mean(SD)	Range
Coercion	5 (3)	0-13
Detachment	7.3 (5)	0-18
Humiliation	11 (2)	0-16
Gender-based	5 (3)	0-12
Physical	5.2 (3)	0-13
Instrumental	4 (2.4)	0-8
Emotional	6 (4.2)	0-9
Sexual	3 (2)	0-15
Suicidality	9 (5)	1-18
Depression	7 (4)	1-20
Anxiety	10 (5.4)	3-21

SD = Standard Deviation

Relationship between dating violence victimisation and anxiety

On correlation analysis, detachment, humiliation, gender-based abuse, physical abuse, and sexual abuse had a statistically significant positive relationship with anxiety (Table 3). The regression model equation summary which included the significant domains of abuse and anxiety, was significant ($F=3.33$, $P=0.01$), and a 13% variance in anxiety scores was explained by the domains of abuse (Table 4). However, physical abuse was the only variable that maintained a significant linear relationship with anxiety ($Beta=0.32$, $P=0.02$) (Table 5).

Relationship between dating violence victimisation and depression

Of all the domains of abuse, only coercion, physical, sexual, humiliation and emotional abuse were significant in correlation analysis (Table 3). Subsequently, on regression, the model equation summary (comprising of depression and the significant domains) showed that the model as a whole was significant ($F=1.45$, $P=0.02$), and about 7% variance in depression scores was explained by the domains of abuse (Table 4). On further analysis, only humiliation continued to remain significant ($Beta=0.29$, $P=0.04$), having a positive relationship with depression (Table 5).

Table 3. Pearson correlation analyses of the relationship between anxiety, depression, suicidality, and the domains of abuse

Variable	Coercion	Detachment	Humiliation	Gender-based	Physical	Instru-mental	Emotional	Sexual
Anxiety								
Correlation Coefficient	0.17	0.22*	0.23*	0.30**	0.27**	0.04	0.14	0.26**
Sig	0.07	0.02	0.01	<0.001	<0.001	0.64	0.12	<0.001
Depression								
Correlation Coefficient	0.15	0.14	0.24*	0.11	0.14*	-0.44	0.17*	0.11*
Sig	0.04	0.12	0.01	0.25	0.03	0.96	0.02	0.03
Suicidality								
Correlation Coefficient	0.30**	0.40**	0.39**	0.29**	0.30**	0.16	0.30**	0.41**
Sig	<0.001	<0.001	<0.001	<0.001	<0.001	0.86	<0.001	<0.001

Sig – Level of significance

* $p<0.05$, ** $p<0.01$

Relationship between dating violence victimisation and suicidality

After the initial correlation analysis, all the domains of abuse were significant, except instrumental abuse (Table 3). The regression model equation summary, which included the significant domains and suicidality was significant ($F=6.97$, $P<0.001$), and 31% variance in suicidality scores was explained by the domains of abuse (Table 4). In the final analysis, only humiliation

(Beta=0.37, $P=0.04$) and sexual abuse (Beta=0.25, $P=0.03$) maintained a significant linear relationship with suicidality (Table 5).

In summary, humiliation was the commonest, while sexual abuse was the least common type of DV victimization experienced by Nigerian undergraduates. Humiliation was predictive of depression and suicidality, while physical abuse and sexual abuse were predictors of anxiety and suicidality respectively.

Table 4. Model summary of the regression analysis between anxiety, depression, suicidality, and the domains of abuse

Dependent variable	R squared	Sum of squares Mean square	F	Sig
Anxiety	0.13	436 87	3.33	0.01*
Depression	0.07	118 20	1.45	0.02*
Suicidality	0.31	883 147	6.89	<0.001*

Sig – Level of significance

* $p<0.05$, ** $p<0.01$

Table 5. Regression analyses showing the relationship between anxiety, depression, suicidality, and the domains of abuse

Variable	Unstandardised Coefficient B	Unstandardised Coefficient SE	Standardised Coefficient Beta	T	Sig	95% confidence	
						LB	UB
Anxiety							
Physical	0.53	0.22	0.32	2.49	0.02*	0.31	0.76
Depression							
Humiliation	0.22	0.11	0.29	2.09	0.04*	0.01	0.43
Suicidality							
Humiliation	0.27	0.12	0.37	2.04	0.04*	0.11	0.53
Sexual	0.29	0.13	0.25	2.25	0.03*	0.04	0.55

Sig – Level of significance

* $P<0.05$

Discussion

The most frequently reported form of DV was humiliation, which happens to be a form of psychological DV. Our findings corroborate earlier studies on undergraduates (2,10,17). On the contrary, sexual abuse was the least reported DV, this had been established in the past (2,3,10).

The steadily rising advocacy against physical intimate partner violence in most societies, coupled with the relatively easy recognition of the signs of physical violence in DV victims, may cause DV perpetrators to resort to covert forms of DV like psychological violence. Hence, leading to elevated rates of psychological DV in victims. Owing to the conservative Nigerian culture, sexual-related discussions are considered taboo, so, are not commonplace. Therefore, the students were probably hesitant to disclose their sexual history, and this could have contributed to the underreporting of sexual abuse among them.

Humiliation was a predictor of depression and suicidality, prior research has proven that humiliation has a linear relationship with depression (19) and suicidality (19). Our findings give credence to the perspective that in undergraduates, psychological DV increases the risk of depression (10,20,21) and suicidality (22-24).

Humiliation is an intense, painful feeling of being unjustly ridiculed, and may be accompanied by a sense of failure (19). Using the Interpersonal – Psychological Theory of Suicide (IPTs), humiliation may promote perceived burdensomeness (feelings of self-hatred and liability) and thwarted belongingness (feelings of loneliness) in DV victims, thereby, making them susceptible to suicide (26,27). It is also postulated that the occurrence of depression secondary to DV could result in suicidality in DV victims (28). Concerning the link between humiliation and depression, humiliation may elicit feelings of inadequacy and worthlessness, causing DV victims to eventually succumb to depression (29,30).

Sexual abuse was associated with suicidality, this is in sync with what is known already (28,31). Coercion to partake in sexual activity by their partner may evoke inappropriate feelings of self-disgust, guilt, and hopelessness in DV victims, to the extent of them having suicidal thoughts, or exhibiting suicidal behavior.

We also found that physical abuse was a risk factor for anxiety. Comparable observations have been made among diverse populations of undergraduates (10,32). When a person constantly receives or is at the risk of receiving physical attacks, there is a chance that they may be in a state of perpetual tension and fear, which at some point, could culminate into anxiety disorder.

Implications for clinical practice

This study hereby underscores the need for the establishment of robust on-site mental health support services and clinics on university campuses across the nation. This could facilitate early psycho-social intervention in DV situations, and DV-related psychiatric morbidity among concerned students.

Implications for policy

Our study findings would equip policymakers, university administrators, and other relevant stakeholders in the education sector, with the requisite knowledge to create policies and programs that promote healthy young relationships, and prevent DV among undergraduates.

Implications for future research

The impact of psychotherapy on undergraduates with DV-related psychopathology will be of interest.

Limitations

Being a cross-sectional study, a causal relationship could not be established between DV victimization and mental disorders. Also, the use of self-reporting questionnaires increased the likelihood of selection of socially desirable responses by the participants.

Conclusions

An in-depth understanding of the magnitude and mental health correlates of DV victimization among undergraduates is essential. This may help reduce the burden of DV and translate to improved mental health outcomes among these students.

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Statement of contribution

A.A.L and M.O.S conceived and designed the study, A.A.L analysed and interpreted the data, and A.A.L and M.O.S wrote the manuscript. Both A.A.L and M.O.S gave final approval for the published version of the manuscript, and are accountable for all aspects of this work.

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Declaration of interest

There are no conflicts of interest.

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