ORIGINAL ARTICLE

PSYCHOPATHOLOGICAL CORRELATES OF CHILD SEXUAL ABUSE: THE CASE OF FEMALE STUDENTS IN JIMMA ZONE, SOUTH WEST ETHIOPIA

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ABSTRACT

BACKGROUND: Arguably, the sexual abuse of children raises a number of important questions for researchers at different times. Thus, the present study was aimed to examine psychopathological correlates of child sexual abuse.

METHODS: This cross-sectional survey study compared the degree of vulnerability to psychopathological variables among respondents with a history of sexual abuse and their unabused counter parts in Jimma Zone. To this end, 400 female students were selected from five high schools as the sample population using multi-stage sampling procedure. Data were gathered using Reynold's Adolescent Depression Scale (RADS), Adolescent Panic Anxiety Scale, and Posttraumatic stress disorder test. The collected data via self-administered questionnaire were analyzed through the two sample t-test statistical procedure.

RESULTS: The study revealed a result of t=3.83 for depression, t=2.46 for panic episode, and t=4.23 for PTSD score, whereas, the critical value of all the three psychopathological variables showed t (52) =1.676 at P=0.05. Results illustrate the presence of statistically significant differences in the mean scores of the above mentioned psychopathologies between females with history of sexual abuse and females who were not victims of this sexual attack at df =52 and P=0.05.

CONCLUSION: The findings of the present study indicate that history of childhood sexual abuse has adverse consequences on the future psychological wellbeing of females. Specifically, females with experience of sexual abuse were found to be more susceptible to develop depression, panic anxiety, and post-traumatic stress disorders than unabused females. Thus, parents, and teachers should give the necessary care and protection to female children. Primary bio-psychosocial care services need to be established in the school system, and both the Ministry of Health and the Ministry of Education should work together against sexual exploitation of female children.

KEY WORDS: Child Sexual Abuse (CSA), Psychopathologies, Correlates

INTRODUCTION

While sexual use of children by adults has existed throughout history, due to the presence of widespread socially tolerated cultural practices such as abduction and early marriage, presumed popular misconceptions, and the absence of clear-cut meaning to child sexual abuse (CSA), the problem has been underreported and overlooked for centuries in most parts of the world (1). Especially, in most developing countries, despite the fact that children under 15 years old constitute 40-50% of their population, major advances in studying sexual abuse against children have not been observed. It is obviously true that such kind of problem is considered as very minor and secondary in the third world countries, where other numerous socio-economic crises are conspicuous. Nevertheless, in order to address child sexual abuse and exploitation through primary health care system, information is needed on the frequency, type, and maladaptive psychosocial consequences of child abuse prevailing in a given locality.

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When we see its current epidemiology, estimates of the incidence of sexual abuse ranges from 15% to 22% for female children and 3% to 8% for male children, or higher, depending on the definition of abuse and the method of data collection (4, 5). In most Ethiopia cultures, the issue of sexuality is an emotion charging topic. Few available studies reported that around 11.4%-16% of females had a history of sexual abuse during their childhood (6, 7, and 8). Specially, children working as maidservants and children who are destined to street life have been exceedingly exposed to sexual violence (9). Nevertheless, the continuing maladaptive consequences of child sexual abuse on the victims were without being clearly seen yet.

The debate over the effects of child sexual abuse has long history starting from Sigmund Freud; the issue has been taken up again in several studies of sexuality since then (1, 4). Even today, although research findings show a considerable inconsistency across studies, most research works have concluded that sexually abused children are more prone to a range of mental and behavioral aberrations including somatoform disorders, sexual dysfunction, sexually acting out behaviors, dissociation, physical injury, and relationship difficulties in childhood, adolescence, and adulthood than children with no history of sexual violence (4, 10). However, a specific characteristic pattern of symptoms has not been identified while there are several hypotheses on the causality of these associations.

Generally, recent theories that explain the effects of childhood sexual abuse have encouraged the studies on the associations between certain characteristics of abusive experiences and mental health conditions (11). However, in most cases, these associated consequences have been roughly mentioned using retrospective data and unstandardized tests/scales (13), specially, in Ethiopia. In addition, studies have indicated that females are more vulnerable to anxiety and mood disorders than males (14). For instance, approximately one-third of the female population across the world experience depression (15). Likewise, studies have also shown that the same proportion (one-third) of females have been sexually abused before the age of 18 (16, 17). Thus,

problems such as anxiety, depression, and sexual abuse are prevalent among females (the relationship of sexual abuse with anxiety and depression needs to be further examined). Above all, this article describes the first prospective assessment of psychopathological correlates of CSA. Therefore, the study intended to fill the content, spatial, and methodological gaps that have been critically observed on the available studies conducted on issue of CSA by examining the association of prevalent psychopathologies (depression, panic anxiety, and PTSD) with the history of CSA among females. To this end, the basic question "Is there a significant association between CSA and psychopathologies (depression, panic anxiety, and PTSD)?" was raised.

MATERIALS AND METHODS

Cross-sectional survey design was employed to explore the association between major psychopathologies with a history of CSA among high school female students. Since the main purpose of the study was comparing females who had a history of sexual abuse with non-abused counterparts in terms of their vulnerability to psychopathologies, the researcher employed quantitative approach. The study was undertaken in one of the regional states of Ethiopia, i.e. Oromia Region, Jimma Zone in the year 2010. Out of the total 27 high schools of the study area, 5 (20%) high schools (i.e. Sokoru, Dedo, Saka, Agaro, and Seto) were incorporated in the study using simple random sampling technique.

Since ample studies have claimed that females are more vulnerable to sexual abuse than males, this study covered 1522 Grade Ten female students as the study population. Of these, 400 (i.e., 75 from Sekoru, 55 from Dedo, 82 from Seka, 93 from Agaro, and the rest 95 from Seto) of them were taken as respondents of the study using stratified random sampling technique. Grade Ten students were purposefully selected because all the 3 adopted scales were developed for adolescents. Thus, the researcher believed that Grade Ten students were in the most appropriate age group.

Instrument and Procedure: Relevant data were gathered using structured questionnaire. The

Reynold's Adolescent Depression Scale (RADS), containing 18 items was adopted and used for measuring depression symptoms. Similarly, Goldberg's Adolescent Panic Anxiety Scale and PTSD Scale were adopted on the basis of DSM-IV and ICD-10 classification criteria consisting of 19 and 14 items respectively. These scales were composed of items rated on a 6-point Likert-type format with scores ranging from 1 (almost never) to 5 (most of the time). In developing the questionnaire, all the necessary steps were followed. Initially, items were prepared based on the purpose of the study. Then, all items were evaluated by three experts to check the content validity of the instrument. As a result of this, a few items were discarded and some were modified. Before the questionnaire was disseminated to the larger sample population, a pilot test was administered to 60 randomly selected female students. Based on the results of the pilot test, the reliability of each scale was computed using Cronbach's alpha and the following were found: r=0.91, r=0.82 and r=0.85 respectively for the above indicated scales. Ultimately, the questionnaire was administered.

Data Analysis: The analysis and interpretation of the data were carried out using both descriptive and inferential statistical techniques through SPSS statistical package. First, some basic information and the prevalence of the problem among respondents were analyzed using descriptive statistics (percentage, mean and frequency distribution), but, the researcher employed the two sample t-test so as to analyze the relative association of psychopathologies with the history of CSA for all the three scales were simultaneously administered to the same groups of respondents .

RESULTS

This section presents the findings of the study beginning with the description of the prevalence of CSA and moving on to psychopathological correlates to CSA. Even though 400 females were participated in the study, only 379 filled out the questionnaire properly. Among these, the majority, 185 (49%), were Muslims and 136 (35.7%) were Orthodox Christians while the remaining 58 (15.3%) were protestants. Regarding their marital status, only 16 (4%) were married, whereas the vast majority, i.e. 363 (96%) of them were single.

The prevalence of child sexual abuse: Regarding the history of sexual abuse, respondents were asked to rate experience of sexual assault (***verbal*** such as insulting children using taboo sexual words; ***visual***-displaying pornography, forcing one to show his/her sex organ or forcing you to see somebody's sex organ and ***physical***, i.e. fondling, touching in a sexual manner, and raping).They were required to respond to this question by choosing 'Yes' or 'No' in the two items indicated in table 1.

Table 1: Prevalence of child sexual abuse, Jimma Zone, March 25, 2010.

Exposure to Sexual Abuse	Yes		No	
	Frequency	%	Frequency	%
Have you experienced sexually abusive advances before in my life?	53	16.6	326	83.4
Have you ever come across other children who had been sexually abused?	374	98.4	4	1.6

* Items measuring the history of CSA among respondents

The result depicted that despite the fact that almost all (N=374, i.e. 98.4%) of the respondents came across other children who had been sexually abused, only 53 (16.6%) of them reported that they personally experienced sexually abusive advances before the age of 18.

In addition, results of the study illustrated in Table 2 below reveal that more than half (N=194, i.e. 51.3%) of the respondents began sexual relationship. Of these, 48(12.7%) of them reported that they began sexual intercourse during an age when sexual consent cannot

legally be given (i.e. before the age of 15). However, rape (N=7, with x=1.80), making children look at somebody's genital organ, and touching around the genitals were among infrequently occurring forms of CSA.

Table 2: The respondents' ages, Jimma Zone, March 25, 2010.

Age	Responses	
	N<u>o</u>	%
≤ 15 years	48	12.7
16-17 years	74	19.6
>18 years	72	19
Not yet experienced/ started	181	48.7
Total	379	100

†Age distribution at which respondents began sexual intercourse

Forms of child sexual abuse: Again, those 53 respondents with a history of CSA were asked to look back into the forms of sexual advances performed by their perpetrators. At the same time, they were also requested to rate the frequency of each form in a 6-point scale that ranges from 0 (not at all) to 5 (all the times). The results show that verbal sexual abuse (N=53, with mean x=4.83) and fondling in a socially unacceptable manner (N=36, with x=4.61) were the two most frequent forms of CSA among respondents.

Correlates (i.e. depression, panic anxiety, and PTSD) of CSA were examined by the two sample t-test statistical package. The following tables display the mean difference, SD, and t-test results.

As illustrated in Table 3, the sample mean of the difference scores is 28, with a standard deviation of the differences given by 1.36. The calculated *t*-statistics (with 52 *df*) is given by 3.83, which has a *p*-value of 0.018. At *p=0.05* level, we reject *H*0 and conclude that the history of CSA has an effect on depression. This explicates that respondents with childhood sexual abuse demonstrated a significantly higher mean score (X=61) on the depression scale than did those without the history of childhood sexual abuse (X=33). Thus, this implies that victims of child sexual abuse are more vulnerable to develop symptoms of depression than non-abused counter parts.

Table 3: The two sample t-test results for depression, Jimma Zone, March 25, 2010.

Psychopathological Variable	Unabused			Abused			Mean Difference	t	Sig.
	Mean (X₁)	N₁	Sd₁	Mean(X₂)	N₂	Sd₂			
Depression	33	325	5.3	61	53	3.96	28	*3.83*	0.018‡

‡ Statistically significant at p<0.05 level

Similarly, a paired *t*-test was computed to ascertain the link between CSA and panic episode. The result demonstrated that the sample mean of the difference is 31 with a SD of the differences =0.53, t=2.46 (with 52 *df*) at *p<0.013*. That is, at *p = 0.05* level, we can reject *H*0 and conclude that there is a significant difference in the mean values of panic anxiety score (X=57) among females with the history of CSA and those without it (X=26). This implies that one of the associated factors with panic anxiety disorder, especially among females, is CSA.

Table 4: The two sample t-test result for panic anxiety, Jimma Zone, March 25, 2010.

Psychopathological Variable	Unabused			Abused			Mean Difference	t	Sig.
	Mean(X₁)	N₁	Sd₁	Mean(X₂)	N₂	Sd₂			
panic anxiety	26	325	4.70	57	53	5.23	31	2.46	0.013§

§ Statistically significant at p<0.05 level

With the same trend, the degree of association between PTSD and history of child sexual abuse was examined as illustrated in Table 5 above. The result of the *t-test* (*t=4.23, df =52, mean difference of 24; p=0.015*) indicates the presence of a substantial difference between the mean values of the two groups (X=42 and X=18) of respondents in terms of their susceptibility to PTSD.

Table 5: The two sample t-test result for PTSD, Jimma Zone, March 25, 2010.

Psychopathological Variable	Unabused			Abused			*Mean Difference*	*t*	*Sig.*
	Mean(X_1)	N_1	Sd_1	Mean(X_2)	N_2	Sd_2			
PTSD	18	325	7.84	42	53	5.72	24	.23	0.015✢

✢Statistically significant at p<0.05 level

DISCUSSION

Most previous studies on the issue of CSA estimated the incidence of child sexual abuse to be at least 6%–17% (4, 5). Likewise, the result in this study depicted that 53 (16.6%) of the respondents experienced sexually abusive advances that ranged from verbal harassment to rape before in their life, whereas a huge portion (N=374, 98.4%) of the respondents came across other children who had been sexually abused. This implies that there might be unreported and overly-tolerated (due to some socio-cultural and other unknown reasons) cases of sexual molestations against female children. Moreover, more than half (N=194, i.e. 51.3%) of the respondents began sexual relationship; among these, 48(12.7%) of teens reported that their age of sexual onset was ≤15.

Findings of earlier studies (1, 4, 6, 8) reported that subjects with sexual abuse history often encounter a range (in terms of both severity and complexity) of psychopathologies than unabused groups. Similarly, in this particular study, a comparison was made between sexually abused and unabused groups of respondents in terms of their vulnerability to depression, panic anxiety, and PTSD. To this effect, as indicated in Table 3, Table 4 and Table 5 above, a two-sample *t*-test was conducted for each of the psychopathological variables and the results were *t=3.83* for depression, *t=2.46* for panic episode, and *t=4.23* for PTSD test scores with *df=52* at *p<0.05* level. When we compare the *t-test* values with the critical value of *t* (52) *=1.676* at *P*=0.05, the data give evidence of a significant difference between sexually abused females and unabused counterparts in their mean scores of depression, panic, and PTSD test scores. This shows the presence of a significant difference between mean values of the two groups in their depression, panic episode, and PTSD test scores. In other words, respondents with childhood sexual abuse experiences demonstrated a significantly higher mean score of depression (X=61), panic episode (X=57), and PTSD (X=42) than did those without the history of childhood sexual abuse, who exhibited mean scores of 33 for depression, 26 for panic episode, and 18 for PTSD. Generally, females who were sexually abused had higher mean of self-report depression scores. They also indicated more incidences of panic, and PTSD syndromes than their counterparts.

In sum, the findings of this study revealed that a substantial proportion (16.6%) of the respondents had history of sexual abuse manifested through verbal, visual, and physical sexual advances. There were also two additional sets of evidence supporting the existence of the problem. The first one was based on whether the respondents had ever come across other children who had been sexually abused or not. And the second type of evidence was their age of sexual onset. Accordingly, 98.4% of the respondents knew other females who had been sexually abused; and 12.7% of them also reported that they began sexual intercourse during an age when sexual consent cannot legally be given (i.e. before the age of 15). Generally, all these premises, disclose the prevalence of child sexual abuse among the study population.

Principally, this particular study found out that that females with sexual abuse are more susceptible to develop or be affected by psychological aberrations, specifically, depression, panic anxiety and PTSD than unabused females. Likewise, the findings from this study showed that a history of childhood sexual abuse has an adverse consequence on the future psychological wellbeing of females. Specifically, they are more susceptible to develop or be affected by depression, panic anxiety, and PTSD than non-abused females.

However, the study is not without limitations. One of the drawbacks that might adversely influence the results of the study was recall bias which is the common phenomenon among retrospective studies. Moreover, it is not clear whether the observed symptoms of psychological disorders preceded the abusive event or resulted from it.

Finally, on the basis of the findings of the study, the following preventive and therapeutic measures were recommended:

- Guardians, parents, and teachers should be aware of existence of CSA among the society, and give the necessary care and protection for female children.
- Primary bio-psychosocial care services need to be established in the school system so as to minimize the long-term psychopathological implications among survivors of CSA. To this effect, both the Ministry of Health and the Ministry of Education should work together against sexual exploitation of female children. There should be trained professionals (psychiatrists, clinical psychologists, counselors, social workers, and forensic experts) that can deliver bio-psychosocial care and support for the victims of sexual abuse in schools, hospitals, clinics and courts.
- Childhood sexual abuse should no longer be ignored or tolerated. To this effect, the concerted efforts of families, law enforcement bodies, mass-media, schools and child rights advocators is crucial.

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