

# Correlates of sexual violence among adolescent females in Riyadh, Saudi Arabia

Al-Joharah M. Al-Quaiz, MSc, MRCP, Hafsa M. Raheel, MCPS, FCRS.

## ABSTRACT

**الأهداف:** معرفة نسبة التعرض، التجارب والعوامل المصاحبة للعنف الجنسي للطالبات المراهقات في مدينة الرياض.

**الطريقة:** أُجريت دراسة مسحية في مدرستين من مدارس البنات في مدينة الرياض - المملكة العربية السعودية، ابتداءً من شهر يناير 2008م ولمدة ثلاثة أشهر. تم اختيار خمسة فصول من كل مدرسة بطريقة عشوائية ومن كل فصل 25 طالبة من المرحلة الدراسية المتوسطة والثانوية. تم مشاركة 419 طالبة. تمت تعبئة الاستبيان من قبل الطالبات في خلال 15 دقيقة تحت إشراف مساعدات البحث.

**النتائج:** اثنان وأربعون طالبة مراهقة (10%) تعرضن للعنف الجنسي. فقط (31%) من الطالبات تم تثقيفهن عن كيفية التعامل مع العنف الجنسي. كما تبين أن الطالبات اللواتي كان ترتيبهن بين أشقائهن الخامسة أو أكثر واللواتي لم يكن والديهن منفطحين معهن في الأمور الجنسية هن الأكثر عرضة للعنف الجنسي، ( $\chi^2=4.02$ ,  $p=0.044$ ,  $\chi^2=4.24$ ,  $p=0.039$ ) على التوالي.

**خاتمة:** أظهرت هذه الدراسة إن الترتيب الخامس أو أكثر بين أفراد الأسرة وعدم وجود انفتاح من قبل الوالدين لمناقشة الأمور الجنسية هما من العوامل المصاحبة للتعرض للعنف الجنسي.

**Objectives:** To determine the frequency, experiences and correlates of sexual violence among female adolescents in Riyadh city, Kingdom of Saudi Arabia.

**Methods:** A cross-sectional survey was conducted in 2 schools in Riyadh city for adolescent females starting from January 2008 for 3 months. Five classes with 25 students in each were randomly selected from intermediate and secondary grade of each school. Four hundred and nineteen students were included. A self-answering questionnaire was distributed and collected after 15 minutes by 3 research assistants.

**Results:** Forty-two adolescent students (10%) were exposed to sexual violence. Only 31% of the students were taught how to react to sexual violence. Students

whose order was  $\geq 5$ th among siblings and who had unsupportive parents in discussing sexual issues were more exposed to sexual violence ( $\chi^2=4.02$ ,  $p=0.044$ ,  $\chi^2=4.24$ ,  $p=0.039$ ).

**Conclusion:** Being  $\geq 5$ th in order among siblings and having unsupportive parents in discussing sexual issues were correlates for exposure to sexual violence.

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*From the Department of Family and Community Medicine, College of Medicine, King Saud University, Riyadh, Kingdom of Saudi Arabia.*

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*Address correspondence and reprint request to: Dr. Al-Joharah M. Al-Quaiz, Department of Family and Community Medicine, College of Medicine, King Saud University, PO Box 231831, Riyadh 11321, Kingdom of Saudi Arabia. Tel. +966 (1) 4671941. Fax. +966 (1) 4671967. E-mail: jalquaiz@yahoo.com*

Childhood sexual violence is a serious public health problem globally.<sup>1</sup> Sexual violence against children exists across cultures and societal boundaries. However, exact figures are difficult to find. Estimates throughout the world indicate that both male and female children and young adolescents are at risk.<sup>2</sup> Although child sexual violence has received much attention in the western countries in the past decades, it still remains a topic of guilt and shame in most of the Arab world. The tight cultural norms and traditions and unacceptability of the society to talk of such incidences make it very hard to investigate this very important public health issue. "Sexual assault", "sexual abuse" and "sexual violence" are considered synonymous and are used interchangeably in global literature. Studies have clearly pointed out both short and long term consequences of sexual violence on the physical and the psychological health of the affected.<sup>3,4</sup> It not only causes physical trauma to the body parts, but also affects the mental state of the victim. Depression, anxiety, cognitive disorders, and nightmares have all been reported as consequences of sexual violence, at times leading to societal rejection and

suicidal attempts.<sup>1-6</sup> Literature from the Western parts of the world has focused and highlighted occurrence of sexual violence and its consequences among children and young adolescents, a particularly vulnerable age to all types of violence and abuse.<sup>7</sup> South African countries have documented a high prevalence of childhood sexual abuse mainly due to the high reporting of such incidences by the victims. Rates range from 30-54%.<sup>8-10</sup> Only one study conducted, among the Bedouin Arab community in Southern Palestine<sup>11</sup> has documented the existence of sexual violence among female adolescents of the community. Elbedour, et al<sup>11</sup> has shown that around 16% of the respondents reported at least one or 2 sexual abuse experiences, 11% experienced 3-4, and 4% experiencing more than 4 events of being sexually abused. This does not give a true picture of the Arab world particularly Middle East. The Arab world, in particular Saudi Arabia has a fast growing adolescent population and so far National policies have not focused on their health needs. Being an extremely crucial age group, their health needs and wants differ from those of the adults. There is a dearth of data focusing and addressing this very important age group in the region and particularly in the country. The foundation of Saudi Arabia, an Islamic state is built on firm religious beliefs and predominantly males are considered authoritative, having a very strong role to play in decision making and family matters. This makes it nearly impossible to talk of such sensitive issues, therefore, sexual violence in adolescents has hardly been investigated. However, keeping in mind the devastating consequences it holds into adult life, we made an attempt to investigate the frequency of sexual violence, and to determine the correlates of sexual abuse among adolescent females of Riyadh Schools.

**Methods.** A cross-sectional survey conducted among adolescent females attending private and governmental schools in Riyadh city, Kingdom of Saudi Arabia, starting from January 2008 and for 3 months. In Saudi Arabia, school education is conducted separately for males and females. Initially one governmental and one private school for males and the same for female adolescents of intermediate and secondary level were selected by using the simple random technique. Four schools from the different regions of Riyadh city were appointed. The average school has around 25-30 students in each class and an average of 5-6 classes for each level. There are 3 levels for intermediate, and 3 for secondary school. The sample size was calculated on the assumption of 10% prevalence rate (the lowest rates). At 95% confidence level and acceptance of 2% difference between the estimated and actual prevalence (degree of precision), the sample size calculated was 412 for female and 412

for male adolescents. A response rate of 80-90% was assumed with a final sample size of 500 for female and 500 for male adolescents. One thousand students' males and females were planned to be included in the study. Approval of the head-quarter of the Educational Supervision Office in Riyadh to conduct the survey was given for the female section only. Both female schools agreed to participate in the study one governmental and one private. Five hundred female adolescent students were enrolled. They were divided equally between private and governmental schools and further divided into 125 students from intermediate level and another 125 from secondary level. The heads of both private and governmental schools showed concern regarding the difficulty of applying the randomized technique for selecting the students. The difficulty was in choosing and controlling separate girls from different classes in each grade and gathering them in a certain area at the same time. Also, the teachers refused to dismiss them during class for answering the questionnaire. Based on this, 5 classes from the intermediate and 5 classes from the secondary were chosen randomly. Each class had 25 students. All cooperative students from these classes were enrolled. A verbal consent was obtained from the students. Confidentiality of the written information was assured and students were instructed not to write their names. Also the names of the schools were kept confidential. A self-answering questionnaire was distributed. The questionnaire included data on socio-demographic, characteristics, experiences and behavior towards sexual violence. Questions were simplified as much as possible using simple clear language pre-tested and validated on a sample of 30 adolescents. Time allocated for answering the 5 page questionnaire was 15 minutes. Students were gathered in a quiet, comfortable area in the schools. Each class was supervised by 2 or 3 members of the research assistants who helped to clarify any questions on the questionnaire. There was no interference from the school staff. Sexual violence was defined according to world health organization (WHO) to include not only the act of forceful sexual intercourse, but any form of verbal abuse or harassment, fondling with private body parts and unwanted sexual comments.<sup>1</sup>

Data entry and analysis were carried out using SPSS (version 13). The data was represented as proportions. The main plan for the analysis was to measure the frequency of specific variables independently. Chi-squared test was used to examine the differences between adolescent females exposed to sexual violence and those who were not. The 5% level of significance was chosen.

**Results.** The present study included 419 adolescent female students with ages ranging from 11-21 years, and

a mean age of 15.1+1.87 years. Fifty-two percent of the students were in the <15 years age group. The majority of schools (60%) were private. Most of the parents (91%) were living together. Only 8.8% of students were living with either parent. Three-quarters of the fathers had college and above educational level compared to 66% of the mothers. Table 1 represent experiences and behavior of sexual violence among adolescent females. Around half of the females were warned regarding sexual violence. Table 2 demonstrate correlates of sexual violence among adolescent females. These females had  $\geq 3$  sisters, ( $\chi^2=3.82, p=0.05$ ). They were of  $\geq 5$ th order among siblings ( $\chi^2=4.02, p=0.044$ ). Their knowledge regarding sexual intercourse was significantly more than females not exposed to sexual violence ( $\chi^2=5.06, p=0.024$ ) and they looked more for sexual information ( $\chi^2=10.17, p=0.0014$ ). Parents' role in sexual education was less supportive for the females exposed to sexual violence than those not exposed ( $\chi^2=4.24, p=0.039$ ). Teachers' attitudes toward sexual education was negative in 60.5% of the students, however, no significant difference was detected between the 2 groups.

**Discussion.** This study focuses and estimates the prevalence of sexual violence among a sample of adolescents in Riyadh city. Despite a thorough search, we were unable to find comparative local and regional

data on sexual violence. Literature from Western and South African countries have reported variable rates of sexual violence among adolescents, ranging from 9-54%.<sup>8-10</sup> A study conducted by Madu et al<sup>9</sup> among college students below 17 years of age in South Africa showed a prevalence rate of 54%. Among these 53% were females, 87% were kissed sexually, and 61% were touched sexually. These studies have reported existence of non-penetrative forms of violence among young people, clearly identifying the need to focus on all forms of sexual violence and abuse.

A meta-analysis conducted in Minnesota among 6th, 9th, and 12th graders, from 1969 to 1991 indicated a prevalence rate of childhood sexual abuse of 22% among females participants.<sup>7</sup> Authors consider these rates as under-reported, the main reason being a taboo issue. Victims were frightened of being blamed or criticized by their colleagues, and of being socially rejected. The high rates among western countries are not surprising as the western society facilitates talking and reporting such instances. Our study found a prevalence rate of 10% for sexual violence among adolescent girls. The foundations of the Kingdom of Saudi Arabia is based on Islam, which forbids sexual interactions in all its forms. Once a girl reaches the age of puberty, "The Veil" (covering of head and face) is mandatory. Male and female adolescents are not free to interact socially, thereby restricting the possibility of sexual attraction. Movement of females alone, without families is nearly impossible. All these factors provide a strong reason for not pursuing activities of sexual violence. Apart from the religious point of view, the societal culture is such that instances of sexual violence are neither disclosed nor they are brought to public as it is a stigmatizing issue. The females who have experienced such happenings are at a threat of being rejected by the society, and even by their own families. Therefore, sexual violence if happening is hidden behind the curtains. However, it is very surprising to realize that irrespective of all these barriers the female respondents have responded to our questions on sexual violence, and have confirmed being exposed to some form of sexual violence. Thereby, our study has revealed eye opening findings towards the existence of such occurrence in our society. Sixteen respondents stated that they were exposed to abusive sexual comments, another 16 to fondling with private body parts, and 4 to an attempt of forceful sexual intercourse. Nine of our respondents reported being exposed to sexual violence more than twice, indicating that this is happening on a frequent basis. Studies have shown that many times the immediate relatives of the victims are the ones that have been the perpetrators.<sup>8,12</sup>

In our study, the order of the adolescent among the siblings made a difference with regards to exposure to

**Table 1** - Experiences and behavior of sexual violence among adolescent females in Riyadh city (N=419).

Experiences and behavior	n	(%)
<i>Warned regarding sexual violence (n=419)</i>		
Yes	228	(54.4)
No	191	(21.7)
<i>Taught how to react to sexual violence (n=419)</i>		
Yes	130	(31.0)
No	289	(68.9)
<i>Exposed to sexual violence (n=419)</i>		
Yes	42	(10.0)
No	377	(89.9)
<i>Type of sexual violence* (n=36)</i>		
Abusive sexual comments	16	(44.4)
Fondling with private body parts	16	(44.4)
Attempt at forceful sexual intercourse	4	(11.1)
<i>Times of violence* (n=36)</i>		
Once	14	(38.8)
Twice	13	(36.1)
>Twice	9	(25.0)
<i>Threatened not to tell (n=42)</i>		
Yes	10	(23.8)
No	32	(76.2)
<i>Reported to (n=42)</i>		
Mother/Sister	33	(78.5)
Aunt/Cousin	9	(21.4)

\*6 females did not report the type of sexual violence or times of violence

**Table 2** - Correlates of sexual violence among adolescent females in Riyadh city (N=419).

Correlates	Total n(%)	Exposed to sexual violence (42 n (%))	Not exposed to sexual violence (377 n(%))	Chi-square	P-value
<i>Age</i>					
≤ 15	218 (57.1)	19 (50.0)	199 (57.8)	0.57	0.450
> 15	164 (42.9)	19 (50.0)	145 (42.2)		
<i>School grading</i>					
Intermediate	210 (50.4)	18 (43.9)	192 (51.1)	0.50	0.48
Secondary	207 (49.6)	23 (56.1)	184 (48.9)		
<i>No. of brothers</i>					
0 - 2	206 (49.3)	20 (47.6)	186 (49.5)	0.00	0.94
≥ 3	212 (50.7)	22 (53.4)	190 (50.5)		
<i>No. of sisters</i>					
0 - 2	214 (51.2)	15 (35.7)	199 (52.9)	3.82	0.050
≥ 3	204 (48.8)	27 (64.3)	177 (47.1)		
<i>Order among siblings</i>					
1 <sup>st</sup> - 4 <sup>th</sup>	305 (76.3)	26 (61.9)	278 (77.9)	4.02	0.044*
≥ 5 <sup>th</sup>	95 (23.7)	16 (38.1)	79 (22.1)		
<i>Parents' status</i>					
Live together	382 (91.8)	37 (88.0)	345 (92.0)	0.01	0.761
Separated	34 (8.2)	4 (9.5)	30 (8.0)		
<i>Living with</i>					
Both parents	381 (91.1)	37 (88.0)	344 (91.5)	0.20	0.40
Either parent	37 (8.9)	5 (11.9)	32 (8.5)		
<i>Type of school</i>					
Private	251 (60.2)	24 (58.5)	227 (60.4)	0.92	0.93
Governmental	166 (39.8)	17 (41.5)	149 (39.6)		
<i>Educational level of father</i>					
Secondary and less	94 (22.8)	9 (22.0)	85 (22.9)	0.00	0.95
College and above	318 (77.2)	32 (78.0)	286 (77.1)		
<i>Educational level of mother</i>					
Secondary and less	188 (45.3)	20 (47.6)	168 (44.9)	0.09	0.75
College and above	227 (54.7)	21 (50.0)	206 (55.1)		
<i>Warned regarding sexual violence</i>					
Yes	228 (54.4)	20 (47.6)	208 (55.2)	0.59	0.44
No	191 (45.6)	22 (52.4)	169 (44.8)		
<i>Taught how to react to sexual violence</i>					
Yes	130 (34.5)	17 (40.5)	113 (30.0)	1.49	0.22
No	289 (76.8)	25 (59.5)	264 (70.0)		
<i>Intercourse knowledge</i>					
Yes	268 (64.0)	34 (80.9)	234 (62.1)	5.06	0.024*
No	151 (36.0)	8 (19.0)	143 (37.9)		
<i>Attitudes of teachers towards sexual education</i>					
Positive	166 (39.6)	20 (47.6)	146 (38.7)	0.91	0.34
Negative	253 (60.4)	22 (52.3)	231 (61.3)		
<i>Parents role in sexual education</i>					
Supportive	345 (82.5)	29 (71.0)	316 (84.7)	4.24	0.039*
Un-supportive	69 (16.5)	12 (29.0)	57 (15.3)		
<i>Looked for sexual information</i>					
Yes	206 (49.3)	31 (73.8)	175 (46.5)	10.17	0.0014*
No	212 (50.7)	11 (26.2)	201 (53.5)		

\*Significant ( $p < 0.05$ )

sexual violence. Those who were in the order between the first and the fourth were less likely to be exposed to sexual violence compared to those whose order was  $\geq 5$ th. The Arab society traditionally has large families with an average number between (6-7) children. This places a big burden on the mother knowing that she is culturally responsible for the upbringing of the offspring. Due to the cultural settings in the Kingdom, the mother has to escort her female daughter to social gatherings. However, if the number of children is more, the attention of the mother is diverted resulting in the independent movement of the female daughter.

Our findings also revealed that those who were exposed to sexual violence were more knowledgeable on sexual intercourse, and looked for information on sexuality more than those who were not. This is most likely due to the fact that those who were sexually violated looked for information on sexuality and therefore became knowledgeable after the incidence. Unlike the western countries, the Kingdom of Saudi Arabia does not have health education campaigns on the media, nor youth friendly programs or facilities where the youngsters can go for help and receive supportive services. Hence, they are relying on personal relationships with teachers, and mothers, friends, and relatives otherwise, they are exposed to the world of internet for information. Our study has pointed out that those who were sexually violated had unsupportive parents in discussing sexual matters compared to those who were not. Also around 60% of the teachers had a negative attitude towards sexual education. Lack of experience in discussing such sensitive information could be the reason for such un supportive behavior. This is an alarming situation and needs to be addressed. With the absence of any formal sexual education and facilities for the youth, the responsibility lies upon the shoulders of the parents and then the teachers to educate and provide the proper sexual knowledge. Reports have documented that where there was lack of communication and where barriers between the children, and their parents existed the incidences of sexual abuse was covered because of shame and guilt causing repeated and prolonged abuse by the perpetrator.<sup>13</sup> Considering the structural dynamics of our society, the teachers can be very well utilized in imparting sexual education to the students. They can be trained on communication skills and delivery of sexual education to their students. Equally it is extremely important to educate our population on building up confidence and trust between the parents and their children. They need to communicate with their children on all aspects of reproductive health and especially with respect to sexual violence, and provide them with knowledge that will help them within the cultural settings. A report by the WHO documented

case studies from Thailand, Sweden, and South Africa documenting utilization of effective government and private sector collaborations in addressing sexual health of adolescents. The report has emphasized the role of involving teachers, parents, and the community on the delivery of sexual health information to the youth. Strategies involving religious leaders to deliver sexual information have been used among Islamic states and were found to be effective.<sup>14</sup>

In conclusion, our study showed a prevalence rate of 10% for sexual violence. Adolescent order of  $\geq 5$ th among siblings and unsupportive parents in discussing sexual matters were found to be correlates for sexual violence. Despite the fact that our findings are preliminary, they are highly important, and should not be ignored. We recommend that formal sexual education should be introduced in the school curriculum in the context of our religion and culture with emphasis on how to prevent, react, and where to seek help for sexual violence. Teachers need to be properly trained to identify and help sexually violated students. Furthermore, our society should be educated on the importance of communication between parents and children especially in sexual matters and how to prevent, and react to sexual violence. Our study was restricted to female adolescents only. This limited the external validity of our findings. Also, our study was conducted on school going adolescents and is not a true representative of the community adolescents. Therefore, it can be an underestimate of the true prevalence of sexual violence existing at the community level. Based on our study findings, we recommend a National study addressing both male and female adolescents to estimate the true prevalence and correlates of sexual violence in the different regions of the Kingdom.

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