Knowledge, Perception, and Attitude of Saudi Mothers Towards Discussing Child Sexual Abuse: A Cross-Sectional Study

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ABSTRACT

Introduction: Abuse is a matter of concern in all societies. A mother's knowledge regarding "child sexual abuse" (CSA), could play an important role in child protection against this preventable social and indeed global problem.

Objective: The aim of this study was to explore the knowledge, perception, and attitude of Saudi mothers towards discussing child sexual abuse.

Method: A cross-sectional study was conducted in Saudi Arabia using a web-based survey from August 2022 to October 2022. The sample included Saudi mothers who have at least one child aged \leq 14 years and are using social media platforms.

Results: A total of 1765 participants in this study. The majority of the mothers (70.3%) were aware of the existence of Saudi prevention laws about sexual abuse. Interestingly, 60.1% of the mothers agreed that the majority of sexual abuse is due to someone trusted or a relative. Saudi mothers showed a moderately positive attitude towards discussing CSA with their kids. Mothers from the Southern region were 51.0% less likely to discuss CSA with kids (p<0.001). The education level of the parents, the age of the mother, and the monthly income of the family showed a direct relationship with the likelihood of discussing CSA with kids (p<0.05). Saudi mothers showed a moderately positive attitude towards discussing CSA with kids.

Conclusion: Knowledgeable mothers who have a positive attitude can discuss preventive measures more effectively with their children to make them educated so that they can say no to sexual abuse and report it if it occurs.

Keywords: Attitudes, Child abuse; Knowledge; Mothers; Perception; Prevention; Saudi Arabia; Sexual abuse.

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INTRODUCTION

The World Health Organization (WHO) defines child sexual abuse (CSA) as "involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared, or which violates the law or social taboos" ¹. CSA affects all socioeconomic and ethnic groups, but there are risk factors for other forms of abuse, most notably a history of sexual abuse. Children may be more susceptible to sexual abuse if their home environment is unstable. Children may be compelled to abandon their homes as a result of domestic violence, making them vulnerable. Children with disabilities and children of substance-abusing parents are particularly susceptible to sexual assault. Increasing the child's social circle, such as through the use of babysitters and chauffeurs, can also increase the risk 1,2. CSA is considered a global silent health problem with negative physical, social, and psychological effects on children and their families 2-4. Children who have been sexually abused suffer from panic disorders, anxiety, and depression ^{5,6}. In addition, they are more likely to suffer from other psychological disorders that may persist into maturity, such as dysfunctional sexual behavior, suicidal ideation, eating disorder, aggressive behavior, and social isolation ⁷⁻⁹. Some families or ethnicities believe that exposing their children to sex education will encourage them to engage in sexual activity at an earlier age and focus their attention on sexuality issues. This may be a factor preventing minors from acquiring adequate CSA knowledge¹⁰.

The WHO estimates that approximately forty million children ages 0 to 14 are subjected to abuse and neglect annually ¹. The prevalence of child sexual abuse varies in different parts of the world, reaching as high as 50% in Swaziland and 34% in the majority of African countries ^{2,11}. In a 2012 study conducted in the Kingdom of Saudi Arabia (KSA), a high assault rate of 56.3% was documented, with the majority of victims being primary school children aged 13 and older, and their homes being the most common site of assault ^{12,13}.

Around 5-10% of men and 20% of women experience sexual abuse as minors, according to WHO estimates¹³. Few studies have been conducted in Tanzania, Dammam, and Louisiana to investigate the knowledge and perceptions of parents regarding CSA and its maltreatment. The majority of parents were knowledgeable about CSA ^{2,10-12,14-16}, but few agreed that it could have serious effects on a child's health, even in the absence of physical contact ^{10,16}. The aim of this study was to investigate maternal knowledge and attitude towards the problem of CSA in order to assist decision-makers in formulating an effective strategic plan to reduce the problem's negative effects on infant and family health.

METHOD

Study design: Between August and October 2022, a cross-sectional study utilizing a web-based online survey was conducted in Saudi Arabia.

Study population: This study included Saudi mothers with at least one child younger than 14 years of age who use social media platforms. The study excluded any participant who did not satisfy the inclusion criteria. The inclusion criteria were outlined in the survey's cover letter.

Sampling and recruitment technique: In this research, participants were recruited using a non-probability technique of convenient sampling. The questionnaire was sent via Google form to mothers. A questionnaire was distributed online via social media platforms (Facebook, Snapchat, Instagram, and Twitter) to eligible participants. The online survey was accessible for one month. The mothers were

encouraged to respond by receiving weekly reminders. Since all participants voluntarily participated in the study, written informed consent is not required. At the outset of the invitation letter for the survey, the study's aims and objectives were outlined in detail.

Study questionnaire: For data acquisition, a self-administered Arabic questionnaire was utilized 10. The employed questionnaire was developed based on similar questionnaires from prior studies ^{10,17,18}. The developed questionnaire consisted of 13 questions divided into five domains; the first domain contained sociodemographic characteristics of mothers (age, level of education for the parents, and family income). Four questions from a modified Arabic version of the Child Sexual Abuse Knowledge Scale comprised the second domain. The third domain contained one question from a modified Arabic version of the CSA scale for recognizing signs. The fourth domain included four Arabic CSA perception Scale questions. The fifth domain consisted of four questions from an Arabic-language adaptation of the CSA prevention practices scale. Six items were used to assess the attitudes of the participants toward discussing CSA with their children. Consequently, the highest possible score is six. The higher the score, the more positively parents view discussing CSA with their children.

Validation of questionnaires and pilot testing: Two experts at Umm AL-Qura University, a public health consultant and a health psychologist consultant, developed and reviewed the questions. In one primary healthcare facility, a pilot study employing the questionnaire was conducted. It included 15 Saudi mothers who fulfilled the study's inclusion criteria in order to test the questionnaire's readability and acceptability. Participants in the pilot study agreed that the questionnaire was straightforward and exhaustive.

Sample size: The target sample size was estimated based on WHO recommendations for the minimum sample size required for a study of prevalence¹⁹. Using a 95% confidence interval, a standard deviation of 0.5, and an error margin of 5%, the required sample size for each study population was 385 individuals. The sample size was increased by approximately 10% to account for the possibility of a non-response or an incomplete response, necessitating a minimum of 392 mothers.

Ethical statement: This study was approved by the Institutional Review Board at Umm Al-Qura University, Makkah, Saudi Arabia (HAPO-02-K-012-2022-08-1160).

Data analysis: Statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS) software, version 27 (IBM Corporation, Armonk, New York, United States). A P-value less than or equal to 0.05 was regarded as statistically significant. According to the distribution of the variable, numerical data were presented as mean and standard deviation (SD). Categorical variables were represented using frequency and percentage. A binary logistic regression analysis was employed to identify predictors of a favorable attitude toward discussing CSA with children. The sample's mean attitude score was used to determine the dummy variable for the dependent variable in the logistic regression analysis.

RESULTS

The demographic characteristics of the study participants: There were a total of 1765 participants in this study. Sixty-nine percent of the participants were from the Western region. Around 67% of the participants reported having children fewer than 14 years old. The majority of fathers held a bachelor's degree (42.7%), followed by a high school diploma (30%). Almost identical results were reported by mothers; roughly half were undergraduates (52%) followed by high

school graduates (27%). The majority of mothers (42.2%) were at least 40 years old. Regarding family income, nearly one-third of study participants (36.5%) reported a monthly income between 5,000 and 10,000 Saudi riyals. Refer to Table 1 for additional information on the demographic characteristics of the study participants.

Table 1. Demographic characteristics of participants

Demographics	Frequency (N)	Percent (%)				
District						
Western region	1221	69.1				
Central region	94	5.3				
Southern region	368	20.8				
Northern region	29	1.6				
Eastern region	53	3				
Education (fathers)						
Postgraduate	236	13.3				
Undergraduate	755	42.7				
High school	544	30.8				
Secondary or less	230	13				
Education (mothers)						
Postgraduate	163	9.2				
Undergraduate	918	52				
High school	482	27.3				
Secondary or less	202	11.4				
Age (mothers)						
Younger than 20 years	21	1.2				
20 – 30 years	443	25				
30 - 40 years	555	31.4				
40 years or older	746	42.2				
Monthly income (for the						
family)						
<5k	226	12.8				
5k-10k	645	36.5				
10k-20k	614	34.8				
>20k	280	15.8				

Knowledge of and attitude towards sexual abuse among kids: Table 2 below details the participants' knowledge and attitudes regarding child sexual abuse. Approximately two-thirds (68.1%) verified that they "told their child(ren) about his/her/their private area (genitals) and that he/she/they should say no if someone touched him/her/them" The vast majority (81.6% of respondents) verified that they "taught their children to never walk with a stranger to any location (such as a grocery store)." Nearly 85% of respondents verified that they "encouraged their children to discuss their day." The majority of respondents (76.1%) agreed that "children cannot be held accountable for sexual abuse." Interestingly, more than half of the study participants (60%) agreed that "the majority of sexual abuses are committed by trusted individuals or family members." About half of the participants (47.8%) disagreed that it is inappropriate to discuss sexual relationships with children. Seventy-point-three percent of respondents agreed that there are laws protecting children from sexual abuse. Almost half of parents (45.3%) agreed that "if a child has been sexually abused, there will be no visible evidence." The majority (89.7%) agreed that "promoting and educating children about sexual abuse will aid in their protection.". Around 53.9% of respondents agreed that "typically, the abused child would not reveal the identity of the abuser." Approximately 81% of parents agreed that "mothers play a significant role in teaching their children about sexual abuse, such as telling them not to accept gifts or candies from strangers." The majority of respondents (81.9%) agreed with the statement, "Parents believe their children are too young to learn about sexual abuse." The majority of participants (72.2%) agreed that "one of the signs of sexual abuse in children is their fear of being alone.".

Table 2. Knowledge and attitude of participants towards sexual abuse
among kids

among kids							
Variables	Frequency (N) Percent (%)					
Told your kid about hi	is personal area (genitals) and if someone					
reached he should say no							
Yes	1202	68.1					
No	563	31.8					
Told your kids about r	never walking wit	h stranger to any place					
(e.g. grocery store)	g						
Yes	1441	81.6					
No	324	18.4					
Encouraged your kids							
Yes	1485	84.1					
No	280	15.8					
Kids can't be blamed t sexual abuse	for						
Agree	1344	76.1					
Disagree	156	8.8					
Not sure	265	15					
Majority of sexual abuses are due to someone trusted or a relative							
Agree	1061	60.1					
Disagree	279	15.8					
Not sure	425	24.1					
It's bad to talk about s	exual relationshi	ps with kids					
Agree	476	27					
Disagree	843	47.8					
Not sure	446	25.2					
Is there any laws that		-					
	-						
Yes	1241	70.3					
No David Las	57	3.2					
Don't know	467	26.5					
If a kid got sexually ab							
Yes	800	45.3					
Yes No	800 498	45.3 28.2					
Yes No Don't know	800 498 467	45.3 28.2 26.5					
Yes No Don't know Promoting and teaching	800 498 467	45.3 28.2					
Yes No Don't know	800 498 467	45.3 28.2 26.5					
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Predictors of positive attitude towards discussing CSA with kids: The predictors of a positive attitude toward discussing CSA with children are presented in Table 3. The mean attitude score was 4.0 (SD: 1.5) out of 6 (66.7% of the maximum score), indicating a moderately positive attitude toward discussing CSA with children. (p<0.001) Southern mothers were 51.0% less likely to discuss CSA with their children. The level of parental education, the age of the mother, and the family's monthly income were all associated with the likelihood of discussing CSA with children (p<0.05). Table 3 provides additional information regarding the results of the binary logistic regression analysis.

 Table 3. Predictors of positive attitude towards discussing CSA with kids

Demographics	Odds ratio of discussing CSA with kids (95% confidence interval)	p-value				
District						
Western region (Reference group)						
Central region	0.80 (0.50-1.28)	0.353				
Southern region	0.49 (0.38-0.63)	<0.001***				
Northern region	0.58 (0.27-1.26)	0.171				
Eastern region	0.65 (0.36-1.17)	0.150				
Education (fathers)						
Postgraduate (Reference group)						
Undergraduate	0.65 (0.45-0.95)	0.027*				
High school	0.43 (0.30-0.64)	<0.001***				
Secondary or less	0.34 (0.22-0.53)	<0.001***				
Education (mothers)						
Postgraduate (Reference group)						
Undergraduate	0.48 (0.29-0.80)	0.005**				
High school	0.22 (0.13-0.36)	<0.001***				
Secondary or less	0.20 (0.11-0.34)	<0.001***				
Age (mothers)						
Younger than 20 years (Reference	Younger than 20 years (Reference					
group)	6.83 (2.26-20.63)	< 0.001***				
20 – 30 years	17.00 (5.61-51.53)	< 0.001***				
30-40 years	13.17 (4.38-39.64)	< 0.001***				
40 years or older	- ()					
Monthly income (for the family)						
<5k (Reference group)						
5k-10k	1.63 (1.19-2.23)	0.003**				
10k-20k	1.98 (1.43-2.73)	< 0.001***				
>20k	2.66 (1.79-3.96)	<0.001***				
*p<0.05; **p<0.01; ***p<0.001						

DISCUSSION

Multiple international studies investigated parental awareness, perception, and knowledge of CSA and its prevention practices ^{2,11,15,17}. These studies demonstrated that mothers play a crucial role in CSA prevention by educating their children about essential preventive strategies and fostering a trusting relationship with them ^{15,17}. It is well-established that mothers who are knowledgeable about CSA can discuss preventive measures with their children more effectively. Consequently, greater protection against this preventable occurrence is obtained, as opposed to mothers who lack this knowledge ¹⁰.

Few studies have examined maternal knowledge and perceptions of CSA ^{10,12,14,16}, and almost none investigated maternal knowledge and perception of CSA. Our study seeks to investigate Saudi mothers' awareness of child sexual abuse (CSA), perceptions of CSA, and

attitudes toward discussing CSA with their children in order to provide an empirical foundation for designing CSA prevention programs in schools and the Saudi community.

None of the 1765 mothers who responded and completed the questionnaire declined to participate. This high response rate indicates that Saudi mothers are willing to speak, share their fears, and answer questions about CSA, despite the fact that CSA is a highly sensitive topic in this conservative community. In contrast, a similar study assessing the knowledge and perceptions of parents about CSA in Botswana and Swaziland reported that some of the approached parents refused to participate because it is culturally inappropriate to discuss sexual issues ². In this sample, many mothers had a rudimentary understanding of the CSA. The majority of mothers, 70.3%, were aware that Saudi Arabia has laws protecting children from sexual assault. In contrast, ALZoubi et al. reported that only 37.7% of mothers were aware of the laws against CSA in Jordan 10. In our study, more than half of the mothers (53.9%) were aware that abused children typically do not reveal the abuser's identity. This was comparable to the results of other studies, including the Chinese study by Chen and Chen, which found that 61.6% of mothers acknowledged this^{10,17}. This may be attributable to the child's fear of the abuser's threats. It is plausible that the adult engaging in abusive behavior may manipulate the child into believing that their claims will not be taken seriously or that they are partially responsible for the abuse and would therefore face retribution. The infant may develop an emotional attachment or protective instinct towards the perpetrator of their sexual abuse. Individuals may experience inner conflict, perceiving disclosure of a sexual encounter as a form of treachery towards the individual who did it. Moreover, the abuser might exploit this knowledge to perpetuate the veil of secrecy surrounding the incident. In many instances, children often choose to maintain a state of silence as a means of safeguarding a non-abusive parent from potentially distressing facts²⁰.

The implication of this is the critical need to educate mothers on the significance of establishing a trusting relationship with their children, which could assist the child in disclosing any incidents of sexual abuse. In our study, nearly half of the mothers (45.3%) were aware that there is typically no visible physical evidence in cases of CSA. This is consistent with the findings of ALMadani et al, who reported that, with a few exceptions, the majority of CSA cases (79%) had normal general body examinations ¹². While a different study found a lower percentage of parents (28.1%) agreeing that there will typically be no apparent physical evidence ¹⁷, the majority of parents agree that there will be no physical evidence. The majority of mothers in our study (90.7%) agreed that educating their children about sexual assault will protect them. This is comparable to what ALZoubi et al. (2017) have reported ¹⁰. The present investigation investigated basic maternal knowledge of CSA. Intriguingly, 60.1% of the mothers agreed that the majority of sexual abuse is perpetrated by a trusted individual or a family member. This was similar to the findings reported by Ige and Fawole, who found that 70.3% of parents in an urban community in southwest Nigeria agreed with this statement ¹⁵. ALZoubi et al. reported a reduced percentage (55.3%) of Jordanian mothers agreeing with this statement ¹⁰. In addition, J.Q. Chen and D.G. Chen reported that only 28.2% of parents agreed with the statement ¹⁷. This suggests that mothers may be less cautious with known adults, thereby exposing their children to the risk of maltreatment. This is alarming and extremely concerning and highlights the need for mothers to educate their children about the possibility of sexual assault, even at the hands of a trusted adult. The majority of mothers (76.1%) in our study agreed that children should not be blamed for sexual abuse. This is comparable to findings published by Ige and Fawole, who found that 89.9% of parents concurred ¹⁵. In addition, ALZoubi et al. reported an identical percentage of 77.7% 10. In contrast, a local study found that only 41.8% of Saudi parents concurred that the abused child should not be held accountable 14. The implication of this is that mothers should be educated on how blaming a child who has been sexually exploited can lead to a loss of trust between the child and the parents, thereby discouraging the child from disclosing the abuse. The majority of respondents had favorable attitudes toward CSA prevention and adequate knowledge of CSA prevention measures. In our study, only 47.8 percent of mothers disagreed that discussing sexual relationships with children is inappropriate., which was comparable to ALZoubi et al., 2017)¹⁰. Approximately two-thirds of the mothers, 68.1%, had informed their children about their private areas and instructed them to refuse any unwanted contact. This was similar to the findings of J.Q. Chen and D.G. Chen, who found that 59% of respondents had discussed their private parts with their children and 60.3% had instructed their children to refuse to be caressed by others ¹⁷. ALZoubi et al. reported that a greater proportion of mothers (94.1%) tell their children about their private regions, and that 89.1% instruct their children not to be touched by others ¹⁰. Around 81.6% of the mothers in our study instructed their children to never venture anywhere with a stranger. This was comparable to the 92.0% percentage reported by ALZoubi et al ¹⁰. In addition, 81.1% of mothers in this study told their children not to receive gifts or candies from strangers. This was consistent with previous research by J.Q. Chen and D.G. Chen, 2005) 17. The majority of mothers, 84.1%, agreed to encourage their children to discuss their day. This was consistent with ALZoubi et al's finding that 90.4% of mothers concurred ¹⁰. The majority of mothers (81.9%) believe their children are too immature to know about sexual abuse by their parents, which was investigated in the current study.

Our study did not assess maternal awareness of the symptoms and indicators of CSA. However, the majority of mothers, 72.2%, agreed that fear of being alone with a specific individual is one of the indicators of CSA. This was comparable to a previously published local study by ALRammah et al., which assessed the knowledge of eastern Saudi parents regarding the symptoms of CSA 14. In addition, consistent with the findings of ALZoubi et al, 57.8% of Jordanian mothers recognize the dread of being alone with a specific person as a sign of CSA ¹⁰. In our study, we found that the education level of the parents, the age of the mother, and the family's monthly income had an association with the likelihood of parents discussing CSA with their children (p<0.05). Culture and even family income play a significant role in enhancing the education of exceptional children, and it is undeniable that these children require the appropriate education program to protect themselves and resist rape and sexual abuse. Although age is a major factor in a child's comprehension of sexual issues and older children are more aware of self-protection strategies, parents, the media, and school educators play a crucial role in educating children about these issues ^{21,22}. Successful curriculum-based prevention programs have enabled children to recognize dangerous situations and develop selfdefense strategies 23.

Our study is the first exploratory cross-sectional investigation of Saudi mothers' knowledge, perceptions of CSA, and attitudes toward discussing CSA with their children across multiple regions of Saudi Arabia. In addition, mothers from diverse age groups, educational levels, and family incomes were recruited in order to produce as representative a sample as possible. A parent, health professional, or social worker who reads this study could benefit from the knowledge it provides.

The cross-sectional design of this study makes it challenging to derive causal conclusions. The data collection instrument is an online self-administered questionnaire, which may be misread and is susceptible to various types of bias, including sampling bias and social-desirability bias. These biases could account for extremely favorable responses. Therefore, it is challenging to generalize our findings to the general population. Because this is an exploratory study, closed-ended questions were designed. However, for future research, it is recommended that open-ended queries be used for improved assessment. Not all aspects of the mother's knowledge and perception of CSA were intended to be captured by the questionnaire. However, it was an instrument for gathering information about the awareness and attitude of Saudi mothers toward discussing CSA with their children. The plurality of respondents, 69.1%, came from the western region, limiting the generalizability of the study. Further prospective research is recommended for a comprehensive national assessment of the prevalence of CSA and its associated risk and protective factors.

Protective measures against CSA are the most important aspect of the prevention procedure. To bridge the divide between knowledge and practice, it is recommended that healthcare centers provide communitybased support services. In addition to professional awareness campaigns and public education programs, educate parents and the community in order to increase their knowledge and perceptions of CSA and to devise preventative measures. For CSA prevention education, schools should develop a curriculum, relevant literature, and audiovisual materials. Lastly, and most importantly, the enhancement of laws that protect against CSA and the implementation of a mandatory reporting law to increase the rate of CSA case recognition and referral.

Several strategies are suggested for preventing sexual exploitation of children. The first and most important of the suggested strategies is parental vigilance and heightened awareness of the behavioral symptoms of suspected sexual abuse in children. The items listed below may classify as some of these indicators. Nightmares, sleep problems, or anxiety in a child without a clear explanation, changes in the child's behavior, such as anger, shortness of breath, or significant alterations in eating patterns, incidence of infantile behaviors such as enuresis and finger sucking, refusal to be in a particular location, be alone with an adult, or resist for an unknown reason, reluctance to bathe and toilet daily, existence of sexual and frightening images in the child's activities ^{24,25}.

CONCLUSION

This exploratory study revealed that many Saudi mothers have adequate knowledge and moderately positive attitudes toward discussing CSA with their children, reflecting their responsibility to prevent CSA. Knowledgeable mothers have a more positive outlook and can discuss preventative measures with their children more effectively. Therefore, children who are educated and endowed with the necessary knowledge can refuse sexual abuse and report it if it occurs.

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Ethics Approval and Informed Consent:

This study was approved by the Institutional Review Board at Umm Al-Qura University, Makkah, Saudi Arabia (HAPO- 02-K-012-2022-08-1160). Informed consent was obtained from all subjects involved in the study. The study was designed and conducted in accordance with the ethical principles that have their origin and comply with in the Declaration of Helsinki.

Potential Conflicts of Interest: None

Competing Interest: None

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