

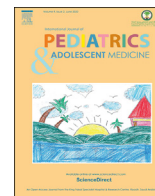
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## Attitude of pediatricians toward suspected cases of child sexual abuse (CSA) in Saudi Arabia

Majed Abdulaziz Aleissa<sup>a</sup>, Khizra Sultana<sup>b,\*</sup>, Hassan Nazmus Saleheen<sup>c</sup>, Dalal Ahmad Aldihan<sup>d</sup>, Razan Hussain Al-Omar<sup>d</sup>, Rana Obaid Alharbi<sup>d</sup>, Raghad Saleh Allahidan<sup>d</sup>, Rema Alshagary<sup>d</sup><sup>a</sup> Department of National Family Safety Program, Ministry of National Guard Health Affairs (MNGHA), King Saud bin Abdulaziz University for Health sciences(KSAU-HS), King Abdullah International Medical Research Center(KAIMRC), Riyadh, Saudi Arabia<sup>b</sup> Research Trial Services, King Abdullah International Medical Research Center (KAIMRC), King Saud bin Abdulaziz University for Health sciences- KSAU-HS, Ministry of National Guard health Affairs (MNGHA), Riyadh, Saudi Arabia<sup>c</sup> Department of National Family Safety Program, Ministry of National Guard Health Affairs (MNGHA), King Saud bin Abdulaziz University for Health sciences (KSAU-HS), King Abdullah International Medical Research (KAIRC), Riyadh, Saudi Arabia<sup>d</sup> Collage of Medicine, King Saud bin Abdulaziz University for Health sciences(KSAU-HS), Ministry of National Guard Health Affairs (MNGHA), Riyadh, Saudi Arabia

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## ABSTRACT

**Objective:** To assess the attitudes of pediatricians working at the Ministry of National Guard-Health Affairs (MNGHA) to report cases of child sexual abuse (CSA) and to determine the association between the demographic, cultural characteristics, and the attitude toward reporting.**Participants and Settings:** The participants included all pediatricians, from consultants to residents, employed at the Pediatric Department of the King Abdulaziz Medical City and King Abdullah Specialist Children's Hospital, Riyadh. Additional inclusion criteria were females and males, Saudis and non-Saudis, and age 20–60 years.**Methods:** A self-administered, hard copy questionnaire was distributed to 277 pediatricians, and the response rate was 58.48%. The sensitivity/specificity emphasis mean score was calculated. Categorical variables were tested against the sensitivity/specificity emphasis mean score using an ANOVA and an independent sample *t*-test. The reliability of the questionnaire was measured with Cronbach's alpha.**Results:** In total, 153 completed questionnaires were analyzed. The responses were inclined toward balanced (indecisive toward reporting) and high specificity (favors the decision not to report suspected CSA). No significant difference was found in the sensitivity/specificity mean score between the different levels of professionals, experience, age, gender, and number of prior child abuse-related courses. The skepticism scale showed, for the different professional levels, that the staff physician/resident believed the 3- to 5-year-old girls and boys to be genuine. The consultants/associate consultants believed 6- to 12-year and 13- to 17-year-old girls and boys to be true most of the time. Nearly half of the participants indicated that their reporting decision was affected by the possible consequences of reporting suspected CSA for the children's families and the social perceptions of sexually abused children as adults.**Conclusion:** The results highlight the low reporting rates of CSA cases. The findings suggest a lack of training and experience of the professionals in this area of assessing, detecting, and reporting CSA cases.© 2021 Publishing services provided by Elsevier B.V. on behalf of King Faisal Specialist Hospital & Research Centre (General Organization), Saudi Arabia. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

\* Corresponding author. King Abdullah International Medical Research Centre, King Saud bin Abdulaziz University for Health sciences- KSAU-HS, King Abdulaziz Medical City P.O.Box: 22490, Riyadh, 11426, Mailcode: 1515 Saudi Arabia.

E-mail addresses: [khizzy31@gmail.com](mailto:khizzy31@gmail.com) (K. Sultana), [hassan\\_nazmus@hotmail.com](mailto:hassan_nazmus@hotmail.com) (H.N. Saleheen), [aldihan092@ksau-hs.edu.sa](mailto:aldihan092@ksau-hs.edu.sa) (D.A. Aldihan), [alomarr102@ksau-hs.edu.sa](mailto:alomarr102@ksau-hs.edu.sa) (R.H. Al-Omar), [alharbir129@ksau-hs.edu.sa](mailto:alharbir129@ksau-hs.edu.sa) (R.O. Alharbi), [allahidan116@ksau-hs.edu.sa](mailto:allahidan116@ksau-hs.edu.sa) (R.S. Allahidan), [Alshagary038@ksau-hs.edu.sa](mailto:Alshagary038@ksau-hs.edu.sa) (R. Alshagary).

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## 1. Background

Child abuse refers to any form of child maltreatment, including physical, sexual, or psychological, by the parent, caregiver, or other people [1]. Child sexual abuse (CSA) has been a major issue affecting many children in Saudi Arabia, which prompted the necessity to recognize and prevent CSA [2]. The prevention and protection of CSA victims began in 1996 after the rectification of the Convention on the Rights of the Child (CRC) in Saudi Arabia, which was adopted as legislation and used as the basis of several programs [3,4]. The laws were enacted and required healthcare professionals to report any case of suspected CSA. Mandatory reporting was considered an improved strategy for preventing any serious injuries and providing comfort to victims, who would not need to seek assistance for them. A study done by Al-Eissa stated that these laws led to an increase in the reporting rates [3]. A study in Riyadh exploring adverse childhood experiences (ACE), such as sexual assault, indicated that participants with four or more ACEs were more vulnerable to depression, diabetes, hypertension, liver diseases, anxiety, chronic respiratory infections, and venereal disease, in addition to other mental illnesses [5]. However, studies consistently indicate that professionals are under-reporting [6]. A study in Dammam reported only 87 CSA cases from 2006 to 2010 [7]. This is mainly due to some obstacles, such as fear of consequences, feelings of guilt, lack of confidence in follow-up care, and the uncertainty of their evidence [8]. Another barrier to reporting is school professionals' low to intermediate level of awareness about CSA [9]. The issue of CSA in Saudi Arabia is a major area of concern which mandates intervention. Reviews were only able to identify seven to ten studies focusing on child abuse and neglect to date in Saudi Arabia [10–12]. Primary care pediatricians are the first point of contact in many CSA cases and they have a vital role in recognizing and reporting such cases [13,14]. Previous studies reported their willingness to serve as multidisciplinary child protection team medical consultants [15]. To date, no study exploring the attitude of pediatricians towards reporting suspected CSA cases in Saudi Arabia is available. The study aimed to assess the attitudes of pediatricians, working at the Ministry of National Guard-Health Affairs (MNGHA), to report CSA cases and determine the association between the demographic, cultural characteristics, and attitudes regarding reporting CSA cases.

## 2. Methods

### 2.1. Participants

This was a cross-sectional study using a self-administered, hard copy questionnaire, completed by professionals from the Pediatric Department at King Abdullah Specialized Children Hospital in Riyadh, Saudi Arabia. The study was conducted in 2019 with 277 prospective participants, who are exposed to suspected CSA children in their practice from different department's specialties.

The survey was distributed to 277 participants. The participants included females and males, Saudi and non-Saudi professionals, 20–60 years old, who provided pediatric healthcare as part of their profession. The participants included consultants, associate consultants, assistant consultants, fellows, staff physicians, and residents.

The instrument was adapted from Dr. Mark Everson, after obtaining permission for use by the researcher in Saudi Arabia [16]. The questionnaire had been used to assess the attitude of professionals who dealt with suspected cases of CSA as part of their job or in professions that necessitated involvement with such cases [17]. The questionnaire took approximately 7–10 min to complete. The original Child Forensic Attitude Scale (CFAS) was modified to

include a demographic characteristics section, and two open-ended Likert scale questions to measure the influence of cultural factors.

Participants completed the modified CFAS after signing informed consent. The questionnaire included a demographic section, including gender, age, nationality, job title, years of pediatric experience, the number of CSA training activities attended, and the number of children examined for CSA. In Section 2, 11 questions assessed sensitivity, which indicate the "efforts to avoid missing true abused cases (avoiding false negative)." The second part consisted of 11 questions aimed at specificity, "efforts to avoid validated false cases (avoiding false positives), and the third section, six questions to assess skepticism, which means "beliefs about the likely truthfulness of the child and adolescent claims of sexual abuse." In the fourth section, the two additional questions in terms of culture, friend, and the relative influence on the participant's attitude. The Specificity and Sensitivity sub-scales were assessed on a 5-point Likert scale ranging from 1-strongly disagree to 5-strongly agree. The Skepticism sub-scale was assessed with a 5-point scale with specific percentage ranges (<25%, 25–49%, 50–79%, 80–94% and >95%). The sensitivity/specificity mean score was used to evaluate the relative strength of the professional attitudes toward sensitivity or specificity. The instrument's reliability in our population, calculating the Cronbach alpha for the sub-scales, ranged from 0.77 to 0.91.

### 2.2. Data analysis

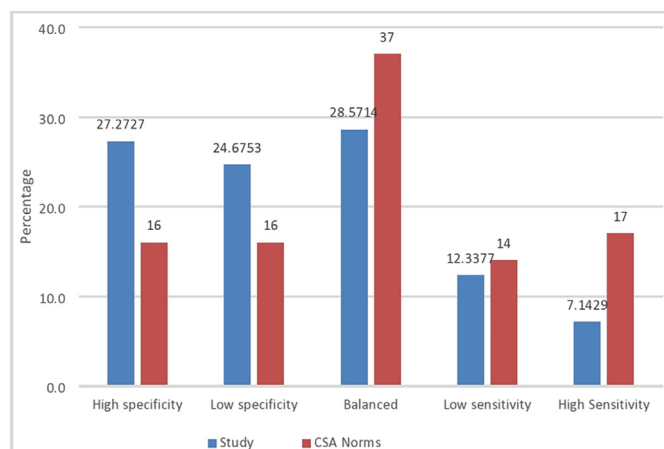
Statistical analysis was performed using the statistical software SPSS v.26 (SPSS Inc., Chicago, IL, USA), with a two-tailed *P* value < .05 considered statistically significant. Questionnaires with missing responses were not included. The result was that from the 162 questionnaires received, only 153 were complete and included in the analysis. A total score for each of the forensic attitude sub-scales was computed by adding the corresponding CFAS items. A sensitivity/specificity emphasis mean score was calculated. This score was converted to a *T*-score, with a common mean and standard deviation of 50 and 10, respectively. According to literature, the sensitivity/specificity emphasis score is divided in five subgroups in terms of the CFAS norms: high specificity, specificity, balanced, sensitivity, and high sensitivity [16]. A comparison of the sensitivity/specificity mean score, based on the professional title and training courses attended was done using an one-way ANOVA test. If the assumption for the homogeneity of the variances was violated, a Welch test was performed. If the data met the assumption for homogeneity of variances, then the post hoc test (Tukey's honest significant difference test) was performed, to determine differences in the groups. If the condition for homogeneity of variances was violated, the Games Howell post hoc test was used to report a significant difference between the mean scores of the groups. Comparison of the sensitivity/specificity scores according to age, gender, and the number of child abuse-related courses attended, were performed using an independent sample *T*-test. The reliability analysis for the CFAS in the sample was measured by calculating the Cronbach Alpha [18].

### 2.3. Ethics

Eligible participants were fully informed about the study's objective and their right to withdraw from the study any time. Informed consent was obtained at the beginning of the study. This study was approved by the Institutional Review Board (IRB) at King Abdullah International Medical Research Center in Riyadh, Saudi Arabia, with protocol-RC19/215/R.

**Table 1**  
Demographics of the participants (n = 153).

Gender	N (%)	Child abuse training activities	
Male	89 (58.2)	none	51 (33.3)
Female	64 (41.8)	1–5	72 (47.1)
<b>Age</b>		6–10	18 (11.8)
20–30	91 (59.5)	>10	12 (7.8)
31–40	27 (17.6)	<b>Children examined for child abuse</b>	
41–50	24 (15.7)	none	69 (45.1)
51–60	9 (5.9)	<10	78 (51)
>60	2 (1.3)	10–20	3 (2)
<b>Nationality</b>		>20	3 (2)
Saudi	121 (79.1)	<b>Years of experience with children</b>	
Non-Saudi	32 (20.9)	<5	92 (60.1)
<b>Title</b>		5–10	23(15)
Consultant/associate consultant	34 (22.2)	>10	38 (24.8)
Assistant consultant/Fellows	23 (15)		
Staff Physician/Residents	96 (62.7)		



**Fig. 1.** Distribution of sensitivity/specificity subgroups compared to CFAS norms (n = 153).

**3. Results**

In total, 162 of 277 questionnaires were received, resulting in a response rate of 58.48%. After removing incomplete responses, the data of 153 participants were included in the analysis.

Table 1 depicts the demographic characteristics of the sample, including gender, age divided in five categories, nationality, job title ranging from consultant/associate consultant, assistant consultant/fellows, staff physician/resident, experience years, number of training activities attended, and the number of children examined for abuse. More than half of the sample were male (58.2%), in the age group 20–30 years (59.7%), and the majority (79.2%) Saudi nationals. In terms of position, the highest proportion (63%) was staff physician/residents, with 22% consultants and associate consultants, and 15% assistant consultants and fellows. More than half had less than five years' experience with pediatric healthcare. A

**Table 2**  
Distribution of sensitivity/specificity subgroups by professional title; n = 153 (%).

Professional title	High specificity (%)	Low specificity (%)	Balanced (%)	Low sensitivity (%)	High sensitivity (%)
Consultant/Associate consultant (n = 34)	20.8	20.8	32.35	17.64	8.82
Assistant consultant/Fellows (n = 23)	26.08	26.08	30.43	8.7	8.7
Staff physician/Residents (n = 96)	29.16	26.04	27.08	11.46	6.25

third of the sample (33%) attended no training course related to CSA, and nearly half (47.1%) attended 1–5 courses. Almost half (45%) have never examined a child for abuse, and just more than half (51%) examined less than 10 children for abuse.

Fig. 1 displays the comparison between the five sensitivity/specificity subgroups in the survey and the CFAS normative samples. The survey responses tended towards balanced (indecisive towards reporting) and high specificity (favors the decision not to report suspected CSA), 28.6% and 27.3% respectively, and only 7.1% were in the high sensitivity group (favors the decision to report suspected CSA). In comparison, the CFAS normative samples had the highest percentage (37%) in the balanced group (indecisive towards reporting) and a similar percentage in the high specificity (17%) and high sensitivity (17%) subgroups.

Table 2 reports the comparison of the sensitivity/specificity subgroups by professional title. There was an equal proportion of 20.8% of consultants and associate consultants in the high and low specificity groups, with the highest proportion (32.35%) in the balanced group. A similar trend was observed with the assistant consultants and fellows with an equal proportion of 26.08% in the high and low specificity group and 30.43% in the balanced group. For the staff physicians and residents, the highest proportion (29.16%) was in the high specificity group with 27.08% in the balanced group, and 26.04% in the low specificity group. The proportion of all the professionals in the low and high sensitivity group was lower compared to other groups.

Table 3 reports the sensitivity/specificity emphasis score mean by professional title. The results indicate no significant difference in the mean score between the different levels of profession (P = .468).

Table 4 displays the sensitivity/specificity subgroups by the years of experience providing pediatric healthcare as compared with the one-way ANOVA. The results were not significant for the chi-square and the Welch (P>.05). There was no significant difference between the means of the different experience groups.

Table 5 displays the results for the difference of means in terms of gender, training received in CSA courses, and age groups. Age was regrouped in two groups, ≤40 years, and >40 years, the number of child abuse-related training courses were regrouped in ≤6 courses and >6 courses. An independent sample t-test was done to compare the sensitivity and specificity score means. No significant difference was found between the means of the groups for the variables age, gender, and the number of child abuse-related courses (P>.05).

Table 6 summarizes the participant's beliefs and experiences regarding the children's disclosure of sexual abuse in forensic assessments of child abuse. For the different professional levels, the staff physician/residents believed the 3–5 year old girls and boys to be genuine. The consultants and associate consultants believed the 6–12 years and the 13–17-year-old girls (23.53% and 20.59% respectively), as well as and the 6–12 years and 13–17 year old boys (26.47% and 29.41% respectively) to be true most of the time, compared to other levels of professionals.

Regarding the two additional questions, nearly half (46%) of the sample reported that they worried about the possible consequences of reporting suspected CSA for the children's families, which may have affected their reporting decisions. In addition,

**Table 3**  
Sensitivity/specificity emphasis score mean by participant's professional title (n = 153).

	Consultant/Associate consultant (n = 34)	Assistant consultant/Fellows (n = 23)	Staff physician/Residents (n = 96)	P value
Sensitivity/specificity emphasis score mean	52.1384	49.50	49.36	.468

**Table 4**  
Sensitivity/specificity emphasis score mean score by participants professional experience.

	Experience <5 years (n = 92)	Experience 5–10 years (n = 23)	Experience >10years (n = 38)	P value
Sensitivity/specificity emphasis score mean	48.59	51.27	52.65	.183

**Table 5**  
Difference of means according to demographics.

	Mean	F	Sig.
Gender			
Male (89)	49.6797	0.02	0.903
Female (64)	50.4454		
Training received			
<6 years (123)	50.0211	1.668	0.198
>6 years (30)	49.9135		
Age			
<40 years (118)	49.9135	0.045	0.832
>40years (35)	50.2917		

approximately half (48%) of the sample indicated that the societal perceptions of sexually abused children as adults affected their reporting decision.

**4. Discussion**

This is the first survey conducted in Saudi Arabia that evaluated the attitudes of pediatricians towards reporting suspected CSA cases using the CFAS. The overall attitude of the pediatricians tended towards indecisiveness to report or not to report.

In this study, the highest proportions of the sample were in the balanced group (indecisive about reporting), meaning they were more sensitive towards the evidence and were indecisive with contradictory evidence. The proportion of the group in the high specificity (inclined not to report) subgroup was similar to the balanced group, and similar to the CFAS norms, which is in contrast to a study done in Saudi Arabia by Al Saif et al. [17] The authors reported different professional inclinations towards not reporting suspected cases (high specificity), which was different from the CFAS norms [17]. In their study, professionals in the high specificity group were double (38.2% vs 16%), and the high sensitivity group was only one-seventh (2.4% vs 17%) compared to the CFAS norms [18]. Our results are consistent with literature reporting a trend of under-reporting CSA cases [12,16,19].

However, in terms of the varying levels of professional title, the consultants and fellows showed greater sensitivity towards the cases (they are inclined to report suspected CSA), compared to the staff physicians and residents. This can be attributed to the higher

level of experience of the consultants and the caution of the fellows to prevent errors in handling such cases [20].

The indecisiveness or tendency of not reporting the CSA cases can be attributed to a deficit of knowledge and experience in terms of CSA, as nearly half of the sample never examined a case of CSA. A recent review reported a lack of knowledge and experience of pediatricians with CSA as one factor for biased reporting [10,20]. A study reported that only 30% of the practitioners felt competent to evaluate CSA cases [21]. Another review illustrated that though the consultants had a higher level of knowledge and experience with such cases, there was no difference in reporting such cases in the different pediatric specialties. This finding is reflected in our study. The highest proportions of consultants, including associate and assistant, were in the balanced subgroup (indecisiveness to report), followed by the high specificity (tended not to report) group. A previous study reported that indecisiveness leads to restricted reporting [19]. In a study conducted in Riyadh, sexual abuse represented only 15% of the total CSA cases reported to hospitals, which underscores the problem of low reporting of CSA cases [6].

Alsaif et al. and Everson et al. reported that females had higher sensitivity (decision to report) compared to males [16,17]. Our study did not find any significant difference in the sensitivity/specificity mean score for gender. The small sample size may have influenced the outcome. The Everson et al. study had 800, and the Al-Saif et al. had 151 females compared to the 64 in the current study [16,17]. There was no significant difference in the sensitivity/specificity mean score with age and the number of child abuse training received. This could be related to a lack of awareness and under-training for reporting CSA and the small sample size (n = 153) in our study, compared to other studies with 327 and 1106 participants [16,17]. The findings of our study support no difference in the case of reporting by gender, as reported in a study done by Wendy et al. [21].

In the current study, one-third of the sample did not receive any training related to the detection, assessment, or reporting CSA. A study reported that healthcare providers, who had some formal education in CSA after their residency, were ten times more likely to report than those who did not have any education [19]. The level of reporting CSA cases can be improved in Saudi Arabia through continuous CSA related education at all levels of teaching and training throughout medical school and clinical practice [19,20,22].

**Table 6**  
Professional beliefs of Children's disclosure: n = 153(%).

	GIRLS			BOYS		
	3–5 years	6–12 years	13–17 years	3–5 years	6–12 years	13–17 years
	Never lie (>95% true)	Never lie (>95% true)	Never lie (>95% true)	Never lie (>95% true)	Never lie (>95% true)	Never lie (>95% true)
Consultant/Associate (N = 34)	17.64%	23.53%	20.59%	20.59%	26.47%	29.41%
Assistant consultant/Fellow (N = 23)	17.39%	8.7%	8.7%	21.74%	17.39%	13.04%
Staff Physician/Residents (N = 96)	23.96%	19.8%	13.54%	25%	19.79%	21.88%



In the current study, regarding skepticism (believability), the professionals' tendency to believe the self-reported cases of abuse increased with an increase in age for both genders. This is in line with the fact that older children are more aware and able to communicate more effectively compared to younger children. For the different positions, the staff physicians and residents had a significant proportion who believed the boys and girls in the 3–5 years age group.

In terms of the cultural influence on the sample's attitude, we found that nearly half did not report the CSA cases due to their anxiety about the consequences for the children's families and societal perceptions of sexually abused children as adults. Another study reported that the attitude, beliefs, and degree of involvement of the healthcare professional with the judicial system affected reporting behavior [23]. In addition, studies reported that one of the reasons for the under-reporting of such cases was the risk of stigmatization of the family, fear of consequences, and lack of confidence in follow-up care [18,24]. According to a study, interventions have been implemented in Saudi Arabia by the Child Protection Centers (CPCs) in major hospitals to overcome the low rates of reporting with the support from the Saudi Health Council, the country's highest health services authority [3]. Based on the council's initiatives, 38 hospitals have been accredited across the country as CPCs. The initiatives also include the drafting and issuance of healthcare professional mandatory reporting laws and establishing a National Child Abuse and Neglect Registry [3]. According to this approach, we expected a more significant proportion of pediatricians in the high sensitivity subgroup and attending training.

Additional research should explore the healthcare providers' experiences with CPS services, as negative experiences have led to underreporting [19]. A study done with nurses in Jeddah illustrated that the barriers in terms of reporting were the lack of training and educational programs and having negative experiences after reporting [25]. Our study highlights the importance of conducting and evaluating the effectiveness of CPC projects and their training sessions to increase the impact of such programs.

## 5. Limitations

This study is subject to several limitations. The questionnaire required 7–10 min to complete in the context of long working hours. It was also a challenge to get the survey back. Our study had a limited sample size of 153, which was smaller than previous studies and the response rate of 58.48% was low. The current study did not assess the pediatricians' knowledge, awareness, or confidence in terms of the child protective services in our facility. In addition, exploring the pediatricians' attitudes and beliefs regarding the legal system was beyond the scope of this study.

## 6. Conclusion

The current study results highlight the issue of the low reporting rate of CSA cases, even after the implementation of national initiatives by the government. It also reports the lack of training of the professionals in this area, for the assessment, detection, and reporting of CSA cases, in addition to the cultural and social values which still influence the attitude of the professionals. There is a need to explore the barriers related to under-reporting of CSA cases in larger sections of healthcare professionals and the strategies required to overcome the social and cultural factors underpinning the pediatricians' attitudes. Additional research is required to explore the pediatrician's personal and cultural factors, participation in awareness and training programs established at the national level, experience reporting to CPC, and an analysis of factors that primarily affect the practitioner's decisions.

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This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## Ethical statement

Eligible participants were fully informed about the study's objective and their right to withdraw from the study at any time. Informed consent was obtained at the beginning of the study. This study was approved by the Institutional Review Board (IRB) at King Abdullah International Medical Research Center (KAIMRC), Riyadh, Saudi Arabia, with protocol-RC19/215/R. This study was performed without receiving any type of funding.

## Author contributions

MA and KS contributed equally. MA, KS, HNS conceived of the study, proposal development, its design and coordination, and data curation. MA and HNS participated in critically revising the manuscript. KS participated in data analysis, data interpretation and writing and critically revising the manuscript. DA, RO, RA, RL and RS participated in data collection and drafting the manuscript. All authors read and approved the final manuscript.

## Declaration of competing interest

The authors declare no conflict of interest.

## Visual abstract

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## References

- [1] Child CDC. Abuse and neglect: violence prevention: injury center. Centers for disease control and prevention [internet]. Online: Centers For Disease Control and Prevention; 2020 [updated 7 April 2020 7 October]. Available from: <https://www.cdc.gov/violenceprevention/childabuseandneglect/fastfact.html>.
- [2] National Family Safety Program [internet]. Saudi Arabia: national family safety program (Saudi Arabia) [cited 2020 14 October]. Available from: [www.nfsp.org.sa](http://www.nfsp.org.sa); 2014.
- [3] Al Eissa M, Almuneef M. Child abuse and neglect in Saudi Arabia: journey of recognition to implementation of national prevention strategies. *Child Abuse Neglect* 2010;34(1):28–33.
- [4] Almuneef M, Al-Eissa M. Preventing child abuse and neglect in Saudi Arabia: are we ready? *Ann Saudi Med* 2011;31(6):635–40.
- [5] Abu-Baker K. Arab parents' reactions to child sexual abuse: a review of clinical records. *J Child Sex Abuse* 2013;22(1):52–71.
- [6] Al-Eissa MA, AlBuhairan FS, Qayad M, Saleheen H, Runyan D, Almuneef M. Determining child maltreatment incidence in Saudi Arabia using the ICAS-CH: a pilot study. *Child Abuse Neglect* 2015;42:174–82.
- [7] AlMadani O, Bamoussa M, Alsaif D, Kharoshah MAA, Alsowayigh K. Child physical and sexual abuse in Dammam, Saudi Arabia: a descriptive case-series analysis study. *Egypt J Food Sci* 2012;2(1):33–7.
- [8] Pietrantonio AM, Wright E, Gibson KN, Alldred T, Jacobson D, Niec A. Mandatory reporting of child abuse and neglect: crafting a positive process for health professionals and caregivers. *Child Abuse Neglect* 2013;37(2–3):102–9.
- [9] Schols MWA, de Ruiter C, Öry FG. How do public child healthcare professionals and primary school teachers identify and handle child abuse cases? A qualitative study. *BMC Publ Health* 2013;13(1):807.
- [10] Ghaffar UB, Ahmad M, Faraz A, Ahmad A. A study of child abuse trend in Saudi Arabia—A review update. *Indian J Forensic Community Med* 2018 Jan;5(1):8–12.
- [11] Mogaddam M, Merdad L, Alamoudi N, Meligy OE, El-Derwi D. Prevalence of child abuse in Saudi Arabia from 2000–2015: a review of literature. *J Oral Hyg Health* 2015;3(189).
- [12] Alsehaimi A. A systematic review of literature on child sexual abuse in Saudi Arabia. *J Child Dev Disord* 2016;2(1).
- [13] Dubowitz H. Tackling child neglect: a role for pediatricians. *Pediatr Clin* 2009;56(2):363–78.
- [14] Mindlin RL. Child abuse and neglect: the role of the pediatrician and the

- Academy. *Pediatrics* 1974;54(4):393–5.
- [15] Arnold DH, Spiro DM, Nichols MH, King WD. Availability and perceived competence of pediatricians to serve as child protection team medical consultants: a survey of practicing pediatricians. *South Med J* 2005;98(4):423–8.
- [16] Everson MD, Sandoval JM. Forensic child sexual abuse evaluations: assessing subjectivity and bias in professional judgements. *Child abuse & neglect* 2011;35(4):287–98.
- [17] Al-Saif DM, Al-Eissa M, Saleheen H, Al-Mutlaq H, Everson MD, Almuneef MA. Professionals' attitude toward reporting child sexual abuse in Saudi Arabia. *J Child Sex Abuse* 2018;27(1):22–37.
- [18] Svensson ED. Validity of scales. 2011. p. 1637–9.
- [19] Flaherty EG, Sege R, Binns HJ, Mattson CL, Christoffel KK. Health care providers' experience reporting child abuse in the primary care setting. *Pediatric Practice Research Group. Archives of pediatrics & adolescent medicine* 2000;154(5):489–93.
- [20] Habib HS. Pediatrician knowledge, perception, and experience on child abuse and neglect in Saudi Arabia. *Ann Saudi Med* 2012;32(3):236–42.
- [21] Lane WG, Dubowitz H. Primary care pediatricians' experience, comfort and competence in the evaluation and management of child maltreatment: do we need child abuse experts? *Child Abuse Neglect* 2009;33(2):76–83.
- [22] Giardino AP, Brayden RM, Sugarman JM. Residency training in child sexual abuse evaluation. *Child Abuse Neglect* 1998;22(4):331–6.
- [23] Jones JG, Rickert CP, Balentine J, Lawson L, Rickert VI, Holder J. Residents' attitudes toward the legal system and court testimony in child abuse. *Child Abuse Neglect* 1990;14(1):79–85.
- [24] Newton AW, Vandeven AM. Update on child maltreatment. *Curr Opin Pediatr* 2009;21(2):252–61.
- [25] Elarousy W, Abed S. Barriers that inhibit reporting suspected cases of child abuse and neglect among nurses in a public hospital, Jeddah, Saudi Arabia. *East Mediterr Health J [Internet]* 2019;25(6). <https://doi.org/10.26719/emhj.18.055>. 2019/08/[413-21 pp.]. Available from:.