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Knowledge and Attitude of Primary Health Care Pysicins Regarding Physical Child Abuse in AL-Khobar city, Saudi Arabia 2017

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Abstract: ***Background**: Child abuse is a huge international public health problem causes morbidity and mortality in children. This study aimed at evaluating primary health care physicians PHCPs knowledge, attitude and barriers to report the child physical abuse CPA in Al-khobar city, KSA. **Method**: Cross – sectional survey of the PHCPs working with the Ministry of Health's primary health care centers in AL-Khobar city. The study was a non-sampled; all PHCPs in the target area were involved. Data collected using on line questionnaire adapted from previous study. **Results**: Out of the targeted 76 PHCPs, 70 participated in the study, with the response rate of 92.1%. All of them were Saudi and (75.7%) were female. The mean knowledge was 62.18 %. Findings showed that those from age group 36-40, with long experience had higher level of the overall knowledge (p=0.020 & 0.001). Training on CPA has no significant effect on the overall knowledge and ability to detect cases (p=.538 &.127). Those who had training and protocol in the practice showed higher level of knowledge regarding the legal authority to report the CPA (p=0.020 & 0.001). The attitudes of participants towards detecting and reporting cases were generally positive. Lack of knowledge about referral procedures and possible harmful effect on the child from the family where the main causes of under reporting. **Conclusion**: Although their attitude towards detecting and reporting cases was generally positive, the participants in this study showed insufficient knowledge about child physical abuse. These findings reproduce the serious problem of underreporting of CPA cases in KSA, which may lead to irony of the seriousness of CPA problems. Training on CPA may need revision in order to improve its effect on PHCPs ability to identify and detect cases.***

Keywords: Child, Physical abuse, Primary health care physicians, knowledge, attitude, Legal authority

1. Introduction

1.1 Background

During the last five decades child abuse become a huge international public health problem cause morbidity and mortality in children such as bruises, abrasions, burns, internal organ injury and physical disabilities, (1, 2) which continue during their adult life and present as poor health outcomes. (3) The Centers for Disease Control and Prevention (CDC) define child abuse as “any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential harm, or the threat of harm to a child”. (4)

There are several types of child abuse which classified to two main categories, commission and omission. Commission child abuse includes Physical abuse (which several studies indicate that it’s the easy type in diagnosis). This type includes corporal punishment, sexual abuse, psychological abuse, shaken baby syndrome (abusive head trauma) and Münchausen syndrome by proxy. The omission child abuses where several studies indicated it is the most difficult child abuse to diagnose. Omission refer to children neglect include emotional neglect, medical/dental neglect, and educational neglect. (4)

The prevalence rate of child abuse is different according to the type, society and country. In 2014 the World Health Organization (WHO) reported that the rate of physical abuse was 23% and sexual abuse was 5-10%. (4) In UK the 2015 annual report of the child protection registry indicates that 94, 690 maltreatment cases 4350 of them were physically abused. (5)

While In Kingdom of Saudi Arabia (KSA) 2015 annual reports of the Hospital – Based child maltreatment registry indicated that 422 cases of child abuse reported, 86% was physically abused and 2.3% died. (6)

Family physicians as primary health care physicians (PHCPs)can play an important role in identifying and reporting a child abuse and neglect (CAN) cases. They have relation extends for years with all family member (adults and children), and in a position that allows them to expose to a lot of children who came for vaccination and preschool assessment. (4)In fact, they are the first professionals to recognize CAN as well as the first support, which put huge legal and social responsibilities on their shoulders (1, 7).

Under normal conditions children are more likely to be injured and most of these injuries didn’t need medical care, and it is common that children present to emergency with various kinds of injuries and accidents. It is also very rare to find witness on abuse, all these factors make the diagnosis of child physical abuse (CPA) difficult(3, 8). On the other hand there are several factors interfere in the physicians’ decision to report CAN. Deficiency of physicians’ knowledge about the duty to report and deficiency in adequate skills to diagnose CAN are the main factors. Other interfering factors in CAN reporting are concerning of the following: negative effects on the relation with family, confidentiality issues, and no enough security in health centers. This means that there is

need to provide doctors with adequate training to identify these cases as early as possible. (1, 7, 9).

In 2008, the Saudi National Health council (NHC) approved the large project of national family program to establish child protection team (CPTs). (10, 11) Since then 39 CPTs have been founded in major hospitals across the 13 provinces of KSA. The CPTs mission is under the jurisdiction of the NHC, each CPT is consisted of a core multidisciplinary team (pediatricians, social workers, psychologists, surgeons, legal service providers, and nurses) (12).

Furthermore, in 2010 (a child help line 116-111) was established that increase the reporting rate compared to earlier years and enable best converge service(10, 11, 12).

Several studies were conducted regarding CAN in KSA, in 2012 a cross sectional study was conduct by Habib HS among the pediatrician in King Abdulaziz university Hospital to assess their knowledge, perception and experience regarding child abuse and neglect cases. The results showed area of weakness in the overall knowledge about reporting cases. The author concluded that the level of knowledge and experience on CANis adequate to adapt a comprehensive strategy for the prevention of CAN. (13)

Another cross sectional study was conduct during 2015 among dentists in Jeddah to assess their knowledge and attitude about child physical abuse (CPA). The results showed that even with the positive attitude towards CPA, still there is a deficiency in the knowledge about the right action that should be taken if there is any suspicion of child physical abuse. On the other hand only few of the participants knew the correct legal authorities to which suspected cases to be reported, which explained the low reporting rate. The authors conclude that there is a great need to increase the level of awareness among dentist about CPA by adding this subject to medical curriculum and designing medical education and training program (14).

To the best of our knowledge, no study has been conducted in KSA to investigate the knowledge and attitude of primary health care physician about child abuse and neglect in KSA.

1.2 Study Rationale

Early diagnosis and proper management of CAN will increase quality of life of patients and their families and decrease the side effect on their health during adult life. Assessing the level of knowledge and attitude among Primary health care physicians PHCPs as a front line for detecting, managing and reporting CPA cases will help in improving CPA management. It also helps in developing future educational and training programs for the physicians according to the result obtained from the study. Based on the researcher Information, no studies have been conduct recently in Eastern Province, KSA.

1.3 Study Aim

To evaluate knowledge and attitude of PHCPs about child physical abuse CPA and the barriers to report CPA cases in Al-Khobar city, KSA2017.

1.4 Study Objectives

1) To assess the knowledge about CPA among PHCPs in Al-khobar 2017.
2) To assess PHC physicians attitudes towards CPA among PHCPs in Alkhobar 2017.
3) To determine barriers to reporting CPA cases.
4) To determine factors associated with the knowledge and attitudes about CPA among PHCPs in Alkhobar, 2017.

2. Material and Methods

2.1 The Study Setting

The study was conducted in all primary health care centers PHCCs (N=13) in Al-Khobar City, Eastern Region of KSA, 2017.

2.2 Study Population

Primary health care physicians PHCPs working in Ministry of Health's (MOH) PHCCs, in Al-Khobar city.

2.3 Study Design

Descriptive cross sectional study.

2.4 Sample Size/Sampling Technique

The study was a non-sampled, covered all of the PHCPs working in MOH's PHCCs, in Al-Khobar city

2.5 Study Variables

Dependent variables

- Knowledge of PHCPs towards the CPA.
- Attitude of PHCPs towards the CPA.
- Barriers to report CPA among PHCPs.

Independent:

1) Socio-demographic data: age, educational level and working years.
2) Professional experience of physicians.
3) Training about CPA.
4) Exposure to CPA cases.
5) Existence of a protocol to deal with CPA

2.6 Inclusion criteria

All PHCPs working in PHCCs, of the MOH in Alkhobr city. Including general practitioners (GP), family medicine resident, specialist and consultant.

2.7 Exclusion Criteria

Physicians who had administrative position and not involved in clinical field.

2.8 Data Collection Tool

The researche used a valid questionnair adapted from previous study conduct among dentist in Jeddah, KSA. (14) The questionnaire consists of four parts:

1) **Participants' Demographics and Job information:** basic demographic characteristics, gender, age, nationality, job title and years of working experience in PHC. Number of physicians in the health center, average number of patients seen and number of CAN cases confronted.
2) **Knowledge of CPA:** Consists of 7main questions and statements (with total of 17 sub questions) pertaining to PHCP' knowledge regarding CPA.
3) **Attitude towards CPA :** consists of 8 questions and statements (5 Likert scale options, ranging from strongly agree to strongly disagree)
4) **Reason for not reporting (Barriers):** consists of 5 main reasons/potential barriers.

2.9 Pilot Study

A pilot study was conducted among (30) PHCPs to test the questionnaire reliability and understanding before starting the actual research. Reliability test was done and Cronback alpha was found to be 0.71 for the CPA knowledge and attitude questions.

2.10 Data Collection Technique:

The researcher distributed the questionnaire on line(Google form). The link to the questionnaire was sent to all participants through WhatsApp messages. Data collected during the period from January to February 2018.

2.11Statistical Analysis

Data entered in SPSS program version (23). Frequency and percentage were used for description of categorical variables while mean and standard deviation for description of continuous variables. Knowledge regarding child abuse and neglect has been measured by scoring of participants' responses based on the correct answers and percentages calculated. Knowledge has been divided in to subgroups: knowledge about signs of child physical abuse (8 points), knowledge about actions to be taken when confronting with child abuse case (5 points.), and knowledge about the social indicators of child physical abuse (4 points). An overall knowledge measured by scoring of all subgroups (17points).

Chi-square test used to test the association between the demographic characteristics (all of them are categorical) and types of knowledge and attitude (categorical).One way ANOVA and independent sample T-test were used to check the association between the demographic characteristics and the overall knowledge score (continuous variable). Alpha level was set at 5% and a p-value less than 0.05 considered as statistically significance.

2.12 Ethical Considerations

- Approval from Saudi Postgraduate of Family Medicine Program obtained.
- Approval from institutional review board of MOH in eastern province obtained.
- All the data were kept confidential.
- Informed consent was taken for answering questionnaire.

2.13 Budget

It was self-funded, the researchers receive no funding for this research.

3. Results

3.1 Demographic characteristics of participants

Out of the targeted 76PHCPs, 70 participated in the study, with the response rate of 92.1%.

Table 1: Demographic Characteristics of participating primary care physicians (Total 70)

Participant's Characteristics	Description	Count	Column N %
Age:	25-30	44	62.9%
	31-35	18	25.7%
	36-40	4	5.7%
	> 40	4	5.7%
Gender:	Male	17	24.3%
	Female	53	75.7%
Marital state:	Single	13	18.6%
	Married	57	81.4%
Number of kids:	0	28	40.0%
	1_3	37	52.9%
	4_6	4	5.7%
	>6	1	1.4%
Job title:	GP	39	55.7%
	Resident	18	25.7%
	Specialist	6	8.6%
	Consultant	7	10.0%
Working years:	< 2 years	24	34.3%
	2-5 years	30	42.9%
	5-10 year	11	15.7%
	>10 years	5	7.1%

As shown in (Table 1), all of the 70 physicians were Saudi, 53 (75.7%) were female, 44, (62.9%) were from age group 25-30 years. The majority 57 (81.4%) were married and more than half had kids 42 (60%). More than half of them were general physician 39 (55.7%) and 30 (42.9%) were having 2-5 years' experience.

3.2 Work-related characteristics of the participants

Table 2: Work related Characteristics of the primary care physicians in Alkhobar PHCCs (Total 70)

Work related characteristics	Description	count	Column N %
Number of physicians in the center including you	1_3	34	48.6%
	4_6	27	38.6%
	>6	9	12.9%
Number of patient seen daily	<30	42	60.0%
	30-50	22	31.4%
	>50	6	8.6%
Number of suspected cases of abuse seen weekly in the center:	0	51	72.9%
	1_5	18	25.7%
	5_10	1	1.4%
Did you ever confront with CAN case?	No	34	48.6%
	Yes	36	51.4%
Did you receive any training on CPA after graduation from the medical school:	No	52	74.3%
	Yes	18	25.7%

Is there a protocol in your practice to deal with CAN cases?	Do not know or not sure	31	44.3%
	No	8	11.4%
	Yes	31	44.3%
Did you read this protocol?	No	53	75.7%
	Yes	17	24.3%

Table 2 shows the detailed Work related Characteristics. Almost half of the physicians work in centers with 1-3 other physicians, more than half of them see < 30 patient daily(60.0%). Below one third, 49 (27.1%) had seen suspected cases of child abuse weekly in the center and majority of them, 52(74.3%) didn't receive any training on CPA after graduation from the medical school. Thirty one (44.3%) of the physician know there is protocol in their practice to deal with CAN cases but only 17 (24.3%) had read it.

Participants' awareness about the legal authority to report CPA

The results revealed that below one third (28.5%) of the participants know the right place where they should report CPA cases "national family safety registry". Followed by 15.71 % selected "social agency", then 12.86% selected "police" as shown in figure (1).

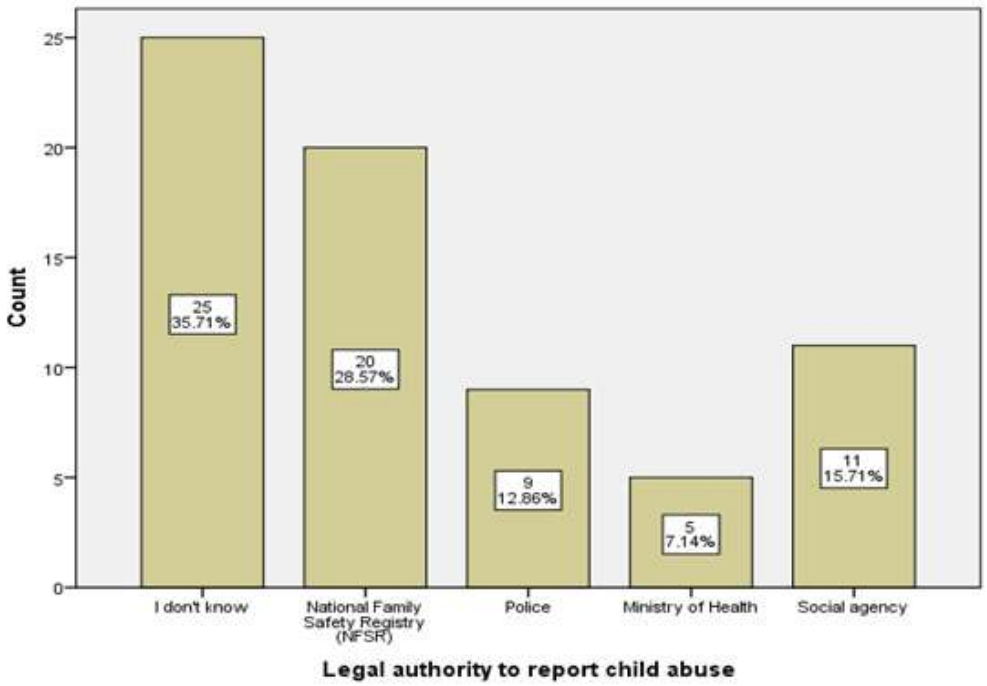

Figure 1: Description of participants' responses regarding the legal authority to report CPA.

3.3 Description of knowledge about CPA among the participants:

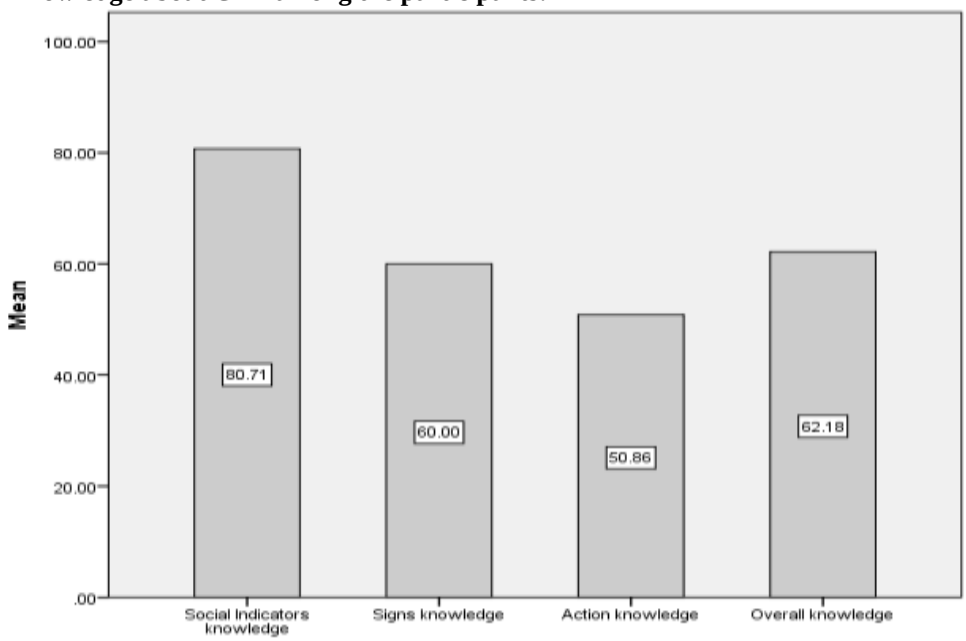

Figure 2: Primary care physician Knowledge regarding CPA (mean scores % of all participants)

The highest CPA knowledge among participating physicians was the social indicators knowledge, (mean 80.71%) and the lowest was action knowledge, (mean 50.86%) as shown in Figure (2).

3.4 Description of knowledge about social indicators of CPA

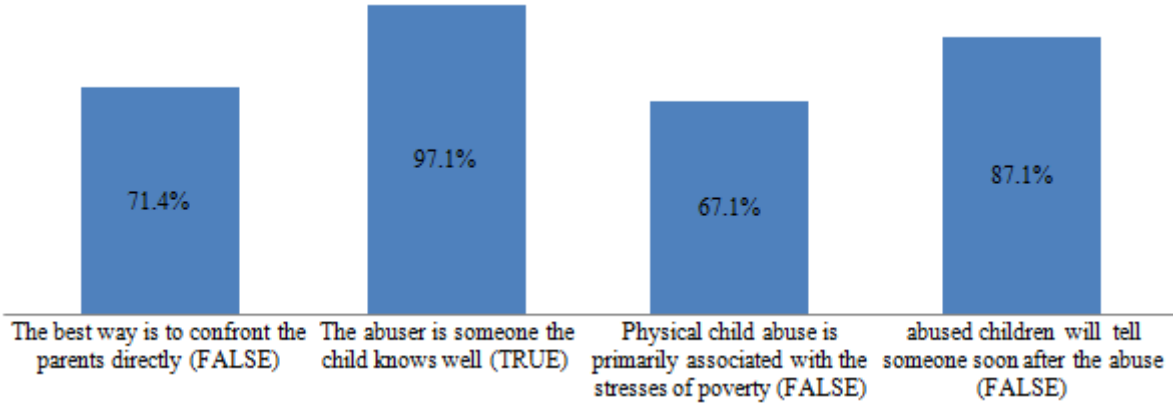

Figure 3: Primary care physician knowledge about social indicators of CPA

Figure 3 is showing the PHCPs knowledge about social indicators of CPA, the majority 97% reported that it is true that the abuser is someone the child know well, followed by 87.1% for it is false that abused children will tell someone soon after the abuse, then 71.4% for it is falls that the best way is to confront the parents directly, and lastly 67.1% for it is fall that the physical child abuse is primarily associated with the stresses of poverty.

3.5 Knowledge about the actions should be taken when a CPA is suspected

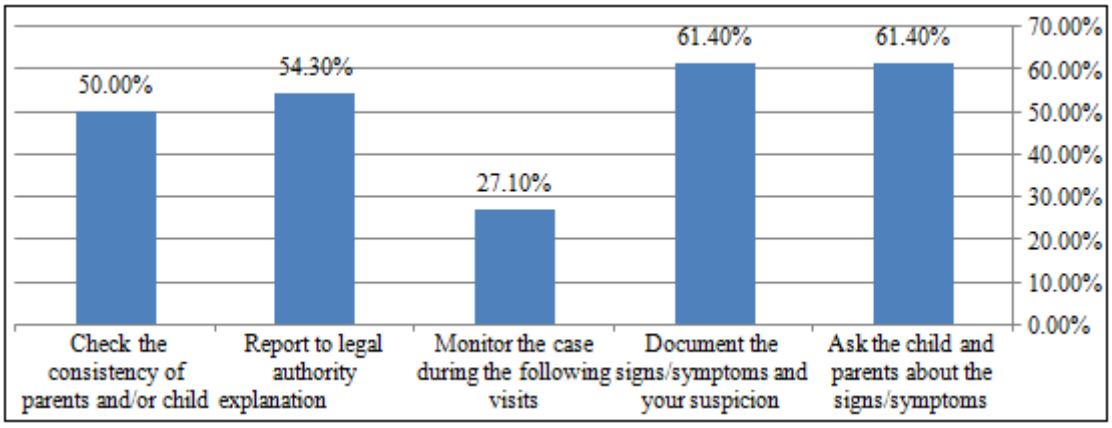

Figure 4: Primary care physicians' knowledge about the actions should be taken when a CPA is suspected

Figure 4 is showing the PHCPs knowledge about the actions should be taken when a CPA is suspected. Almost two thirds 61.4% reported "documented the signs and suspension " and "ask the child and parents about the signs and symptoms' equally, followed by 54.3% "report to legal authority', then 50% " check the consistently of child and parents explanation", and lastly 27.1% for "monitoring the case during following visits.

3.6 Knowledge about signs and symptoms of CPA

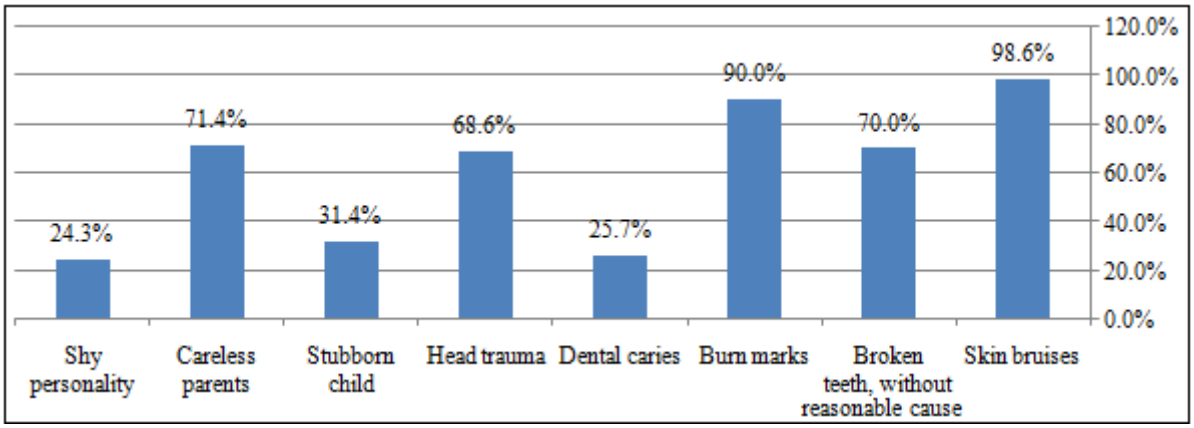

Figure 5: Primary care physicians' knowledge about signs and symptoms of CPA

Figure 5 is showing the PHCPs knowledge about signs and symptoms of CPA. The highest signs were skin bruises (98.6%), followed by burn marks (90.0%), then carless parents (71.4%). And the lowest signs were shy personality (24.3%), followed by dental caries (25.7%).

3.7 Primary health care physicians' attitude towards CPA

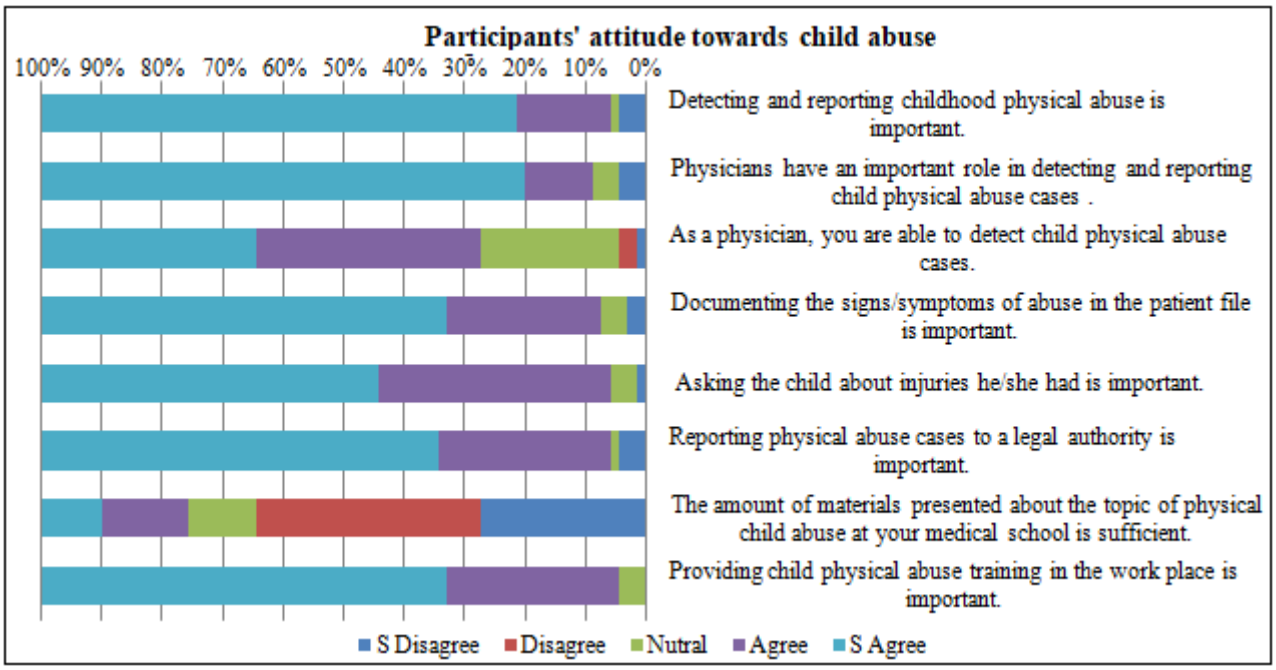

Figure 6: Primary care physicians' attitude towards CPA

As display in Figure 6, the majority of participants were strongly agree/ agree about the importance of: Providing CPA training in the work place (95.7%); detecting and reporting childhood physical abuse and reporting to a legal authority (94.3%); Documenting the signs/symptoms of abuse in the patient file (92.8%) and physicians role in detecting and reporting CPA cases (91.4%). Two thirds of the participants, 64.2% did not agree (disagree or strongly disagree) that the amount of materials presented about the CPA in medical school is sufficient. Only above one third, 35.7% are strongly agreed that they were able to detect CPA cases.

3.8 Barriers of reporting CPA among the participating PHCPs

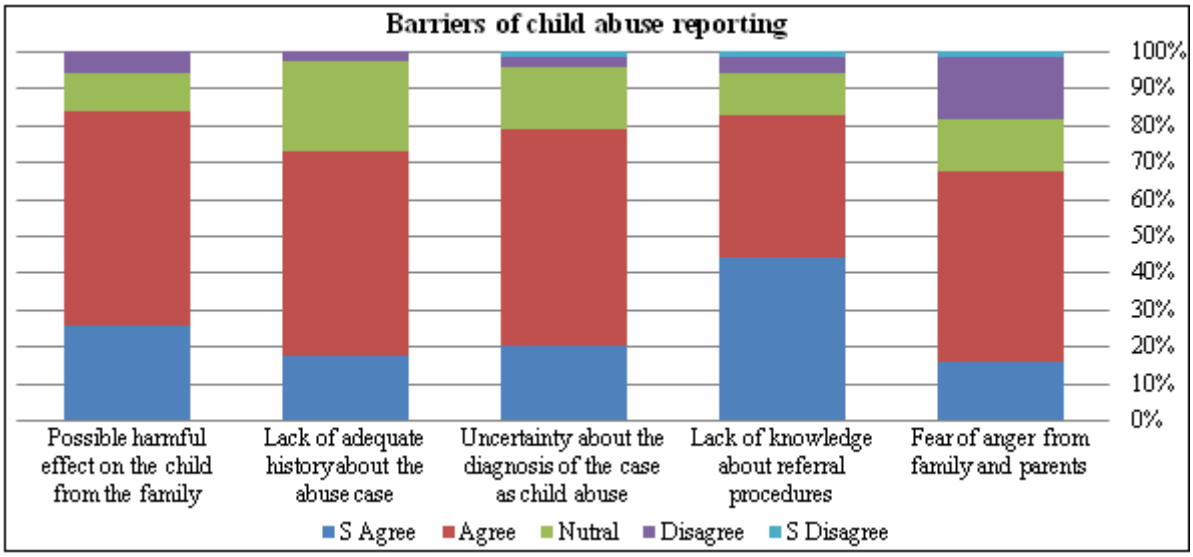

Figure 7: Barriers of reporting CPA cases among the participating PHCPs

As shown in Figure 7, participants are strongly agree/ agree about the following as barriers of reporting CPA cases; Possible harmful effect on the child from the family (83.6%), Lack of knowledge about referral procedures (82.9%), Uncertainty about the diagnosis of the case as CPA (78.6%), Lack of adequate history about the CPA case (72.8%) and the least (67.1%) was Fear of anger from family and parents.

3.9 Factors associated with CPA knowledge

Table 6: Association of demographic/work related characteristics with knowing the correct CPA reporting authority

		To which legal authority should CPA reported				P-value Chi-squre
		False		True		
		N	Row %	N	Row %	
Gender:	Male	11	64.7%	6	35.3%	.481[a]
	Female	39	73.6%	14	26.4%	
Job Title	GP*	28	71.8%	11	28.2%	.157[a]
	Resident	13	72.2%	5	27.8%	
	Specialist	6	100.0%	0	0.0%	
	Consultant	3	42.9%	4	57.1%	
Did you receive any training on CPA** after medical school	Yes	9	50.0%	9	50.0%	.020*
	NO	41	78.8%	11	21.2%	
Is there a protocol in your practice to deal with CAN***?	Yes	16	51.6%	15	48.4%	.001*
	No/Not Sure	34	87.2%	5	12.8%	
Working years	< 2Years	19	79.2%	5	20.8%	.710[a]
	2-5	21	70.0%	9	30.0%	
	5-10	7	63.6%	4	36.4%	
	> 10	3	60.0%	2	40.0%	

*General physician ** child physical abuse *** child abuse and neglect

The results revealed a significant association between level of knowledge of the legal authority where CPA should be referred and training & having protocol, where those who had training and protocol in the practice to deal with CAN cases showed the higher level of knowledge than others (p=0.020 & p=0.001). On the other hand, there was no significant association regarding gender, professional qualifications and experience years were having no significant effect. (Table 6)

Table 7: Association of the overall CPA knowledge of primary health care physicians with demographic characteristics

Variable	Description	N	Overall Knowledge (Mean%)	P-value (ANOVA & T-test)
Age group	25-30	44	58.02	.022*
	31-35	18	66.67	
	36-40	4	76.47	
	>40	4	73.53	
	Total	70	62.18	
Job title	GP*	39	60.78	.248
	Resident	18	59.8	
	Specialist	6	69.61	
	Consultant	7	69.75	
	Total	70	62.18	
Working years	< 2Years	24	54.17	.011*
	2-5	30	65.29	
	5-10	11	65.24	
	> 10	5	75.29	
	Total	70	62.18	
Number of suspected CPA**cases seen weekly	0	51	62.75	.453
	1-5	18	61.44	
	5-10	1	47.06	
	Total	70	62.18	
Ever confront with CAN*** case	Yes	36	62.58	.835
	No	34	61.76	
	Total	70	62.18	
Receive training in CPA	Yes	18	60.13	.538
	No	52	62.9	
	Total	70	62.18	
Have a protocol	Yes	31	61.29	.685
	No, Not sure	39	62.9	
	Total	70	62.18	

*General physician ** child physical abuse *** child abuse and neglect

The results revealed a significant association of overall knowledge with age and working experience. Where those from group age 36-40, with experience more than 10 years showed the higher level of knowledge than others (p=0.021 & p=0.10). On the other hand, there was no significant association regarding Job title, Number of suspected abuse patients seen weekly, Ever confront with CAN case, Receive training in CAN, Having a protocol, and read it. (Table 7, figure8)

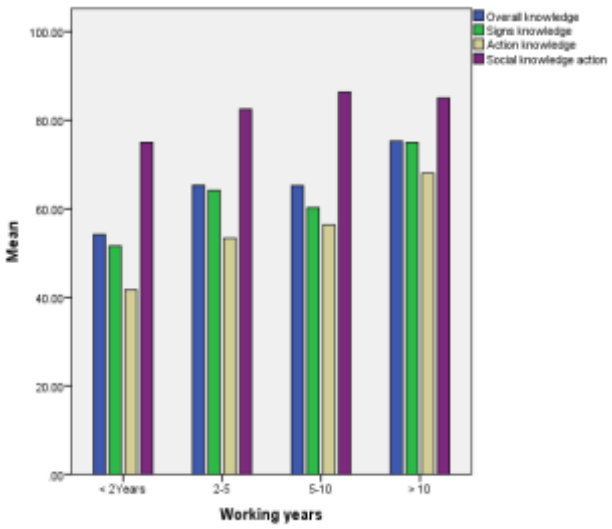

Figure 8: Comparison of CPA knowledge based on experience years

3.10 Factors associated with physicians attitude towards child physical abuse

Table 8: Factors associated with PHCPs' attitude towards CPA (Detecting and reporting CPA is important)

Characteristic	description	Detecting and reporting CPA**is important.		
		Agree/S agree		P-value Chi-square
		Row N %		
Age:	25-30	34	77.3%	.000[*, b, c]
	31-35	16	88.9%	
	36-40	4	100.0%	
	> 40	1	25.0%	
Gender:	Male	15	88.2%	.448[b, c]
	Female	40	75.5%	
Job title:	GP*	30	76.9%	.369[b, c]
	Resident	15	83.3%	
	Specialist	4	66.7%	
	Consultant	6	85.7%	
Working years:	< 2Years	19	79.2%	.002[*, b, c]
	2-5	23	76.7%	
	5-10	11	100.0%	
	> 10	2	40.0%	
Training on physical child abuse	Yes	17	94.4%	.081[b, c]
	NO	38	73.1%	
Did you read this protocol?	Yes	12	70.6%	.654[b, c]
	No	43	81.1%	

*General physician ** child physical abuse

The result revealed a significant association between attitude and age and working years.Those who were from group age 36-40, and had experience of 5-10 years had the higher rate of agreement on (Detecting and reporting CPA is important), (p=0.0001, p=0.002,) respectively. (Tables 8)

Table 9: Factors associated with PHCPs' attitude towards CPA
(As a physician, you are able to detect CPA cases)

Characteristic	description	You are able to detect CPA** cases.		
		Agree/S agree		P-value Chi-square
		Row N %		
Age:	25-30	19	43.2%	.052[b, c]
	31-35	4	22.2%	
	36-40	1	25.0%	
	> 40	1	25.0%	
Gender:	Male	8	47.1%	.456[b, c]
	Female	17	32.1%	
Job title:	GP*	8	20.5%	.000[*, b, c]
	Resident	14	77.8%	
	Specialist	1	16.7%	
	Consultant	2	28.6%	
Working years:	< 2Years	12	50.0%	.208[b, c]
	2-5	9	30.0%	
	5-10	2	18.2%	
	> 10	2	40.0%	
Training on CPA	Yes	8	44.4%	.127[b, c]
	NO	17	32.7%	
Did you read this protocol?	Yes	7	41.2%	.004[*, b, c]
	No	18	34.0%	

*General physician ** child physical abuse

Resident and who read the protocol had the higher rate of agreement on (As a physician, you are able to detect CPA cases.) (p<0.0001, p=0.004) respectively (Table 9)

Table 10: Factors associated with PHCPs' attitude towards CPA (Reporting CPA cases to a legal authority is important)

Characteristic	Description	Reporting CPA** cases to a legal authority is important.		
		Agree/S agree		P-value Chi-square
		Row N %		
Age:	25-30	28	63.6%	.001[*, b, c]
	31-35	13	72.2%	
	36-40	3	75.0%	
	> 40	2	50.0%	
Gender:	Male	11	64.7%	.556[b, c]
	Female	35	66.0%	
Job title:	GP*	25	64.1%	.255[b, c]
	Resident	14	77.8%	
	Specialist	3	50.0%	
	Consultant	4	57.1%	
Working years:	< 2Years	14	58.3%	.004[*, b, c]
	2-5	22	73.3%	
	5-10	7	63.6%	
	> 10	3	60.0%	
Training on CPA	Yes	11	61.1%	.879[b, c]
	NO	35	67.3%	
Did you read this protocol?	Yes	12	70.6%	.768[b, c]
	No	34	64.2%	

*General physician ** child physical abuse

Those who were from group age 36-40, and had experience 2-5 years and 5-10 years had the higher rate of agreement on Reporting CPA cases to a legal authority is important) (p=0.001, , p=0.004) respectively (Table 10).

2. Discussion

Globally, Child abuse is a significant issue that necessitates collaboration of numerous disciplines including medical, legal, psychological and sociological dimensions. Approximately one million children become victims every year and more than 1, 200 die as a result of abuse and the annual incidence of abuse is estimated to be between15and 40 cases per 1, 000 children (1, 2). This study comes as part of the efforts towards better understanding of this multifaceted problem. It aims at assessing the knowledge and attitude about child abuse among primary care physicians and to determine the barriers to report child abuse cases Alkhobar city KSA.

Primary care physicians' knowledge about CPA

This study showed that the mean CPA knowledge among participating physicians was 62.18%.It also revealed a wide variation in physicians' knowledge (correct answers ranging from minimum 17.65% to maximum 88.2%).This finding is slightly lower than study conducted in Turkey (15) where the mean knowledge was 64.43% and the range of knowledge was from 9.37% to 100%. This result has been also supported by Acik et al. study(1) found that correct answers range from 4% to 93.7%. These results revealed that the variation and gap in physicians' knowledge regarding CPA is a common problem.

The participants' knowledge about social indicators of CPAfocused on four indicators; "it is true that the abuser is someone the child know well"; "it is false that abused children will tell someone soon after the abuse"; "it is falls

that the best way is to confront the parents directly"; and lastly "it is falls that the physical child abuse is primarily associated with the stresses of poverty". Findings of this study are similar toMogaddam M et al. (14).

Regarding knowledge about signs and symptoms of CPA, 98.8% of the participants recorded skin bruises, 90% burn marks, 70% broken teeth without reasonable cause then 68.6% head trauma. These findings are generally similar to Mogaddam M et al. study (14) where the participants recorded 94%, 84%, 67% and 74% respectively.

In thisstudy, 51.4% of PHCPs confronted with CAN cases. This is slightly lower than the finding of study performed by Lazenbatt et al. (19) among nurses, physicians and dentists in Ireland, where the rate of confronting with physical abuse was 60%. In Garrusi et al. study (18) finding was a bit higher, where 65% of the physicians confronted with cases of neglect. In this study regarding the actions should be taken when a CPA is suspected above half, 54.3% said they will report to legal authority compare to 47% rate of legal notice found by Lazenbatt et al. study (19). In Garrusi et al.study (18)the finding is much lower, only 4.5% completed a legal notice. The variation in this finding might be explained by the fact that this study reported the physicians' perceived actions that should be taken but not tested the real action done, which is expected to be much lower if tested.

Associated factors with CPA knowledge

Only the long experience and its naturally correlated factor, the age of PHCPs, are associated with significant increase in overall CPA knowledge. Training on CPA in this study has not increases significantly the knowledge to identify and detect cases while significantly increases the awareness about the correct legal authority to report cases. Possible explanation of this finding could be the focus on administrative and legal reporting issues in the training rather than technical issues related to detection and treatment of CPA like signs/symptoms, social indicators and actions to be taken.

Unlike this study finding, Gender was found to be significantly associated with CPA knowledge in several studies. kera at el (8) and Habib et al among pediatrician(13). They found positive association with females having better knowledge but no significant difference found by this study.

Primary care physicians' attitude towards CPA

Regarding PHCP' attitude towards CPA, This study finding is similar to Mogaddam et al. study. The majority of the participants were agree (mean of strongly agree/ agree was 93.7%) about the importance of the following: detecting and reporting CPA; Reporting to a legal authority; Documenting the signs/symptoms of abuse in the patient file and Providing CPA training in the work place. In Mogaddam et al study the mean of strongly agree/agree for the same statements was 93.8%). This study shows that72.8% of the participants are(agree/strongly agree) that they are able to detect child physical abuse cases. This is slightly lower than Mogaddam et al study finding (78%). In this study, there is significant association between the job title and the ability to detect CPA cases. Residents are markedly better than even specialists and consultants in their perceived ability to detect CPA which reflect the positive effect of academic environment on this regard. Those who read the protocol had higher ability to detect child abuse cases, which support the importance of the CAN protocol in this regard.

Barriers of reporting CPA

The most common barriers of reporting CPA cases among participant in this study are; possible harmful effect on the child from the family(83.6%) which relect the conservitve culture of Saudi's culture, then Lack of knowledge about referral procedures (82.9%). There were other studies (1, 8, 14) which found the lack of knowledge about referral procedures as a main barrier. This highlights the importance developing a clear referral policy for CAN and training on the referral procedures. Overall, the findings of this study indicate the importance of child abuse problem; necessitate the provision of appropriate training for detecting CPA cases to PHCPs and application of strict referral policy in PHC facilities.

Study limitations

The collection of data was self-reporting and might increase the source of recall bias. The study is limited to Alkhobar city and not covering other areas in eastern province with small sample (n=74). The physicians were surveyed about general knowledge about actions to be taken when confronting with a CPA case, but their real practice and skills were not evaluated. The cross-sectional design of the study has its own limitations of inability to detect the temporal relationship between the study and their possible predictors.

3. Conclusion

Primary health care physicians are the front line for detecting, managing and reporting child abuse and neglect cases. In this study although the knowledge of the participating PHCPs about CPA detection is satisfactory, their knowledge about actions they should take and the correct authority where they should report cases is comparatively low. These findings reproduce the serious problem of underreporting of CPA cases in KSA which may lead to irony of the seriousness of CPA problem.

Training on CPA may need revision in order to improve its effect on PHCPs ability to identify and detect cases.

4. Recommendation

- Provide the PHCPs a trainig on child abuse with focus on the main points of knowledge gap, especially reporting procedures and actions to be taken.
- Strengthening the distribution of CPA protocol to cover all PHCCs.
- Develop a clear referral policy for CPA and training on the referral procedures.
- Encourage the Introduction of CPA in medical schools' curriculum.
- Conduct further studies on child abuse and neglect.
- Present the key findings of this study to PHC doctors and write a pamphlet about child abuse to be distributed.

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6. Annex

Data collection tool "the questionnaire"