

## Assessment of Knowledge of Family Physicians Regarding Risk Factors Associated with Child Abuse

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### ABSTRACT

**Background:** The reporting and investigation of child maltreatment, and the response to it, involve people from many different walks of life, ranging from parents, relatives, and acquaintances to child-care workers, teachers, association members, volunteers in children's aid societies, child Protection Offices, police officers, prosecutors, and judges. One of the most frequently encountered types of child neglect is the child mal-treatment and has the most serious long-term consequences. Hence, we planned the present study to assess the level of knowledge and attitude of family physicians in regard to child abuse.

**Materials & Methods:** The present study included assessment of knowledge of 80 family physicians in relation to child abuse. All the physicians were pre-informed about the study protocol. A questionnaire was framed for assess in the level of knowledge and attitude of family physicians in relation to child abuse. Criteria given by Oral et al. were used for assessing the quality and standardization of questionnaires framed for assessing the knowledge and attitude of physicians. All the results were recorded and analyzed. All the results were analyzed by SPSS software.

**Results:** A total of 80 physicians were included in the present study out of which, 45 were males and 35 were females. The mean age of all the physicians were 31.2 years, out of 80, 61 were married while 19 were unmarried. In regard to the most

commonly seen sign of child abuse cases, 41 physicians knew the correct answer. 42 physicians had correct knowledge regarding the most common body side manifested with signs of child abuse while only 7 physicians knew that in which body parts, echymoses reminds of physical abuse.

**Conclusion:** There is a need for increasing the awareness and educational training of the physicians for increasing their knowledge for early identification and management of child abuse cases.

**Key words:** Abuse, Child, Physician.

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### INTRODUCTION

Society began to take greater notice of violence against children in the late twentieth century. Violence in the families and in between the small social groups drew all the attention and the previous taboos were discarded.<sup>1</sup> The reporting and investigation of child maltreatment, and the response to it, involve people from many different walks of life, ranging from parents, relatives, and acquaintances to child-care workers, teachers, association members, volunteers in children's aid societies, Child Protection Offices, police officers, prosecutors, and judges.<sup>2,3</sup> From the 1960s onward, the topic of child abuse and neglect has received more attention from physicians as well, above all from pediatricians, pediatric surgeons, specialists in child psychiatry

and psychosomatic medicine, general practitioners, and forensic physicians.<sup>4</sup>

One of the most frequently encountered type of child neglect is the child mal-treatment and has the most serious long-term consequences. Its physical signs may enable it to be diagnosed medically; if not, it can be detected only through the emotional and behavioral abnormalities that it causes.<sup>3</sup> Education and information regarding the maternal and child health services, immunization and regarding public health education is provided by primary health care centre. Therefore, the knowledge and attitude of primary care physicians as leader of the health team toward child abuse and neglect is very important.<sup>5</sup>

As there are degrees of legal and social responsibilities, physicians should have adequate information and skills on identifying specific physical and behavioral patterns, epidemiology, treatment, and prevention of child abuse, as well as the statutes outlining their reporting duties and what happens to reports in their community. Timely educational programs and events should be organised on child abuse for making physicians aware thoroughly about these sensitive matters.<sup>1,2</sup>

Hence, we planned the present study to assess the level of knowledge and attitude of family physicians in regard to child abuse.

**MATERIALS & METHODS**

The present descriptive questionnaire based study was conducted among 80 family physicians with the aim of assessing their knowledge in relation to child abuse. All the physicians were pre-informed about the study protocol.

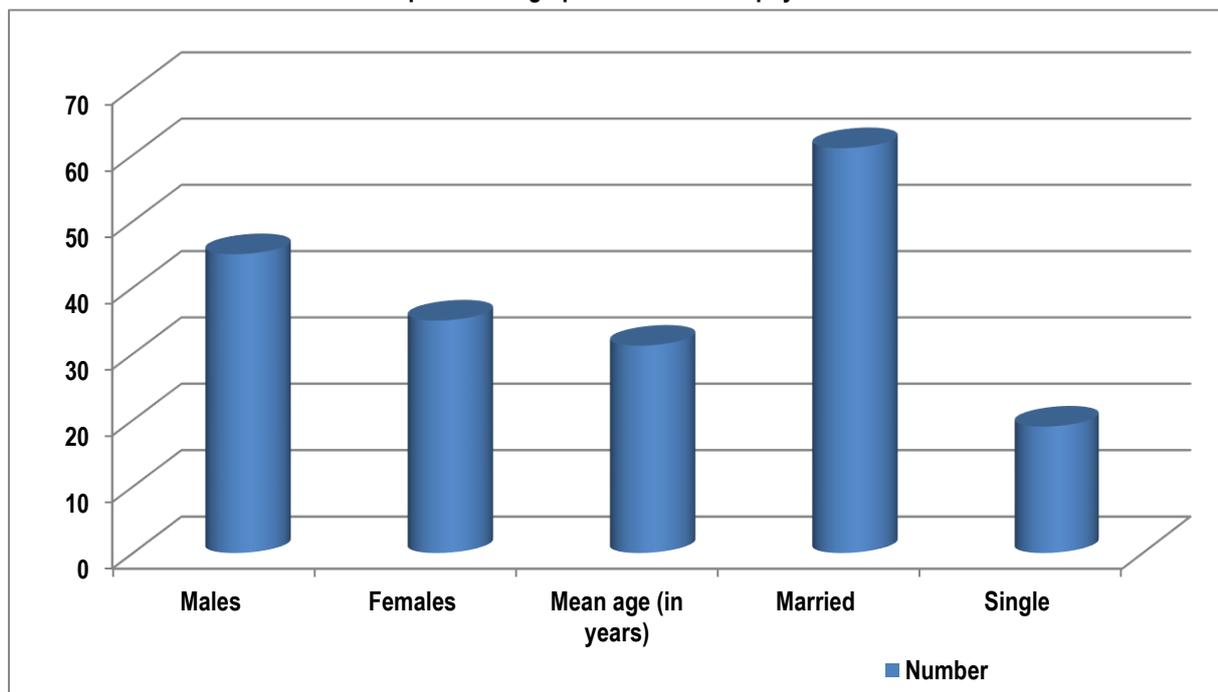
A questionnaire was framed for assessment of the level of knowledge and attitude of primary care family physicians in relation to child abuse. The questionnaire consisted of multiple choice questions that were sent to the primary health care physicians who filled it and sent it back either through post or through mail. The questionnaires presented to subjects were three sets of questions. In the first set, questions were in relation to the

demographic and personal details of the physicians. Second set asked about bruises, fracture, burns, and bites, lesions that are most frequently seen in physically abused child. In the third set, the physicians were asked about their knowledge and attitudes in managing a suspected child abuse.

Reliability of the questionnaire was determined by using Cronbach's alpha coefficient test value degree 0.72. The analysis was performed at 95% confidence interval. The validity and reliability of questions regarding to the knowledge level of physicians about child abuse and neglect were previously tested by Oral et al.<sup>6</sup> Before the questions in this set of questionnaire were presented to all subjects, pre-tests were conducted with a group of 10 physicians, and after obtaining their answers about the clarity and relevance of the items required, corrections were made in the questions. For drafting the questions to assess the knowledge of physicians regarding the common lesions of physical child abuse, a multiple choice question set and educational kits were used as a source. Around 20 physicians assess the inter-observer agreement (Cohen's kappa), and it was found to be substantial (kappa = 0.65).

All the results were recorded and analyzed. All the results were analyzed by SPSS software. Chi-square test and student t test were used for the assessment of level of significance. P-value of less than 0.05 was taken as significant.

**Graph 1: Demographic details of the physicians**



**RESULTS**

A total of 80 physicians were included in the present study out of which, 45 were males and 35 were females (Graph 1). The mean age of all the physicians were 31.2 years, out of 80, 61 were married while 19 were unmarried. 61 physicians correctly answered the questions regarding the typical appearance of mark of child abuse (Table 1).

In regard to the most commonly seen sign of child abuse cases, 41 physicians knew the correct answered. 42 physicians had correct knowledge regarding the most common body side manifested with signs of child abuse while only 7 physicians knew

that in which body parts, echymoses reminds of physical abuse. Significant results were obtained while comparing the answers of the physicians in relation to identification of child abuse cases. Answers of the physicians to the questions in relation to the management of suspected child physical abuse case are shown in Table 2. 61 physicians correctly answered the question that whether a child abuse case should be reported to the child protection agencies. Non-significant results were obtained while comparing the answers of the physicians in relation to the management of child abuse (p-value > 0.05).

**Table 1: Answer rates of physicians in response to questions about identification of child physical abuse**

S No	Sample Questions	Number of physicians answering correctly	Number of physicians answering incorrectly	p-value
1.	Most typical mark of child abuse	56	44	0.25
2.	Most common symptom of child abuse	41	59	0.04*
3.	Most common body side manifested with signs of child abuse	42	58	0.04*
4.	Non-accidental fractures due to child physical abuse are most commonly seen in which age group	38	62	0.03*
5.	Echymoses in what body parts reminds physical abuse	7	93	0.01*

\*: Significant

**Table 2: Answer rates of primary care physicians to the questions regarding to the management of a suspected child physical abuse case**

S No.	Questions	Number of physicians answering correctly	Number of physicians answering incorrectly	p-value
1.	Physician should report a child abuse suspected case to Child Protection Agencies	61	39	0.09
2.	Physicians should report suspected cases of child abuse to the Child Protection Agencies but exemption should be given from legal procedure due to this allegation	54	46	0.18
3.	Reporting of all signs and symptoms of physical abuse should done using a standardized form	59	41	0.36
4.	Implementation of national educational program for prevention of child abuse should be done	58	42	0.39

## DISCUSSION

Child abuse and neglect has been defined as “any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm.”<sup>7</sup> Child abuse and child neglect are often found to be associated with a number of factors such as low income,<sup>8</sup> low maternal education etc.<sup>9</sup> Hence, we planned the present study to assess the level of knowledge and attitude of family physicians in regard to child abuse.

In the present study, we observed that most of the physicians had inadequate knowledge about the identification and management of cases of child abuse.

Fung et al investigated the definition of child abuse and neglect from the prospective of Singaporean doctors and lawyers. They framed a self-addressed questionnaire survey which included a total of 368 respondents. Similar parenting attitude was observed in most of the respondents. The majority felt that child abuse occurred sporadically but 25% of family physicians felt it seldom occurred. In comparison to less than one third of hospital doctors, 38 percent of family physicians had a personal definition of child abuse. Among all the three groups in context of 21 behaviour studies, a high consensus was observed. In all 3 groups, more than 80% agreed that having sex, burning child, tying child and

not protecting the child from sexual advances were both unacceptable and abusive. More than 80% of respondents felt that some form of compulsory reporting is necessary in Singapore. Doctors and lawyers preferred to refer the case of child abuse to hospitals and police respectively. Respondents were more likely to act in cases of physical abuse and sexual abuse than for cases of emotional abuse and neglect. From the above results, the authors concluded that in our society, there is a need of formalizing the definitions of child abuse.<sup>10</sup>

Açik et al assessed the level of knowledge and attitude of family physicians in relation to child abuse in Turkish cities. They assessed the knowledge of 266 primary health care physicians out of which only 175 replied and participated in the survey. Inadequate knowledge of physical assessment of the suspected child abuse was observed to be present in most of the participated primary care physicians. From the results, the authors concluded that primary care physicians working in the eastern cities of Turkey do not have adequate knowledge and proper attitudes toward the identification and reporting of suspected child abuse. Hence, there is a need for educational programs to primary care physicians and other health personals working with child abuse and neglect to increase their knowledge and skills in detection, assessment, reporting, treatment, and prevention of child abuse and neglect.<sup>11</sup>

Kennedy RD assessed the experience, knowledge, and attitudes of primary care physicians toward elder mistreatment. They framed and mailed a self-report questionnaire to a random sample of 500 primary care physicians. The population included 250 family physicians and 250 general internists in Ohio, divided equally between large urban, suburban, and rural practice settings. They observed an overall response rate of more than 75 percent among the 216 family physicians and 176 internists responding. No exposure or only minimal exposure to the physical, emotional, or sexual abuse of the elderly was reported by only approximately 72 percent of the respondents. More than half of the respondents in both groups reported that they had never identified a case of elder mistreatment. Both family physicians and general internists estimated its prevalence as roughly less than 25% of the prevalence documented in the medical literature, and both were reluctant to accept the problem as universal. From the above results, the authors concluded that in relation to elder mistreatment, physicians need more education.<sup>12</sup>

DeMattei et al examined the training needs of allied health students to be legally responsible in reporting child abuse and neglect. A questionnaire was administered to 236 students enrolled in 5 allied health programs. The questionnaire addressed the knowledge base and perceptions of allied health students in regard to child abuse and neglect. Results revealed that most allied health students felt inadequately prepared academically in the topic of child abuse and neglect. Only half of the students knew they could be charged with a crime for failure to report suspicions of child abuse and neglect. Nursing students, female students, and students older than 25 years were those likely to report child abuse and neglect. Students appear to have insufficient preparation in the areas of knowing how to report child abuse and neglect as well as their responsibilities to do so as allied health professionals.<sup>13</sup> Thomas et al explored dental and dental hygiene students' educational experiences and knowledge concerning child abuse/neglect. Questionnaire data were collected from 233 dental and seventy-six dental hygiene students. Of those surveyed, 94.7 percent of the dental hygiene and 70.5 percent of the dental students reported having learned about child abuse/neglect in classroom settings, and 15.8 percent of the dental hygiene and 29.3 percent of the dental students reported having learned about it in clinical settings. Dental students reported more minutes of instruction about this topic than dental hygiene students. Only 5.5 percent of the dental and 16.7 percent of the dental hygiene students defined child abuse correctly; 32.2 percent of the dental and 13.2 percent of the dental hygiene students did not know their legal responsibility concerning reporting child abuse; and 82.4 percent of the dental and 78.9 percent of the dental hygiene students did not know where to report child abuse. Dental care providers are likely to encounter child abuse and neglect in their professional lives and are legally required to respond to these matters. Dental and dental hygiene curricula should be revisited to ensure that students are adequately prepared for this professional task.<sup>14</sup> Campbell et al explored the practice and attitudes of child abuse physicians regarding the evaluation of "contact children" identified in the home of a physically abused index child. A self-administered survey was planned and was E-mailed to the physicians in the United States who were recognized as experts in child abuse

medicine based on membership in the Helfer Society. Descriptive measures of recommended medical evaluations of contact children in 3 clinical settings, estimates of association between these recommendations, and respondent experiences. There was a 61% (93/153) response rate. Respondents uniformly endorsed medical evaluation for contact children, although there was substantial variability in the extent of evaluation recommended. Recommended diagnostic testing varied by age of contact child and by type of abuse in the index child. Recommendations were influenced by anecdotal recall of abused contact children "missed" during the initial evaluation of another child in the household. Of our 93 respondents, 37 (40%) reported routine disagreement with child protection workers about the need for medical evaluation of contact children. A better understanding of risk of abuse in contact children and improved collaboration between physicians and child protection workers are needed to improve evidence-based care of this high-risk population.<sup>15</sup>

## CONCLUSION

From the above results, the authors concluded that in the present scenario, there is a need for increasing the awareness and educational training of the physicians for increasing their knowledge for early identification and management of child abuse cases.

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