Investigation of the awareness and knowledge about child abuse and negligence among doctors and nurses working in the east part of Turkey

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Abstract: Objective: This descriptive survey was conducted to evaluate the knowledge, awareness and actual professional experience of health professionals, regarding child abuse and neglect, and also to study training needs in this area.

Materials and Methods: This descriptive study was conducted between November 2013 - January 2014. The study group was a convenience sample comprising 471 health professionals (response rate: 50.1%) working four different hospitals which are located in Ağrı and Erzurum. In this descriptive survey, the health professionals were asked to complete an anonymous, structured questionnaire consisting of sociodemographic variables, questions on their knowledge, experience and training with child abuse and neglect. The correct answers given to the questions included in the questionnaire were added 1 point and knowledge score was calculated. Chi-square, t-testi and ANOVA were used to analyse data.

Results: Less than half of participants (38.6%) had experienced a case of child abuse or neglect in their practice. 58.4% of participants thought that, “difficulties encountered in legal process” could be the reason for low reporting rate. The mean total knowledge score related with child abuse and neglect was found to be 20.62. The level of knowledge was found to be significantly higher in women, health professionals who confronted with cases of abuse and who received education related with child abuse and neglect before graduation.

Conclusion: Guidelines regarding reporting suspected cases of child abuse and neglect must be established. Additional training is required to help health professionals to diagnose with certainty cases of child abuse and neglect in their practice.

Key Words: child abuse and neglect, physician, nurse, awareness, level of knowledge.

Child abuse is an important issue requiring collaboration of various disciplines with medical, legal, psychological and sociological dimensions. It has been stated that 25% of children aged 7-18 are neglected, every one of two children (51%) is exposed to undesirable behaviour in the extent of emotional abuse, and 45% are exposed to physical abuse according to the Child Abuse and Domestic Violence in Turkey report published by UNICEF in 2010 [1].

Child abuse and negligence cases usually present to emergency services and paediatrics polyclinics. If child abuse is suspected in this type of cases, responsibilities

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about legal and preventive measures should be fulfilled following the treatment of medical issues [2-4]. Healthcare professionals should be able to perform diagnostic and treatment approaches, should know the legal procedures and direct the cases as required, as the child abuse is a frequently seen multi-dimensional problem.

It has been reported that 5-10% of children die, and 35-50% have major injuries in cases where children admitted to the emergency rooms or other medical units are not thoroughly evaluated and sent home [3, 5, 6]. If we consider that abuse is a repeating process, more severe child abuse will appear, as minor findings such as skin lesions related to child abuse are not recognized. Therefore, awareness and education of emergency unit and paediatrics personnel about child abuse and negligence are very important. In cases of suspected child abuse or negligence, the physician should decide whether or not to have the child admitted as an in-patient after evaluating the risk of continuing child abuse according to the severity of lesions [7].

Collaboration of personnel such as physicians, nurses, psychologists, and social service personnel on the decision of child abuse will decrease the risk of misdiagnosis. Observation in the hospital, support provided by forensic medicine specialists, child and adolescent psychiatry specialists, psychologists and social service personnel in cases of uncertainly decided child abuse will provide the possibility of correct diagnosis and application of suitable approaches.

The purpose of this study was to determine the awareness of healthcare professionals about child abuse and negligence, and to develop solutions about the problems of healthcare personnel on this issue.

**MATERIAL AND METHODS**

The study was a descriptive study with the purpose of investigating the awareness of physicians and nurses about child abuse and negligence. The data were collected through a face-to-face questionnaire between November 2013 and January 2014. The investigation was performed in four hospitals ( Ağrı Public Hospital, Ağrı Military Hospital, Private Hospital, Erzurum Training and Research Hospital ) located in the Ağrı and Erzurum provinces. All the physicians and nurses working in these hospitals were conducted to inform about the aim and the protocol of the study and invited to participate. The total participation rate is 50.1% (n:471). The participation rates are 84.5% (n:268), 90.3% (n:56), 47.2% (n:34), 23.1% (n:113) respectively in Ağrı Public Hospital, Ağrı Military Hospital, Private Hospital and Erzurum Training and Research Hospital.

The questionnaire consists of two sections. The first section comprises questions about socio-demographic characteristics, education about the subject, status and frequency of encountering and difficulties towards the subject; the second section consists of questions about the measures that could be taken to define the findings and risks of child abuse and negligence. A total number of 32 statements are present in the questionnaire. There is no accepted scale about the subject in the literature. Thus, the knowledge score was calculated by giving 1 point to correct answers and 0 to wrong and "I don't know" answers. The total knowledge score could be 32 at the highest, and 0 at the lowest. This means that the number of known correct statements increased as the total score got closer to 32. Approval of Acıbadem University Ethical Committee was acquired for the study.

Analysis of the data was performed using the Chi-square test and the ANOVA test utilizing the SPSS program. Double post-hoc comparisons were made using the Tukey test in case of significant differences among groups and the significance level was accepted as p<0.05.

**FINDINGS**

The participation rate was 50.1%. The mean age of participants was 30.58±5.70; the distribution interval was 19-45 and the female/male ratio was 1.84 (305/166). 230 of the participant worked in the medical field (48.8%), 175 worked in surgical fields (37.2) and 66 worked in emergency medicine (14%). Three hundred and sixty-five individuals had been working in the same hospital for less than one year and 106 individuals had been working in the same hospital for more than one year.

Twenty-four percent (113) of the participants stated that they had been educated prior to graduation and 5.9% (28) stated that they had been educated after having graduated.

The distribution of healthcare professionals included in the study according to the hospital they worked in relation with gender, profession, specialty field, if they had children, pre- and post-educational status has been presented in Table 1.

The rate of encountering child abuse and negligence by physicians and nurses is 38.6%. This rate is 55.1% for the physicians and 31.8% for the nurses. The number of cases which health professions encountered according to the hospital worked in is presented in Table 2.

The personnel who had encountered child abuse stated that the most difficult part of managing a child abuse case was the history taking (68.8%) and mental examination (40.3%). 16.9% of the participants stated that there was a procedure about child abuse in the hospital they worked in, and 46.8% stated that they did not have knowledge of such a procedure.

The distribution of opinions of the participants about the causes of inadequate reporting has been presented in Table 3.
61.1% of the participants stated that in cases of suspected child abuse, legal medicine consultation should be requested to protect the child; 63.5% stated that the public prosecutors’ office should be informed; 59% stated that the social services should be informed, and 41.4% stated that child should be admitted as an in-patient for protection.

51.2% of the participants stated that the institution that should be informed about the cases of child abuse is the prosecutors’ office, 43.9% stated that children police should be informed, 31.0% stated that the hospital police should be informed, and 31.0% stated that the social services should be informed.

The mean knowledge score of the participants was 20.62, the medium was 21, and the standard deviation was 5.01. 4 participants scored 32 points by interpreting all statements correctly. The lowest score obtained from the statements was 3. The mean knowledge point acquired from the statements was different related to gender. The mean knowledge score of female personnel was 21.11, and that of the male personnel was 19.72 (p=0.004).

The mean knowledge score of physicians was 20.11 and that of the nurses’ was 20.83 (p=0.157). The mean knowledge score of personnel stating that they had been educated about child abuse and negligence prior to graduation (n=113) was 21.94 and this was higher than the mean knowledge score (20.20) of the personnel stating that they had not been educated about child abuse and negligence prior to graduation (p=0.001). The mean knowledge score of personnel stating that they had been educated about child abuse and negligence after having graduated was 20.64, and the mean knowledge score of personnel stating that they had not been educated after graduation was 20.35 and there was no statistically significant difference between these two (p=0.77).

The mean knowledge score of the physicians and nurses who had never encountered a child abuse and negligence case (n=182) was 19.92, and the mean knowledge score of the personnel who had encountered a child abuse and negligence case previously was 21.73.
The mean knowledge score of the physicians and nurses who had encountered a child abuse and negligence case previously was higher than that of the personnel who had never encountered a case (p<0.001).

The mean knowledge score of participants who had children (21.23) was higher than that of participants who did not have children (19.95) (p=0.006). There was a statistically significant difference among groups based on the field that the personnel work in (p<0.001). The mean knowledge scores of the medical, surgical and emergency personnel were 20.63, 21.44 and 18.40, respectively. It was observed that this result had been caused by the emergency care personnel who had followed the post-hoc comparisons of the groups in pairs.

**DISCUSSION**

The World Health Organization emphasizes that diagnosis, protection and maintenance of suitable treatment conditions for abuse and neglected children are among the responsibilities of healthcare professionals [8].

The child protection law obliges the physicians and other personnel working in healthcare to report the suspected cases of child abuse and negligence in many countries following the diagnosis of “Maltreatment syndrome of children” first described by Kempe et al. [9]. Healthcare professionals should have necessary knowledge about this subject, and they should also be able to recognize the characteristic physical and behavioural patterns of child abuse, and treat, prevent and report these cases.

The rate of encountering child abuse and negligence by physicians and nurses is 38.6%. 55.1% of the physicians and 31.8% of the nurses stated that they had encountered a case of child abuse and negligence. The interval between the different cases of child abuse is shortest in private hospital personnel and longest in training-research hospitals. Kara et al. reported that 82% of paediatricians and 54.8% of general practitioners had encountered a case or suspected case of child abuse and negligence. Kocaer stated that 52.8% of the physicians and 30.1% of the nurses had encountered a case of child abuse. These different rates are observed due to the absences in the diagnosis of child abuse and negligence. Kocaer explained the lower rates of nurses encountering these cases as the inability to recognize the abuse and negligence cases and reported the lack of education about this subject. The similar rates of physicians and nurses stating the encounter with child abuse and negligence support this idea. It has been stated in the literature that child abuse is only thought of in major trauma cases as the education and experience is absent in this subject and minor trauma cases are missed and not reported. Missing cases with minor trauma will lead to undesirable results with vital importance when it is considered that trauma is usually continuous in this type of cases [10]. Cases presenting to healthcare facilities could be missed because of the lack of knowledge, ability and experience about the subject, while healthcare professionals have a very important role in this subject [11-15]. In addition, lack of evidence, false information, cultural and traditional values may lead to ignorance of abuse. The personnel that had encountered child abuse stated that the most difficult part of managing a child abuse case was the history taking (68.8%) and mental examination (40.3%). Kara et al. emphasized in their study that the leading issues that the doctors had difficulty with were the communication/legal process with required authorities, history taking, recording and physical examination in case of child abuse and suspicion of negligence.

Garrussi et al. [16] determined in their study that 65% of the physicians had encountered child abuse and negligence, but only 4.5% of them had reported the cases. In the study of Kara et al. [11], 85% of the physicians stated that they thought they would report the case or suspected case of abuse if they ever came across one. In this study, 58.4% of the participants stated that the reason for not reporting the cases was “difficulties that may be faced during the legal process”. Furthermore, lack of knowledge about the reporting procedure, the fear that the child may be placed in a worse position in case of reporting, were also stated as the reasons for not reporting. Healthcare professionals have to report suspected cases to both legal authorities and social services. 51.2% of the participants stated that the institution that should be informed about the cases of child abuse was the prosecutors’ office; 43.9% stated that the children police should be informed; 31.0% stated that the hospital police should be informed and 31.0% stated that the social services should be informed. These results advocate that all suspected cases of child abuse are not reported in Turkey, and this is so also in other countries although the personnel is obliged to report these cases. Lawrence et al. determined that physicians with an on-going education process reported more cases [17]. Improvement of the awareness and knowledge about this subject will contribute to an increase in the number of legal reports.

The mean knowledge score about child abuse and negligence of the participants was 20.62. The total score was 32, and the knowledge score ranges between 3 and 32. In the study of Acik et al. [9], correct answers about physical abuse range from 4% to 93.7%. Armstrong and Wood determined in the investigation they conducted in Austria that physicians did not possess adequate knowledge about child abuse findings, symptoms and prognosis [18].

Cases admitted to the polyclinic or the emergency department is usually directed to paediatric surgery, neurosurgery, orthopaedics, legal medicine and child psychiatry, and history taking and physical examination are carried out again in these departments. This process
is destructive for children [19]. Only 16.9% of the participants stated that there was a procedure about child abuse in the hospital they worked in, and 46.8% stated that they did not have knowledge of such a procedure at the hospital they worked in. However, a coordinated multi-disciplinary team working in these cases and the determination of the diagnosis criteria are very important for both the diagnosis and the quick planning of the treatment and the avoidance of secondary abuse of the child during this process. Paradise et al. determined that the number of cases reported to child protection centres increased after determination of the diagnostic criteria [20]. Lately, Child Observation Centres reporting to the Ministry of Health and Child Protection Centre inside universities in which personnel from different disciplines work together have been established for improving the service in this field in Turkey. Generalization of these centres and collaboration of healthcare professionals with these centres about child abuse and negligence will be effective for the diagnosis, treatment and the protection process.

24% of the participants stated that they had been educated about child abuse and negligence prior to graduation. The mean knowledge score of personnel stating that they had been educated about child abuse and negligence prior to graduation was 21.94 and this was higher than the mean knowledge score (20.20) of the personnel stating that they had not been educated about child abuse and negligence prior to graduation (p=0.001). The pre-graduation education of physicians and nurses about child abuse and negligence will render them to take an affective role in the early diagnosis and treatment of the cases as soon as they start working. However, only the pre-graduation education is not sufficient. The presence of continuous and quality post-graduation education is important. 5.9% of the participants stated that they had attended a certification program after graduation. The rate of post-graduation education in this field is low. Kocaer determined the rate of post-graduation certification program attendance as 7.5% among physicians and 5.9% among nurses. These low participation rates may have been caused by the inadequacy of post-graduation programs or the lack of interest of healthcare professionals towards these education programs. Improving the number and quality of education programs in this field will increase the awareness and knowledge of the healthcare professionals about child abuse and negligence.

Besides the preventive affords about child abuse that may result in significant injuries and death, recognition of those who are exposed to abuse and initiating the legal process and protection of the abused children is very important. Therefore, physicians and nurses should consider the possibility of child abuse in cases they encounter, request necessary consultations, and keep the child under observation in cases in which they are unable to make a definitive decision. In cases of suspected child abuse and negligence, the correct approach is reporting the case and protecting the child.

The awareness and knowledge about the subject will be increased with continuous education programs for the solution of the problems faced during the diagnosis and the reporting process [21]. The major priority during the evaluation of this type of cases is to act, considering the benefits to the child. Formation of a multidisciplinary team consisting of personnel working in different fields who have received necessary education about child abuse, and evaluation of the cases by this team is an important first step. Procedures including the steps that should be followed for these cases in polyclinics and emergency departments, and physicians and nurses should have the practical education about the subject.

References
3. Akçay Ş. İstanbul Üniversitesine Bağlı Tıp fakülte ve çocuk sağlık ve hastalıkları anabilim dalları ile travma ve acil cerrahi. [20]. Lately, Child Observation Centres reporting to the Ministry of Health and Child Protection Centre inside universities in which personnel from different disciplines work together have been established for improving the service in this field in Turkey. Generalization of these centres and collaboration of healthcare professionals with these centres about child abuse and negligence will be effective for the diagnosis, treatment and the protection process.

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