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ARTICLE**

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Exploring Prevalence of Child Abuse: Use of ICAST-Retrospective Instrument with the First Year Medical Students in a University

ABSTRACT

Objective: This study determined the prevalence of child abuse in first year medical students in a Turkish university using the ICAST-R, as well as the relationships between sociodemographic data and abuse.

Methods: First-year medical students in a Turkish university have been surveyed between 15th-30th June 2012, using ISPCAN Child Abuse Screening Tool-Retrospective Version (ICAST-R) and a questionnaire to collect sociodemographic data. Data analysis was performed with SPSS 15.0.

Results: This study was included 192 students, 56.8% female and 43.2% male. Physical, emotional and sexual abuses were found in 14.6%; 32.3%; and 8.9% of participants, respectively. No significant relation between gender and emotional abuse was found ($p= 0.775$), whereas both physical and sexual abuse were more common in males ($p= 0.04$; $p= 0.018$ respectively). There was a statistically significant relation between emotional abuse and parental separation ($p= 0,014$).

Conclusions: Abuse is not rare among the medical student participants, and several preventable factors could worsen it. The findings have implications on how medical students are taught about these issues.

Keywords: Child, Abuse, Prevalence, Medical Students, Turkey, ICAST

Çocuk İstismarı Prevalansının Araştırılması: Bir Üniversitedeki Tıp Fakültesi Birinci Sınıf Öğrencilerinde ICAST-R Ölçeğinin Kullanımı

ÖZET

Amaç: Bu çalışma ICAST-R kullanılarak Türkiye'deki bir üniversitenin tıp fakültesi birinci sınıf öğrencilerinin çocukluk dönemi istismar prevalansının yanı sıra istismar ile sosyodemografik veriler arasındaki ilişkinin belirlenmesini amaçlamaktadır.

Gereç ve Yöntem: Tıp fakültesi birinci sınıf öğrencilerine 15-30 Haziran 2012 tarihleri arasında ISPCAN Child Abuse Screening Tool-Retrospective Version (ICAST-R) ve sosyodemografik verileri toplamak için anket uygulandı. Veri analizi SPSS 15.0 ile gerçekleştirildi.

Bulgular: Çalışmaya %56.8'si kadın ve %43.2'si erkek olan 192 öğrenci katılmıştır. Fiziksel, duygusal ve cinsel istismar sıklığı sırasıyla % 14.6; % 32.3; ve % 8.9 bulunmuştur. Fiziksel ve cinsel istismar erkeklerde daha sık olmasına (sırasıyla; $p=0.04$; $p=0.018$) rağmen cinsiyet ile duygusal istismar arasında anlamlı ilişki saptanmamıştır ($p=0.775$). Ebeveynlerin ayrı olması ile duygusal istismar arasında istatistiksel olarak anlamlı ilişki saptanmıştır ($p= 0,014$).

Sonuç: Tıp fakültesi öğrencilerinde istismar nadir değildir ve birkaç önlenebilir faktör durumu daha da kötüleştirebilir.

Anahtar Kelimeler: Çocuk, İstismar, Prevalans, Tıp Öğrencisi, Türkiye, ICAST

INTRODUCTION

According to the World Health Organization, 40 million children throughout the world, aged 15 and below, are neglected or abused every year(1). International studies show that approximately 20% of females and 5-10% of males undergo emotional abuse in their childhood and 25-50% of all children, regardless of gender, undergo physical abuse(1). Furthermore, many more children are exposed to both emotional abuse and neglect(1). Child maltreatment is defined as “all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power”(1).

Turkey has recently put regulations in place to prevent and manage child abuse and neglect cases. There is a limited number of local Turkish studies investigating the frequency of this issue(2-6), but no study has yet explored the issue deeply with an internationally recognized, reliable and valid questionnaire.

The International Society for the Prevention of Child Abuse and Neglect (ISPCAN) developed the ISPCAN Child Abuse Screening Tool (ICAST) as a result of The World Report on Children and Violence which was produced at the request of the UN Secretary General and the UN General Assembly(R). Three new instruments - ICAST-Parent(P), ICAST-Retrospective(R) and ICAST-Child(C) - were designed to assess the incidence and prevalence of child abuse and neglect(7).

The primary aim of this study is to pilot-test the instrument “ICAST-Retrospective (R) for young medical students” in a Turkish context to determine the frequency of childhood abuse in this group. The secondary aim of this study is to determine the social risk factors associated with the abuse in this particular group.

MATERIAL AND METHODS

Study Methodology: This cross-sectional study was performed in the Department of Pediatrics at a university. All of the first year medical students were included to the study. A sociodemographic questionnaire developed by the research team and ICAST-R were applied to the students for collecting the data during the lesson. ICAST-R was developed through focused group discussions with international child maltreatment experts from 28 countries, and then subjected to a Delphi study in two waves to determine the perceived importance and translatability of items. The resultant questionnaire was translated into six languages and field tested in seven countries with convenient samples of young adults aged 18–26 years (N = 842). The aim of the Delphi study was to sample for diversity. The data of the study wasn’t sufficient for estimating prevalence or making comparisons between countries(8).

During the data acquisition process, all the participants were asked to fill in the questionnaire under observation, after reading and signing the consent form.

Setting: The study was performed with first year medical students in a university between 15th-30th June 2012, on a voluntary basis.

Participants: Medical students were chosen as a convenient sample because of their ease of accessibility. All the participants were clearly informed about the aim of the study and the content of the questionnaire. Personal identity information was not collected from the participants. During the data acquisition process, all the participants were asked to fill in the questionnaire under observation, after reading and signing the consent form.

Tools: Sociodemographic Questionnaire: This questionnaire consisted of questions with the aim of obtaining information about the demographic characteristics of the participants.

ICAST-R: This is a questionnaire that was developed by ISPCAN and aims to evaluate whether the participants experienced physical, emotional, or sexual abuse in their childhood before the age of 18. The instrument includes 15 primary questions about physical, sexual and emotional abusive events. There were three choices to all questions: “yes”, “no”, and “cannot remember.” Supplementary questions about the context of child abuse including frequency, duration, and perpetrator were asked under each main question. The choices were “once or twice”, “between 3 and 10 times,” or “more than 10 times” for frequency; “before 5 years,” “between age 5 and 9,” “between age 10 and 13,” or “between age 14 and 17” for duration, and both adult and peers for perpetrators. The questionnaire was developed using the Delphi method and field tests were performed in 7 countries. After these tests, researchers decided that the questionnaire proves effective when translated and it can competently reflect the childhood abuse and neglect across many cultures(8).

The original questionnaire form was independently translated from English into Turkish by two translators. The resultant two translations were examined by a small group to work out differences between two versions and ended up with a first version of translated tool. This version was back-translated into English by one translator. Discrepancies between the original English and back-translated version were examined. All ambiguities were identified and clarified. The final translation was externally reviewed by two experts.

Data analysis: SPSS 15.0 for Windows application was used for the statistical analysis. Frequencies, percentages, median (min., max.) and mean± standard deviation were presented as descriptive statistics. Chi-square test was performed to compare the data. $p < 0.05$ was accepted to be statistically significant.

Ethics: The ethical approval for the study was taken from Ethics Committee of Gazi University Faculty of Medicine.

RESULTS

There were 258 students as the first year medical students. Fifty four students didn't want to participate. Twelve students didn't complete the questionnaire. Finally, 192 students (74.4% of the targeted) were included in the study.

Demographic properties: One hundred nine of the 192 participants were female (56.8%), whereas 83 were male (43.2%). The mean age of the participants was 19.41±1.33. Sociodemographic data is summarized in Table 1. Of all the participants 160 (83.3%) were non-smokers, 27 (14.1%) were active smokers, and 3 (1.6%) were ex-smokers.

Table I. Demographic Properties

Age (Mean±SD)	19.41± 1.33
Number of person in the family (Mean±SD)	4.76±1.37
Number of siblings(Mean±SD)	1.97± 1.24
Income level	
Low income	7(%3.8)
Medium income	98(%53.5)
High income	78(%42.6)
Place of residence	
Flat	151(%79.5)
Self-contained house	38(%2)
Squatter's house	1(%0.5)

Education levels of parents: 28 of fathers (14.6%) had an education level of primary school or less, 164 of fathers (85.4%) had an education level of high school or more, while 59 of mothers (30.7%) had an education level of primary school or less and 133 of mothers (69.3%) had an education level of high school or more.

One hundred and eighty had parents who lived together (93.8%), while the parents of 10 participants (5.2%) were separated due to reason such as death, divorce, etc.

ICAST Results: 14.6% (28) of participants had stated that he/she had experienced physical abuse, 32.3% (62) had suffered emotional abuse, and 8.9% (17) had been victims of sexual abuse in their childhood. 8.3% (9) of the females and 23.5%(19) of the males stated that he/she had undergone physical abuse while 31.8% (34) of the females and 33.7% (28) of the males had stated that he/she had suffered emotional abuse. Additionally, 4.6% (5) of the females and 14.5% (12) of the males reported having been sexually abused in their childhood.

The relations between sociodemographic characteristics and abuse types are given in Table 2. Although there was a statistically significant relation between male gender and both physical and sexual abuse (p=0.04; p=0.018 respectively), there

was no relation between gender and emotional abuse (p=0.775). Furthermore, parent separation had a statistically significant relation with emotional abuse (p=0.014), but not with physical or sexual abuse (p=0.607; p=0.211 respectively).

Table 2. Relations (p values) Between the Abuse Types and Sociodemographic Characteristics of the Participants (Statistically significant values are marked as underlined.)

	Physical abuse	Emotional abuse	Sexual abuse
Gender	<u>0.040</u>	0.775	<u>0.018</u>
Smoking	<u>0.001</u>	0.104	0.610
Parents separation	<u>0.014</u>	0.607	0.211
Mothers' education level	0.225	0.718	0.643
Fathers' education level	0.821	0.706	<u>0.023</u>
Family income level	0.059	0.944	0.588

The most common type of physical abuse was hitting or punching at 71.4% (n=20), the most common type of emotional abuse were verbal insults at 80.6% (n=50), the most common type of sexual abuse was genital touching against the victim's will 47% (n=8) (Table 3). According to the statements of the attendants, mothers and male teachers were most commonly responsible for physical abuse. Male teachers were also reported as being responsible for emotional abuse while peers or younger girlfriends were accountable for sexual abuse.

DISCUSSION

Main findings: This study showed that there was a statistically significant relation between male gender and both physical and sexual abuse. Mothers and male teachers were most commonly responsible for physical abuse and parent separation has a statistically significant relation with emotional abuse.

Strengths and limitations: The present study has several limitations. First, as the questionnaire involves questions exploring abuse and neglect, it may have been hard for the participants to answer such questions about their private life, and this might have lead to underreporting and underestimation of actual abuse. This is a general limitation that can be seen in most of the studies and we tried to overcome this limitation by asking the participants to fill the questionnaire without revealing their identity. Second, 66 people did not want to participate and this population might have avoided to answer the questions due to any psychological effect of their experiences in the past.

As the percentage of those who avoided to participate is only 20.9%, we think that our data losses are acceptable. Third, the findings reflect only one center with a limited number of participants and might not be generalizable to other settings.

Table 3. Distribution According to Types of Abuse

	Number	(%)*
Physical Abuse (n=28)		
To be hit/punched	20	10.4
To be kicked	9	4.6
To be beaten with an object like stick, cane, whip or belt	7	3.6
To be shaken	4	2.1
To be stabbed or cut you with a knife	4	2.1
Emotional Abuse (N=62)		
To be insulted	50	26
Not to be loved	8	4.2
Wanted to be died or not to be borned	11	5.7
Threatened to be hurt or killed	11	5.7
Threatened to be abandoned by the people in the family	7	3.6
Sexual Abuse (N=17)		
To be exposed toones' genitals without will	7	3.6
To be forced to pose nude in front of any person or for photo., video or webcam	6	3.1
To be touched to private parts	8	4.2
To be forced to touch ones' private parts	4	2.1
To be forced to have any sexual intercourse	2	1

*:Participants ticked more than one option.

On the other hand, our study group actually involves lots of students from different cities who came to Ankara, therefore it may give an idea about the frequency of abuse and neglect in childhood. Despite above common limitations of such studies, the major strength of this study is that it is the first study about prevalence of child abuse in Turkey, which used ICAS-T-R, an internationally recognized tool and it has given us the opportunity to see and discuss child abuse and risk factors in our country.

Comparison with existing literature:

There is no universal reliable prevalence of abuse and neglect because of the lack of data in low and middle income countries. There is no reliable data for our country either, mostly due to deficient records and lack of academic studies. Studies published to date about this issue were performed with different questionnaires. The ICAS-T questionnaires are internationally recognized and have already been used in epidemiological studies from several settings, either as ICAS-T-Retrospective(R), ICAS-T-Parent(P) or ICAS-T-Child(C)(8-12).

Lee and Kim(9) performed a study using the retrospective version of ICAS-T to determine the prevalence of childhood maltreatment in South Korea and the associations between perceptions of abuse experienced during childhood and recent interpersonal problems and depression. In the study, 539 young persons aged 18–24 years from various universities, work places, and clinical settings participated. Şimşek and his colleagues (13) performed a study using the ICAS-T-R to determine the prevalence of childhood maltreatment at medical faculty in Turkey. That study was conducted with 173 first-year students.

The participants may have had difficulty in remembering abuse and/or neglect experienced during their childhood. To lower the probability of forgetting the abuse experienced in the childhood period, the minimum age of the ICAS-T-R instrument which is 18 years old was targeted, therefore the study was performed with the university students who are in the first year of medical school. The mean age was 19.41 ± 1.33 in our study; 18,8 in the study of Şimşek et al.(13), 20.1 in the study of Lee et al.(9) and 20.3 in the study of Dunne et al.(8) Also 109 of the 192 participants were female (56.8%), 83 were male(43.2%) in our study whereas 434 of the 842 participants were females (51.5%) and 407 of them were males (48.3%) in the study by Dunne et al(8).

Twenty eight of 189 medical school students (14.8%) in our study stated that they had been physically abused. Physical abuse prevalence was found to be 23.1% in the study of Şimşek et al.(13), 42.2% in the study of Lee et al.(9) and 52% in the study of Dunne et al(8).These studies yielded higher physical abuse prevalence probably because of intersociety differences about perception of child abuse as an item of discipline. In our study, the most common physical abuse type was “hit/punched”(10.4%). Lee et al.(9) and Dunne et al.(8) also found that “hit/punch”, “beat with a stick or belt” are the most common physical abuse types. According to the study of Dunne et al.(8) the most common answer in Russia, Egypt, Kyrgyzstan was “hit/punched” (48.3%;49.4%;15.8%);“beaten with an object” in Malaysia and Colombia (39.2%;433%); but in India both of these types were seen equally with the percentage of 33.1.

In cases of physical abuse, fathers were found to be the first person to blame. According to the study of Dunne et al.(8), fathers are most likely

and mothers are second most likely to be responsible for physical abuse; however, Lee et al.(9) found that those with the greatest responsibility were males from school followed by the victim's father. This difference may also be explained by cultural differences. It was thought that beating is perceived as a normal disciplinary method in schools in South Korea as compared to our country.

We have found emotional abuse prevalence as 32.3%; similarly Lee et al.(9) found as 36.3%. In the study of Şimşek et al.(13) emotional abuse prevalence was 40.5%. Dunne et al.(8) found that 53% of the participants had either been harshly insulted or threatened with violence before age 18. The most common type of emotional abuse was "insulted or criticized" in our study(31.2%). Likewise, Lee et al.(9) and Dunne et al.(8) (Russia 54.2%; Egypt 59.6%; Lebanon 45.8%; India 46.8%; Malaysia 41.6%; Colombia 63.3%; Kyrgyzstan 39.6%;) found that most common emotional abuse types was "insulted or criticized". While Dunne et al.(8) found that fathers and mothers and Lee et al.(9) found that boyfriends at school and fathers are the primary and secondary responsible parties for emotional abuse, respectively. In contrast, our study found that male teachers are primary contributors of emotional abuse.

Sexual abuse is a taboo in most of the populations and, thus, discussions on this topic are often avoided. For this reason, its accurate frequency is widely unknown. Studies performed in our country about sexual abuse frequency yielded similar results with percentages between 10.7 and 26 (3-5). We have found in our study that sexual abuse frequency is 8.3%; 4.6% of female and 14.5% of male students stated that they had been sexually abused. The reason of the low frequency in female students compared with the males might be that female students are more sensitive about this issue and it is hard for them to share their experience or sexually abused women are much less likely to achieve sufficient educational qualifications in order to get to medical school. In the study of Şimşek et al.(13), prevalence of sexual abuse was found %11. Dunne et al.(8) found determined that 242 respondents reported experiencing at least one unwanted sexual act (29%). In our study the most common two answers were "Someone touched child's genital" and "someone exposed their genitals" respectively (4.1% and 3.6%). Similarly Dunne et al.(8) found that "someone touched child's genitals" and "someone exposed their genitals" were the two most common types of sexual abuse (17.8% and 16.9%) The most common answer given by the participants in Russia, Lebanon, Colombia was "someone exposed their genitals" (respectively 15%;14,2%;28,3%) and in Egypt, India, Malaysia, Kyrgyzstan was "someone touched child's

genitals" (respectively 28.1%;25%;18.4%;13.9%;). According to the study of Lee et al.(9) females reported 'someone exposed genitals' the most and 'someone touched genitals' was reported most for males. Dunne et al.(8) had found that the abuser is mostly an old foreign male and Lee et al.(9) had found that it is a unknown person. We have found in our study that the most common abuser is a person out of the family. But it must be kept in mind that the abuse might have been covered in cases of in-family sexual abuse, which, in turn, affects the study results.

Previous studies performed in Turkey showed that 13,9-87% of the children had experienced physical abuse (6,14,15). These studies yielded results with higher prevalence than our study, most likely due to variations in questioning techniques used. Moreover, there could have been a change in the society in the recent 25 years after publication of the study performed by Bilir et al.(6); however, the prevalence was still high in a study contributed by UNICEF in 2010(15). The physical violence prevalence is thought to be high because types of behavior that do not cause injury like "throwing slippers" were also included in this study.

Broken families because of death, divorce or different study place constitute a significant risk in child abuse(16). Furthermore, Zeren et al.(17) found in their study with 150 university students that the children whose mother were divorced, undergone mostly emotional type of abuse. Like, in our study we found a statistically significant relation between emotional abuse and parent separation.

CONCLUSION

There are many studies and arrangements on especially medical field about child abuse and neglect that have been put into practice recently. It is an issue with undefined parts because of the difficulty in diagnosis and deficiencies in statistical and epidemiological data. To our knowledge there are no studies performed on medical students about the incidence of their childhood abuse and neglect. This study may be important in this aspect as well. As the long term negative effects of childhood abuse on personal relations and psychological health is very well known, it is of interest how these future physicians who were abused in their childhood will act in their professional lives about the care of the patients and building empathetic relations. Further national studies need to be performed with an internationally accepted tool regarding examined validity and reliability, like ICAST-R, in order to determine the frequency in Turkey. Our pilot study will guide the future national studies and help raise efficiency in study process.

Competing interests: The authors declare no conflict of interest.

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