

The Effects of Undergraduate Nursing Education in Diagnosing the Symptoms of Child Abuse and Neglect

Hemşirelik Lisans Eğitiminin Çocuk İstismar ve İhmalinin Belirtilerinin Teşhisine Etkileri

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Geliş Tarihi / Received : 27.09.2020 Kabul Tarihi / Accepted : 01.02.2021

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(Sakarya Tıp Dergisi / Sakarya Med J 2021, 11(1):162-169) DOI: 10.31832/smj.800669

Abstract

Objective	Health professionals are expected to properly identify all the four dimensions of child abuse that are discussed as physical, sexual, emotional abuse, and neglect. This study was conducted to measure the impact of education given in the nursing department on the knowledge level of students about child neglect and abuse and to identify areas that require intervention.
Materials and Methods	The population of this study is 425 students studying in all four grades of the nursing department. A sample was not determined, those who volunteered to participate and completed the questionnaire forms of the study were included (n=313, 74%). A questionnaire form for socio-demographic information and scale by Uysal were used to collect data. Statistical Package for the Social Sciences programme was used for data analysis.
Results	Of the participants 64.9% were female and 74.4% did not want to receive an education on the topic. The mean total scale score was 244.92 ± 22.96 and the mean response to the items in the scale was 3.65. Compared with male students (3.59 ± 0.34), the mean score of female students (3.68 ± 0.33) was significantly higher (p = 0.020). Compared with other grades, the mean score of fourth grade students was significantly higher (p < 0.001).
Conclusion	In the nursing education curriculum, topics related to child abuse and neglect should be included in each year. Higher participation of male students in these trainings should be ensured. Further studies on this topic should be conducted with students.
Keywords	Undergraduate Education; Nursing; Student; Child Abuse; Neglect

Öz

Amaç	Sağlık çalışanlarının çocuk istismarının fiziksel, cinsel, duygusal istismar ve ihmal olarak tartışılan dört boyutunu da doğru bir şekilde tanımlamaları beklenir. Bu araştırma, hemşirelik bölümünde verilen eğitimin öğrencilerin çocuk ihmali ve istismarı konusundaki bilgi düzeylerine etkisini ölçmek ve müdahale gerektiren alanları belirlemek amacıyla yapılmıştır.
Gereç ve Yöntemler	Bu çalışmanın evreni, hemşirelik bölümünün dört sınıfında öğrenim gören 425 öğrencidir. Örneklem belirlenmemiş, çalışmaya katılmaya gönüllü olan ve anket formlarını dolduranlar dahil edilmiştir (n=313,%74). Veri toplamak için Uysal tarafından hazırlanan sosyo-demografik bilgiler için anket formu ve ölçek, verilerin analizinde Sosyal Bilimler için İstatistik Paketi programı kullanılmıştır.
Bulgular	Katılımcıların%64,9'u kadındive%74,4'ü konuyla ilgili eğitim almak istemiyordu. Ortalama toplam ölçek puanı 244,92 ± 22,96 ve ölçekteki maddelere verilen yanıtların ortalama puanı 3,65'tir. Erkek öğrencilerle karşılaştırıldığında (3,59±0,34), kız öğrencilerin ortalama puanı (3,68±0,33) anlamlı olarak daha yüksektir (p=0,020). Diğer sınıflarla karşılaştırıldığında, dördüncü sınıf öğrencilerinin ortalama puanları anlamlı olarak daha yüksektir (p < 0,001).
Sonuç	Hemşirelik eğitimi müfredatında her yıl çocuk istismarı ve ihmali ile ilgili konulara yer verilmelidir. Erkek öğrencilerin bu eğitimlere daha fazla katılımı sağlanmalıdır. Bu konuyla ilgili öğrencilere yönelik daha ileri çalışmalar yapılmalıdır.
Anahtar Kelimeler	Lisans Eğitimi; Hemşirelik; Öğrenci; Çocuk İstismarı; İhmal

INTRODUCTION

Defined as the physical, psychological and social development and health of the child being negatively affected by the deliberate or unintentional behaviours of an adult, child abuse is discussed in four dimensions as physical, sexual, emotional abuse and neglect.^{1,2}

In a review of various studies in Turkey, it has been reported that research on child abuse and neglect is being conducted for 20 years; the rate of physical abuse in society is between 15% and 75%, whereas the rate of sexual abuse is approximately 20%.³ Similar studies carried out abroad have shown that abuse is more common in children of low-income families regardless of race, and children are exposed to both sexual and physical abuse at an age earlier than previously reported.⁴ It takes time to realise that some practices and behaviours exhibited by the society and individuals can negatively affect the development of the child, which in other words is defined as neglect and abuse. This includes examples over a broad spectrum from the severe methods that try to change the behaviour of children using violence under the name of upbringing, to shocking behaviours such as parents leaving their children in cash or coin-operated lockers when they have errands to do in public places.⁵ Such examples of the fact that such an unpleasant and unacceptable situation as child neglect and abuse (CNaA) is usually done by those closest to the child give us clues about how difficult it is to identify them and therefore eliminate the associated negative effects and traumas.⁶

Because of the fact that the applicable law requires notification when signs of CNaA are detected, it has been reported that members of professional groups such as health workers, social workers, educators, etc, have begun to be more careful and attentive in this regard.⁷ However, a recent literature review showed that due to the inability of health professionals to detect findings of CNaA, there are still serious shortcomings in the notification and registration of such cases⁸. Studies conducted in different prov-

inces at different times show that the ratio of those receiving pre-graduation and post-graduation training on this subject varies from 27% to 70% and from 6% to 83%, respectively, thereby indicating that the training received by health professionals on this topic should be further standardised.⁹⁻¹³

For these reasons, this study was planned and conducted to measure the impact of standard education given in the nursing department, where the children are most open to learning and learning opportunities are the most plentiful, on the knowledge level of students about CNaA and to identify areas that require intervention.

MATERIALS and METHODS

This descriptive study was conducted between January 2018 and April 2018 and the population of this study comprised 425 students studying in the first, second, third and fourth grades of the Nursing Department of Harran University Faculty of Health Sciences. In addition, a sample was not determined, all the 313 students (74%) those who volunteered to participate in the study and completed the questionnaire forms prepared within the scope of the study were included in the study.

An 11-item socio-demographic questionnaire form and 'Diagnosis of Symptoms and Risks of Child Abuse and Neglect (DSRCAN) Scale' was used to collect data. DSR-CAN is a 67-item Likert-type scale. Its validity and reliability studies were conducted by Uysal.⁹ The Cronbach's alpha value of the scale is 0.92. Out of 67 questions on the scale, 46 are scored as: 'completely agree' five points, 'agree' four points, 'undecided' three points, 'disagree' two points and 'completely disagree' one point. The remaining 21 items are scored in reverse. When calculating total scale and subscale scores, arithmetic average obtained by dividing the total score obtained by collecting the points from the questions of the related category by the number of questions in that category was used. The maximum score is 335. Arithmetic average approaching five means that the

questions have been answered correctly, and approaching one means that they have been answered incorrectly.⁹

Study data were analysed using IBM SPSS Statistics for Windows, version 16 (IBM Corp., Armonk, NY, USA) package program. Descriptive characteristics were evaluated by number, percentage and average. The distribution of the data was analyzed using the Kolmogorov-Smirnov Z test and data conform to normal distribution. Independent samples T-test and analysis of variance tests were used to determine the relationship between descriptive characteristics and DSRCAN mean scores. Statistical significance level was taken at 0.05 in all tests.

The study was conducted with approval from the Haran University Faculty of Medicine Ethics Board dated 07.12.2017 and numbered 12/07 and the institution permit. An informed consent form was signed by all the participants before enrollment in the study.

RESULTS

Table 1 compares the socio-demographic characteristics of the students with the mean score they received from the scale. The mean score of female students was 3.68 and it was higher than that of male students' 3.59. This difference was statistically significant ($p=0.020$). Scale scores were compared with respect to number of siblings, parents' education status, economic status and place of residence, and no significant relationship was found ($p>0.05$). When the willingness of students to receive education related to CNaA was evaluated, it was found that the total score of those who wanted to receive education was higher than those who did not want to receive education. This difference was also statistically significant ($p<0.001$).

Table 2 shows the mean scores of students from the scale according to their grade. Fourth graders had the highest mean scores with 3.83 points and second graders had the lowest mean scores with 3.56 points. The difference between the mean scores received by students in different

grades was statistically significant ($p<0.001$).

Table 3 shows the subscale scores received by students in different grades. It was found that the scores obtained in recognition of physical signs of child abuse, knowing the behavioural symptoms related to child abuse, recognition of characteristics of parents prone to neglect and abuse, knowing the characteristics of children prone to neglect and abuse, and knowing family characteristics in CNaA sub-dimensions were significantly different with respect to the grade of the students, and fourth graders received the highest scores ($p<0.05$). The scores obtained in recognising the symptoms of neglect on the child sub-dimension were not significantly different with respect to the grade of the students ($p>0.05$).

Table 4 shows the mean scores of those obtained in DSRCAN sub-dimensions. Mean score of 'recognising the physical signs of abuse on the child' sub-dimension was 72.08. Mean score of 'knowing the behavioural symptoms related to child abuse' sub-dimension was 56.15. Mean score of 'recognising the signs of neglect on the child' sub-dimension was 27.21. Mean score of 'recognition of characteristics of patients prone to neglect and abuse' sub-dimension was 41.23. Mean score of 'knowing the characteristics of children prone to neglect and abuse' sub-dimension was 18.39. Mean score of 'knowing family characteristics in child neglect and abuse' sub-dimension was 29.34.

Table 5 shows the item response averages in DSRCAN sub-dimensions. The highest item response was obtained for the 'recognising the symptoms of neglect on the child' sub-dimension with an average of 3.88 points, while the lowest item response was obtained for the 'recognising characteristics of parents prone to abuse and neglect' sub-dimension with an average of 3.17 points. The item response average for the entire scale was 3.65 points.

Table 1. Comparison of students' socio-demographic characteristics and mean DSRCAN scores					
Characteristics	n	%	Mean scale score (Mean ± SD)	Test	p
Gender					
Male	110	35.1	3.59±0.34	t=-2.336	0.020
Female	203	64.9	3.68±0.33		
Total	313	100	3.65±0.34		
Number of siblings					
1-3	31	9.9	3.58±0.22	F=789	0.455
4-5	79	25.2	3.66±0.36		
6 and more	203	64.9	3.66±0.34		
Mother's education status					
Illiterate	176	56.2	3.64±0.32	F=2.297	0.078
Literate	33	10.5	3.71±0.42		
Primary school	66	21.1	3.71±0.32		
Secondary school and above	38	12.2	3.54±0.34		
Father's education status					
Illiterate	30	9.6	3.58±0.23	F=0.469	0.759
Literate	39	12.5	3.63±0.38		
Primary school	113	36.1	3.67±0.31		
Secondary school	62	19.8	3.66±0.37		
High school and above	69	22.0	3.65±0.37		
Economic status					
Bad	32	10.2	3.65±0.38	F=0.079	0.924
Middle	218	69.6	3.66±0.33		
Good	63	20.2	3.64±0.34		
Place of residence					
Rural	77	24.6	3.66±0.34	t=0.370	0.711
Urban	236	75.4	3.65±0.34		
Willingness to receive education related to CNaA					
Yes	80	25.6	3.81±0.32	t=5.064	<0.001
No	233	74.4	3.60±0.33		
DSRCAN=Diagnosis of Symptoms and Risks of Child Abuse and Neglect CNaA=Child Neglect and Abuse t=Independent sample t test F=One Way Anova test					

Table 2. Comparison of mean scale scores according to grade of the students					
Year of study	n	%	Mean scale score (Mean ± SD)	Test	p
First grade	103	32.9	3.61±0.32	F=10.652	<0.001*
Second grade	64	20.4	3.56±0.32		
Third grade	71	22.7	3.60±0.34		
Fourth grade	75	24.0	3.83±0.31		

Table 3. Subscale scores according to the grade of the students

Subscale groups	Year of study	n	%	Main subscale score (Mean ± SD)	Test	p
Recognition of physical signs of child abuse	1st grade	103	32.9	3.74±0.32	F=8.439	<0.001
	2nd grade	64	20.4	3.70±0.39		
	3rd grade	71	22.7	3.73±0.43		
	4th grade	75	24.0	3.98±0.40		
Knowing the behavioural symptoms related to child abuse	1st grade	103	32.9	3.74±0.38	F=5.619	0.001
	2nd grade	64	20.4	3.61±0.40		
	3rd grade	71	22.7	3.70±0.47		
	4th grade	75	24.0	3.88±0.31		
Recognising the symptoms of neglect on the child	1st grade	103	32.9	3.90±0.64	F=1.000	0.393
	2nd grade	64	20.4	3.81±0.63		
	3rd grade	71	22.7	3.84±0.68		
	4th grade	75	24.0	3.97±0.49		
Recognition of characteristics of parents prone to neglect and abuse	1st grade	103	32.9	3.12±0.42	F=4.485	0.004
	2nd grade	64	20.4	3.10±0.39		
	3rd grade	71	22.7	3.14±0.40		
	4th grade	75	24.0	3.31±0.37		
Knowing the characteristics of children prone to neglect and abuse	1st grade	103	32.9	3.60±0.65	F=4.682	0.003
	2nd grade	64	20.4	3.60±0.52		
	3rd grade	71	22.7	3.61±0.63		
	4th grade	75	24.0	3.91±0.62		
Knowing family characteristics in CNaA	1st grade	103	32.9	3.62±0.61	F=10.681	<0.001
	2nd grade	64	20.4	3.63±0.60		
	3rd grade	71	22.7	3.60±0.64		
	4th grade	75	24.0	4.07±0.54		

Table 4. DSRCAN sub-dimension total scores

Subscales (N=313)	Mean	SD
Recognition of physical signs of child abuse	72.08	7.57
Knowing the behavioural symptoms related to child abuse	56.15	6.07
Recognising the symptoms of neglect on the child	27.21	4.34
Recognition of characteristics of parents prone to neglect and abuse	41.23	5.29
Knowing the characteristics of children prone to neglect and abuse	18.39	3.16
Knowing family characteristics in CNaA	29.84	5.07

Table 5. Item response averages of DSRCAN sub-dimensions

Subscales (N=313)	Mean	SD
Recognition of physical signs of child abuse	3.79	0.39
Knowing the behavioural symptoms related to child abuse	3.74	0.40
Recognising the symptoms of neglect on the child	3.88	0.62
Recognition of characteristics of parents prone to neglect and abuse	3.17	0.40
Knowing the characteristics of children prone to neglect and abuse	3.67	0.63
Knowing family characteristics in CNaA	3.73	0.63
Scale's total	3.65	0.34

DISCUSSION

Child abuse and neglect is a violation of the fundamental human rights of a child and is one of the most critical issues that occupy the international human rights agenda.¹⁴ This study was conducted to determine the effects of nursing undergraduate education on the level of knowledge in diagnosing the symptoms and risks of child abuse and neglect. The average total score of students from DSR-CAN was 244.92 and the average item response was 3.65. The highest item response average was obtained for the 'recognising the symptoms of neglect on the child' sub-dimension with 3.88 points, and the lowest item response average was obtained for the 'recognising characteristics of parents prone to abuse and neglect' sub-dimension with 3.17 points. Over a full score of 5.00, the students' overall knowledge level was intermediate with an average of 3.65 points. In the literature, limited studies on students have emphasised that they have insufficient knowledge of child abuse and neglect.¹⁴⁻¹⁶

In the present study, knowledge level of female students on CNaA was significantly higher than that of male students. Consistent with our results, literature data show that women have a higher level of knowledge about child abuse and neglect than men.¹⁵⁻¹⁸ Burç stated that being a daughter was a risk factor for abuse and neglect, whereas Bozkurt et al. conducted a study on midwifery students at a college and reported that 40.6% of students had been exposed to domestic violence. Worldwide, girls are exposed to more abuse and neglect than boys.^{19,20} They are therefore more sensitive about this issue, which may be the reason why female students' knowledge level of CNaA was higher than that of male students.

Scale scores were compared according to the number of siblings, parents' education status, economic status and place of residence, and no statistically significant relationship was found ($p > 0.05$). In their study on nursing students, Seferoğlu et al. found that students whose parents were secondary school graduates and above, whose family

had more economic income than expenses, who had a nuclear family and had children had higher CNaA knowledge level, but the difference between groups was insignificant¹⁵. Unlike our study, it is reported in the literature that low level of education of parents and family income, in addition to an extended family structure increases the risk of CNaA.^{21,22} It is believed that this is due to the differences in the regions where the studies are conducted, and therefore the differences in students' cultural perception of violence and knowledge and experience related to abuse.

When the willingness of students to receive education related to CNaA was evaluated, it was found that the mean score of those who wanted to receive education was higher than those who did not want to. This difference was also statistically significant ($p < 0.001$). A study on the awareness levels of health care professionals about CNaA emphasises the necessity of organising trainings on this subject to increase their awareness.²³ In their study, Duman et al. stated that the awareness and sensitivity of the health care professionals could be increased with training on violence, and the education of the health care professionals on violence could improve their thoughts and attitudes.²⁴ We believe that students who wanted to receive education on CNaA were more active in the trainings on related subjects that were provided previously and therefore the higher level of knowledge compared with those who did not want to receive education on CNaA was an expected situation.

The mean scores of the students were compared according to their grade. Fourth graders had the highest mean scores, whereas second graders had the lowest mean scores. The difference between the mean scores according to the grade of the students was statistically significant as seen from Table 2. It was found that the scores obtained in recognition of physical signs of child abuse, knowing the behavioural symptoms related to child abuse, recognition of characteristics of parents prone to neglect and abuse, knowing the characteristics of children prone to neglect and abuse, and knowing family characteristics in CNaA sub-dimensions

were significantly different with respect to the grade of the students, and fourth graders received the highest scores according to Table 3. In another study on health workers, it was reported that participants stating that they have received information about child abuse during their education received higher scores in the 'characteristics of parents prone to abuse and neglect'sub-dimension compared with those stating otherwise.¹²

In the study by Poreddiet al. on the knowledge level of nursing students about CNaA, it was found that fourth grade nursing students had higher knowledge levels¹⁴. Similar studies also found that students' experience and seniority increased their level of knowledge about child abuse.^{25,26} Senior nursing students take paediatric nursing and public health nursing courses in third and fourth grades and take more applied courses by that time compared with other grades, which may be a factor for the higher knowledge level.

Conclusion

There are limited studies in the literature on the knowledge level of nursing students about child abuse and neglect. The results of the present study can be summarised as follows: The students who participated in the present study did not have enough knowledge about child abuse and neglect, knowledge level of those who wanted to obtain information about child abuse and neglect and of female students were higher than others and senior students received higher scores on both the overall DSRCAN scale and its sub-dimensions. It was also found that undergraduate nursing education increases students' knowledge levels about child abuse and neglect.

In line with these results, topics related to child abuse and neglect should be included in the nursing education curriculum for each year, higher participation of male students in these trainings should be ensured, and necessary reinforcing repetitions should be conducted. Further, similar studies on this topic should be conducted with nursing

students in different regions and cultures.

Funding

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

Conflict of Interest Disclosures

The authors have no conflicts of interest

Ethical Issues

The study was conducted with approval from the Haran University Faculty of Medicine Ethics Board dated 07.12.2017 and numbered 12/07. An informed consent form was signed by all the participants before enrollment in the study.

References

- Dubowitz H. Preventing child neglect and physical abuse: a role for pediatricians. *Pediatr Rev.* 2002; 23:191-6.
- Balci E, Gun I, Sarli SM, Akpınar F, Yagmur F, Ozturk A, et al. Still an unknown topic: child abuse and "shaken baby syndrome". *Turkish Journal of Trauma and Emergency Surgery.* 2011; 17:430-4. doi:10.5505/tjtes.2011.23427
- HelvacıÇelik F, Hocaoglu Ç. Childhood Traumas: A Review [Turkish]. *Sakarya Med J.* 2018; 8(4): 695-711.
- Jones ED, Mccurdy R. The Link Between Types of Maltreatment and Demographic Characteristics of Children. *Child Abuse and Neglect.* 1992; 16(2): 201- 15.
- Kouno A, Johnson CF. Child abuse and neglect in Japan: Coin-operated-locker babies. *Child Abuse & Neglect.* 1995; 19: 25-31. doi:10.1016/0145-2134(94)00108-7
- Yılmaz G, İşiten N, Ertan Ü, Öner A. Child abuse: a case report [Turkish]. *ÇocukSağlığıve-HastalıklarıDergisi.* 2003; 46: 295-8.
- Showers J, Johnson CF. Child Development, Child Health and Child Rearing Knowledge among Urban Adolescents: Are They Adequately Prepared for the Challenges of Parenthood? *Health Education.* 1985; 16:37-41. doi:10.1080/00970050.1985.10615875
- Bakır E, Kapucu S. Reflection of Child Neglect and Abuse to Researches In Turkey: A Literature Review [Turkish]. *Journal of Hacettepe University Faculty of Nursing.* 2017; 4(2): 13-24.
- Uysal A. Determining the Knowledge Levels of Nurses and Midwives in Diagnosing the Symptoms and Risks of Child Abuse and Neglect [Turkish] (Master Thesis). Ege University, Turkey; 1998.
- Kocaer Ü. Levels of awareness in doctors and nurses regarding child abuse and neglect [Turkish] (Master Thesis). Marmara University, Turkey; 2006.
- Demir H. The knowledge, awareness and attitude of physicians working in family health centres in Edirne on child abuse and neglect [Turkish] (Speciality Thesis). Trakya University, Turkey; 2012.
- Gölge ZB, Hamzaoglu N, Türk B. Assesment of medical staff awareness about child abuse and neglect. *Turkish Journal of Forensic Medicine.* 2012; 26(2): 86-96.
- Türker G. Levels of awareness in family doctors, nurses and midwives regarding child abuse and neglect: sample of Burdur [Turkish] (Master Thesis). Selçuk University, Turkey; 2017.
- Poreddi V, Pashapu DR, Kathyayani B, Gandhi S, El-ArousyW, Math SB. Nursing students' knowledge of child abuse and neglect in India. *British Journal of Nursing.* 2016; 25(5): 264-8. doi: 10.12968/bjon.2016.25.5.264
- GüdekSeferogluE, Sezici E, Yiğit D. Nursing Students' Level of the Diagnosing Symptoms and Risks of Child Abuse and Neglect [Turkish]. *OPUS- International Journal of Society Researches.* 2019; 10(17): 257-76. doi: 10.26466/opus.511405
- AkgünKostak M,Vatansver C. Views and opinions of faculty of health sciences students about child abuse and neglect [Turkish]. *Journal Of Health Science and Professions.* 2015; 2(1): 1-11. doi: 10.17681/hsp.79915
- Burç A,GüdücüTüfekçi F. Occurance of diagnosis by nurses of symptoms and risks of child abuse and neglect [Turkish]. *AcıbademÜniversitesiSağlıkBilimleriDergisi.* 2015; 6(3): 144-51.
- Pakış I, Demir F, Bektas G, Altun U,Yıldırım S. Investigation of the awareness and knowledge about child abuse and negligence among doctors and nurses working in the east part of Turkey. *Romanian Journal of Legal Medicine.* 2015; 23(2): 151-6. doi: 10.4323/rjlm.2015.151
- Bozkurt ÖD, Daşkan Z, Kavlak O, Şirin A. Determination of the knowledge, opinions and professional attitudes of midwifery students about violence during pregnancy. *Balikesir Health Sciences Journal.* 2013; 2(2): 99-107.
- BurçA. . The Level of Diagnosis of the Symptoms and Risks of the Child Abuse and Neglect of the Nurses (PhD thesis). Atatürk University, Turkey; 2014.
- Kurt G, Dönmez S, Eren Ö, Balcı E, Günay O. The university last year students' perceptions of abuse, neglect and domestic violence; who are studying at three different sections. *Journal of International Social Research.* 2017; 10(50): 405-14.
- Sinan Ö, Tosun B, Ünal N. Perspectives of nursing students on violence. *TürkiyeClinics Psychiatric Nursing-Special Topics.* 2017; 3(2): 108-14.
- Uncu F, Oğuzöncül F. Health care workers' who work in the province of Elazığ levels of awareness about child abuse and neglect, and the factors affecting. *International Journal of Medical Investigation.* 2013; 2(3): 129-42.
- Duman ZÇ, Özdağ Ş, Özcan A. The opinions of nurse students on the subject of the effect of violence in the family on the child. *Atatürk Üniv. HemşirelikYüksekokuluDergisi.* 2003; 2: 50-6.
- Adams B. Assessment of child abuse risk factors by advanced practice nurses. *J PediatrNurs.* 2005; 31(6): 498-502.
- Elarousy W, Houaida H, Louise V. Child abuse and neglect: student nurses' knowledge and attitudes. *J Am Sci.* 2012; 8(7): 665-74.