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**An Evaluation of the Knowledge Level of Nurses and Midwives Working in Family Health Centers about Child Abuse and Neglect**

*Aile Sağlığı Merkezlerinde Görev Yapan Hemşire ve Ebelerin Çocuk İstismarı ve İhmali Hakkındaki Bilgi Düzeylerinin Değerlendirilmesi*

Hacer KABAKOĞLU<sup>1</sup>

Hatice TAMBAĞ<sup>2</sup>

<sup>1</sup> Hatay Mustafa Kemal University Vocational School of Health Services, Elderly Care Program, Lecturer

<sup>2</sup> Hatay Mustafa Kemal University Faculty of Health Sciences, Psychiatric Nursing Department, Assoc. Prof.

Sorumlu yazar /  
Corresponding author:

Hacer Kabakoğlu

[h.kabakoglu@hotmail.com](mailto:h.kabakoglu@hotmail.com)

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**ABSTRACT**

**Aim:** In this study, it was aimed to determine the level of knowledge and awareness of nurses and midwives, who have an important role in the diagnosis and prevention of child abuse and neglect.

**Material and Method:** The cross-sectional study was conducted in 51 family health centers located in the central district of Antakya and Defne in Hatay province between 2017-2018. In data collection, a introductory information form consisting of 20 questions determining the sociodemographic characteristics of nurses and midwives, and a "Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect" consisting of 67 questions were used.

**Results:** The results showed that 27.6% of the midwives and nurses who encountered cases did not report them. Average scale scores showed that nurses' and midwives' scale mean scores were affected by the variables such as encountering cases of child neglect and child abuse throughout their professional life, recognizing child neglect-abuse, and being knowledgeable about the law ( $p<0.05$ ).

**Conclusion:** As a result, it was observed that the knowledge of nurses and midwives on child abuse was slightly above the average. This situation is not sufficient for nurses who are health professionals.

**Keywords:** Child abuse, Midwife, Nurse, Neglect, Abuse

**ÖZET**

**Amaç:** Bu çalışmada çocuk istismarı ve ihmalinin tanınması aynı zamanda önlenmesinde önemli bir rolü olan hemşire ve ebelerin konuyla ilgili bilgi düzeyi ile farkındalıklarının belirlenmesi amaçlanmıştır.

**Gereç ve Yöntem:** Çalışma kesitsel olarak 2017-2018 yılları arasında Hatay ili Antakya ve Defne merkez ilçesinde bulunan 51 aile sağlığı merkezinde yapılmıştır. Veri toplanmasında hemşire ve ebelerin sosyodemografik özelliklerini belirleyen 20 sorudan oluşan tanıtıcı bilgi formu ve 67 sorudan oluşan "Çocuk İstismarı ve İhmalinin Belirti ve Risklerinin Tanınmasına Yönelik Ölçek Formu" kullanılmıştır.

**Bulgular:** Ölçek ortalama puanları, hemşire ve ebelerin ölçek puan ortalamalarının meslek yaşamları boyunca çocuk ihmal ve istismarı vakalarıyla karşılaşma, çocuk ihmal-istismarını tanıma, hukuk hakkında bilgi sahibi olma gibi değişkenlerden etkilendiğini göstermiştir ( $p<0.05$ ).

**Sonuç:** Sonuç olarak hemşire ve ebelerin çocuk istismarı konusundaki bilgilerinin ortalamasının biraz üzerinde kaldığı görülmüştür. Bu durum sağlık profesyoneli olan hemşireler için yeterli düzeyde değildir.

**Anahtar kelimeler:** Çocuk istismarı, Ebe, Hemşire, İhmal, İstismar

## INTRODUCTION

It is known that there are 2.3 billion children in the world and children constitute 30% of the world population (Turkish Statistical Institute, 2021). The total population of Turkey was 79,814,871 at the end of 2016; the ratio of children population aged between 0 and 17 in the whole population was 22.7 million, and the percentage of children's population within total population was 26.9% (Turkish Statistical Institute, 2021). The Child Protection Law accepts any person who has not turned 18 as a child, even if s/he is mature at an earlier age (Child Protection Law Turkey, 2005). The upbringing of healthy children depends on the attitudes and behaviors of the parents. For this reason, the behavior models demonstrated by parents for their children, the environment where the child grows up, and the behaviors of other people who are role-models are important in terms of the child's ability to create a healthy personality structure (Aktay, 2020). Diverse factors have negative effects on child development. Of these factors, child abuse and neglect are the issues that are commonly encountered in our country and in the world. In the report by the United Nations International Children Emergency Fund entitled "Preventing child maltreatment: a guide to taking action and generating evidence", child abuse was 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" (UNICEF, 2016; Pala, Ünalacak & Ünlüoğlu, 2011). It is estimated that one in four children will experience child abuse or neglect at some point in their lifetime, and one in seven children have experienced abuse over the past year. In 2016, 676,000 children were reported to child protective services in the United States and identified as victims of child abuse or neglect. However, it is widely accepted that statistics on such reports represent a significant underestimate of the prevalence of childhood maltreatment, because the majority of abuse and neglect goes unreported (US Department of Health and Human Services, 2018). Lansford et al. (2009) evaluated the relationship between the early physical abuse and violent crime and their social consequences in the early adolescence period. In the same study, it was reported that children exposed to physical

violence until the age of 5 commit more crimes. Neglect and abuse negatively affect the physical and psychosocial development of children. Children who have been abused by their parents may have lifelong negative consequences. Some physical symptoms, which can be defined as a kind of post-traumatic stress disorder, can be seen in children who are exposed to violence by their families. Findings such as insomnia, urinary incontinence at night, sore throat are observed in children (Aktay, 2020). In a meta-analysis study on child neglect and abuse, the relationship of abuse with depressive disorders, anxiety and post-traumatic stress disorder was examined. As a result of the study, it was determined that depressive disorders, anxiety disorders and post-traumatic stress disorder were associated with all types of abuse (Gardner, Thomas, & Erskine, 2019).

There are primary, secondary and tertiary protective processes for the prevention and intervention of child abuse and neglect. In these processes, nurses and midwives take active responsibility. Within the scope of their primary preventive services, nurses are reported to identify these risk groups and provide families and children forming these groups with necessary training (Turhan, Sangün & İnandı, 2006; Ben Yehuda, Attar-Schwartz, Ziv, Jedwab & Benbenishty, 2010). Kim, Flowers and Song (2022) suggest that increasing state-funded home visiting services in communities may have benefits in lowering their child maltreatment report rates. Another study reported that cases of child abuse in families in which nurses and midwives performed home visits and interventions in the pregnancy process and throughout the babyhood were significantly lower in comparison to the families to which no home visits or trainings were performed. The same studies concluded that home visits were promising in terms of preventing health and developmental problems and reported that nurses and midwives had a key role in this issue (Han & Oh, 2022; Ezzati, Lopez, Rodgers & Murray, 2004; Gölge, Hamzaoglu & Türk, 2012; Henry, Ueda, Shinjo & Yoshikawa, 2003). In a study conducted with 341 nurses across Israel, it was reported that nurses had a positive attitude towards reporting child abuse, but only 44.8% reported it. It has been reported that the situation affecting the reporting rates is organizational factors (Zusman & Saporta-Sorozon, 2022). Nurses and midwives have important roles in the

diagnosis, intervention, and prevention of child abuse. In this context, identification of the knowledge levels of midwives and nurses, who have important roles in the prevention and treatment of child abuse and neglect, is considered to be of importance.

## MATERIAL and METHOD

### Research Type and Aim

The aim of the cross-sectional study to determine the level of knowledge and awareness of nurses and midwives, who have an important role in the diagnosis and prevention of child abuse and neglect.

### Study Population

The cross-sectional study was conducted in 51 family health centers located in the central district of Antakya and Defne in Hatay province between 2017-2018. The population of the research consists of 123 nurses working in 51 FHCs in the central districts of Hatay, Antakya and Defne, who agreed to participate in the research. All nurses who accepted the study without using the sampling method were included in the study. No sampling was done; 106 volunteer nurses and midwives who agreed to participate in the study participated. 17 nurses and midwives were unwilling to participate in the study, reaching 86% of the target population.

### Data Collection Tools

Data were collected through the Socio-demographic Form that consisted of 20 questions aiming to collect data about nurses' and midwives' sociodemographic features and "The Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect" (DCRSCAN) consisting of 67 questions.

**Socio-demographic Form:** In the question prepared by the researcher by scanning the relevant literature, the first ten questions were prepared to determine the sociodemographic and working life characteristics of the health care professionals (age, gender, educational status, occupation, marital status, whether they have children, If yes, how many children does he have, service of employment, working year, where the nurse worked before the family health center), and the last 10 questions are whether they have received any training on child abuse and neglect, whether they have encountered child abuse and neglect or suspicious situations, if any, their type,

thoughts on situations that prevent reporting, information about where to report their child abuse and neglect, and information about child abuse. It has been prepared to determine the legal information. The survey consists of 20 questions in total.

### Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect (DCRSCAN):

Developed by Uysal to diagnose the symptoms and risks of child abuse and neglect, the scale consists of 67 questions, including the physical symptoms of abuse on the child (PSAC) (19 questions), the child's behavioural symptoms of abuse (CBSCA)(15 questions), the symptoms of neglect in the child (SNC) (7 questions), characteristics of parents prone to abuse and neglect (CPIAN)(13 questions), characteristics of children inclined to abuse and neglect (CCIAN) (5 questions), and family characteristics in child abuse and neglect (FCCAN) (8 questions). Response options are given as "very correct", "quite correct", "undecided", "not quite correct", "not correct at all", and the responses are scored between 1 and 5. If the mean score approaches 5, it shows that they answered the questions as "correct", and when it is closer to 1, it means they answered the questions as "incorrect. If the average score is close to 5, it means that they are aware of the symptoms and risks of child abuse and neglect; The subject who answered all the items of the scale form correctly was expected to get 335 full points. The Cronbach's alpha coefficient of the scale developed by Uysal was found to be 0.92. The Cronbach's Alpha value within the scope of internal consistency was found 0.89 (Uysal, 1998). After necessary permissions were taken to perform the study, the Family Health Centers were informed about the study, appointments were taken, and the centers were visited. Informed consent was obtained for the forms and scale to be used in the study, and nurses and midwives who accepted to participate in the study were asked to fill in the forms. Interviews took about 25 minutes.

### Ethical Considerations

The study was approved by the Ethics committee of the related university (Decision number: 04, dated 9th of February, 2017). Written permission was obtained from the Family Health Centers where the study was conducted. Since the responses required volunteer participation, special attention was paid for the volunteer participation of nurses and midwives. In addition,

participating nurses and midwives were informed about the purpose of the study and for which purposes the obtained data will be used. They were also assured that the data collected will not be used by anyone apart from the researcher, they will not be unclosed to anyone, and no one will be allowed to access them. Then a written informed consent form was obtained from the participants. Permission to use the Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect was obtained through email.

### Analysis of the Data

Statistical evaluation was made using SPSS 23.0 (SPSS Inc.) program. The conformity of the variables to normal distribution was examined using the Kolmogorov–Smirnov test. In the descriptive statistics, number distributions, percent age distributions, mean, standard deviation, median, minimum and maximum values were used. Student t test was used for normally distributed data and Mann Whitney U test was used for non-normally distributed data and the Kruskal–Wallis Variance Analysis was used to compare three or more groups.

### RESULTS

Of all the participating nurses and midwives, 33% were aged between 37 and 42 ( $35,33 \pm 5,35$ ), 77,4% were married, 69,8% were midwives, and 70,7% had an undergraduate degree. The scale mean scores of the nurses and midwives were found  $3,65 \pm 0,35$ .

Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect total mean score of the nurses and midwives was found  $3.65 \pm 0.35$ . The mean scores in the subscales were found  $3.79 \pm 0.35$  for the Physical Signs of Abuse on the Child (PSAC) sub-scale;  $3.73 \pm 0.39$  for The Child's Behavioral Signs about Child Abuse (CBSCA) sub-scale;  $3.80 \pm 0.61$  for the Signs of Neglect on the Child (SNC) sub-scale;  $3.38 \pm 0.54$  for the Characteristics of Parents Inclined to Abuse and Neglect (CPIAN) sub-scale;  $3.25 \pm 0.51$  for the Characteristics of Children Inclined to Abuse and Neglect (CCIAN) sub-scale; and  $3.71 \pm 0.58$  for the Family Characteristics in Child Abuse and Neglect (FCCAN) sub-scale (Table 1).

**Table 1. DCRSCAN and Sub-scale Mean Scores of Nurses and Midwives**

Scales and Subscales	( $\bar{x} \pm \sigma$ )	Minimum	Maximum
DCRSCAN	$3.65 \pm 0.35$	2.91	4.48
PSAC	$3.79 \pm 0.35$	3.00	4.84
CBSCA	$3.73 \pm 0.39$	2.93	4.73
SNC	$3.80 \pm 0.61$	2.29	5.00
CPIAN	$3.38 \pm 0.54$	1.69	4.62
CCIAN	$3.25 \pm 0.51$	2.00	4.80
FCCAN	$3.71 \pm 0.58$	2.38	5.00

**DCRSCAN:** Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect

**PSAC:** Physical Symptoms of Abuse on the Child, **CBSCA:** Child's Behavioural Symptoms of Abuse, **SNC:** Symptoms of Neglect in the Child, **CPIAN:** Characteristics of Parents Prone to Abuse and Neglect, **CCIAN:** Characteristics of Children Inclined to Abuse and Neglect, **FCCAN:** Family Characteristics in Child Abuse and Neglect

Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect total and sub-scale mean scores of the nurses and midwives according to their socio-demographic features are presented. There were no statistically significant differences between the nurses' and midwives' age, marital status, and education level and DCRSCAN total and other sub-scale mean scores ( $p > 0.05$ ). An analysis of nurses' and midwives' DCRSCAN total and sub-scale mean scores according to their profession showed that nurses' CPIAN sub-scale mean score was higher in comparison to the midwives ( $p < 0.05$ , Table 2).

An analysis of nurses' and midwives' DCRSCAN total and sub-scale mean scores according to their characteristics showed that CCIAN sub-scale mean score was higher in those who encountered cases in comparison to those who did not; CCIAN sub-scale mean score was higher in those who did not recognize abuse in comparison to those who did; and SNC sub-scale mean score was higher in those who were not knowledgeable about the law in comparison to those who were; the differences were statistically significant ( $p < 0.05$  Table 3). No statistically significant differences were found between the things done when a case is encountered and DCRSCAN total and sub-scale mean scores ( $p > 0.05$  Table 3).



**Table 2. Nurses’ and Midwives’ DCRSCAN Mean Scores According to the Socio-demographic Characteristics**

Individual Characteristics	DCRSCAN and Sub-scales						
	DCRSCAN ( $\bar{x} \pm \sigma$ )	PSAC ( $\bar{x} \pm \sigma$ )	CBSA ( $\bar{x} \pm \sigma$ )	SNC ( $\bar{x} \pm \sigma$ )	CPIAN ( $\bar{x} \pm \sigma$ )	CCIAN ( $\bar{x} \pm \sigma$ )	FCCAN ( $\bar{x} \pm \sigma$ )
<b>Age</b>							
30 and below (n=27)	3.65 ± 0.31	3.83 ± 0.39	3.69 ± 0.39	3.86 ± 0.66	3.32 ± 0.43	3.23 ± 0.59	3.74 ± 0.48
31-36 (n=32)	3.57 ± 0.37	3.70 ± 0.35	3.64 ± 0.42	3.79 ± 0.59	3.34 ± 0.52	3.18 ± 0.42	3.57 ± 0.67
37-42 (n=35)	3.73 ± 0.33	3.84 ± 0.29	3.86 ± 0.35	3.83 ± 0.55	3.48 ± 0.55	3.27 ± 0.54	3.80 ± 0.52
43 and over (n=12)	3.62 ± 0.43	3.77 ± 0.39	3.68 ± 0.39	3.63 ± 0.72	3.35 ± 0.82	3.43 ± 0.48	3.75 ± 0.72
	$\chi^2=3.991$ p=0.262	$\chi^2=3.584$ p=0.310	$\chi^2=7.156$ p=0.067	$\chi^2=0.929$ p=0.819	$\chi^2=1.725$ p=0.631	$\chi^2=2.420$ p=0.490	$\chi^2=3.224$ p=0.358
<b>Marital Status</b>							
Married (n=82)	3.63 ± 0.36	3.77 ± 0.36	3.71 ± 0.38	3.80 ± 0.59	3.35 ± 0.56	3.23 ± 0.52	3.70 ± 0.60
Single (n=24)	3.69 ± 0.33	3.82 ± 0.32	3.78 ± 0.45	3.79 ± 0.68	3.47 ± 0.48	3.22 ± 0.46	3.75 ± 0.52
	Z=862.50 p=0.359	Z=875.50 p=0.12	Z=935.00 p=0.711	Z=982.50 p=0.991	Z=839.00 p=0.273	Z=899.50 p=0.519	Z=909.00 p=0.570
<b>Occupation</b>							
Nurse (n=32)	3.69 ± 0.39	3.82 ± 0.38	3.75 ± 0.44	3.77 ± 0.53	3.58 ± 0.57	3.13 ± 0.35	3.73 ± 0.64
Midwife (n=74)	3.63 ± 0.34	3.77 ± 0.34	3.72 ± 0.37	3.81 ± 0.64	3.29 ± 0.51	3.30 ± 0.49	3.71 ± 0.56
	t=0.804 p=0.423	t=0.624 p=0.534	t=0.425 p=0.672	t= -0.394 p=0.695	t=2.495 <b>p=0.014</b>	t= -0.1532 p=0.129	t=0.151 p=0.880
<b>Education Level</b>							
High School (n=9)	3.58 ± 0.24	3.77 ± 0.34	3.62 ± 0.35	3.75 ± 0.45	3.21 ± 0.38	3.36 ± 0.59	3.63 ± 0.31
Associate Degree (n=22)	3.74 ± 0.35	3.88 ± 0.31	3.87 ± 0.39	3.76 ± 0.60	3.43 ± 0.68	3.35 ± 0.42	3.86 ± 0.44
Undergraduate Degree (n=75)	3.63 ± 0.36	3.76 ± 0.36	3.70 ± 0.39	3.82 ± 0.62	3.38 ± 0.52	3.21 ± 0.53	3.68 ± 0.64
	$\chi^2=1.674$ p=0.433	$\chi^2=1.952$ p=0.377	$\chi^2=3.807$ p=0.149	$\chi^2=0.228$ p=0.982	$\chi^2=0.938$ p=0.626	$\chi^2=1.948$ p=0.377	$\chi^2=1.483$ p=0.476

$\chi^2$  =Kruskal Wallis Test, t=Student’s t test, Z= Mann Whitney U test **DCRSAN**:Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect

**PSAC**: Physical Symptoms of Abuse on the Child, **CBSA**: Child’s Behavioural Symptoms of Abuse, **SNC**: Symptoms of Neglect in the Child, **CPIAN**: Characteristics of Parents Prone to Abuse and Neglect, **CCIAN**: Characteristics of Children Inclined to Abuse and Neglect, **FCCAN**: Family Characteristics in Child Abuse and Neglect

## DISCUSSION

Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect total mean score and other sub-scale mean scores of the participating midwives and nurses were not at a desired level. A study conducted before found the DCRSCAN total mean score as  $3.76 \pm 0.33$ ; the same study reported similar sub-scale mean scores with the present study (Gölge et. al., 2012). An analysis of the findings of the present study showed that the highest level of knowledge was about the signs of neglect on children and physical signs of neglect and abuse on children. Akcan and Demiralay

(2016) conducted a study with nursing students and found that students’ rates of giving correct examples about cases of physical abuse were higher than the other abuse types. This could be associated with the fact that physical findings are observed and assessed more easily. CPIAN sub-scale scores of the nurses were found to be higher and more significant in comparison to midwives. Uysal (1998) found nurses' PSAC mean score significantly higher than that of midwives, which could be associated with the differences between the education of nurses and midwives.

**Table 3. Nurses' and Midwives' DCRSCAN Mean Scores According to Their Features About Child Abuse and Neglect**

Features about the Issue	DCRSCAN and Sub-scales						
	DCRSCAN ( $\bar{x} \pm \sigma$ )	PSAC ( $\bar{x} \pm \sigma$ )	CBSCA ( $\bar{x} \pm \sigma$ )	SNC ( $\bar{x} \pm \sigma$ )	CPIAN ( $\bar{x} \pm \sigma$ )	CCIAN ( $\bar{x} \pm \sigma$ )	FCCAN ( $\bar{x} \pm \sigma$ )
<b>Having encountered cases</b>							
Yes (n=30)	3.70 ± 0.36	3.80 ± 0.33	3.79 ± 0.40	3.88 ± 0.49	3.42 ± 0.60	3.42 ± 0.61	3.74 ± 0.62
No (n=76)	3.63 ± 0.35	3.78 ± 0.36	3.71 ± 0.39	3.77 ± 0.65	3.36 ± 0.52	3.18 ± 0.45	3.70 ± 0.57
	t=0.884 p=0.379	t=0.245 p=0.807	t=0.907 p=0.367	t=0.935 p=0.353	t=0.498 p=0.620	t=2.144 <b>p=0.034</b>	t=0.311 p=0.756
<b>Things done when a case is encountered</b>							
Not reporting (n=8)	3.53 ± 0.19	3.60 ± 0.11	3.71 ± 0.29	3.93 ± 0.28	3.13 ± 0.53	3.37 ± 0.59	3.45 ± 0.48
Applying to a legal authority (n=8)	3.69 ± 0.41	3.82 ± 0.40	3.72 ± 0.43	3.91 ± 0.69	3.31 ± 0.59	3.58 ± 0.65	3.78 ± 0.54
Referring to a doctor (n=6)	3.65 ± 0.40	3.86 ± 0.31	3.84 ± 0.39	3.57 ± 0.36	3.32 ± 0.65	3.47 ± 0.84	3.54 ± 0.79
Talking with the family (n=7)	3.86 ± 0.39	3.91 ± 0.32	3.89 ± 0.54	3.98 ± 0.48	3.81 ± 0.43	3.29 ± 0.50	4.03 ± 0.51
	$\chi^2=2.590$ p=0.459	$\chi^2=6.763$ p=0.080	$\chi^2=0.954$ p=0.812	$\chi^2=3.690$ p=0.267	$\chi^2=5.468$ p=0.139	$\chi^2=0.994$ p=0.803	$\chi^2=3.867$ p=0.276
<b>Recognizing Abuse</b>							
Yes (n=83)	3.64 ± 0.35	3.78 ± 0.36	3.71 ± 0.40	3.81 ± 0.59	3.38 ± 0.51	3.20 ± 0.45	3.71 ± 0.57
No (n=23)	3.70 ± 0.35	3.83 ± 0.28	3.81 ± 0.35	3.78 ± 0.66	3.37 ± 0.66	3.44 ± 0.67	3.73 ± 0.64
	Z=839.00 p=0.376	Z=844.00 p=0.396	Z=772.50 p=0.162	Z=950.00 p=0.972	Z=949.50 p=0.969	Z=780.00 <b>p=0.043</b>	Z=920.00 p=0.791
<b>Being Knowledgeable about law</b>							
Yes (n=34)	3.56 ± 0.37	3.71 ± 0.37	3.64 ± 0.35	3.63 ± 0.63	3.29 ± 0.60	3.26 ± 0.48	3.62 ± 0.68
No (n=72)	3.69 ± 0.34	3.82 ± 0.34	3.77 ± 0.41	3.88 ± 0.58	3.42 ± 0.51	3.25 ± 0.53	3.76 ± 0.53
	t= -1.779 p=0.078	t= -1.560 p=0.122	t= -1.563 p=0.121	t= -2.050 <b>p=0.043</b>	t= -1.219 p=0.226	t=0.163 p=0.871	t= -1.162 p=0.248

$\chi^2$  =Kruskal Wallis Test, t=Student's t test, Z= Mann Whitney U test; **DCRSAN**: Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect; **PSAC**: Physical Symptoms of Abuse on the Child, **CBSCA**: Child's Behavioural Symptoms of Abuse, **SNC**: Symptoms of Neglect in the Child, **CPIAN**: Characteristics of Parents Prone to Abuse and Neglect, **CCIAN**: Characteristics of Children Inclined to Abuse and Neglect, **FCCAN**: Family Characteristics in Child Abuse and Neglect

When the participants were asked whether they encountered any cases, 28.3% of the nurses and midwives were found to have encountered cases of child neglect or abuse. Given that the average age was mainly between 37 and 42 in our study, the rates of encountering cases were expected to be higher as the number of experienced participants was high. However, the rates of encountering cases in the literature were similar to our study (Canbaz, Turla, Aker & Pekşen, 2005; Tansu & Karadas, 2011). Canbaz, Turla, Aker and Pekşen (2005) reported that 14.3% of the doctors working in Family Health Centers reported to have encountered cases of child abuse and neglect within the last one year. Another study reported the rates of encountering child abuse throughout professional life as 58.3% among doctors and 24.7% among nurses (Tansu

& Karadas, 2011). A different study reported health professionals' percentage of encountering child abuse and neglect as 16.4% (Metinyurt & Sarı, 2016). A study conducted with 116 nurses in Korea, it was reported that knowledge of child abuse, awareness of child abuse reporting and attitudes towards mandatory reporting were low (Lee & Kim,2018).

When it is considered that new cases are encountered in our country every day and the issue has been on the agenda in our country, it is concluded that the rates in the literature do not reflect the real number of cases. Low numbers of reported cases indicate a low level of awareness of society, professionals in society, and authorized organizations about child abuse. Doctors, nurses, and midwives prioritize only the

interventions for symptoms and do not initiate anything about the source of the cases unless a third person resorts to the judgment about the issue or it is mentioned by the press. Lack of standardized education of nurses, midwives, and doctors working in hospitals and family health centers about child abuse or neglect might not only cause lack of knowledge or experience but also be a factor for failing to notice the cases.

Characteristics of children inclined to abuse and neglect sub-scale mean score of the nurses and midwives who encountered cases was found to be significantly higher in comparison to the ones who did not ( $p < 0.05$ ). No significant differences were found between encountering cases and DCRSCAN total and other sub-scale mean scores ( $p > 0.05$ ). A study reported no statistically significant differences between encountering cases and DCRSCAN total and sub-scale scores (Çatık & Çam, 2006). However, since midwives and nurses who encountered cases would be more experienced about child abuse and neglect signs and symptoms, they are expected to have higher scale mean scores. In this way, they will have a higher chance of evaluating and identifying the cases coming to the institution.

The results showed that 27.6% of the midwives and nurses who encountered cases did not report them, 27.6% applied to judicial authority, 20.7% informed the doctor about the case, and 24.1% preferred talking with the family. Uysal found that 63.2% of nurses and midwives who encountered a case of child abuse talked with the family and provided the family with trainings, 10.6% remained passive by not reporting the case, and 5.3% reported the case to legal authorities (Uysal, 1998). When the study is compared with our study, the number of cases reported to legal authorities seems to increase. As child abuse and neglect are current issues lately, the increase in in-service trainings, and awareness of nurses and midwives about their legal responsibilities might have been factors for the increase in the number of cases reported. The aim of the study, which was conducted through in-depth interviews with nurses working with children in Australia, was to determine the difficulties experienced by nurses when reporting child abuse. As a result of this research, it was determined that nurses experienced fear of making mistakes (Lines, Hutton & Grant, 2020). A study conducted with nursing students reported that 19.6% of students who encountered cases of child neglect and abuse reportedly interfered, and almost all of them did

so in a way to warn the families (Özbey, Gökçe, Gül & Kahriman, 2018). One-fourth of the students who did not participate in the intervention reported to have done so because they did not have information about the issue. According to a study conducted with midwifery students, 85.9% of the students stated that they would report the abuse to the related institutions (Büyük, 2019). However, both this study and other studies found that the rates of reporting cases to the legal authorities were low (Uysal, 1998; Simon, Luetzow & Conte, 2020). This case was found to result from a lack of knowledge about the legal procedures, worries about experiencing something negative, thinking that legal authorities and social services would not deal with the issue, and worrying about putting the child in a more difficult situation than the current one. SNC sub-scale mean scores of nurses and midwives who were not knowledgeable about the law were found to have higher scores in comparison to those who were ( $p < 0.05$ ). No significant differences were found between being knowledgeable about the law and DCRSCAN total and other sub-scale mean scores ( $p > 0.05$ ). This is considered to result from the fact that the symptoms of child neglect and abuse are not stated clearly in the Turkish Criminal Law; they are mentioned only in the Penal Law. Nurses and midwives who reviewed the Turkish Criminal Law might have had an idea only about the law without having knowledge about child neglect-abuse, which could be explained by low SNC sub-scale mean score but sufficient knowledge about the law.

### Limitations

The research is limited to the nurses working in the family health center working in Antakya and Defne districts of Hatay province in 2017-2018.

### CONCLUSION

Diagnosis Scale of the Risk and Symptoms of Child Abuse and Neglect total mean score of nurses and midwives were found to be at a medium level. Nurses' and midwives' recognizing age, marital status, education level, and child neglect signs and risks of abuse did not affect general scale and sub-scale mean scores. According to the results of the study; Nurses and midwives should follow up-to-date information and publications on child neglect-abuse, increase their level of knowledge on the subject, raise awareness about child neglect-abuse, and

consider reporting cases as a personal responsibility. Institutions should provide training to nurses and midwives on the subject, and the content of the training should be revised and updated to create professional-social awareness in nurses and midwives. Nurses and midwives working in primary care services should have school and home visits to identify the risk groups and perform screenings for these groups. Children at schools should be given superficial education about the need to protect themselves and talk with their family or other people around them if they encounter abuse, and cooperation should be done with their teachers. Children should be provided with telephone lines to report cases easily and media assistance should be used to enhance revealing hidden cases. In the study, it was found that nurses and midwives skipped negligence and abuse symptoms or put them in the second plan when they encountered the child. It was also reported in the study that nurses and midwives have very low child neglect and abuse reporting rates and they produce their own solutions instead of reporting. Notification rates may increase if nurses and midwives have sufficient confidence in the reporting process and subsequent procedures. If nurses and midwives are provided with full information about the need to evaluate child neglect and abuse in all areas (clinical, protective, preventive) and how to manage the process, reporting rates may increase.

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### Ethics Committee Approval

Aethics committee approval was received for this study from the Hatay Mustafa Kemal University Faculty of Medicine Clinical Research Ethics Committee (Date: 09.02.2017 and No: 04).

### Author Contributions

Idea/Concept: H.T., H.K.; Design: H.T., H.K.; Supervision/Consulting: H.T., H.K.; Analysis and/or Interpretation: H.K., H.T.; Literature Search: H.K., H.T.; Writing the Article: H.K., H.T.; Critical Review: H.T., H.K.

### Peer-review

Externally peer-reviewed.

### Conflict of Interest

The authors have no conflict of interest to declare.

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