

# Knowledge, Attitude and Practice of Community Health Workers Regarding Child Abuse in Tabriz Health Centers in 2015-2016

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## ABSTRACT

**Background:** Child abuse is a widespread social phenomenon with serious life-time consequences. Since parents bring their children to healthcare centers for growth screening and vaccinations, Community Health Workers play an important role in identifying and reporting child abuse cases. Thus, the current study aimed to investigate knowledge, attitude and performance of Community Health Workers regarding child abuse in Tabriz.

**Methods:** This is a descriptive (cross-sectional) study; census method was used for sampling. Study population consists of 265 people, employed at units of family health and vaccination in Tabriz healthcare centers in 2015-2016. A questionnaire was used to collect the data. Data analysis was carried out using SPSS, version 23 through descriptive (mean and standard deviation) and analytical (Two Independent Samples T-test and analysis of variance) statistics.

**Results:** Findings indicate that 58.5 percent of Community Health Workers had good knowledge about causes of child abuse and 45 percent had good knowledge of the signs, symptoms and complications of child abuse. Their total knowledge was good (57%). The mean score of awareness (knowledge) was significant according to the variable of training participation ( $P=0.04$ ). The participants had a favorable attitude toward dealing with child abuse (91.3 %); the mean score of attitude was significant according to the educational field ( $P<0.001$ ) and their performance in dealing with child abuse was moderate and lower (94.3 %).

**Conclusion:** Community Health Workers had good knowledge regarding child abuse, favorable attitude toward dealing with child abuse, and poor performance in dealing with child abuse. This may be due to fear of side issues to deal with child abuse, or lack of clear legal guidelines regarding this.

**KEYWORDS:** Child abuse, Knowledge, Attitude, Practice, Community health workers

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## INTRODUCTION

Childhood and adolescence are specific periods of human life, during which one's personality is formed. Mental health in adulthood largely depends on the quality of education and life in this period. Therefore, a successful transition requires the support of family and community.<sup>1,3</sup>

Child abuse refers to a kind of physical, emotional, sexual and neglect abuses causing potential and real problems for children's health and growth.<sup>4</sup> Child abuse includes a wide range of abusive activities and procrastination in performing parental tasks and responsibilities, leading to physical or mental harm, physical abuse, sexual abuse, misbehaving or neglecting the child, and death of the child.<sup>5,6</sup> Child abuse may cause instability and fragility of family and social pillars.<sup>7</sup> The most important impact of child abuse is child mortality. However, there are other consequences in both childhood and adulthood.<sup>8</sup> According to studies, several disorders such as anxiety, depression,<sup>9</sup> panic disorder, alcohol dependence, conduct disorder, post-traumatic stress disorder, separation anxiety, and suicidal behaviors are more prevalent among these children.<sup>10</sup> Also, these children will most likely abuse their parents in the future.<sup>8,11</sup> Abuse leads to low self-esteem and problems in language development and school performance.<sup>12</sup> Child abuse may cause stress, leading to changes in the nervous, cardiovascular, and immune systems; and metabolism<sup>13</sup> Child abuse would form inappropriate personality features and increase risk behaviors among children.<sup>14</sup> In addition to the physical, psychological and social effects of child abuse, costs of treatment, prolonged hospitalization and mental health costs cause huge economic burden on the family and society.<sup>10,15</sup>

In the US in 2011, about 680 thousand children were victims of child abuse, 78 percent of whom were neglected, 18 percent were physically abused, and 9 percent were sexually abused. Most of these children had experienced more than one type of abuse,

and it is estimated that 1570 children must have died due to child abuse.<sup>5</sup> One study reported that 1 out of every 11 children have been subject to physical violence.<sup>16</sup> One research in Finland showed that children and adolescents experience a wide range of misbehavior at home.<sup>13</sup> In another study, the prevalence of physical and emotional abuse was 43.5 and 64.5 percent, respectively.<sup>17</sup> The child abuse is common in families. 5.4% are always subject to physical abuse, 7.3 percent are under emotional abuse, and 5.5 percent experience neglect.<sup>8</sup> Given the high prevalence of child abuse, it is essential that health care professionals possess adequate knowledge to identify, report and document child abuse. In addition to identifying signs of abuse, they must identify suspected child abuse cases.<sup>18</sup> The need for quick identification of child abuse necessitates continued effects of child abuse and aggravated psychological, physical, and education issues to be prevented.<sup>19-21</sup> According to a study conducted in Turkey, general practitioners and nurses had inadequate information regarding child abuse.<sup>22</sup> As indicated in one study, 60 percent of physicians and nurses had inadequate knowledge regarding child abuse.<sup>23</sup> Another study showed that 55 percent of general practitioners did not have adequate information about the issues of child abuse.<sup>24</sup>

Child abuse is one of the issues of public health nurses and children's human rights violation.<sup>13</sup> Public health nurses or Community Health Workers are among the first ones who come into contact with children and their families. They can investigate interactions and communication within the family, parent-child relationships, and how to support the child, and pursue the issue in case a dysfunction occurs in the family.<sup>25</sup>

Primary prevention of child abuse is the most important issue from the perspective of children, families and the entire community in Iran and across the world. Although secondary and tertiary preventions are very important in development of child abuse,<sup>13</sup> since knowledge and attitude are of great importance in

the primary prevention of predicting and controlling the behavior, and on the other hand, primary prevention is the lowest-cost level of prevention in healthcare,<sup>26,27</sup> it is essential that the knowledge, attitude and performance of Community Health Workers, especially those who serve families and children at the first level, be evaluated. Therefore, this study aimed to assess the knowledge, attitude and performance of Community Health Workers regarding cases of child abuse in Tabriz.

## **MATERIALS AND METHODS**

This is a descriptive (cross-sectional) study. The study population included Community Health Workers working in public and private health centers in Tabriz at the time of study in 2015-2016. Sampling was done by census through which all the people working as Community Health Workers or vaccinators in each health center willing to participate in the study were selected. Additionally, participants' consent and their freedom in leaving the study were emphasized at the beginning part of the questionnaire. Participants with less than 20% questionnaire answers were removed from the study. The total sample size was 295, thirty of whom were not willing to cooperate, so 265 participants were finally enrolled. A questionnaire was used to collect data comprising of four parts. The first part was about demographic characteristics of the subjects, which included 13 questions about Age, Marital status, Gender, Education, Field of study, Number of children, Attending educational training courses, Children's gender, Income, and Employment status. The second part was about knowledge which consisted of 45 questions about Parents with mental health problems, Poor families, Mentally retarded children, Single-parent children, Children of educated parents, unwanted pregnancy, Extended family, Hard pregnancy, Hyperactive children, Children of young parents, Children of addicted parents, Burn, Bone fracture, Scratches, Working children, Abdominal pain, Overeating, stutter, and weakness of the anal sphincter tone. This part consisted of

two parts: 1) Misbehavior factors including 20 questions, and 2) Signs and complications of child abuse including 25 questions. Knowledge questions had three choices (true, false, I do not know) in which score 1 indicated "true", and score 0 "false", and "I do not know". Scores of knowledge in Community Health Workers regarding signs, symptoms, and factors of misbehavior were low (5-10), moderate (11-15), good (16-20) while scores of signs, symptoms, and complications of misbehavior were weak (0-6), moderate (7-12), good (13-18), and excellent (19-25). The total knowledge score (signs and symptoms of abuse and misbehavior complications) were classified into four levels of low (0-11), moderate (12-23), good (24-34), and excellent (35-45). One-third of the questions were trick questions.

The third part was attitude questions, including 15 questions about Corporal punishment, Imprisonment, Exclusion of meal, Mentally retarded children, Mock, Verbal punishment, and Touching genitals. Attitude questions had five choices with the following options: strongly agree, agree, neutral, disagree, and strongly disagree. Strongly disagree, disagree, neutral, agree, and strongly agree were assigned 5,4,3,2, and 1 scores, respectively. Therefore, the minimum attitude score was 15 (bad attitude towards dealing with child abuse) and maximum score was 75 (very good attitude towards dealing with child abuse). Attitude questions were classified into five levels: too weak (0-15), weak (16-30), moderate (31-45), good (46-60), and High (61-75). One-third of the questions were trick questions and the scoring direction was reversed in these questions.

The fourth part dealt with performance. This part was filled in the case of participant's experience of facing child abuse containing 16 two-choice questions about Talk with the child's family, Referral to a psychiatrist, Referral to a psychologist, Informing the police, Informing the doctor or nurse, Financial support to children, Talking to a lawyer, informing the school principal, and teaching life skills. Practice questions had two

choices (did, did not do). The “did not do” was assigned zero, and “did” was assigned 1, and performance ranged between zero and 16. Scores of Community Health Workers were classified into four levels: poor performance (scores 0-4), moderate (scores 5-8), good (scores 9-12), and excellent (scores 13-16). We did not find the cut-off point for knowledge, attitude and practice and, therefore, we divided the intervals equally into 4 levels.

To ensure the validity of the questionnaire, scientific resources and questionnaires of other studies were used. A questionnaire containing 89 questions was designed, and content and face validity of the questionnaire was determined by 15 experts from different fields including community health nursing, psychiatric nursing, subspecialty in pediatrics, psychiatry and midwifery. In order to assess construct validity, exploratory factor analysis with Principal Component Analysis Extraction Method was used. The results of exploratory factor analysis showed good fit of the model for knowledge scale (part one) (Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)=0.769, Bartlett's  $P < 0.001$  and Total Variance Explained (TVE)=50.75%). Additionally, the factor loading ranges between 0.326 to 0.607), indicating reasonable loading in this scale. These results also yield good fit of the model for knowledge scale (part two) (KMO=0.867, Bartlett's  $P < 0.001$  and TVE=53.02%) with a loading range of 0.325 to 0.634. Factor analysis for attitude scale yields a good fitting model (KMO=0.748, Bartlett's  $P < 0.001$  and TVE=53.637%) with a loading ranges between 0.326 to 0.752. The results were similar for practice scale (KMO=0.663, Bartlett's  $P < 0.001$  and TVE=60.999% and loading ranges between 0.352 to 0.667). To ensure reliability, internal consistency was determined by Cronbach's alpha for knowledge (0.79), attitude (0.72) practice (0.74), and also test-retest exam (with 14 days interval) on 30 participants (0.59).

The data were analyzed through statistical software SPSS version 23, using descriptive statistics, including raw and percentage

frequency, and mean. Two Independent Samples t-test and analysis of variance test were used to study the mean of knowledge, attitude, and performance according to demographic variables.

The findings of the present study were extracted from the M.S.C. nursing thesis, and ethics approval was issued (Code TBZMED. REC.1394.169) by Ethics Committee of Tabriz University of Medical Sciences.

## RESULTS

This study was participated by 265 Community Health Workers. The mean age was  $39 \pm 7.85$  years, with average work experience of  $14 \pm 8.14$  years. Other demographic characteristics of participants are displayed in Table 1.

In this research, 28.68 percent of the participants had excellent knowledge, 58.52 percent had good knowledge, and 12.80 percent had moderate or lower knowledge regarding misbehavior factors. The mean and standard deviation of knowledge and subcategories of knowledge score are shown in Table 2.

Findings showed that the average score of knowledge of Community Health Workers regarding the complications and symptoms of abuse was significantly different ( $P = 0.04$ ) in those who attended educational courses. They also manifested more knowledge.

In this study, 91.35 percent of the participants had good and excellent attitudes (acceptable) in dealing with child abuse and 8.65 percent had moderate attitude. Mean and standard deviation of attitude was  $53.09 \pm 5.58$  (Table 2).

In the analysis, the mean score of Community Health Workers regarding dealing with child abuse was significantly different by field of study ( $P < 0.007$ ) (Table 3); those with physiology and anatomy education had better attitude towards dealing with child abuse.

In this study, 92 participants (35%) reported that they had faced with some cases of child abuse. Among those faced with cases of child abuse, 5.67 percent had

**Table 1:** Frequency of demographic percentage in healthcare staff in 2015-2016

Variable	Variable components	No. (%) N=265
Marital Status	Single or Widow	85 (32.31)
	Married	178* (67.69)
Gender	Male	8 (3.10)
	Female	250 (96.90)
Education	Diploma or Associated Degree	79 (30.74)
	Bachelor's Degree or higher	178 (69.26)
Field of Study	Midwifery	185 (77.40)
	Nursing	12 (5.02)
	Family Health	34 (14.23)
	Other	8 (3.35)
Number of Children	One Child	56 (34/78)
	Two Children or more	105 (65/22)
Children's gender	Female	55 (30.90)
	Male	59 (33.14)
	Both	64 (35.96)
Have passed educational training courses	Yes	71 (26.99)
	No	192 (73.01)
Income	Equal or less than 295\$	123 (48.80)
	More than 295\$	129 (51.20)
Satisfaction of Income	Low	210 (82.03)
	Adequate and High	46 (17.97)
Employment Status	Official/ Contractual	153 (60.00)
	Committed to serving/ hired	102 (40.00)

\*Total is less than 265 due to missing value

**Table 2:** Mean±SD of knowledge, attitude and practice of health care workers in 2015-2016

Variable	Mean±SD
Knowledge 1 (factors affecting misbehavior)	13.74±2.74
Knowledge 2 (complications, signs, and symptoms affecting misbehavior)	15.35±4.21
Total Knowledge (Knowledge 1 , 2)	28.98±6.20
Attitude	53.09±5.58
Performance	3.67±2.58

good performance and 94.33 percent had moderate and poor performance. The mean and standard deviation of the participants' performance were 3.67±2.58 (Table 2).

## DISCUSSION

As indicated by the results of the present study, family health experts in Tabriz were aware enough regarding child abuse. These results are adaptable with those obtained from another study investigating the level of medical students' awareness and attitude in this regard.<sup>28</sup> This

adaptation is mostly due to the high similarity of the questionnaires in two studies. In another study, awareness, attitude and performance of dentists toward child abuse was studied, indicating high awareness of dentists. These results were not adaptable with those of the present study.<sup>29</sup> Lack of adaptation in this regard was caused because of sending questionnaires through emails, giving participants the chance of increasing their knowledge for child abuse. Another study reported the rate of the students and dentists' awareness and attitude lower than that of the present study.<sup>30,31</sup> Additionally,

**Table 3:** Knowledge, attitude and practice of healthcare professionals according to various factors in 2015-2016

Variable	Knowledge 1			Knowledge 2			Total Knowledge			Attitude			Performance		
	Mean±SD	t OR F	P value	Mean±SD	t OR F	P value	Mean±SD	t OR F	P value	Mean±SD	t OR F	P value	Mean±SD	t OR F	P value
Marital Status	Single or	13.75±2.97	T=0.07	15.27±4.07	T=0.16	29.02±6.13	T=0.13	53.58±5.28	T=0.96	3.69±2.45	T=0.11	0.93	3.62±2.65	T=0.15	0.88
	Widow														
	Married	13.72±2.63		15.36±4.29	0.86	28.91±6.24	0.89	52.87±5.74	0.33	3.62±2.65	0.91				
Gender	Male	14.75±2.96	T=1.05	15.27±4.07	T=0.25	30.50±6.80	T=0.69	52.75±6.54	T=0.139	3.80±2.58	T=0.15	0.88	3.80±2.58	T=0.15	0.88
	Female	13.73±2.69	0.29	15.36±4.29	0.79	28.96±6.13	0.48	53.02±5.54	0.89	3.61±2.61	0.88				
Education	Diploma or	13.39±2.85	T=-1.23	14.49±4.01	T=-1.94	27.88±6.07	T=-1.66	53.35±5.83	T=0.63	3.04±2.085	T=-1.20	0.23	3.04±2.085	T=-1.20	0.23
	Associated														
	Bachelor's or higher	13.85±2.71	0.21	15.59±4.23	0.05	29.26±6.19	0.09	52.87±5.49	0.52	3.83±2.74	0.23				
Field of Study	Midwifery	13.84±2.62	F=0.59	15.31±4.23	F=0.40	29.16±5.90	F=0.18	53.01±5.49	F=4.08	3.41±2.50	F=1.40	0.24	3.41±2.50	F=1.40	0.24
	Nursing	13.33±2.96	0.61	14.58±3.65	0.75	27.91±5.90	0.90	53.08±5.82	<0.001	4.20±3.11	0.24				
	Family Health	13.23±2.81		16.00±3.49		28.76±6.65		52.60±4.96		4.90±2.99					
Number of Children	Other	13.87±3.39		15.25±6.04		29.12±9.18		59.75±4.94		2.40±1.81					
	One	13.82±2.68	T=0.18	15.21±3.88	T=0.08	29.03±5.91	T=0.40	52.64±5.31	T=-0.44	3.76±2.71	T=1.26	0.21	3.76±2.71	T=1.26	0.21
	Two or more	13.74±2.61	0.85	15.15±4.67	0.93	28.60±6.60	0.68	53.05±5.85	0.66	2.79±2.34	0.21				
Children's gender	Female	14.18±2.67	F=1.05	15.27±4.49	F=2.12	29.45±6.48	F=2.58	53.92±5.67	F=1.51	3.71±2.97	F=0.21	0.80	3.71±2.97	F=0.21	0.80
	Male	13.47±2.68	0.34	14.43±4.28	0.12	27.42±6.37	0.07	52.38±5.51	0.22	3.52±2.38	0.80				
	Both	13.75±2.48		16.06±4.21		29.81±5.6		52.20±6.61		3.19±2.66					
Have passed educational training courses	Yes	14.16±2.58	T=1.59	16.16±3.85	T=1.99	30.33±5.78	T=2.25	53.28±5.18	T=0.27	3.96±2.69	T=0.81	0.41	3.96±2.69	T=0.81	0.41
	No	13.56±2.79	0.11	15.00±4.30	0.04	28.41±6.27	0.02	53.06±5.74	0.78	3.48±2.54	0.41				
Income	Equal or less than 10 million IRR <sup>a</sup>	13.76±2.85	T=0.07	14.96±4.31	T=-1.44	28.73±6.10	T=-0.62	52.94±5.78	T=-0.52	3.58±2.86	T=0.00	0.99	3.58±2.86	T=0.00	0.99
	More than 10 million IRR	13.73±2.72		15.73±4.07		29.22±6.31		53.31±5.49		3.58±2.28					

Satisfaction of Income	Low	13.70±2.85	T=-0.31	15.11±4.21	T=-1.48	28.67±6.30	T=-1.29	52.96±5.63	T=-0.32	3.69±2.67	T=0.35
	Adequate and High	13.84±2.36	0.75 T=0.27	16.13±4.11	0.13	29.97±5.67	0.19	53.26±5.23	0.74	3.43±2.22	0.72
Employment Status	Official/ Contract	13.79±2.69	0.78	15.62±4.28	T=1.32	29.21±6.33	T=0.77	52.97±5.46	T=-0.09	3.40±2.29	T=-1.08
	Recruitment/ contractual	13.69±2.81		14.91±4.07	0.18	28.60±5.92	0.44	53.03±5.53	0.92	4.03±3.07	0.28

\*Independent- sample t test OR One-way ANOVA; <sup>a</sup>Islamic Republic Rials

most of the physicians and dentists, in another study, showed low knowledge which is not in the same line with the results of the present study.<sup>32</sup> Studying the level of knowledge and attitude among dentists regarding child abuse, one study indicated lower level than the present study.<sup>33</sup> Medical students' awareness was the study subject of another study with lower level of knowledge relative to that of the present study.<sup>34</sup> This is due to the difference in academic courses spent by each group, more confrontation of health centers' experts with children, and the fact that less educational courses are spent by physicians and dentists than experts.

As indicated by the results of the analysis regarding the participants' knowledge about signs, symptoms, and complications related to misbehavior, as far as the attendance in educational courses is concerned, the mean of knowledge among those attending training courses was higher. This indicates that education is the foundation of knowledge. As far as attitude is concerned, the results of the present study indicated optimal attitude of experts regarding the importance of coping with child abuse<sup>35</sup> These results were adaptable with those of another study regarding the attitude of pediatrics. This study indicated positive attitude of pediatrics toward coping with child abuse. Fathers showed positive attitude toward child abuse that was parallel with that of the present study.<sup>27</sup> This is perhaps because of the culture similarities of the study participants.

Furthermore, findings of this study showed that the attitude of the participants was significantly different based on their field of study; that is, those educated in other medical courses (anatomy, physiology, etc.) manifested better attitudes. It is probably due to the fact that these people had a higher degree (MSc) and were, in fact, midwives and nurses with higher mean of knowledge promoted to MSc and were expected to have better information regarding child abuse.

As indicated by the results of the present study, fewer experts faced with child abuse cases. The rate of confrontation in dentists

was also reported low in another study parallel with the results of the present study.<sup>31</sup> Another study investigating the level of nurses' awareness and attitude indicated that more cases faced child abuse compared to the present study. This difference is mostly caused because there is no obligation by law for reporting child abuse in Iran.<sup>36</sup> In this study, few participants showed optimal performance. The results of this study are parallel with those of the study investigating the dentists' knowledge, attitude and performance in London<sup>37</sup> as well as with those of the study investigating general Physicians' awareness and attitude.<sup>24</sup> In Saudi Arabia, one study showed that a few participants were suspicious of child abuse and some few reported it.<sup>38</sup> According to the results of another study, some few teachers attended the educational courses and few of them reported child abuse experience.<sup>39</sup> In India, specialists did not spend educational courses and a few of them reported child abuse.<sup>40</sup> Lack of reports regarding child abuse cases in this study and others may be due to the fear of violence against children, fear of litigation, fear of family violence against them, lack of knowledge about referrals, and lack of certainty about the diagnosis of child abuse. However, it can also be due to the lack of supporting systems in healthcare centers of Iran. Another reason can be lack of attendance of many participants in the training courses (73%).

Given the prevalence of child abuse as well as the high knowledge and attitudes of healthcare professionals toward it, more reaction was expected. However, in general, reports of child abuse in the Community Health Workers have been low. This may be due to the optional nature of reporting of child abuse as well as the weakness in the field of ethical responsibility in protecting children's rights in Iran. To reach more accurate answers, further research is recommended in this field.

All employees working with children in health centers participated in the study, and the opinions all of them were collected and

this was the advantage of the present study. However, our study had some limitations. As the number of knowledge, attitude and performance questions was numerous, some participants found it tiresome to answer them. Questionnaires only answered by 20% or below were excluded from the study.

Given the special role of Community Health Workers in identifying and reporting child abuse cases, it is essential that the knowledge of healthcare professionals be improved and practical plans for dealing with cases of child abuse or suspected child abuse be established.

## CONCLUSION

As indicated by the results, regarding child abuse, Community Health Workers have good knowledge, optimal attitude, and poor performance. Given the special role of Community Health Workers in identifying and reporting child abuse cases, it is essential that the knowledge of healthcare professionals be improved and practical plans for dealing with cases of child abuse or suspected child abuse be established.

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