

## Learning Needs of Primary Schools Teachers in First Aid

*The aim of this research was to determine the learning needs about first aid of teachers working in public primary schools. This descriptive study was undertaken on a sample of 214 teachers working in 15 public primary schools in Amasya city, Turkey. Data collection was achieved via a questionnaire consisting of items on teachers characteristics and 15 questions basic first aid knowledge. One point was given for each correct answer. The lowest and highest possible scores were 0 and 15. The data were collected through face to face interview method and analyzed in SPSS program. Statistical analyzes were performed using descriptive statistic. Totally, 47.2 % of the teachers took courses on first aid and 11.7 % teachers found their own sufficient about first aid knowledge equipment. 70.5 % teachers had confronted with situations needing first aid. In this study, it was found that teachers had medium level first aid knowledge scores (average 7.60). Most teachers answered wrongly to the questions regarding foreign body stuck in the abdominal region (89.3 %) and nosebleeds (83.2 %). It was revealed that the teachers's insufficient knowledge about first aid and it was determined that teachers have learning needs relating first aid. Accordingly, it is recommended training for teachers on first aid through in-service training programs.*

**Keywords:** *Learning need, needs assessment, adult education, teachers, first aid knowledge*

### Introduction

The characteristics of adults regarding learning, the need for lifelong learning, adult education based on volunteering have increased the importance of the concept of need in adult education. The concept of need is used in the sense of lack of anything in daily life. In other words, the need the difference between the existing situation and the situation that is supposed to be defined as gap, imbalance, inequality (Uysal, 2013, p. 208; Doğan, 1997, p. 122; Bülbül, 1991, p. 92; Kowalski, 1988, p. 122). The concept of need is defined in different ways in the literature. "Need" for an adult is the difference between the demanded condition and the existing conditions (Igarashi, Suveges, & Moss, 2002, p. 60). Betty (1981) describes the concept of need as follows. It is the measurable inconsistency that exists between a current situation and a demanded situation put forward by an authority or someone in need. Kaufman and Herman (1991) define the concept of need as the difference between the competencies that the staff must demonstrate, depending on the requirements of the job or service. Training programs are designed to narrow or close this gap (McClean, 2000).

Correctly establishing the relationship between education and needs in adult education brings different types of needs into the agenda. One of the types of needs we encounter in adult education is "felt needs". Since the felt needs or demands were determined only according to the individual, they were found insufficient in defining the educational goals. The second need term may

1 correspond to a lack of knowledge, attitude and skill in the person. This  
2 concept is often referred to as "real need". The fact here shows that not only the  
3 individual himself, but also an outside observer can set criteria (Monette, 1977,  
4 pp. 117-122). Real need is defined as the lack of purpose in relation to the  
5 environment of the individual, group, institution or society (Atwood & Ellis,  
6 1971, p. 11). Making the right decisions about the educational needs of adults,  
7 makes systematic needs determination processes one of the important  
8 components of program planning (Uysal, 2013; Bülbül, 1991; Kowalski, 1988;  
9 Okçabol, 1986).

10 The educational need is defined as the difference between the existing  
11 behavior and the required behavior, the existing competence and the required  
12 competence (Uysal, 2013, p. 208; Doğan, 1997, p. 122; Bülbül, 1991, p. 92;  
13 Kowalski, 1988, p. 122). Monette (1977) states that educational needs can be  
14 defined either by an individual's perspective or from an external perspective,  
15 by objectively identifying the lack of knowledge, skills and attitudes (p.121). In  
16 order to plan future training activities, the process of determining this distance  
17 between the competencies that should be in the staff and the existing  
18 competencies is expressed as "determining the educational need" (Gözütok,  
19 1990). Kuh, Orbanh and Byers (1981) stated that undermines the reliability of  
20 the results obtained the defects or weaknesses experienced in the educational  
21 need determination process.

22 Knowles (1996) asserts the three dimensions of needs in adult education.  
23 These; (1) the needs of the participants, (2) the needs of the institutions, and (3)  
24 the needs of the community. Both Knowles and other adult educators always  
25 prioritize the needs of the participants as a service ethic. If a program does not  
26 meet the needs of the participants, it will not attract the attention of the  
27 individuals, so participation in the program is low or expected from the training  
28 cannot be achieved (Jarvis, 1986, pp. 63-64).

29 Apart from the educational needs of adults, the needs of the institution and  
30 the society should also be taken into consideration during the needs  
31 determination phase. While an adult may need to learn to read or learn a skill,  
32 he / she may need to increase his / her productivity in an institution of  
33 "educational needs, performance problems, new job opportunities,  
34 technological developments" (Rand, 1976, p. 1). Needs assessment that are  
35 extremely comprehensive, in issues such employers' expectations and society  
36 expectations should also be taken into consideration (Caffarella, 1994, p. 68).

37 The most important criticism to adult education programs is that they do  
38 not meet the needs of learners. The main source of the problem, adult  
39 educators' own predictions assuming as need of learning group and plans their  
40 programs accordingly (Rauch, 1972, p. 113).

41 Needs assessment is basically research. These researches can be carried  
42 out directly on potential participants or can be obtained from indirect sources.  
43 There is no accepted single method on this subject, planners can use one or  
44 more of them within their possibilities and needs. Direct research techniques;  
45 Techniques such as tests, survey, interview, Q-sort, nominal group technique,

1 job analysis, community impression technique can be used (Caffarella, 1994, p.  
2 88).

3 The main approaches to identifying educational needs can be classified  
4 into four categories. These; differences approach, democratic approach,  
5 analytical approach and description approach.

6 Differences Approach: In this approach, educational needs are determined  
7 by revealing the difference between the existing and desired or expected  
8 competencies in teachers. In this approach, firstly, competence areas and  
9 competencies are determined by experts and it is investigated which of these  
10 competencies exist in the teacher (Dillon, 1981, p. 69).

11 Democratic approach: In this approach, it is envisaged participate in the  
12 needs assessment process that everyone (teacher, student, school principal,  
13 parent ...) who will be affected by the results of the need assessment study.  
14 Although the learning needs of teachers are determined by taking the opinions  
15 of all concerned, the opinions of teachers are of particular importance  
16 (Crocker, 1981, p. 29; Dillon, 1981, p. 70).

17 Analytical approach: It is the process of determining the learning needs of  
18 teachers based on possible situations that may arise in the future (Gözütok,  
19 1994, p. 13).

20 Description approach: It is the process of determining the needs based on  
21 the benefit that will reveal with existence of that life with the harm that occurs  
22 with the absence of a life. It is the examination of the situation that arises in  
23 cases of lack of certain things or educational experiences that meet the needs  
24 (Gözütok, 1995).

25 Ensuring efficiency in result of training activities depends on being “ the  
26 training need determination process” of the first stage in the program  
27 preparation and development efforts (Stenhouse, 1993, p. 55; Ornstein &  
28 Hunkins, 1988, p. 194). Training courses based on needs will provide great  
29 benefits to both teachers and the institution (Kaya, Küçük, & Cepni, 2004).

30 Recently, “first aid” knowledge and skills are among the human qualities  
31 that society needs because people may be exposed to accidents, natural  
32 disasters and diseases. Many people die or may be permanently disabled.

33 World Health Organization (WHO) (1998) aims to reduce accidents and  
34 violence-related deaths and injuries by at least 50 % by 2020. For this purpose  
35 the World Health Organization has started projects making more widespread  
36 first aid training in Turkey and World. Within the framework of the world,  
37 Ministry of National Health has prepared the First Aid Regulation (Resmi  
38 Gazete: 25 July 2015 Issue: 29429); This Regulation aims to increase the basic  
39 health knowledge of individuals and society, teach first aid knowledge and  
40 skills to the society, It aims to keep first-aiders in all public and private  
41 institutions / organizations according to the number of personnel and to  
42 organize first-aid trainings by authorized institutions in this direction.

43 First aid involves saving life in any accident or situation which puts life  
44 at risk until medical staff are available, drug-free treatment with current  
45 facilities for purpose of preventing the situation become worse in the accident  
46 place without using medical devices (İnan, Kurt, & Kubilay, 2011).

1 Early intervention can increase the chances of survival for people who are  
2 injured or sick in the event of an illness or accident that they may encounter at  
3 an unexpected time, prevent it from getting worse and facilitate the recovery  
4 process. For correct and timely assistance, individuals with first aid training are  
5 needed. Incorrect first aid practices can delay the healing process, causing  
6 permanent injury or death. In the first minutes of the accident, death and  
7 disability injuries can be reduced by making conscious first aid interventions.  
8 There are some studies showing that 10 % of death occurs in the first five  
9 minutes of the accident and 50 % in thirty minutes. In addition, it has been  
10 determined that death can be reduced up to 38 % and the most effective first  
11 aid application can be performed within the first five minutes thanks to a  
12 proper and punctual response in the accident place (Singer, Gulla, Thode, &  
13 Cronin, 2004; Lingard, 2002). These studies show that it is really vital for  
14 people who witnessed accident situations to be knowledgeable about first aid.  
15 For this reason, teachers and, in general, all working groups of society should  
16 have information about first aid.

17 Teachers are the first to assist the student in an accident or injury at school.  
18 Therefore, teachers need to know basic first aid rules (Uskun, Alptekin, &  
19 Öztürk, 2008; Grand, Muray, & Bergeron, 1982). In the literature, the results of  
20 the researches show that the first aid knowledge of the teachers working in  
21 schools is not sufficient (Hosapatna, Bhat, Prakash, & Sumalatha, 2020;  
22 Mohsen & Zahra, 2019; Saruhan, Saruhan, Yıldırım, & Ovayolu, 2018; Kaur  
23 & Kaur, 2017; Pandey et al., 2017; Awad, Faisal, & Fatimah, 2015; Sönmez,  
24 Uskun, & Pehlivan, 2014; Al-Robaiyaay, 2013; Özpulat & Sivri, 2013; Nayir,  
25 Uskun, Türkoğlu, Uzun, Öztürk, & Kışioğlu, 2011; Erkan & Göz, 2006).  
26 These results suggest that teachers do not know the importance of first aid. In  
27 this context; It is thought that a quantitative research should be carried out to  
28 determine the learning needs of the primary school teachers who provide  
29 primary education to the students, provide the first contact with the outside  
30 world, and refer them to research. In this way, it is possible to reveal in which  
31 subjects the teachers need to be informed and studies can be initiated to  
32 eliminate the deficiencies identified. In the light of this information, the  
33 examination of what the learning needs of teachers working in public primary  
34 schools in the city center of Amasya about basic first aid is the problem of this  
35 research.

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### 38 **Research Questions**

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40 The purpose of this study is to determine the learning needs about first aid  
41 of teachers working in public primary schools. In line with this basic purpose,  
42 answers were sought for the following questions:

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- 1) What are the socio-demographic characteristics of teachers?
- 2) What are the learning needs about first aid of teachers working in public primary schools?

## 1 Literature Review

2  
3 The study, conducted by Mohsen and Kamrava (2019), aimed to evaluate  
4 teachers' knowledge of first aid in Kashan, Iran. This cross-sectional study was  
5 carried out between November 1, 2017 and March 28, 2018. Twenty of all  
6 public and private primary, secondary and high schools in the city of Kashan  
7 were randomly selected. In this study, a two-part tool was used. The first part  
8 contains questions about the demographic characteristics of the participants.  
9 The second part included 20 questions about basic first aid practices (filling in  
10 the gaps, 5 multiple choice and 14 right / wrong questions). A score is given  
11 for each question answered correctly. The lowest and highest possible scores  
12 are 0 and 20. Then, total scores of 0–9, 10–16, and 17-20 were considered  
13 weak, moderate and good first aid knowledge, respectively. In total, 40.3 % of  
14 teachers reported that they had passed first aid courses and 48.5 % of them  
15 faced situations where first aid was required in the school setting. The most  
16 common conditions requiring first aid are pale and convulsions (15.8 %),  
17 wounds (14.7 %) and insect lice (12.6 %), respectively. Most of the teachers  
18 (59.7 %) evaluated their personal knowledge about first aid management at a  
19 moderate level, and only 8.2 % evaluated themselves well in this regard.

20 The study, conducted by Saruhan, et al. (2018), aimed to compare first aid  
21 knowledge scores of teachers working in public primary schools in Gaziantep  
22 city of Turkey according to variables such as age, gender, duration of  
23 education, educational status, and first aid education status. The population of  
24 the descriptive research consists of 4972 teachers working in 121 primary  
25 schools in the center of Gaziantep. In 29 primary schools selected with simple  
26 random sampling method, 545 teachers selected with random method were  
27 included in the research. The data were collected with questionnaire forms  
28 created by the researcher and analyzed in SSPS program. In terms of first aid  
29 knowledge scores of the research group, a statistically significant difference  
30 was found between age, gender, duration of education, educational status, and  
31 first aid education status.

32 The research design by Amro and Otait (2017) is a cross-sectional  
33 descriptive research. Simple random sampling was used to select the schools  
34 included in this study. The study population included all male and female  
35 teachers in primary and secondary schools in the south of Hebron. 150 teachers  
36 was selected from 8 schools participated in the study by using convenience  
37 sampling. More than a third of the participants were between the ages of 30  
38 and 39 and (30.7 %) were between the ages of 40 and 49 (83.3 %), most of the  
39 participants had a bachelor's degree. The most important source of information  
40 is (32 %) and (28.7) nurse and Dr. However, more than half did not have first  
41 aid training before. Regarding basic life support knowledge, (81.3 %)   
42 successfully recognized the number of emergency services, While (50.7 %)   
43 correctly answered the location of the hands during artificial respiration. It was  
44 stated that the school teachers' knowledge of first aid concerning external  
45 bleeding and fractures and trauma, dealing with epilepsy, diabetes and burn is

1 high, the knowledge of CPR is medium, the school teacher need more training  
2 in CPR.

3 The study conducted by Gowri and Missiriya (2017), cross-sectional study  
4 was undertaken with the objective of assessing the knowledge and practice of  
5 school teachers towards health of school children. Cross-sectional survey  
6 conducted among school teachers in Chennai, Thiruvellore and Kancheepuram.  
7 Structured questionnaire was used and 900 teachers were randomly selected  
8 from schools and assessed on their knowledge and practice regarding health of  
9 children. Totally 78 % of the teachers were not having adequate knowledge  
10 and 89 % were not having the practice of maintaining health care of school  
11 children.

12 De Lima Rodrigues, et al. (2015) aims to understand the role of teachers  
13 facing emergency and emergencies in the context of school. It was developed  
14 as a descriptive study with a qualitative approach in the city of Juazeiro do  
15 Norte, Ceara, Brazil, having as scenario a kindergarten, primary and high  
16 school from a private network, and eighteen active teachers from this  
17 institution as informants. Empirical material was collected from semi-  
18 structured interviews. It was clear that teachers had a very close perception of  
19 first aid concepts; however, it is still very limited to the concept of disease  
20 prevention, not to health promotion in the school context. The same study also  
21 demonstrated the importance of maintaining a calm behavior before an  
22 emergency and emergency; however, many teachers do not feel fully ready to  
23 act when faced with an accident. Teachers also highlighted the possibilities and  
24 difficulties in performing these actions, highlighting access to the materials  
25 needed to perform first aid, but having this material is not enough, because the  
26 lack of information remains the biggest challenge.

27 Awad, et al. (2015) conducted a cross-sectional descriptive study on  
28 teachers' first aid knowledge in public primary schools for boys in the city of  
29 Abha, Kingdom of Saudi Arabia. 187 teachers were included in the study and it  
30 was determined that teachers' first aid knowledge levels were not satisfactory  
31 according to the results of the study.

## 32 33 34 **Methodology**

### 35 36 *The Model of the Study*

37  
38 This research is a descriptive study trying to reveal the current situation,  
39 and was conducted based on the scanning model. The quantitative research  
40 method was used in this study. The screening model is a research approach that  
41 aims to describe a situation or event as it exists in the past or present (Karasar,  
42 2014).

43  
44

## 1 *Population and Sample*

2

3 The universe of the research was composed of teachers working in various  
4 branches (N =250) in 15 public primary schools in the city of Amasya. The  
5 research sample consisted of all members of the population. The questionnaire  
6 was distributed to 250 teachers, 214 of whom consented to participate in the  
7 study by returning the completed questionnaire (97 classroom teachers, 117  
8 branch teachers). A total of 214 completed questionnaires were returned  
9 (response rate= % 85.6) and analyzed. The convenience sampling was used as  
10 sampling technique in this research. Convenience sampling is a non- probability  
11 sampling method that involves of conveniently available study participants  
12 (Grove, Burns, & Gray, 2013). This sampling method cost-effective and  
13 allowed data collection from available population members.

14 Before starting the research, a written consent was obtained from the  
15 Amasya Provincial Directorate of National Education and volunteering was  
16 sought in the participation of teachers. Verbal consent was obtained by  
17 explaining the purpose of the research to the teachers at the data collection  
18 stage, and then the questionnaire was applied. The researcher went to the  
19 schools in which the teachers in the universe, the purpose of the research was  
20 specified and the teachers were asked to fill in the data collection tools on a  
21 voluntary basis.

22

## 23 *Data Collection Tool*

24

25 In this research, "Scientific Survey Form" developed by Şahin (2011) was  
26 used. This questionnaire consists of 2 parts. In the first part of the  
27 questionnaire, there are 18 questions to determine the demographic information  
28 of the teachers, and in the second part, 12 questions to measure the first aid  
29 knowledge of the teachers. The survey consists of a total of 30 questions.  
30 Teachers' first aid knowledge score was calculated by giving 1 point for each  
31 correct answer of 15 multiple choice first aid knowledge questions with one  
32 correct answer. The lowest score that can be obtained from first aid  
33 information questions is 0, the highest score is 15. Cronbach Alpha value was  
34 calculated to determine the reliability of the scale. Cronbach Alpha reliability  
35 coefficient was found to be .815 (Şahin, 2011). The results of all analyzes show  
36 that the Survey is a valid and reliable scale in determining teachers' learning  
37 needs about basic first aid. Nunally (1978) states that the coefficient for the  
38 reliability measurement needs to be over 0.70.

39

## 40 *Statistical Analysis of Data*

41

42 In the present study, SPSS 22.0 Statistics package program (SSPS Inc.  
43 Chicago, IL, USA) was used in the statistical analysis of the data obtained with  
44 the data collection tool. The descriptive statistics such as the mean, standart  
45 deviation, frequencies, the minimum and maximum scores were computes.

46

1 **Findings/Results**

2

3

**Table 1.** *Personel Charasteristics of teachers in the study sample*

Variable	Frequency (n)	Percentage (%)	
Gender	Female	105	49.1
	Male	109	50.9
	Total	214	100.0
Age (year)	20-25	12	5.6
	26-30	15	7.0
	31-35	40	18.7
	36-40	43	20.1
	41-45	34	15.9
	46-50	36	16.8
	51-55	16	7.5
	56+	18	8.4
	Total	214	100.0
	Marital Status	Married	169
Single		24	11.2
Divorced		17	7.9
Widowed		4	1.9
Total		214	100.0
Education Level	Associate Degree	34	15.9
	Bachelor's Degree	168	78.5
	Master's degree	9	4.2
	Other	3	1.4
	Total	214	100.0
Graduated higher education institution	Faculty of Educational	133	62.1
	Institute of Educational	29	13.6
	Faculty of Science and Literature	20	9.3
	Other	32	15.0
	Total	214	100.0
Field of Study	Science /Mathematics	40	18.7
	Social/Turkish	52	24.3
	Visual arts	8	3.7
	Foreign language	17	7.9
	Other	97	45.3
	Total	214	100.0
Teaching experience (years)	≤ 5	21	9.8
	6-10	35	16.4
	11-15	46	21.5
	16-20	31	14.5
	21-25	30	14.0
	≥ 26	51	23.8
	Total	214	100.0

4



1 In Table 1, 49.1% of the participants are female teachers and 50.9% are  
 2 male teachers. 20.1% of the teachers participating in the study are between the  
 3 ages of 36-40, 18.7% between the ages of 31-35, 16.08% between the ages of  
 4 46-50 and 15.9% between the ages of 41-45. 79% of the teachers participating  
 5 in the research are married and 11.2% are single. The rate of divorced and  
 6 widowed persons is 9.8%.

7 Table 1 shows that the 18.7% of teachers had studied in the fields of  
 8 Science-Mathematics, 24.3% Social-Turkish, 3.7% Visual arts, 7.9% in the  
 9 field of Foreign Language and 45.3% in classroom teachers.

10 Table 1 shows that 23.8% of the teachers who participated in the study,  
 11 whose working time in the profession is 26 years or more. Teachers between  
 12 11-15 years 21.5% of the participants, teachers between 6-10 years 16.04% of  
 13 the participants, teachers between 16-20 years 14.5%, 21-25 years 14.0% of  
 14 teachers and teachers between 1-5 years make up 9.8% of the participants.

15  
 16 **Table 1.** *Personel Charasteristics of teachers in the study sample (Continue)*

Variable	Frequency ( n)	Percentage (%)	
Having received first aid training	Yes	101	47.2
	Partially	75	35.0
	No	38	17.8
	Total	214	100.0
Self-sufficient about first aid knowledge equipment	Yes	25	11.7
	Partially	119	55.6
	No	70	32.7
	Total	214	100.0
Frequent encounters with situations that require first aid at school	Yes	27	12.6
	Partially	124	57.9
	No	63	29.4
	Total	214	100.0
Existing a healthcare worker at school	Yes	4	1.9
	No	210	98.1
	Total	214	100.0
Existing a first aid cabinet	Yes	176	82.2
	No	38	17.8
	Total	214	100.0

17  
 18 In Table 1, 47.2% of the teachers who participated in the research stated  
 19 that they had received partial training about first aid, only 11.7% of teachers  
 20 state that they find themselves sufficient with first aid knowledge equipment.  
 21 While 12.6% of the teachers stated that they frequently encounter situations  
 22 requiring first aid at school, 57.9% state that they partially encountered  
 23 situations requiring first aid. 1.9% of the participants stated that they are a  
 24 healthcare worker at the school, while 82.2% stated that there is a first aid  
 25 cabinet at the school.

26 In Table 1, 30.9% of the teachers participating in the research stated that  
 27 the educational activities related to first aid should be increased, 3.6% of the

1 facilities and materials should be increased, 7.3% of the health officials should  
2 be increased, 58.2% teachers should be increased all of them.

3 37.9% of the teachers who participated in the study stated that insufficient  
4 training activities related to first aid, 7.5% lack of facilities and materials,  
5 10.3% insufficient health workers, 44.4% insufficient all of them (see Table 1).

6 13.6% of the teachers who participated in the study stated that they knew  
7 how to make heart massage and artificial respiration. 93% of the teachers  
8 stated that they did not perform cardiac massage and artificial respiration. 86%  
9 of the teachers who participated in the research stated that they knew the  
10 regions where the pulse in the body (see Table 1).

11  
12 **Table 2.** *Teachers' Scores From First Aid Knowledge Questions*

	n	Mean	Median	Minimum	Maximum	SD
Fisrt Aid Knowledge Total Score	214	7.60	8.00	1.00	11.00	1.90

13  
14 In table 2, descriptive statistics such as average, standard deviation,  
15 minimum and maximum value of the teachers who participated in the research  
16 from the first aid knowledge questions are presented. The mean total scores of  
17 first aid knowledge questions was 7.60 (SD 1.90), indicating that the first aid  
18 knowledge of teachers was medium level and it was observed that the teachers  
19 got the lowest 1.00 and the highest 11.00 points from the first aid information  
20 questions.

21  
22 **Table 3.** *Distribution of teachers' first aid knowledge scores*

Item No.	Topik	Correct Answers		Wrong Answers		Total	
		n	%	n	%	n	%
1.	Definition of first aid	195	91.1	19	8.9	214	100.0
2.	Definition of first aider	188	87.9	26	12.1	214	100.0
3.	What should not be done to a student who has a epistaxis	36	16.8	178	83.2	214	100,0
4.	What should not be done when a foreign body is stuck in the abdomen	23	10.7	191	89.3	214	100.0
5.	What should be done to a student who has an epileptic seizure	131	61.2	83	38.8	214	100.0
6.	Which of the following is wrong to do to a student who has an asthma attack?	116	54.2	98	45.8	214	100.0
7.	What should not be done in burns caused by heat	108	50.5	106	49.5	214	100.0
8.	Knowing cardiac massage and artificial respiration	29	13.6	185	86.4	214	100.0
9.	Performing cardiac massage and artificial respiration	15	7.0	199	93.0	214	100.0
10.	Knowing the areas where the pulse in the body	182	86.0	30	14.0	214	100.0
11.	How many minutes should the cardiac arrest be intervened ?	152	71.0	62	29.0	214	100.0
12.	What kind of ground should the cardiac massage be applied?	185	86.4	29	13.6	214	100.0
13.	What should not be done to a person who drinks acidic substances	126	58.9	88	41.1	214	100.0
14.	Pressure should be applied to the bleeding area to stop	174	81.3	40	18.7	214	100.0

external bleeding						
15. What should not be done to an unconscious person	193	90.2	21	9.8	214	100.0

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In Table 3, the percentage of correct answers to the first aid knowledge questions varies between 10.7% and 91.1%. The least well-known questions are the knowledge that the foreign body should not be removed when the foreign body is stuck in the abdominal area (n = 23, 10.7%), and what to do with a nose bleed (n = 36, 16.8%). The definition of first aid and practitioners was known by the vast majority of the participants (91.1%, 87.9% respectively).

8

83.8% of the participants in the study gave wrong answers to questions related to epistaxis, 89.3 % of foreign body stubs, 49.5% of burns, 45.8% of asthma. Which of the following should not be done to a student who has epilepsy/epileptic seizures? ” 38.8 % of the participants incorrect answered the question. In the first few minutes should the heart arrest be intervened? ” 71.0% of the participants answered the question correctly. 86.4% of the participants correct answered the question “Cardiac massage should be applied on a soft surface”. 41.1% of the teachers who participated in the research answered the question “A person drinking acidic substance should be vomited immediately”. 18.7% of the participants incorrect answered the question “Pressure should be applied on the bleeding place to stop external bleeding”. 90.2% of the teachers correct answered the question of what should not be done to an unconscious person (see Table 3).

21

86.4% of the teachers who participated in the study stated that they did not know how cardiac massage and artificial respiration are applied. According to these answers, it is seen that most of the teachers participating in the research do not know how to perform cardiac massage and artificial respiration. 93% of teachers stated that they did not apply cardiac massage and artificial respiration. 86% of the teachers who participated in the research stated that they knew the regions where the pulse in the body. These responses show that most of the teachers participating in the study know the areas of the body that are pulsating (see Table 3).

30

Considering the rate of answering according to the topics they contain, the most correct answers were the questions about the definition of first aid and the practitioners, what to do with an unconscious person. The least correct answers were questions about the approach to someone who drinks an acidic substance, what to do with a nosebleed and the approach to a burned patient and Performing cardiac massage and artificial respiration

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## Discussion

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40

In the study aiming to determine the learning needs of teachers working in primary schools in Amasya city center, it was determined that 47.2% of the teachers participating in the study received first aid training. In the research, where Bozkurt, Özbar, Çekiç and Yetgin (2015) investigated the knowledge levels of 72 different branch teachers working in secondary and primary

44

1 schools affiliated to the Ministry of National Education with regard to basic life  
2 support, 25% of the teachers did not have any knowledge about first aid and  
3 did not receive any education. It was. In a study conducted by Nayir, et al.  
4 (2011) in Isparta province, it was found that 61. % of teachers did not receive  
5 first aid training. This deficiency is also emphasized in Hırça's (2012) study.  
6 Dinçer, Atakurt and Şimşek (2000) reported that 62.3% of the teachers did not  
7 receive first aid education in the study, in which the knowledge level of the  
8 teachers working in institutions that provide preschool education to students  
9 about basic life support was examined. It can be said that even these rates are  
10 indicative of a need in terms of learning needs about first aid. Teachers who  
11 spend most of their time with children in schools have the most effective  
12 educational role in preventing accidents (Avery & Jackson, 1993).

13 In the present research, it was found that 88.3% of the teachers working in  
14 primary schools considered themselves insufficient regarding first aid  
15 knowledge equipment. In the studies conducted in Isparta, Afyonkarahisar and  
16 Ankara, the rates of feeling sufficient about first aid were found to be low,  
17 similar to our study (15.5%, 13.6%, 16.7%, respectively) (Sönmez, et al., 2014;  
18 Yürümez, Yavuz, Sağlam, Köken, & Tunay, 2007; Dinçer, et al. 2007). Carter,  
19 et al. (1994) stated that very few teachers have sufficient knowledge and need  
20 their first aid training in study to determine the role of teachers in preventing  
21 accidents (Carter, Bannon, & Jones, 1994). Nayir, et al. (2011) reported that  
22 86.0% of the teachers participating in the study inadequate and 81.0 % wanted  
23 to receive first aid education. It has been thought that primary school teachers'  
24 perceptions of competence should be increased through qualified educational  
25 programs.

26 In the present research, the majority of teachers (70.5%) stated that they  
27 encountered situations requiring first aid at the place where they worked. This  
28 indicates the importance of teachers' knowledge about first aid. On the same  
29 line, a study in Ankara, 68.8 % of teachers stated that they faced a situation that  
30 would require first aid for children (Dinçer, et al., 2000). Nayir, et al. (2011)  
31 stated that nearly half of the teachers encountered a situation requiring first aid  
32 in their workplace.

33 In the present research, The most of the participants stated that they did not  
34 know how to perform cardiac massage and artificial respiration (86.4 %).  
35 Similarly, it was determined by Erkan and Göz (2006) that 89.6% of the  
36 teachers working in primary level schools in Diyarbakır province should be  
37 provided with information and training on first aid to teachers, where 89.6 % of  
38 the teachers have insufficient knowledge about artificial respiration and cardiac  
39 massage.

40 In the present research, the average score of teachers on first aid  
41 knowledge questions was found to be 7.60. In general, it is seen that the  
42 average of first aid knowledge score is at medium level in accordance with the  
43 results of other studies. In the study conducted by Sönmez, et al. (2014) in  
44 Isparta, first aid knowledge point average of preschool teachers was  
45 determined as 11.9 out of 20 points. In the study conducted in primary and high  
46 school teachers in Isparta, the average of first aid knowledge score was

1 determined as 7.07 out of 12 points (Nayir, et al., 2011). In the study  
2 conducted in Afyonkarahisar, the average of first aid knowledge scores of pre-  
3 school teachers was found as 54.4 out of 100 points (Yürümez, Yavuz, Sağlam,  
4 Köken, & Tunay 2007). Kaur, et al. (2017), according to the results of their  
5 studies on first aid management among teachers working in selected public  
6 schools in Dehradun, India, it was determined that most of the teachers  
7 (77.5%) had average knowledge about first aid management. In a similar study  
8 conducted by Pandey, et al. (2017), it was emphasized that teachers assigned in  
9 health have an average level of knowledge about first aid, therefore, the level  
10 of knowledge of teachers should be increased. They conducted a first aid  
11 knowledge study with teachers selected for the purpose in schools selected by  
12 simple random sampling in the south of city of El-Halil of Palestinian by Amro  
13 and Qtait (2017), and the average first aid knowledge score level was  
14 determined as 71.41%. In the study conducted by Mohsen and Zahra (2019) on  
15 teachers in Iranda, it was found that many of the teachers had insufficient  
16 knowledge about first aid. Gowri and Missiriya (2017) conducted a  
17 questionnaire with 900 teachers in Chennai, Thiruvellore and Kancheepuram  
18 cities of India, in the study they prepared with the name of their teachers'  
19 practice and knowledge levels on health care of school children. They  
20 determined that 78% of the teachers did not have sufficient knowledge.  
21 Determining the target and content determined for the training to be delivered  
22 in a meaningful and realistic manner in terms of the needs of the participants  
23 provides adults to tend to actively participate in educational activities (Synder  
24 & Wolfe, 1997).

25 A cross-sectional descriptive study has been carried out on teachers' first  
26 aid knowledge at public primary schools in the city of Abha, Kingdom of Saudi  
27 Arabia 187 teachers were included in the study and it was determined that  
28 teachers' first aid knowledge levels were not sufficient according to the results  
29 of the study (Awad et al. 2015).

30 Considering the response rates according to the topics, the most correct  
31 answers were the definition of first aid and questions related to first aid  
32 practitioners, which should not be done to an unconscious person and  
33 knowledge that cardiac massage should be done on a hard surface. The least  
34 correct answers were questions about the approach to someone with a foreign  
35 body stuck in the abdominal region and what to do with a epistaxis (See Table  
36 3).

37 In the present study, It is known by 16.8 % of the research group that the  
38 head of a child with a epistaxis should not be laid back. The rate of responding  
39 to the question about first aid in one of epistaxis in teachers was low, it is  
40 thought-provoking the fact that around 83% of the teachers can be misapplied  
41 even in such frequent situations. In the study carried out in Isparta, 57.3% of  
42 the participants have correctly understood that the child's head should not be  
43 receded in epistaxis (Sönmez, Uskun & Pehlivan, 2014). Sönmez, et al. (2014),  
44 it was concluded that 57.3% of the teachers correctly knew how to intervene in  
45 case of nosebleeds, in which the pre-school teachers' first aid knowledge level  
46 was examined.

1 In the present study, 58.9% of the participants knew correctly how to  
2 manage a case with drinks an acidic substance. In Isparta, 35.5% of teachers  
3 (Sönmez, et al., 2014) and 16.7% of preschool teachers in Ankara knew the  
4 first aid application in case of drinking acid substance (Dinçer, Atakurt, &  
5 Şimşek, 2007). Nayir, et al. (2011), emphasized that teachers had a lack of  
6 knowledge about the approach to someone who drinks an acidic or basic  
7 substance (29.4%). Correct response rate to first aid applications was found to  
8 be quite low. It is a known fact that those who drink acidic substances should  
9 not be vomited (Ege, 1981). Considering the importance of not vomiting in  
10 approaching a person who drinks acidic substances, the importance of the  
11 trainings to be held on such important matters increases more.

12 In the present study, 38.8% of teachers wrong answer as regarding the  
13 first aid application to be made to a student who has epileptic seizure. Many  
14 studies demonstrated deficient knowledge about epilepsy among teachers  
15 (Awad, et al., 2015; Tahirovi'c & Toromanovic, 2006 ). In a study conducted  
16 on teachers about interventions that should be done in the case of epilepsy  
17 disease in childhood in the USA, it was determined that the general level of  
18 knowledge of teachers about epilepsy disease was sufficient but insufficient in  
19 first aid interventions in the crisis (Bishop and Boag 2006).

20 In the present research, the most of teachers knew correctly how to  
21 manage loss of consciousness (90.2%). This result is in congruent with Awad  
22 et al., (2015) Who stated that 68.4% of teachers in Saudi Arabia knew  
23 correctly.

24 In the present study, about half of the teachers knew correctly how to  
25 manage a case with in an asthma attack (54.2%). On the same line, an other  
26 study in Turkey was knew correctly by 46.8% of teachers (Şahin, 2011).

27 As a result, they stated that the first aid knowledge scores of the teachers  
28 were moderate and the majority of them found themselves insufficient.  
29 Knowledge about first aid is not satisfactory among teachers of primary school  
30 in Amasya. This is largely due to a lack of knowledge and training. So, first  
31 aid educational and training programs should be introduced at schools for early  
32 management injuries and emergencies. Moreover, first aid knowledge should be  
33 incorporated in educational curricula in school.

34 In order to minimize the risk of accidents in schools, to save lives with  
35 simple first aid applications in accidents that occur, first aid courses should be  
36 included in the curriculum of the faculty that educates teachers.

37 Since teachers are a group that may often encounter situations requiring  
38 first aid, they may be recommended to take in-service first aid training at  
39 certain intervals by the ministry of education.

40 The organized courses are often conducted without a needs analysis and  
41 cannot go forward from the transfer of theoretical knowledge. It is important to  
42 consider the demands and needs of teachers in the regulation of the content of  
43 first aid courses.

44 This problem can only be overcome with the planning of training studies  
45 on the subject. First aid training programs for teachers should be organized by  
46 healthcare professionals who know the subject in public education centers.

## 1 Conclusions

2  
3 The key person in the health of the student outside the family is teachers.  
4 Teachers are the first to assist the student in an accident or injury at school.  
5 Therefore, teachers need to know basic first aid rules. According to the  
6 findings obtained from this study that we carried out with the aim of  
7 determining the learning needs of the teachers working in primary schools, it  
8 was determined that the teachers did not have sufficient information about first  
9 aid and they were aware of these deficiencies and expressed their educational  
10 needs. Considering the response rates according to the topics, the most correct  
11 answers were the definition of first aid and questions related to first aid  
12 practitioners, which should not be done to an unconscious person. The least  
13 correct answers were questions about the approach to someone with a foreign  
14 body stuck in the abdominal region and what to do with a apistaxis.

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