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SURVEYING THE LEVEL OF KNOWLEDGE OF HOUSEWIVES ABOUT CRIMEAN FEVER DISEASE IN SHOUSHTAR CITY IN 2017

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Abstract:

Introduction: *Crimean-Congo fever is a febrile and bleeding fever that is transmitted to a healthy person via bite, direct contact with blood or patient discharge and infected animal carcasses. Housewives are one of the most at-risk populations. Therefore, the present study was conducted with the aim of evaluating the awareness of housewives in Shoushtar city regarding the Crimean Crimean fever disease in the year 2017.*

Method: *This is a descriptive-cross sectional study. 188 women who were referred to four centers of eight health centers in Shoushtar city were selected randomly in two-step cluster sampling. A data collection tool was a researcher-made questionnaire consisting of two demographic information sections and 20 questions about the knowledge of the disease, the way of transmission, complications and prevention. Data were analyzed by SPSS software version 21 and descriptive statistics, and Pearson and Spearman correlation coefficients were significantly (P <0.05) analyzed.*

Results: *The mean age of the participants (49.33 ± 12.10) and the knowledge of housewives about the Crimean Crimean fever (47.12 ± 4.48) were obtained. In the women's knowledge survey, it was found that 105 (55.9%) were moderate and 67 (35.6%) were weak. There was no significant correlation between age, place of residence, income and education (P = 0.058 and r = 0.429, respectively) between the variables affecting the level of knowledge. However, only between education and women's awareness Significant differences were observed (P = 0.001 and r = .371).*

Conclusion: *The results obtained and the analyses of the information of the tests indicate that the awareness of the housewives about the Crimean Crimean fever disease was moderate. However, the level of awareness can be increased with the training programs.*

Key words: *Crimean Crimean fever, consciousness, housewives*

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INTRODUCTION:

Today, the common diseases between humans and animals are considered as one of the most dangerous most deadly and most prevalent diseases in the humans which can be transmitted by viruses, bacteria, parasites, or fungi which among them the viruses are considered to be the most dangerous and serious (1). Of the 156 disease-causing agents that have been prevalent over the past three decades, about 73% of them are commonly known as human-animal species. The risks of transmissible diseases are very high for the human community and it is difficult to control the animal reservoir (2). The causes of these diseases are transferred via the various edible, respiratory, penetration of the skin and mucus membranes and animal and arthropod bites. Contact with the animals is one of the sources of human pollution according to the requirements of the occupation and contaminated animal products such as meat, milk and other products (1). Some of these diseases like hemorrhagic fever kill thousands of people annually. The most prominent and most prevalent disease in this group is the Crimean-Congo hemorrhagic fever (CCHF) transmitted by ticks (3 ,4) that is categorized in the acute febrile illnesses common to humans and animals (2). Human infections can be transmitted via a contact with blood and animal secretions or by a contact with human patients or via the infected stings or transmitted via the occupations related with the infected animals such as farmers, butchers and ruminants (5). This disease is in Asia, Europe and Africa and it is important due to the high mortality and sudden epidemics of the disease inside the hospital. Sheep, goats, cows and other domestic animals can be the virus source but they will not get the sick. The agent of the viral disease is from the genus of Nairovirus and from Bunyaviridae family (6) ,in the most cases the Hyalomma ticks are the carriers of this virus too (6,7). The transfer of virus in successive generations of trick occurs from egg to the mature form and the source animals are contaminated through the nourishment neophyte or the infected mature trick (1). The disease has been reported as a epidemic and non-epidemic from the Mediterranean countries of Europe , Turkey, Iran , other Middle Eastern states and Persian Gulf, Pakistan, Saudi Arabia and Sudan (4). According to studies conducted from 1999 onwards in many regions of Iran, the various cases of the Crimean-Congo hemorrhagic fever have been reported as the epidemic form as well as confirmed by para-clinical studies (5). The onset of illness is sudden and is observed as an acute febrile illness. Its symptoms begin with fever, headache, severe pain in the back and abdomen. The progression of the disease is associated with severe bleeding from most parts of the body (7).

The severe hemorrhage from the mucus, gums, nose, lungs and genital tract is considered as a sign of severe and fatal type of disease. In most cases, there are symptoms of hepatitis with jaundice, liver enlargement and the increased liver enzymes. The internal bleeding leads to shock, pulmonary edema and death (2). The time of ticks activity and the prevalence of the disease are in the warm season of summer and especially in July as well as the probability of death is reported 30 % and the lowest rate of infection is reported in autumn (8).

According to the Ministry of Health until July 2015, the number of cases was 39 in 2014, six people died last year out of 39 cases of this disease and this year despite the decrease in the number of deaths 12 people, Four people lost their lives in the provinces of Khorasan Razavi, Kerman Kermanshah and Mazandaran (5). Undoubtedly, the use of livestock products such as milk and meat is regarded as the highest consumption rate of each household and if the preparation of these products is unhealthy it is the source of many diseases. Meanwhile, the meat is one of the most important sources of animal protein (9). According to this that the most people in Shushtar have livestock and animal husbandry and housewives are in constant contact with livestock and meat and the blood of these animals then having basic and health information knowledge and familiarity with the methods of transmission and prevention of this disease will be as a great deal of help in controlling this health problem. Therefore, the present study was conducted with the aim of assessing the level of knowledge of housewives regarding Crimean fever disease in Shoushtar city (2017).

METHODOLOGY:

The current study is a descriptive cross-sectional study that was conducted for assessing the level of housewives' knowledge about Crimean Crimen fever disease in Shoushtar city in 2017. The sampling was done in a two-stage cluster sampling. The criteria for entering the study was being housewife and the exit criteria was not willing to participate in the study. For sampling, four centers were randomly selected from eight health centers in Shoushtar city. Then 202 women were selected among the housewives referring to these centers. In order to collect data, a researcher-made questionnaire containing 20 questions was arranged by studying books and journals and experts. 10 experts of Shoushtar medical school were provided to assess the validity of the questionnaire, After investigating the comments by

modifying some of the items and correcting and deleting some of them, a final questionnaire was prepared. A questionnaires were given to 20 housewives with the specimen specification in order to determine the reliability of the determination of internal consistency , These subjects were excluded from the study which its reliability was obtained according to Cronbach's alpha = 0.78 that confirmed the reliability of this questionnaire. The questionnaire included questions about demographic information about age and education and 20 questions about Crimean fever (9 questions about the knowledge of disease, 3 questions about the symptoms, 3 questions about the transfer way , 5 questions about the prevention). The questions are designed in such a way that there is a correct option in each question and is given the score 1 to a correct answer and zero to the wrong answer then the scores are divided into three levels. The score below 10 is the level of weakness, 10-15 average level and above 15 are considered good level.

The questions are designed in such a way that there is a correct option in each question and a correct answer is given to score 1 and the wrong answer is zero. Then the grades are divided into three levels. The score is below 10 levels of weakness 15-10 average levels above 15 levels are considered good. The written questionnaire was distributed in person form among housewives. The method of conducting research was that the researcher met with each individual person and while explaining the importance of research and obtaining satisfaction from them , distributed the questionnaire among the sample population. Finally ,188 questionnaires were collected and after collecting the information all questionnaires were first encoded. The descriptive statistical methods including the mean standard deviation, minimum and maximum score , frequency, percentage and correlation test for t were also used from the inferential statistics methods of hypothesis testing. According to Kolmogorov-Smirnov test, the data distribution is not normal. The acceptable significance level was considered for the alpha test equal to 0.05. SPSS-21 software was utilized to analyze the results.

RESULTS:

188 housewives participated in this study and based on the findings the mean age of participants (49.12 ± 33.10) and the knowledge score (47.12 ± 3.48) were obtained. 35 people (18.62%) of the participants in the research had a lower education level than the diploma and 30 people (15.96%) had master and more and 100 people (53.19%) were women living in the city (Table , 1). In an investigation of women's awareness level by applying the descriptive tests, 96 people had (51.1%) of the average level of knowledge and 37 people had (19.7%) of level of weak knowledge respectively (Table 2). In the field of questionnaire , it was found that 3 people (1.6%) of the questions related to the etiology of the disease, 42 people (22.3%) of the symptoms, 47 people (25%) of the ways of preventing the disease and 72 people (83.3 %) answer correctly to the questions on the way of disease transmission and none of the samples responded to the question of the method of burial of infected animals. By using Pearson correlation coefficient, it was diagnosed that there was no significant relationship between the age and place of living and income with women's awareness about Crimean fever (P = 0.058 and r = 0.429). Meanwhile, we observed a significant relationship between the education and women's knowledge (P = 0.001 and r = .371).

According to the Croswell Wallis test, the level of awareness is different at different education levels of (P <0.001 and Chi-square = 18.26) and as can be observed, they were more aware of the grade of university education.

Table.1: the Average and Frequency of Demographic Information for Participants

Variable		Number(percent)	Standard deviation ± Average
Education	Under the diploma	(18.62)35	10.3±11.66
	Diploma	(23.93)45	11.3±66.26
	Academic	(57.44)108	13.3±57.03
Income	Low	(28.19)53	
	Average	(47.87)90	
	Much	(23.93)45	
Location of living	Village	(46.80)88	
	City	(53.19)100	
Education	They had not seen	(100)188	

Table 2: Level of housewives' awareness

Level of housewives' *awareness			Average score
>15 Good	15-10 Average	<10 Weak	
29%.3	% 51.1	% 19.7	47/12± 3/48

* از 20 Total score of the test

DISCUSSION AND CONCLUSION:

With a quick look at the incidence of Crimean Congo hemorrhagic fever in Iran and other countries where the disease natively exists, it can be seen that consumption of meat and other raw animal products has a significant role in the prevalence of this disease. Since, the culture of some countries including Iran , women are responsible for cooking in the family then their awareness of the factors that cause and transfer this disease is considered very effective in its prevalence. In this research , the mean scores of women were 47.12 ± 3.48 while the average score of women under study of Çİlİngİroğlu Nwas 17.5 ± 8.3 (10).The results of this study showed that 51.1% of the women had a moderate level of knowledge regarding the disease while in Sharifzadeh's study, the majority of women did not have enough knowledge in this regard which is not in line with this study (2).Perhaps the reason for mismatch with this study is that in the study of Sharif Zadeh, all the women were from the village and were not educated or informed yet. But, in the study performed by Yilmaz (2009-Turkey) it was found that 70% of rural and illiterate women had the required information about this disease that identified radio and television as the main remarkable source of gained information (11). Also, in the 2010 study of Çİlİngİroğlu N (2010) it was found that 85% of women did not know enough about the cause of the illness and did not even know its name (10) as well as in the Zulfaghar (Pakistan-2011) , the rural women did not have sufficient knowledge and attitude (8); in the study of Arican (Turkey -2010), the people in rural areas did not have enough information (12). One of the most important factors influencing family knowledge is the media and the geographical location of the transmission of the disease. In these studies it was found that women who are resident in these geographical areas where the disease was prevalent, have a greater knowledge of the rest of the housewives in other areas (5) . In the current study, 65% of the samples answered the correct questions on the knowledge and pathophysiology of the disease. In the study by Yilmaz 40% (11), Çİlİngİroğlu N 12% (10), 12% (10%) and Caucasus11% (8) in the study of the Soalan, the disease symptoms in this study was 22.3% and in the study of Yilmaz 12% (11) provided the correct answer . In the context of the correct answer to the prevention questions in this study was 25%, 65% (10) for Çİlİngİroğlu N, 40% (11) for the study of Yilmaz , while none of the samples in the study of Caucasian have no available information in this field (8). In the context of the transfer way, 38.3% of this study, 81% of the study of Çİlİngİroğlu N (10), 75% of the study of Yilmaz (11) , 65% of the study of Greenler(13) (Georgia-2014), the respondents answered the correct questions. It should be noted that none of the samples responded to animal sanitary landfill to prevent the transfer of disease. In the study of Sheikhi, the treatment personnel did not have sufficient knowledge about the sanitary landfill of these animals (9) which is in line with the study. In the study of effective variables in the present study, there was no statistically significant relationship between age, income, place of living and level of knowledge which is associated to age (8) in a Caucasian study in one direction. However with the study of Çİlİngİroğlu N, it does not match with the age (10). It should be noted that most of the people in the study of Çİlİngİroğlu N were older than 50 years of age but in the present study most people were between 40-50 years old, This statistical difference in age may be due to the level of education of the participants or the problems of communication with older people. Also, it was found in the present research that the education has a significant relationship with consciousness which is consistent with the study of Çİlİngİroğlu N (10). However, there was no statistical relation between the level of education (8) in the study of the Caucasus, which is not consistent with the current study. This mismatch can be justified by the fact that in the current study, most of the samples have academic education and are residents of the city. However, in the Kasfkas study, all samples are rural residents and the majority are illiterate. Although, the notification is provided by educational tools, pamphlets, brochures as well as information on the Health Department website, it may be due to the distribution problems, lack of

sufficient quantities, poor access level, the literacy level or lack of access to the Internet in rural areas has been ineffective. However, in urban areas due to the media and the increase in the level of education of female housewives, access to facilities and regular visits to health centers are more knowledgeable.

CONCLUSION:

In this study, it was found that the level of awareness of women is moderate and the level of education has a significant impact on the awareness of people regarding the causes of the disease, Since, the performance of a person is the result of his knowledge then it is suggested that by improving the level of individuals' knowledge via the control education, we would be better in dealing with this disease.

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