Investigation of the effect of training given to high ranking soldiers on the level of knowledge regarding sexually transmitted diseases

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A B S T R A C T

Objective: In this research, the effect of the training given to the senior soldiers on the level of knowledge about sexually transmitted diseases was investigated.

Material and methods: This research, which is planned as an semi-experimental study with pretest-posttest, without control group, was conducted between March and April 2020 with the soldiers working in garrison located in the city center of Ağrı.

Results: The pre-test of the soldiers of the rankings was a total score mean of 11.66 ± 4.18, and the level of knowledge was low. The total score mean of the post-test Sex Knowledge Level for the Sexually Transmitted Disease of the ranking soldiers was 16.26 ± 3.78 and the level of knowledge was found to be high. A statistically significant difference was found between the total score means of the pre-test and post-test, Sexually Transmitted Disease Knowledge Level of high-ranking soldiers (p <0.05).

Conclusion: It has been determined that the training given to senior soldiers increases the level of knowledge of sexually transmitted diseases, which is low. It is recommended to work in larger groups.

Keywords: sexually transmitted diseases; education; high-ranking soldier

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Introduction

Sexually transmitted diseases (STDs) are an important public health problem that negatively affects public health [1,2]. STDs; These are infectious diseases that usually start with acute symptoms and signs after sexual intercourse and often become chronic [3]. Chlamydia, human papilloma virus, trichomonas, syphilis, gonorrhrea, fungus, herpes, granuloma inguinale, lymphogranuloma venereum, scabies, pediculosis, hepatitis B, hepatitis C, AIDS are some of these diseases [4]. Sexually transmitted infections (STIs) often lack symptoms or mild symptoms that do not bother the person, causing the disease to spread rapidly. For this reason, the disease spreads silently in the society and affects a wide population [1]. The incidence of STI has increased in recent years. Conditions such as inadequate sexual education programs in developing countries, the age of sexual intercourse in developed and developing countries, having more than one sexual partner, having sexual intercourse for money, not using condoms during sexual intercourse, joint use of tools used for manicure, pedicure, razor, piercing and tattooing, and the use of dental instruments without sterilization are among the risk factors for STI. [5-7]. According to the data of the World Health Organization, more than 1 million people are caught with STIs every day in the world. Approximately 500 million people get chlamydia, gonorrhrea, syphilis and trichomoniasis infections every year [8].

46.8 million of 450 million people in the 15-49 age group living in the European region, in which Turkey is located, are estimated to have curable STI. [9]. One of the situations that increase infection most is likely to be due to the lack of knowledge of Young people [10]. There are a limited number of studies to increase the level of knowledge on education about sexually transmitted diseases. This study was carried out with the aim of effecting the training given to the soldiers on the level of knowledge about sexually transmitted diseases.

Material and methods

Study Design

This research, which was planned as a semi-experimental study with pretest-posttest, without control group, was conducted between March and April 2020 with the soldiers working in garrison located in the city center of Ağrı.

The target population of the study; It formed 382 high-ranking soldiers in the 12th Mechanized Infantry Brigade Command. The sample of the study was composed of individuals from the ranks in the 12th Mechanized Infantry Brigade Command, who met the research criteria (being a ranking soldier, serving in the garrison now) and agreeing to participate in the study.

Those who had to be on duty during data collection and training, those who had previously been trained in this subject were not included in the study. Priori power analysis was performed to determine the sample volume.
In the power analysis, it was determined that at least 24 individuals should be reached in order to reach 80% power in the 95% confidence interval at 0.05 significance level.

**Collection of Data**

By explaining the purpose of the study, after obtaining verbal permission from those who voluntarily agreed to participate in the study, pre-test application of the Knowledge Level Questionnaire for Sexually Transmitted Diseases and Introductory Information Form prepared by the researchers were collected. Later, a professor who is a specialist in the field of Sexually Transmitted Diseases was provided with face-to-face education and brochures were distributed. What are sexually transmitted diseases, causes of infection, symptoms, methods of diagnosis, treatment and prevention are mentioned. The training lasted 4 hours with 3 breaks. Posttest data was collected from the group where the pretest was performed two weeks later. In the collection of research data, Introductory Information Form and Knowledge Level Test for Sexually Transmitted Diseases were used.

**Data Collection Tools**

1. **Introductory Information Form**

   It consists of 7 questions created by the researchers and containing the identifying features of the soldiers (age, gender, marital status, educational level) and their experiences about sexually transmitted diseases [1,6,7].

2. **Knowledge Level Questionnaire Form for Sexually Transmitted Diseases**

   A questionnaire form for sexually transmitted diseases was created by scanning the literature [1,2,10]. In the questionnaire consisting of 25 questions, there are True (1 point), False (0 point), I don’t know (0 point) options and the scale is scored in the range of 0-25. Questions were created by taking the expert opinion. The high total score of the survey means that the level of knowledge is high. In our study, the Kuder-Richardson 20 value of the questionnaire was found 0.72.

**Evaluation of the Data**

The analysis of the data was done on the computer using the SPSS statistical software. Descriptive statistics, Kolmogorov-Smirnov, Independent Samples t test and Paired Samples t test were used to evaluate the data.

**Ethical Principles**

Consent was obtained from Ağrı İbrahim Çeçen University Scientific Research Ethics Committee and written permission was obtained from the institution where the study would be conducted. Verbal permission was obtained from those who wanted to participate in the research by making necessary explanations to the individuals included in the research.

**Results**

All of the individuals participating in the study are male, 69.0% are single, 81.0% are graduates of higher education, 76.2% are not trained on Sexually Transmitted Disease (STD), 100% have not STD on their own and family. It was determined that there are no individuals who have STD disease. And the mean age of the group was found to be 31.43 ± 5.08 (Table 1).

The pre-test of the rank soldiers was 11.66 ± 4.18 and the level of knowledge was low. The total score mean of the post-test Sex Knowledge Level for Sexually Transmitted Disease of the ranking soldiers was 16.26 ± 3.78 and it was determined that the level of knowledge was high (Table 2).

A statistically significant difference was found between the total score averages of the Level of Knowledge Regarding Sexually Transmitted Disease pre-test and post-test of the ranking soldiers. (p <0.05) (Table 2).

**Table 1. Descriptive Characteristics of High-ranking Soldiers**

| Variables                  | n  | %  |
|----------------------------|----|----|
| Gender                     |    |    |
| Male                       | 42 | 100|
| Female                     |   |    |
| Marital status             |    |    |
| Single                     | 29 | 69.0|
| Married                    | 13 | 31.0|
| Level of education         |    |    |
| Secondary education        | 8  | 19.0|
| Higher education           | 34 | 81.0|
| Did you get educated about STDs? | Yes |     |
|                             | No | 10  |
|                             |   | 32 |
|                             |   | 23.8 |
|                             |   | 76.2 |
| Is there any STD disease?  | Yes | 42  |
|                             | No | 100 |
| Do you have the STD disease in your family? | Yes |   |
|                             | No | 100 |

| Age                        | 31.43 ± 5.08 (min. 24, max. 43) |

The ranking soldiers’ pre-test knowledge level about Sexually Transmitted Disease total score mean was found to be statistically significantly higher in the individuals whose marital status was married and trained on STD (p <0.05). The ranking soldiers’ post-test knowledge level about Sexually Transmitted Disease was statistically significantly higher in the individuals whose marital status was married and trained on STD (p <0.05) (Table 3).

**Table 2. Comparison of the Average Level of Knowledge Level of the Pre-Test and Post-Test Sexually Transmitted Disease of High-ranking Soldiers**

| Knowledge Level for Sexually Transmitted Disease | Pre-test ±SD | Post-test ±SD |
|-------------------------------------------------|-------------|---------------|
| Mean ± Standard Deviation                       | 11.66 ± 4.18| 16.26 ± 3.78  |
| Min-max                                         | 5-20        | 9-24          |
| T test                                          | -           | 16.847        |
| P value                                         | 0.001       |               |
| Cohen’s d value                                 | 0.001       | 0.001         |
| Impact size (r)                                 | -1.54       | -0.499        |

**Discussion**

In the literature, training studies on the knowledge level of sexually transmitted diseases for soldiers, who are at risk groups and senior soldiers, are not sufficient. In this study, training was provided to determine the knowledge levels of soldiers about some selected infectious diseases such as tuberculosis, tuberculosis, malaria, AIDS, typhoid, which are considered important for public health and health management. It protects themselves and their close friends about sexually transmitted diseases with the training given to the senior soldiers, but it is also important for them to raise their rank-free soldiers.

The ranking soldiers’ pre-test and post-test knowledge level of the Regarding Sexually Transmitted Disease total score mean were statistically significantly higher among the individuals whose marital status was married. (p <0.05).
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Disclosure

Authors have no potential conflicts of interest to disclose.

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