EXAMINATION OF THE EFFECTS OF CIGARETTE AND ALCOHOL USE STATUS ON PHYSICAL ACTIVITY LEVELS AND QUALITY OF LIFE OF COURSE ATTENDEES OF PUBLIC EDUCATION CENTER (EXAMPLE OF ANTALYA PROVINCE)

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ABSTRACT

The aim of the research is to examination the level of physical activity and quality of life of individuals according to their smoking and alcohol use status.

This research consists of a total of 916 attendees of 672 female and 244 male. The "International Physical Activity Questionnaire" was used to determine the physical activity levels of the participants and the "SF-36 Questionnaire" was used to determine the quality of life. As a result of the reliability analysis performed in the SF-36 questionnaire, the Cronbach’s Alpha value was found to be 0.92 for all of the scale, while the Cronbach's Alpha values for the 8 sub-dimensions were found to be 0.60-0.90. The normality tests for physical activity values and the Quality of Life scales indicate that data are not normally distributed. The Mann-Whitney U and Chi-Square tests have been used as the descriptive and non-parametric statistical tests. Analysis results are interpreted in the direction of medians. The level of statistical significance was determined as p <0.05 and the confidence interval as 95%.

The analyzes were statistically significant (p <0.01) between the levels of physical activity according to participant smoking status; and there was no statistical difference between the quality of life (p>0.05). Analysis of participants' alcohol use showed a statistical difference (p <0.001) between physical activity levels. Analyzes showed that there was a statistically significant difference at p <0.01 level in physical function and general health subscale of quality of life, and at p <0.05 level in physical health summary scale of quality of life. It stands out in this study that the level of physical activity of cigarette smokers is sufficient active and the level of physical activity of non-smokers is minimum active in this study. The same is true for individuals who drink alcohol and do not drink alcohol. In addition, quality of life of alcohol-consuming individuals was found to be higher than alcohol-free individuals in the physical function and general health subscales and the physical health summary scale.

Looking at these results; individuals who smoke and drink alcohol are thought to tend more towards physical activity to avoid harmful effects of cigarettes and alcohol. Higher quality of life in certain sub-dimensions of alcohol-consuming individuals may also be attributed to higher levels of physical activity.

Key Words: Public education center, cigarette, alcohol, physical activity, quality of life.
INTRODUCTION

The rapidly changing and spread across in all areas of life, from past to present, is the source of transformation in many fields from physical activities to health to quality of life. In addition to useful work such as physical activity which is known to affect quality of life positively and as a part of preventive health activities, bad habits such as smoking and alcohol which negatively affect health and quality of life are the social phenomena that affect the individuals who constitute the society indirectly or indirectly.

In addition to many health related problems, smoking and alcohol use continues to be a current problem in the world and in our country. The existence of this problem increases the importance of efforts to increase the quality of life, as well as legal measures, to increase the quality of life and to reduce smoking and alcohol use. Because, it is one of the objectives of physical activity to minimize the possibility of individuals having any health problems or to reduce or eliminate the barriers and difficulties that individuals face due to their current diseases.

Physical activity is one of the recommended methods for improving the quality of life for all healthy and diseased people (Karatosun, 2010). It is known that physical activity, in addition to its preventive and curative aspects in many diseases, positively affects the conditions such as reducing smoking, alcohol and drug use, correcting eating habits, improving work capacity and improving social relations (Akyol et al., 2008).

Exercise, which is a dimension of physical activity, increases the quality of life (Cindaş, 2001; Ordu Gökkaya, 2009). Passive or active smoking affects exercise capacity and hence physical activity level negatively affecting the quality of life of people (Aktaş et al., 2013). As a result, the quality of life of smokers is lower and the quality of life increases as the amount of smoking per day increases (Şen et al., 2008).

Smoking increases the level of physical activity and reduces the level of physical activity, depending on the amount of use leads to obesity and increases the level of anxiety (Efendi, 2012). The rate of alcohol use, inactivity and sedentary life were significantly higher in smokers (Efendi, 2012). It is clear that smoking cessation is necessary to reduce inactivity
and sedentary life. In this context, exercise is recommended as an adjunctive method in smoking cessation (Metin et al., 2005).

Alcohol dependence is a multi-dimensional and chronic disease that affects the physical, mental, social and sexual health of the individual and thus the quality of life (Dişiz, 2012). Studies show that there are differences in alcohol use rates in different socioeconomic sub-groups and that alcohol dependence is increasing gradually (Bulut et al., 2006; Coşkun, 2008).

Considering the number of deaths caused by smoking in 2018, the number of deaths caused by smoking in the period between June 28, 2014 and the number of deaths caused by alcohol is 1,223,608 (http://www.worldometers.info); The importance of studies examining the relationship between smoking and alcohol use and physical activity and quality of life is emerging.

**MATERIALS AND METHODS**

Cigarette and alcohol use cases were obtained through personal information form. 244 (26.64%) males, 672 (73.36%) females, totally 916 individuals were included in the study.

The validity and reliability study of the short and long Turkish versions of the International Physical Activity Questionnaire (IPAQ), used in this study was performed by Öztürk (2005).

In this study, the best known and most widely used Health Related Quality of Life Questionnaire Short Form-36 (SF-36) was used in health care research (Ergün et al., 2011).

SF-36 is a quality-of-life scale developed by Ware and validated by Pınar in Turkish society (Pınar, 1995).

Because the number of samples was more than 50, Kolmogorov-Smirnov test was used for normality tests. Normality tests show that data are not normally distributed (p <0.005).

Since non-normally distributed data required the use of nonparametric tests, the Mann-Whitney U test was used to compare the two groups for quality of life. The analysis results were interpreted in terms of median values.
In order to determine physical activity levels, "Chi-Square" analysis method was used. The "chi-square" analysis method is an analysis method that operates on frequency distributions.

RESULTS

In this section, physical activity levels and quality of life among smokers and non-smokers; the physical activity levels and the quality of life of the patients who were not receiving alcohol were compared and the results were given in tables.

Table 1. Comparison of physical activity levels between smokers and non-smokers (Chi-Square test analysis results)

| Physical Activity     | Smokers | Non Smokers |
|-----------------------|---------|-------------|
|                       | f  | % | f  | % |
| Inactive              | 72 | 23.1 | 142 | 23.5 |
| Inadequate Active     | 113 | 36.2 | 274 | 45.4 |
| Adequate Active       | 127 | 40.7 | 188 | 31.1 |
| TOTAL                 | 312 | 100.0 | 604 | 100.0 |

\(X^2 = 9.580; p = 0.008\)

There was a statistically significant difference between the level of physical activity of smokers and nonsmokers (p <0.05). Among the smokers, the largest proportion is composed of individuals with adequate active level while the lowest rate is composed of inactive individuals. Among the non-smokers, the largest proportion is composed of less active individuals. Smokers are more active than non-smokers (Table 1).

Table 2. Comparison of physical activity levels between alcohol and non-alcohol users (Chi-Square test analysis results)

| Physical Activity     | Alcohol | Non-Alcohol |
|-----------------------|---------|-------------|
|                       | f  | % | f  | % |
| Inactive              | 31 | 17.2 | 183 | 24.9 |
| Inadequate Active     | 59 | 32.8 | 328 | 44.5 |
| Adequate Active       | 90 | 50.0 | 225 | 30.6 |
| TOTAL                 | 180 | 100.0 | 736 | 100.0 |

\(X^2 = 24.248; p = 0.000\)
There was a statistically significant difference between the physical activity levels of alcohol and non-alcoholic subjects (p < 0.05). Among the alcohol areas, the largest proportion is composed of individuals with adequate active level while the lowest rate is composed of inactive individuals. Among those who do not drink alcohol, the largest proportion is composed of less active individuals. It is observed that alcohol areas are more active than non-alcohol users (Table 2).

### Table 3. Comparison of the quality of life of smokers and non-smokers (Mann-Whitney U test analysis results)

| Quality of Life       | Smoking | Range Mean | Mean | Z    | p     |
|-----------------------|---------|------------|------|------|-------|
| Physical Function     | Yes     | 461.66     | 80.00| -0.262 | 0.794 |
|                       | No      | 456.87     | 80.00|      |       |
| Physical Role Restriction | Yes    | 453.22     | 75.00| -0.466 | 0.641 |
|                       | No      | 461.23     | 100.00|      |       |
| Pain                  | Yes     | 464.93     | 77.50| -0.533 | 0.594 |
|                       | No      | 455.18     | 77.50|      |       |
| General Health        | Yes     | 457.10     | 60.00| -0.115 | 0.908 |
|                       | No      | 459.22     | 60.00|      |       |
| Physical Health       | Yes     | 458.81     | 76.55| -0.026 | 0.980 |
|                       | No      | 458.34     | 75.00|      |       |
| Emotional Role Restriction | Yes     | 453.33     | 100.00| -0.463 | 0.643 |
|                       | No      | 461.17     | 100.00|      |       |
| Vitality              | Yes     | 461.66     | 55.00| -0.261 | 0.794 |
|                       | No      | 456.87     | 57.50|      |       |
| Emotional Goodness    | Yes     | 443.58     | 64.00| -1.230 | 0.219 |
|                       | No      | 466.21     | 64.00|      |       |
| Social Function       | Yes     | 445.45     | 75.00| -1.090 | 0.276 |
|                       | No      | 465.24     | 75.00|      |       |
| Mental Health         | Yes     | 452.49     | 65.36| -0.494 | 0.621 |
|                       | No      | 461.60     | 66.07|      |       |

There was no statistically significant difference in the quality of life among smokers and nonsmokers (p > 0.05) (see Table 3).
Comparing the quality of life of alcohol and non-smokers; p <0.01 level was found in physical health summary score and p <0.01 level in general health and physical function subscales. In both the physical health summary score and the sub-dimensions of general health and physical function, the quality of life of individuals who took alcohol was higher (see Table 4).

Table 4. Comparison of the quality of life of alcohol and non-alcohol users (Mann-Whitney U test analysis results)

| Quality of Life         | Smoking | Range     | Mean  | Z      | p      |
|-------------------------|---------|-----------|-------|--------|--------|
| Physical Function       | Alanlar | 507,24    | 87,50 | -2,773 | 0,006**|
|                         | Almayanlar | 446,58    | 80,00 |        |        |
| Physical Role Restriction| Alanlar | 461,76    | 100,00| -0,198 | 0,843  |
|                         | Almayanlar | 457,70    | 75,00 |        |        |
| Pain                    | Alanlar | 486,22    | 77,50 | -1,580 | 0,114  |
|                         | Almayanlar | 451,72    | 77,50 |        |        |
| General Health          | Alanlar | 518,15    | 70,00 | -3,384 | 0,001**|
|                         | Almayanlar | 443,91    | 60,00 |        |        |
| Physical Health         | Alanlar | 499,67    | 78,93 | -2,329 | 0,020* |
|                         | Almayanlar | 448,43    | 74,64 |        |        |
| Emotional Role Restriction| Alanlar | 449,76    | 100,00| -0,539 | 0,590  |
|                         | Almayanlar | 460,64    | 100,00|        |        |
| Vitality                | Alanlar | 484,68    | 60,00 | -1,487 | 0,137  |
|                         | Almayanlar | 452,10    | 55,00 |        |        |
| Emotional Goodness      | Alanlar | 456,07    | 64,00 | -0,138 | 0,890  |
|                         | Almayanlar | 459,09    | 64,00 |        |        |
| Social Function         | Alanlar | 458,34    | 75,00 | -0,009 | 0,993  |
|                         | Almayanlar | 458,54    | 75,00 |        |        |
| Mental Health           | Alanlar | 461,11    | 65,00 | -0,148 | 0,883  |
|                         | Almayanlar | 457,86    | 66,07 |        |        |

*: p<0,05; **: p<0,01

CONCLUSION

In this study, the physical activity levels and quality of life of the participants were evaluated by considering the cigarette and alcohol use cases. the level of physical activity of the smokers is sufficient and the level of physical activity of the non-smokers is low. There is a
similar situation for individuals who take alcohol and not. In addition, individuals with alcohol, physical function and general health subscales and physical health summary scale showed that the quality of life was higher than the individuals not taking alcohol.

When the results are examined; It is thought that individuals who smoke and drink alcohol may be more likely to be directed to physical activity in order to prevent the harmful effects of cigarette and alcohol.

High quality of life in certain sub-dimensions of individuals who take alcohol can also be attributed to high levels of physical activity.

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