

Determination Of Physical Activity Level In The Caregiving Of Schizophrenia Patients

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Abstract

The aim of this study was to evaluate the physical activity levels of the caregivers of the schizophrenic patients. This research was descriptive and was conducted with face-to-face interviews with relatives of schizophrenia patients enrolled in a Community Mental Health Center. The sample of the study consisted of 124 individuals who agreed to participate in the study. Socio-demographic data form and International Physical Activity Questionnaire were used for data collection. In order to evaluate the demographic data of the study, t-test and Kruskal-Wallis test were used in order to evaluate the relationship between number and percentage distributions, socio-demographic characteristics and International Physical Activity questionnaire. The mean age of the participants was $38,26 \pm 4,26$, 61,32% female, 38,68% male, 34,65% married, 81,65% single, 10,47%. 27,49% are primary school / middle school, 33% are high school and 29,04% are university graduates. When the body mass index of the participants was evaluated, 65,35% were overweight, 54,95% were inactive and 33,85% were given care for 6-10 years. When sociodemographic and physical activity levels are compared; 41,17% of women, 19,18% of those with care years 1-5 years and 52,46% of overweights were found to be inactive in terms of physical activity and the difference was statistically significant ($p < 0,05$). In our study, it was observed that the sociodemographic characteristics of the participants significantly affected the physical activity level.

Keywords: Schizophrenia, Caregiver, Physical activity level

INTRODUCTION

Schizophrenia is a brain disease that causes deviations in emotions and thoughts and behavior. Schizophrenia is an important discomfort that needs to be taken into account and causes the person to get away from the outside world. Generally, symptoms occurring between the ages of 15-35 can be observed as being away from friends and family, decreasing school success, nervous behavior and behavioral changes (3). The majority of patients with schizophrenia may require the care of another person in a semi-dependent or dependent manner.

When considered as a family system, there is a continuous interaction between the parts of the system and the change in the patient individual in the case of illness affects the whole family. The fact that an individual in the family has schizophrenia may disrupt the existing balance of the family by creating severe stress in family members (5). When the disease occurs, one of the members of the family has to take care of the sick individual. The movement of the care of patients with schizophrenia and other mental disorders in the community has brought about serious changes in the last 10 years. Families are often exposed to various stresses every

day due to unexpected and strange behavior of patients (7). At the same time, because of domestic conflicts and stigmatization in the care-giving process and environmental factors, they live in isolation, emotional frustration (such as guilt and loneliness). Giving care is a process that is difficult and brings heavy loads to the caregiver. The key person who supports the patient and is usually the most caring person is defined as the primary caregiver. Epidemiological data show that women are the main caregiver in schizophrenia and women are the most common (2). Health protective and enhancing effect, with daily activities; physical activity is planned, repeated and regular. Such physical activity is also called exercise (2,9). Active life as much as possible is the first step of a healthy life (4). However, long-term care for a patient with schizophrenia causes the person to take him out of priority and take all his time to his patient (12). These difficulties may cause caregivers to experience feelings such as burden, depression, anxiety, burnout, physical health deterioration, social isolation and economic difficulties, stress, shame, guilt, helplessness, anxiety, fear, strain, anger, loss and hopelessness. In the studies conducted with caregivers, the incidence of chronic diseases is increasing in individuals due to their physical and social burden (1). Therefore, caregivers should be more physically active to provide better care for them and their caregivers. This study was conducted to evaluate the physical activity levels of caregivers of individuals with chronic mental illness.

Research Questions

1. What are the physical activity levels of caregivers?
2. Does it affect the sociodemographic characteristics and physical activity levels of caregivers?

METHOD

The research descriptive relational type is planned. The universe of the study was composed of caregivers of individuals with chronic mental illness registered to a Community Mental Health Center. The sampling method of the universe was used to determine the sample of the study. Because the prevalence was not known, the incidence of the event was 50%, 5% standard deviation and 95% confidence interval. In the collection of data; International Physical Activity Questionnaire Short Form was used to evaluate the physical activity

levels of the individuals and the information form prepared by the researchers who question socio-demographic information.

Personal Information Form

The Personal Information Form included demographic questions such as age, gender, educational status, marital status, year of care and body mass index.

International Physical Activity Questionnaire

In this study, the International Physical Activity Questionnaire short form was used to determine the physical activity levels of the individuals. For this survey, conducted by the International validity and reliability study of Craig et al, validity and reliability study of university students in Turkey are made by Ozturk (6). In the evaluation, it is taken into consideration that each activity is performed for at least 10 minutes in one time. The minutes, days and Metabolic Equivalent (MET) values (multiples of resting oxygen consumption) are multiplied and a score is obtained as MET-minute / week. Physical activity levels were not physically active (<600 MET / min), with low physical activity (600 - 3000 MET-min / week), and physical activity level (> 3000 MET-min / week). In calculating the energy consumption related to physical activities, the weekly duration of each activity (minutes) and the MET energy values generated for the International Physical Activity Survey were multiplied. Thus, energy consumption for each individual for severe, moderate, walking, sitting and total physical activities was obtained in MET-min / Week unit.

Collection of data

The data of this study were collected from face to face interview technique from adult individuals who came to an institution.

Ethical of Research

The study was started after the consent of the ethics committee and the consent of the individuals were taken. Verbal permissions were obtained from individuals before starting the study. The purpose of the research, the duration of the research and the procedures to be done during the research briefly explained in a language to understand the illuminated Consent principle, the patients can be withdrawn from the research at any time by specifying the in Autonomy principle, the individual information will be protected after sharing with the researcher, Privacy and Privacy Protection principle

has been fulfilled. Before giving the forms to be used in the research, necessary explanations were made orally, and during the application, attention was paid to create a quiet environment with little warning.

Evaluation of Data

After the data were collected, the SPSS 21 program was entered by the researchers and the total scores of the total and scale sub-dimensions taken from the scale were calculated by the researchers. In order to evaluate the demographic data of the study, chi-square test was used to evaluate the relationship between number and percentage distributions, socio-demographic characteristics and International Physical Activity questionnaire. The results were evaluated at 95% confidence interval and $p < 0.05$ significance level.

RESULTS

The mean age of the participants was $38,26 \pm 4,26$, 61,32% female, 38,68% male, 34,65% married, 65,35% single, 10,47% illiterate 27,49% are primary / secondary school graduates, 33% are high school graduates and 29,04% are university graduates. When the body mass index of the participants was evaluated, 65,35% were overweight, 54,95% were inactive and 33,85% were given care for 6-10 years (Table 1).

Table 1. Distribution of Socio-Demographic Characteristics of Caregivers

Characteristic	Number	%
Gender		
Female	76	61.32
Male	48	38.68
Marital status		
Married	43	34.65
Single	81	65.35
Educational status		
Literate	13	10.47
Elementary / Middle School	34	27.49
High school	41	33.0
University	36	29.04
Year of care		
1-5 years	49	42.14
6-10 years	42	33.85
11 years and above	33	24.01
Body Mass Index		
Normal weight	43	34.65
Overweight	81	65.35
Physical Activity Level		
Minimal Active	56	45.2
Inactive	68	54.8

When sociodemographic and physical activity levels are compared; 41,17% of women, 19,18% of those with care years 1-5 years and 52,46% of overweights were found to be inactive in terms of physical activity and the difference was statistically significant ($p < 0,05$). It was found that 39.49% of the singles were minimally active and the difference was statistically significant ($p < 0.05$) 23.37% of high school graduates were found to be minimal active and the difference was not statistically significant ($p > 0.05$). (Table 2).

Table 2. Evaluation of Physical Activity Levels of Participants according to Sociodemographic Characteristics

Characteristic	Inactive (< 600 MET- min / week)	Min Active ($600-3000$ MET- min / week)	Test Value
	Number (%)	Number (%)	
Gender			
Female	25 (% 20.15)	51 (% 41.17)	$\chi^2:1.275$ $p:0.01^*$
Male	31 (% 24.98)	17 (% 13.78)	
Marital status**			
Married	12 (% 9.67)	31 (% 24.98)	$\chi^2:2.423$ $p:0.02$
Single	48 (% 39.49)	33 (% 25.86)	
Educational status			
Literate	5 (% 4.03)	8 (% 6.44)	$\chi^2:0.476$ $p:0.20$
Elementary / Middle School	10 (% 8.06)	24 (% 19.43)	
High school	29 (% 23.37)	12 (% 9.63)	
University	23 (% 18.53)	13 (% 10.51)	
Year of care**			
1-5 years	11 (% 8.86)	38 (% 33.28)	$\chi^2:0.756$ $p:0.03^*$
6-10 years	12 (% 9.67)	30 (% 24.18)	
11 years and above	6 (% 4.83)	27 (% 19.18)	
Body Mass Index**			
Normal weight	11 (% 8.86)	32 (% 25.79)	$\chi^2:3.751$ $p:0.01^*$
Overweight	16 (% 12.89)	65 (% 52.46)	

* $P < 0.05$ ** Yates corrected chi-square analysis was performed because the observed number is less than 25 in the numbers.

DISCUSSION

Giving care is a process that is difficult and brings heavy loads to the caregiver. The key person who supports the patient and is usually the most caring person is defined as the primary caregiver. Epidemiological data show that women are the main caregiver in schizophrenia and women are the most common (13,14). In our study, it was found that female caregiver rate was higher than male. The aim of this study was to determine the physical activity level of caregivers in schizophrenia patients.

In our study, it was observed that males were more active than females in terms of physical activity. Lloyd et al. (5), in which the caregivers determined the level of physical activity, it was reported that males were more active than females in terms of physical activity. It can be thought that the daily work of men is more than women. In our study, it was observed that singles were more active than married and physically active. (11). It may be related to men's efforts to continue their social lives and to adopt more planned work. Since women have other responsibilities to carry out at home, it can be thought that women's time is shortened.

In our study, it was found that the caregivers of the patient for 1-5 years were inactive in terms of physical activity. Rogers et al. (7) and Uribe et al. (10), similar to our study findings, it is reported that individuals who are just starting to give care are more passive in terms of physical activity and that they do not have time to devote themselves to care due to inadequacy and inadequacies created by caregiving. The results of these studies are similar to our findings.

In our study, it was observed that overweight individuals performed less physical activity than normal weight. Wang et al. (12) and Selçuk and Avcı (8) reported that overweight individuals were more passive in terms of physical activity. Caring for people with chronic mental illness is a condition that forces caregivers and changes their lives. In the first years, caregivers are much more tired and have more burdens. For this reason, they seem to have difficulty in giving time to themselves.

CONCLUSION

In our study, it was observed that the level of physical activity varied significantly according to the sociodemographic characteristics of the participants. In terms of physical activity, women, singles, caregivers for 1-5 years and overweight are in the risk group. Therefore, it is considered that it is important to support caregivers of individuals with chronic mental illness in terms of physical activity and to organize the services to be provided to them.

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