

Evaluation of Physical Activity Levels of Individuals with Mental Diseases in a Region

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Abstract

Aim: The aim of this study was to determine the physical activity levels of individuals with mental illness living in a region.

Method: This research is descriptive cross-sectional. The population of the study consisted of 46 individuals with mental illnesses registered to a family health center and all individuals who accepted to participate in the study without sampling selection method were included in the sample. The data were collected sociodemographic information form and the International Physical Activity Questionnaire was used. In the evaluation of the number and percentage of data distribution and chi-square test was used.

Results: The mean age of the individuals was 33.02 ± 9.41 , 60.9% were women, 63% were high school and above, 84% were living in the metropolitan, 52.2% perceived their health as moderate. It was found that 47.8% of them evaluated their income as bad. It was found that 50% of individuals had a diagnosis of schizophrenia and 39.1% had a diagnosis of 1-5 years. When the physical activity levels of the individuals were evaluated, it was seen that 58.7% were inactive. In terms of physical activity, it was seen that men, high school and above educated people, people living in the metropolitan area, those who perceive their health well and those who perceive their income as good are more active. When the characteristics of the disease were examined, it was found that individuals with schizophrenia and those with a diagnosis of 6-10 years were in better condition in terms of physical activity and the difference was found to be statistically significant.

Conclusion: In terms of physical activity among the individuals with mental illness, women, primary school graduates, those who perceive their health as moderate, people living in the district, those who perceive their income as moderate and bad are in the risk group. In addition, having a diagnosis of bipolar and anxiety disorder and having mental illness for 1-5 years or 11 years or more is a risk factor for having low physical activity.

Keywords: mental illness; physical activity; individuals

Introduction

In the treatment of chronic mental illnesses, a familiar thing and interpretation forms are alienated, a process of relapse that continues in a unique world of closed closure and continues with the direction of emotion, thought, planning and behavior (Maynou et al., 2019). Regardless of the cause of the disease, the relationships rounded by the individual negatively affect work and social harmony, thoughts, feelings and behaviors (Aguayo et al., 2019). Psychiatric patients are at moderate risk of sedentary lifestyle diabetes and cardiovascular diseases. In addition, it is emphasized that it deteriorates metabolic status in patients

disinfected with lifestyle such as smoking, excessive food consumption and decreased physical activity (Takahashi et al. 2019).

In studies investigating the relationship between mental illness and physical activity, it is stated that one is indicated in the determination of physical activity conditions, physical activity-oriented, elevated level of life, while on cognitive connection, on the right of mental well-being and in depression and psychotic disorders (Verhoeven et al., 2019; Lynch, 2019). Physical activity is impressive, similar to psychotherapeutic interventions in chronic psychiatric patients. Exercise is also reported to have a positive effect on social withdrawal and low self-esteem. Treatment plans in psychiatric patients, moderate moderate activity

opportunities throughout the day that may change lifestyle may be appropriate interventions (Lök and Lök 2016).

In a systematic review evaluating the effect of physical activity and exercise in chronic mental illnesses, individuals with chronic mental illnesses participating in physical activity programs were found to feel better mentally, more compatible with drug treatment and therapeutic interventions, decreased anxiety, strengthened physical self-perception, and increased social functionality. It has been found to have positive results as it reduces sleep and improves night sleep (Lök and Lök 2016). Nurses working in psychiatry clinics are responsible for determining the level of physical activity of psychiatric patients, taking preventive measures against physical illnesses, early diagnosis and intervention programs such as exercise and diet and developing healthy life behavior (Naidoo et al., 2019). For this reason, this study was conducted to determine the physical activity levels of individuals with mental illness living in a region.

Material and Method

This research is descriptive cross-sectional. The population of the study consisted of 46 individuals with mental illness registered in a family health center and all individuals who agreed to participate in the study without sampling selection method were included in the sample. Sociodemographic information form and International Physical Activity Questionnaire were used to collect data.

Personal Information Form

The Personal Information Form included questions such as age, gender, educational status, place of residence, perceived health status and perceived family income status. In terms of disease characteristics, the diagnosis and the number of years of disease have been questioned.

International Physical Activity Survey

In this study, short form of International Physical Activity Questionnaire was used to determine the physical activity levels of 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 Öztürk. Evaluation is based on the fact that each activity is performed at least 10 minutes at a time. A score of "MET-minutes / week" is obtained by multiplying the minutes, days and BAT (multiples of rest oxygen consumption). Physical activity levels were physically inactive (<600 MET-min / week), low physical activity (600 - 3000 MET-min /

week) and adequate physical activity (health-beneficial) (> 3000 MET-min / week). In the calculation of energy consumption for physical activities, the weekly duration (minutes) of each activity and the BAT energy values generated for the International Physical Activity Survey were multiplied. Thus, energy consumption for each individual in terms of severe, moderate, walking, sitting and total physical activities was obtained in MET-min / Week unit (Öztürk 2005).

Data collection

The data of this research was collected from individuals by face to face interview method.

Ethical and Legal Aspects of Research

It was started after ethical approval and institutional permission were obtained. Verbal consent was obtained from the individuals before starting the research. The purpose of the study, the duration and the duration of the research will be explained briefly in a language that they will understand the On Informed Consent "principle, individuals can withdraw from the research at any time by specifying the "Autonomy" principle, individual information is shared with the researcher after the principle of "privacy and confidentiality protection korun principle was fulfilled. Before giving the forms to be used in the research, necessary explanations were made orally and care was taken to create a quiet environment where the stimulus was low during the application.

Statistical analysis

After the data were collected, the SPSS 21 program was selected by the researchers for each item of each item and the total scores of the individuals were calculated. In the evaluation of demographic data, chi-square test was used to evaluate the relationship between number and percentage distributions and socio-demographic data and mean scores of the International Physical Activity Questionnaire.

Results

When the sociodemographic characteristics of the participants were examined, the mean age was 33.02 ± 9.41 . It was found that 47.8% perceived income status as bad. It was found that 50% of individuals had schizophrenia, 32.55% had bipolar and 17.45% had anxiety disorder, and 39.1% had a diagnosis of 1-5 years.

When the physical activity levels of the individuals were evaluated, 58.7% were inactive (<600 MET-min / week) (Table 1).

Physical Activity Levels	Number	%
Inactive (<600 MET- mn/week)	27	58,7
Minimal Active (Low) (>600 – 3000 MET-min/week)	19	41,3
Total	46	100,0

Table 1. Physical Activity Levels of Participants

When the sociodemographic characteristics and physical activity levels of the participants were evaluated, it was seen that males performed more physical activity than females and the difference was statistically significant ($p < 0.05$). It was found that those with high school and higher education were more active in terms of physical activity than primary school graduates, and the difference was found to be statistically significant ($p < 0.05$). It was seen that those who spend the majority of their lives in the metropolitan area, those who perceive their health well and those who perceive their income better are more active in terms of physical activity, and the difference was found to be statistically significant ($p < 0.05$). When the disease characteristics of the participants were examined, it was seen that individuals with schizophrenia had more

physical activity than individuals with anxiety and bipolar diagnosis and the difference was statistically significant ($p < 0.05$). When the diagnosis duration and physical levels of the participants were evaluated, it was found that the patients who were between 6-10 years of age were better in terms of physical activity than those who were newly diagnosed and whose diagnosis time was between 1-5 years and the difference was statistically significant ($p < 0.05$).

Discussion

When the physical activity levels of the individuals were evaluated in our study, it was seen that most of them were physically inactive. Biddle reported that individuals with mental illness were physically passive

(Biddle 2016). When they evaluated the relationship between physical activity and mental illness, they concluded that as physical activity level decreased, individuals felt more mentally worse (Cohen-Cline et al., 2015). The present study finding was reported by Biddle (2016) and Cohen-Cline et al. (2015) showed similarity with this finding.

In our study, it was observed that women did less physical activity than men. It has been observed that those who have high school and higher education are more active in terms of physical activity than primary school graduates. It has been observed that those who spend most of their lives in metropolitan cities, those who perceive their health better and those who perceive their income situation better are more active in terms of physical activity. In our study, it was also found that individuals with a diagnosis of schizophrenia do more physical activity than individuals with a diagnosis of anxiety and bipolar. Clough et al. reported that individuals with mental illness were included in the physical activity program and that individuals felt better in terms of mental health after the application (Clough et al., 2016). Biddle et al. (2019) evaluated physical activity levels of individuals with chronic mental illness and reported that physical activity levels of patients with bipolar disorder were better than other mental illnesses (Biddle et al. 2019). Our present study findings differed in this respect from this research finding. Snedden et al. (2019) examined the effect of physical activity level on individuals in the study reported that men are more physically active (Snedden et al., 2019). Our current study findings were similar to this finding.

Conclusion

In terms of physical activity among individuals with mental illness, women, primary school graduates, those who perceive their health as moderate, people living in the district, those who perceive their income as moderate and bad are in the risk group. In addition, having a diagnosis of bipolar and anxiety disorder and having mental illness for 1-5 years or 11 years or more are risk factors for having low physical activity.

References

1. Aguayo, L., Lin, A., & Davis, M. M. (2019). A Health Twofer: Nurturing Relationships Are Associated with Lower Odds of Obesity-related Mental Health Comorbidities in Adolescence (P04-173-19).
2. Biddle, S. (2016). Physical activity and mental health: evidence is growing. *World Psychiatry*, 15(2), 176.
3. Biddle, S. J., Ciaccioni, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. *Psychology of Sport and Exercise*, 42, 146-155.
4. Clough, P., Mackenzie, S. H., Mallabon, L., & Brymer, E. (2016). Adventurous physical activity environments: a mainstream intervention for mental health. *Sports Medicine*, 46(7), 963-968.
5. Cohen-Cline, H., Turkheimer, E., & Duncan, G. E. (2015). Access to green space, physical activity and mental health: a twin study. *J Epidemiol Community Health*, 69(6), 523-529.
6. Lök, S., & Lök, N. (2016). Kronik psikiyatri hastalarına uygulanan fiziksel egzersiz programlarının etkinliği: sistematik derleme. *Psikiyatride Güncel Yaklaşımlar*, 8(4), 354-366.
7. Lynch, T. (2019). Mental Health: Social and Emotional Dimensions. In *Physical Education and Wellbeing* (pp. 153-165). Palgrave Macmillan, Cham.
8. Maynou, L., Hernández-Pizarro, H. M., Herisson, M., & Saez, M. (2019). Physical activity and mental health: a systematic review.
9. Naidoo, P., Nyembezi, A., Thomas, E., Lachman, A., & Kagee, A. (2019). Perceived barriers and facilitators for healthy behaviours among parents of adolescents receiving mental health care in a public hospital in Cape Town, South Africa: A qualitative study. *Journal of Child & Adolescent Mental Health*, 1-12.
10. Öztürk, M., (2005) Üniversitede Eğitim-Öğretim Gören Öğrencilerde Uluslararası Fiziksel Aktivite Anketinin Geçerliliği ve Güvenirliği ve Fiziksel Aktivite Düzeylerinin Belirlenmesi", Yüksek Lisans Tezi, Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü.
11. Snedden, T. R., Scerpella, J., Kliethermes, S. A., Norman, R. S., Blyholder, L., Sanfilippo, J., Heiderscheit, B. (2019). Sport and physical activity level impacts health-related quality of life among collegiate students. *American Journal of Health Promotion*, 33(5), 675-682.
12. Takahashi, M., Lim, P. J., Tsubosaka, M., Kim, H. K., Miyashita, M., Suzuki, K., Shibata, S. (2019). Effects of increased daily physical activity on mental health and depression biomarkers in postmenopausal women. *Journal of physical therapy science*, 31(4), 408-413.
13. Verhoeven, J., Han, L., Jansen, R., Milaneschi, Y., & Penninx, B. (2019). O18. Biological Aging in Mental Health: An Integrative Study of Five Biological Age Indicators. *Biological Psychiatry*, 85(10), S112-S113.



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