

## PAPER DETAILS

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AUTHORS: Ugur ARSLAN,Sevda ASQAROVA

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### Occupational therapy intervention on mental health in the COVID-19 pandemic: telerehabilitation

#### COVID-19 pandemisinde ruh sağlığı üzerine ergoterapi müdahalesi: telerehabilitasyon

Uğur ARSLAN<sup>1</sup>, Sevda ASQAROVA<sup>2</sup>

<sup>1</sup> Siirt Training and Research Hospital, Siirt, Türkiye.

<sup>2</sup> Uskudar University, Faculty of Health Science, Istanbul, Türkiye.

#### ABSTRACT

Millions of people died from COVID-19, which affected the whole world. Although the precaution taken by governments and health institutions were some steps to protect people's lives, they have had negative consequences in some aspects, too. The lockdown and quarantine practice, which were among the measures, have caused disruptions in the health system and physical and mental breakdowns in people. In addition, it has been stated that patients with existing mental disorders were more affected. The use of remote access systems has become widespread in many areas for the continuity of the service received by the patients registered in the treatment and rehabilitation application. Telerehabilitation, a sub-branch of telehealth, has also become an effective service in this process. This study aims to share the significance of telerehabilitation practices performed by occupational therapists in the field of mental health in recent years and the current information in this field.

**Keywords:** Occupational Therapy, Mental Health, Telerehabilitation

#### ÖZET

Tüm dünyayı etkisi altına alan COVID-19 ile birlikte milyonlarca insan hayatını kaybetmiştir. Hükümetler ve sağlık kuruluşlarının almış olduğu tedbirler insanların hayatlarını korumak için atılmış bir adım olsa da bazı yönlerden olumsuz sonuçlar doğurmuştur. Tedbirler içerisinde bulunan sokağa çıkma yasağı ve karantina uygulaması hem sağlık sisteminde aksamalara hem de insanlar üzerinde fiziksel ve ruhsal bir çöküntüye yol açmıştır. Bunların yanında mevcut ruhsal bozukluğu bulunan hastaların daha fazla etkilendiği belirtilmiştir. Tedavi ve rehabilitasyon uygulamasına kayıtlı hastaların aldıkları hizmetin devamlılığı için bir çok alanda uzaktan erişim sistemlerinin kullanımı yaygınlaşmıştır. Teles sağlığın alt dalı olan telerehabilitasyon da bu süreç içerisinde etkili bir hizmet haline gelmiştir. Bu çalışmada, ruh sağlığı alanı ile ilgili ergoterapistlerin yapmış olduğu telerehabilitasyon uygulamalarının son yıllardaki önemi ve alandaki mevcut bilgiler paylaşılacaktır.

**Anahtar Kelimeler:** Ergoterapi, Ruh Sağlığı, Telerehabilitasyon

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Sorumlu Yazar / Corresponding Author: Uğur ARSLAN, Siirt Training and Research Hospital, Siirt, Türkiye.

e-mail: erg.ugur.arslan@gmail.co

## INTRODUCTION

The coronavirus (COVID-19) has become a global public issue and has spread to more than 220 countries around the world. The World Health Organization (WHO) declared the COVID-19 outbreak a pandemic as a result of a decision on March 11, 2020.

Looking at the data of May 29, 2022, a total of 525,467,084 confirmed cases and 6,285,171 deaths were recorded in the world. In order to prevent the spread of the virus in the community, governments and health institutions had to take measures such as social isolation, quarantine curfew, and interpersonal distance rules in particular countries (WHO, 2022). In addition to these, appointment systems in many health institutions were closed or limited for a while. (Leochico, 2020). With the increasing restrictions and the risk of virus transmission during the pandemic, rehabilitation practitioners stopped face-to-face practices and began to seek for safer methods for health. For these reasons, telerehabilitation, which is a sub-level of telehealth, has been tried to be implemented (Ganesan et al., 2021). Telehealth is defined as the applications in which evaluation, counseling and therapeutic interventions are provided with the help of current communication and information technologies. Studies have shown that telehealth interventions to be offered as occupational therapy services are supported (AOTA, 2013). WHO confirms the effectiveness of telerehabilitation services as an effective method.

### Effect of COVID-19 on Mental Health:

Considering the restrictions experienced during the COVID-19 process, it has been observed that individuals with mental disorders are highly affected, as well as the physical problems experienced (WHO, 2020). Mental and physical deteriorations have revealed the participation of people in daily life activities, changes in behavioral patterns, disruption of routine and occupational balance, and restriction of the environment that constitutes the individual (Muñoz-Valverde, 2020). A fear of death scenario faced even by people who do not have a mental health problem affected them psychologically (Marmarosh et al., 2020). When combined with pre-existing diseases, mental disorders revealed even more. In order to minimize the effects of these situations, healthcare professionals used practices that would support the community on mental health. Strategies developed in line with the demands of the society were provided by the use of telephone and social networks when the lockdown was implemented (IASC, 2020).

### What is Telerehabilitation:

The intervention that is needed because of the restriction of a situation that a person is likely to

encounter or experience in his/her daily life is called "Rehabilitation". Occupational therapy includes branches such as physical therapy, speech and language therapy, and psychology. Many people need rehabilitation both physically and mentally at certain times of their lives. Telerehabilitation, on the other hand, is a sub-branch of telehealth and enables remote rehabilitation activities to be carried out together with communication technologies (Peretti, 2017). While taking into consideration the tools and methods that can be used for telerehabilitation, it is a fact that there is a quite variety. It includes many options such as video recording, video calling platforms and applications. More advanced and different devices can be used to increase the quality of the service to be provided, but all devices have certain advantages and disadvantages (Wosik et al., 2020).

### Telerehabilitation Applications:

Telerehabilitation applications provide a wide range of services and use it for both physical and mental disorders. When we consider the physical applications; it serves many areas such as musculoskeletal system diseases, spinal cord injuries, traumatic brain injury, wheelchair use, ambulation techniques. On mental health; It is studied in areas such as depression, anxiety, post-traumatic stress disorder, and substance use (Varker, 2019).

### Telerehabilitation as an Occupational Therapy Application in Mental Health:

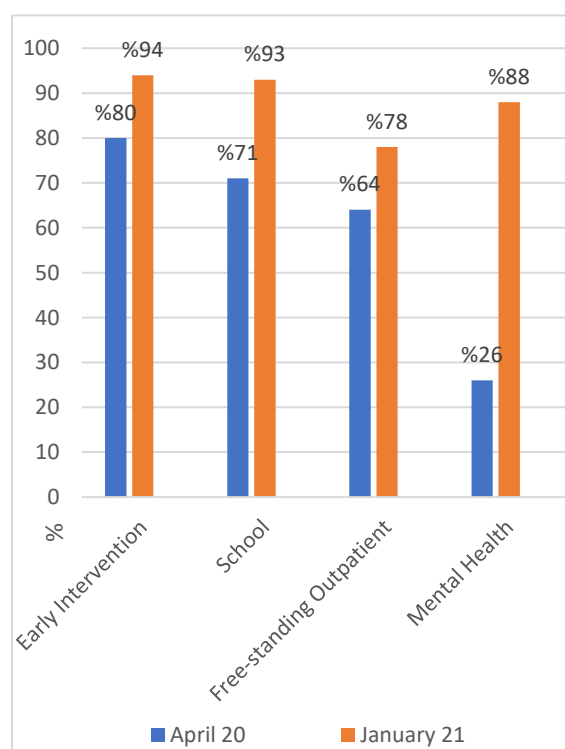
In studies conducted during the COVID-19 process, it is recommended that occupational therapy be used effectively in individuals with mental disorders. It has been proven that occupational therapy services prevent hospitalizations by increasing the social, cognitive and functionality of the individual in daily life (Mann, 2020). Occupational therapy meetings, which were planned to be held face-to-face due to the problems experienced around the world, were disrupted, thus paving the way for alternative methods for interventions in the field of mental health (Kozloff et al., 2020). During the implementation of the interventions, the continuity of the conversations was ensured with applications such as telephone, video conference, instant messaging applications, virtual reality, remote-controlled robots, which are seen as the closest method to the health of both the patients and the occupational therapists. Although the name telerehabilitation has been talked about a lot recently, it has been stated in previous studies that telerehabilitation does not adversely affect the therapeutic effect among people. In this method, positive feedback was received from the patients and no problem was observed in terms of applicability

(Cowan et al., 2019). Considering the practices of occupational therapists in this area, it makes telerehabilitation effective by preventing the current disease symptoms, creating an intervention program, making the intervention and trying to prevent the risk of hospitalization by including the relationship between the family and the environment (WFOT, 2014).

Occupational therapy interventions have been applied for many years on individuals diagnosed with mental disorders such as schizophrenia, bipolar disorder, major depressive disorder, and obsessive-compulsive disorder. These interventions include prevention, diagnosis, treatment, improvement of cognitive functions, daily living activities, improving functioning and social relationships, gaining individual roles and routines, stress management, medication tracking as well as adaptation to the disease.

As can be seen from the table below, occupational therapists have adopted telerehabilitation as a service model. When compared to April 2020 and January 2021, the rates of telerehabilitation services have increased considerably.

**Tablo 1.** Telerehabilitation usage rates by occupational therapists.



<https://www.aota.org/career/state-of-the-profession/occupational-therapy-essential-through-the-pandemic>.

## METHODS

The information in the article was searched through Pubmed and Google Scholar for the developments in the field of telerehabilitation in the last 15 years, and then unsuitable articles and theses were eliminated. Keywords were chosen from the words that make it easier to reach the data during the literature review and that will best summarize the title.

## RESULTS

Due to a worldwide epidemic, telerehabilitation which has become a popular health service both in our country and in the world, is used as a highly functional method. Individuals have many advantages in terms of accessibility regardless of location. It emerges as a system that eliminates the road difficulties of living in the city center by living in a rural area, ensures mutual safety when there is any health threat, contributes to people in terms of time, and creates a special area for patients who are afraid of stigma. Although the possibilities for individuals living in a rural area are limited, the adequacy of these services is also a matter of debate. In this way, individuals will have the opportunity to receive the same service as everyone else and have equal opportunities whenever they want. Considering the studies, it is a strong method that the satisfaction rates of the remote services received by the patients are high and that they will prevent the disruption of health services in case of any global threat. Although the efficiency of the state-of-the-art devices is seen as high among the methods used, the effectiveness of the studies made with a simple mobile phone has also been determined. Although occupational therapists use telerehabilitation applications in many areas, they have been applying online therapies for a long time.

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## Author Contributions:

**Idea/Concept:** Uğur ARSLAN, Sevda ASQAROVA; **Design:** Uğur ARSLAN, Sevda ASQAROVA; **Supervision/Consulting:** Uğur ARSLAN, Sevda ASQAROVA; **Data Collection and/or Processing:** Uğur ARSLAN; **Analysis and/or Interpretation:** Sevda ASQAROVA; **Literature Review:** Uğur ARSLAN, Sevda ASQAROVA; **Writing of the Article:** Uğur ARSLAN; **Critical Review:** Sevda ASQAROVA

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