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Continuing care in drug addiction: What can telemental health offer?

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ABSTRACT

In the field of addiction treatment, continuing attention for an extended period of time is considered essential for recovery. Traditionally, continuing care in addiction has consisted of individual monitoring sessions, group therapy sessions, and assistance to self-help groups. Recently, the development of health care based on new technologies has allowed an improvement on health outcomes. In this context, the different strategies framed in the so-called telemental health which offer the opportunity to complement treatment programs are discussed.

KEY WORDS: Continuing care, drug addiction, telemedicine, telemental health

INTRODUCTION

There is a certain agreement in considering drug addiction as a cyclical and chronic condition, in which treatment episodes alternate with episodes of relapse, so treatments are more and more contextualized within a management framework similar to that of other chronic diseases. Incorporating some sort of continued assistance service of lower intensity, integrated in a context of outpatient treatment after the stage of more intensive primary treatment (outpatient, residential, or hospital), seems to be a necessary requirement if we aspire to a successful outcome [1]. In the field of alcohol and other drug (AODs) problems, continuous attention for an extended period of time, up to 12 months, appears to be essential if there is a reasonable recovery expectation. There is evidence about the effectiveness of continuing care in the treatment of AOD problems, although it seems that not all patients benefit from it in the same way [2,3].

CONTINUING CARE AND TELEMEMENTAL HEALTH

For several years now, various procedures included in the so-called telemedicine and telemental health (TMH) which may be useful as a strategy for continuing care are being studied. e-health is the use of information and communication technologies (ICTs) for health that can improve prevention, diagnosis, treatment, monitoring, and management. It can benefit the entire community by improving access to care and quality of care and by making the health sector more efficient. Examples include treating patients, conducting research, educating the health workforce, tracking diseases, and monitoring public health [4].

Telemedicine has been defined as a branch of e-health. Telemedicine is the provision of health-care services through the use of ICT, in situations where the health professional and the patient (or two health professionals) are not in the same location. It involves secure transmission of medical data and information through text, sound, images, or other forms needed for the prevention, diagnosis, treatment and follow-up of patients [5], and overcoming problems such as the unequal distribution, lack of infrastructure, and human resources [6].

TMH is a branch of telemedicine oriented toward mental health. TMH, like telemedicine, is an intentionally broad term referring to the provision of mental health care from a distance. Patients can be located in hospitals, clinics, schools, nursing facilities, prisons, and homes. TMH providers and staff include psychiatrists, nurse practitioners, physician assistants, social workers, psychologists, counselors, primary care providers, and nurses [7]. There is substantial empirical evidence for supporting the use of telemedicine interventions in patients with mental disorders [8].

Special Populations

Significant differences in socioeconomic status, lifestyle behaviors, and access-to-care have resulted in health disparities between rural and urban communities. Rural populations have unique characteristics that affect the conditions of TMH

service provision. The potential of TMH in rural communities is important particularly with regard to the provision of services [9].

Many elderly individuals have multiple health problems in addition to mental health problems; the medical problems may complicate or even precipitate mental health problems so that the elderly population may benefit significantly from improved access to specialty mental health care that can be provided through video conferencing [10].

Recommendations for child and adolescent TMH build on information and recommendations for adults. These programs have been successfully implemented in multiple diverse settings such as pediatric clinics, community mental health centers, rural schools, urban daycare, corrections, and private practice [7]. In addition, innovative approaches are developed to youth intervention for marijuana use, which combines real-time assessment of social media activity and geographic location [11].

TMH treatment has been provided in both jails and prisons [12]. Several studies have proven the acceptability and limited clinical evidence of effectiveness with the incarcerated population. Because detained persons are a vulnerable population, teleproviders should be confident that incarcerated patients are referred for video conferencing evaluation appropriately rather than solely to avoid costs [13].

TMH AND AOD PROBLEMS

The potential advantages of TMH include enabling a better access to care for patients who live in poorly served areas, have physical limitations that restrict their ability to obtain routine care, or those who work or have other responsibilities that prevent them from attending a regular clinic [14]. Although its use is limited, TMH has a great potential to improve the recovery of people with AOD problems, as it offers the possibility of increasing contact with patients by removing the barriers of time and distance, is affordable, private, and offers a good cost-benefit relation; besides, it makes it easier to overcome the shame and stigma that are the common concerns of mental health patients [15]. While providing little effect in reducing drug use, such interventions are likely to be highly cost-effective [16].

Various forms of telemedicine have been used in the field of mental health and AOD problems: Web-based treatment [17,18], videoconferencing [19,20], teleconferencing [21], and mobile phone-based care or mobile therapy [22,23], including smartphones [24,25]. Interventions using telemedicine aim to minimize the impact of abandoning treatment when offered together with face-to-face interventions and often represent significant treatment alternatives when used in isolation.

Mobile Phone-based Care or Mobile Therapy

Compared to other forms of TMH, the main advantage of mobile therapy is its portability and accessibility. Through telephone, patients can talk to their therapists and access other recovery supports from home or other locations, without having to travel to a clinic location. This can be particularly advantageous for individuals living in rural areas, those who work or have family responsibilities that preclude them from attending a regular clinic, and those with disabilities who have difficulty in traveling [26].

Some applications developed for smartphones (apps) in recent years allow to provide data on behaviors, thoughts, and adaptation strategies in real time and help design very specific and contextualized interventions, reinforce skills learned during the treatment, and provide immediate access to social and professional support. They can also help the user to identify risk or protective factors such as attending self-help groups [27].

Text messaging services or short message service and phone calls have also been used as an intervention that can immediately provide messages and reminders of health goals, appointments and therapy tasks [28], and effects of medication adherence [29]. Text messaging has received comparatively little research but appears promising as a means to conduct assessments and deliver automated interventions [28].

Strategies based on telephone counseling have proved to be promising in improving outcomes in patients with AOD problems [30-35]. Although as a continuous care approach this has received little study in the literature on substance abusers [36], there is some evidence regarding the improvement of adherence when used with face-to-face interventions [37,38]. Recent studies indicate that monitoring and telephone counseling appears to be an effective strategy to reduce substance use and it is cost-effective in reducing costs among drug users [39]. Some authors have reported that the greater therapeutic effects of telephone-based continuing care are partially accounted for by participation in self-help meetings and related activities during the continuing care phase of treatment [40].

Smartphones are being used to collect large amounts of sensitive information. Given that detailed information is being collected about potentially illegal behavior, several authors have identified the following ethical considerations [41]: Protecting user privacy, ensuring informed consent, and the need to demonstrate the evidence of safety and efficacy of the technologies.

A large amount of accumulated evidence indicates that TMH assessments are reliable and often compromised by methodological problems. The need for more rigorous scientific investigation into the nuances of telemental practice has been noted [42]. Although further advances in technology and research are expected to solve many of these problems, the way forward would be to promote TMH as an adjunct to conventional care and to develop hybrid models, which incorporate both traditional and telemental forms of mental health care [43].

DISCUSSION

Relapse rates for patients with AOD problems are high in the 1st month after discharge in inpatient or residential treatment, and patients' adherence to aftercare plans is often low. Clinicians and researchers have generated various approaches to improve the long-term management of patients with AOD problems,

responding to the chronic nature of such management problems. Some interventions encompassed in what we call TMH can help improve the continuity of care and provide effective support for the long-term recovery.

The development of phone-based interventions is especially outstanding. However, a lot of work remains to be done to overcome the limitations in implementing procedures based on new technologies. Despite considerable interest in TMH and the growing impulse gained in the past 10 years, there are significant barriers to its implementation: Associated costs, lack of familiarity with the technology, confidentiality regulations, concerns about the "therapeutic alliance," privacy fears, and dropout of patients [44,45].

Some studies have found that certain factors favor non-adherence to treatment for patients with AOD problems using telemedicine. Adherence is better when more than one intervention technique is used and when the treatment time is shorter. Treatments that use telemedicine technology are still unknown to many patients and professionals, which leads us to believe that this decreases confidence in the possibility of a positive result and leads to non-adherence [44].

The provision of health-related services through the information technologies and telecommunications is a practical and useful vehicle to improve health outcomes. The development of the effectiveness of such interventions can supplement traditional treatment programs as part of a continued care, especially in contexts where treatment resources are limited. Nevertheless, rigorous studies are needed to ensure that these interventions provide a real benefit and help determine how they could complement other forms of assistance.

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