بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / سلوي محمود عقل

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

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Assessment of Telepsychiatry services provided by the Institute of Psychiatry during COVID-19 Pandemic

Thesis

Submitted in Partial Fulfillment of the M.Sc. Degree in Neuropsychiatry

By

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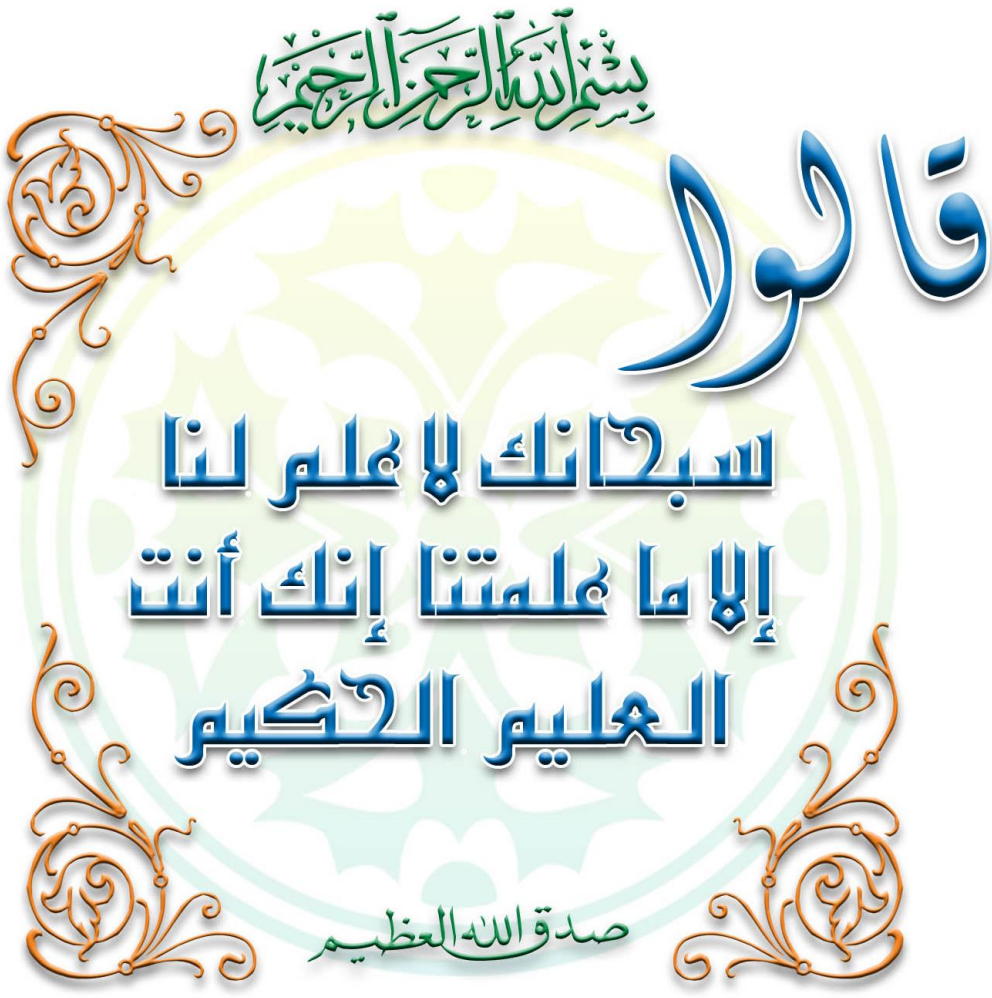

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Nouran Mohamed Sabry Abdel Aziz

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List of Abbreviations

Abb.	Full term
AI	*Artificial intelligence*
AIDS	*Acquired Immune Deficiency Syndrome*
AVH	*Ain Shams Virtual Hospital*
CDC	*Center for Disease Control*
DALYs	*Disability Adjusted Life Years*
ECT	*Electroconvulsive Therapy*
EMR	*Electronic medical record)*
EMR	*Eastern Mediterranean Region*
ER	*Emergency Room*
HC	*Health Care*
HDI	*Human development index*
HCW	*Health care workers*
HIV	*Human Immune Deficiency Virus*
IATV	*Interactive television*
IT	*Information Technology*
MGH	*Massachusetts General Hospital*
MHPSS	*Mental health and psychosocial support*
MNS	*Mental, neurological, and substance use*
MSc	*Masters Degree*
NGO	*Non-Governmental Organization*
OPC	*Outpatient Clinic*
PCMH	*Patient-Centered Medical Home*
PC	*Personal Computer*
PhD	*Doctor of Philosophy*
PCP	*Primary Care Practitioner*
PTSD	*Post Traumatic Stress Disorder*
PHEIC	*Public Health Emergency of International Concern*

List of Abbreviations (Cont…)

Abb.	Full term
RC	*Remote consultation*
SARS	*Severe Acute Respiratory Syndrome*
TAM	*Technology Acceptance Model*
OTN	*The Ontario Telemedicine Network*
WEF	*The World Economic Forum*
TM	*Telemedicine*
TTT	*Treatment*
UHI	*Universal health system*
USA	*United states of America*
WHO	*World Health Organization*
YLDs	*Years lived with disability*
YLLs	*Years of life lost*

INTRODUCTION

On March 11, 2020, the World Health Organization (WHO) declared the coronavirus disease 2019 (COVID-19) outbreak as a pandemic, with over 720,000 cases reported in more than 203 countries as of 31 March. This announcement followed the declaration of a Public Health Emergency of International Concern (PHEIC) on January 30. The confinement of population and the outbreak impact on health care systems is disrupting routine care for non-COVID-19 patients. In this context, telemedicine, particularly video consultations, has been promoted and scaled up to reduce the risk of transmission ***(Ohannessian et al., 2020).***

Telemedicine is broadly defined as the use of information technology (IT) to deliver medical services over distances ***(Tanriverdi et al., 1999; Perez-Garcia et al., 2015).***

As providing adequate and equal access to healthcare services is a priority of the WHO ***(Humphreys et al., 2008)***. One proposed solution to problems of quality, accessibility, and costs of medical care is the use of telemedicine ***(Tanriverdi et al., 1999; Perez-Garcia et al., 2015).***

Meanwhile it is important to acknowledge that telemedicine in general and telepsychiatry in particular, also called tele-mental health ***(Perez-Garcia et al., 2015)***, are not new tools in medicine that the use of videoconferencing in psychiatry

began during the 1950s, where in 1959, the Nebraska Psychiatric Institute was using early video conferencing to provide group therapy, long-term therapy, consultation-liaison psychiatry, and medical student training at the Nebraska state hospital in Norfolk. In 1969, Massachusetts General Hospital (MGH) provided psychiatric consultations of adults and children at a Logan International Airport health clinic. During the 1970s-80s it became increasingly common, expanding to most diagnostic and therapeutic interactions. By the 1990s, it spread further across the world, particularly in Australia, and research began on its ability to facilitate access to care, overcome geographical obstacles and how it compared to in-person care. By the 2000s, the field began to see it as effective, but slightly different, than in-person care, and research in outcome studies provided a platform for practice guidelines ***(Hilty et al., 2013).***

Recent technological advances have led to the use of telemedicine as a way to increase access to health care to those who have limited resources. Through the use of videoconferencing equipment. The increasing accessibility of broadband internet have allowed this technology to reach more parts of the world, while the increasing sophistication of equipment such as high-definition televisions and remote-controlled webcams has allowed this technology to feel less impersonal ***(Perez-Garcia et al., 2015).***

Telemedicine (TM) has the potential to help by permitting mildly ill patients to get the supportive care they need while minimizing their exposure to other acutely ill

patients. After all, the only infection that one can catch while using TM is a computer virus. To encourage the TM approach, nearly all health plans and large employers offer some form of coverage for TM services.

Although the use of TM has increased over the last 2 to 3 years, rates of TM adoption among allergists are still low ***(Portnoy et al., 2020).***

In response to the current COVID-19 situation, the Centers for Medicare & Medicaid Services and commercial health plans largely have waived co-pays for TM visits as a means to encourage utilization in this time of need, and allergists need to pay attention to this ***(Portnoy et al., 2020).***

A recent survey demonstrated that patients are willing to use telehealth, but some barriers still exist, like for example how many people revert to what they are used to doing and the way in which they previously interacted with the health care system. Patients would prefer that they see their own provider through TM versus someone with whom they do not have a previously established relationship. Patients may be unaware that they have TM as an option and do not know how to make use of it ***(Portnoy et al., 2020).***

The key use of telemedicine in these illustrations is to have a thorough understanding of the current healthcare situation in the country and also provide healthcare from a distance, without

diminishing the quality of care, to enable more successful prevention without face-to-face interaction and the inherent dangers of traditional service provision ***(Leite et al., 2020).***

Indeed, it is shortsighted to consider the utility of telemedicine as being limited to handling the current crisis whose utility will dissipate when the pandemic crisis ends ***(Bashshur et al., 2020).***

Most studies of telepsychiatry report high levels of satisfaction among patients and their relatives as well as among clinicians ***(Bishop et al., 2002).***

So, developing telemedicine in general and telepsychiatry in particular along with patients and clinicians' satisfaction must be one of our priorities.

Some studies revealed that, patients speak freely when using telepsychiatry, are willing to use it again, and positively rate their experiences with providers. Patients also prefer telepsychiatry over waiting a longer period of time to see a specialist or traveling a significant distance for an appointment. Moreover, telepsychiatry can reduce absenteeism (work, school), enhance sense of patient choice and control, and spare patients from long, expensive, and life-disrupting journeys ***(Chung-Do et al., 2020).***

Patient satisfaction is a growing concern in all aspects of healthcare because the patients are the only source of

information that can report how they were treated and if the treatment received met the patients' expectations of care. If the patients are not happy with their healthcare services being provided remotely, the service becomes redundant and expensive. With the increase in prevalence of telehealth, it is important to maintain the key quality indicator of patient satisfaction regardless of modality of delivery. The voice of the customer needs to be continuously heard ***(Kruse et al., 2017).***

Providers' opinions about telemedicine is also important, the competency of the practitioner on the other end of the system and the completeness of the patient records both comprise important considerations for providers. Trust among healthcare workers influences and directly affects their attitudes toward the telemedicine set-up. Practitioners also appreciate the educational possibilities of teleconsultations, as well as the method's ability to reduce unnecessary specialist referrals. If specialists can get initial views of the patients, they can make early decisions about the need for full office visits ***(Whitten et al., 2005).***

So, conducting research to assess the satisfaction of patients and health care providers was mandatory to keep pace with the ongoing development across the world.