
Online Psychological Care and Psychotherapy: Reality, Evidence, and Indicators

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ABSTRACT

The provision of psychological care in its various forms using the Internet has been associated with the emergence of the Internet and the developments seen by various digital media. Multiple justifications exist for using media, including limited resources and difficulty accessing mental health services. The use of remote psychological care has significantly increased during the Covid-19 crisis. The references abound with various discussions and studies on the effectiveness and effects of this type of therapy, the differences from face-to-face therapy, and the qualification requirements of providers. Today, many studies and meta-analyses have examined the effectiveness of internet-based therapy, most likely cognitive-behavioral therapy. The matter still needs more research due to the variety and interrelatedness of the issues raised in this context, especially with reference to the effectiveness of different psychological trends, whether within the same direction or in different directions. It can be concluded that online psychological services are effective, and interventions that combine internet-based elements with organized face-to-face communication have equivalent effects to traditional therapy. Remote psychotherapeutic services should not replace traditional therapy. The provision of psychological services in most Arab countries in its various forms suffers from multiple problems, such as the lack of professional organization and randomness, the

absence of philosophy oriented to the humanities and psychology. This review aims to supply a picture of several of the issues raised in the field of psychological services using the Internet and some supporting and opposing points of view without claiming inclusiveness in this presentation.

Keywords: Psychological Care, Psychotherapy, Online Psychotherapy, Face-to-Face Therapy, Cognitive Therapy, Evidence-Based Psychotherapies.

Introduction

The prevalence of mental disorders is increasing, the most common of which are anxiety, depression, and obsessive-compulsive disorder, which are associated with great suffering for those affected and their relatives. Due to their widespread nature, their social and economic effects are remarkably high (Silvestri et al., 2023; Wolffe, Robinson, Clinton, Turrell, & Stec, 2023).

It is difficult to quantify the scale of suffering and the huge severe social and economic effects on mental health, especially in countries suffering from serious political and social problems, such as Syria, Lebanon, Libya and Sudan in particular, due to the absence or lack of policies related to mental health in most Arab countries and the absence of guidelines related to the preparation and qualification of psychologists in the fields of psychotherapy, negative social and individual trends towards mental disorders, fears of stigma, lack of resources, difficulty accessing services, customs and traditions that restrict freedom of speech in front of a stranger about personal matters directly, (Cuijpers, van Straten, & Andersson, 2007). Thus, individual, social, and economic suffering becomes double (Merhej, 2019), which can eventually be catastrophic.

On the other hand, online psychological services in Arab countries are still unregulated and scientifically undocumented-like face-to-face psychological care -, they are randomized, practiced often by non-specialists, and there are almost no

evidence-based studies on effectiveness. Only a few of the studies available in Arabic do not meet the criteria for attribution by evidence.

Thus, the state of mental health care for those suffering from some form of mental disorder is generally unsatisfactory in the Arab countries. This is due to the absence of guidelines for rehabilitation, training, and treatment, the lack of mental health projects, and the absence of laws regulating the profession in the majority of Arab countries, with the exception of Egypt and Jordan, in addition to the lack of qualified and trained personnel in providing psychological care in general and psychotherapy in particular. Many patients who need treatment do not receive proper treatment, especially in the categories of young people, the elderly, patients, and people with poor socio-economic conditions marginalized in society. This is due to the lack of attention to the indicated mental health care policy and a set of cultural factors that hinder it. Regarding developing countries, World Health Organization statistics indicate that the treatment gap for mental disorders ranges between 76% and 85%, according to Singh (2023). Denial of the disorder and not declaring it due to fear of social isolation, a lack of culture related to mental health, and linking the psychological disorder with religious belief is just one example (Abi Doumit et al., 2019). In some Arab cultures, a negative view of psychology prevails, and it is viewed with suspicion by religious people, considering it a "Western science" and their belief that religion has answers to everything, and considering disorder as an indicator of a lack of the faith or caused by the "Jinn". This negative outlook worsens psychological problems and makes people turn to sorcerers or healers who claim to be treated with the Koran in a desperate attempt to get rid of their suffering.

Guidelines for the practice of telepsychology first appeared in 2013 by the American Psychological Association (APA), as did the British Association for Counseling and Psychotherapy (BACP). Both recommend a set of behaviors and good practices aimed at facilitating the continuous, systematic profession development and helping

to ensure a high level of psychologists professional practice (Guidelines for the Practice of Telepsychology, 2013; BACP, 2023).

However, the history of counseling in the field of internet-based psychological care in its various forms has long preceded this. For example, there is a presentation of Situmorang's teleconsultation history (Situmorang, 2020).

Terminology-Definitions

When reviewing the internet-supported therapeutic interventions area, a total lack of clarity and inconsistency is observed. This is shown by the variety of terms and concepts used for internet-based psychological interventions (Barak, Klein, & Proudfoot, 2009; Andersson & Titov, 2014) and the difficulty of unifying them, such as online psychotherapy, on-line therapy, distance therapy, e-mail and chat therapy, e-therapy and e-counseling, computerized cognitive behavioral therapy (cCBT), and electronic cognitive behavioral therapy (eCBT) (APA Dictionary of Psychology, n.d.; Ostrowski & Collins, 2016) and electronic health. Here, we will use these concepts contextually in the same sense to refer to psychological services provided through electronic media.

Digital media have become an essential medium in the overall exchange of information (Zarski, Baumeister, & Ebert, 2023). In the mental health care field and psychotherapy services, a significant transformation has occurred thanks to the Internet (Vlaescu, Alasjö, Miloff, Carlbring, & Andersson, 2016). On the other hand, this medium may not be an easy and guaranteed way, both for potential beneficiaries who suffer from mental health problems and, at the same time, have almost no opportunity to benefit from psychological services because there are no such services at all (Bucci, Schwannauer, & Berry, 2019), and for the qualified and professional specialist. Opportunities for people with mental health problems around the world to get psychological help may be limited if any at all.

The Internet today holds a large amount of incorrect, random, and misleading information about mental disorders and their causes, non-evidence-based treatment tips, especially in the context of Arab culture, and yet people tend to adopt it quickly. This causes problems in communication with therapists. Several general public, including clients, suffer from so-called "mental health literacy illiteracy" (Jorm, 2000). The Arabic-speaking environment is no exception to this for the reasons we mentioned above. There are also many non-specialists who supply inaccurate information, such as human development groups, who promote scientifically unproven theories that can cause confusion about the service and make the work of a professional specialist more difficult.

Studies show that technology impacts the management of an individual's health and traditional therapist-patient relationships (Richards, Simpson, Bastiampillai, Pietrabissa, & Castelnuovo 2018). Over the past years, a wealth of health information has become available online, and most people use the Internet to find health information of some kind and come for treatment with several confusing self-diagnoses, accompanied by increased anxiety about their health. Some of them may suffer from "cyberchondria," which is like "hypochondria", which is just a pun on the term hypochondria! - A phenomenon that arises when an internet search for information on a health topic—medical or psychological—leads to severe anxiety about health. This phenomenon is believed to have increased after the Covid-19 pandemic's spread (Jokic-Begic, Lauri Korajlija, & Mikac, 2020).

There is a little bit of agreement on a specific classification of internet-based interventions in the relevant references. However, the following forms of intervention can be mentioned:

- Psychological self-care: that is, the use of the Internet as an information medium so that therapeutic techniques are offered to the user by the program "in an automated way" without personal support.

- The use of the Internet as a means of communication between the therapist and the client in the form of "remote psychotherapy".

- The so-called mixed therapy, in which it is possible with different degrees of mixing, from "minimally targeted therapy" to "intensively supported therapy" or even "mixed therapy", with traditional personalized (face-to-face) therapy elements.

The latter may provide a better opportunity to utilise the strengths between online treatment applications and face-to-face clinical supervision, reduce dropout rates, increase transparency, and enhance patient self-management (Fiske, Henningsen, & Buyx, 2019; Sander et al., 2021).

- Forms of mixed therapy: these combine internet-related and offline elements such as telephone calls, written paper materials, CDs holding educational and training materials, and awareness films, which provide information aimed at erasing "mental health literacy," such as:

- "Identify specific disorders or different types of psychological distress."
- Knowledge and beliefs about risk factors and their causes
- Knowledge and beliefs about self-help interventions
- Knowledge and beliefs about the professional help available
- Situations that help recognition and an appropriate request for help
- The know-how to search for mental health information" (Jorm, 2000, p. 396).

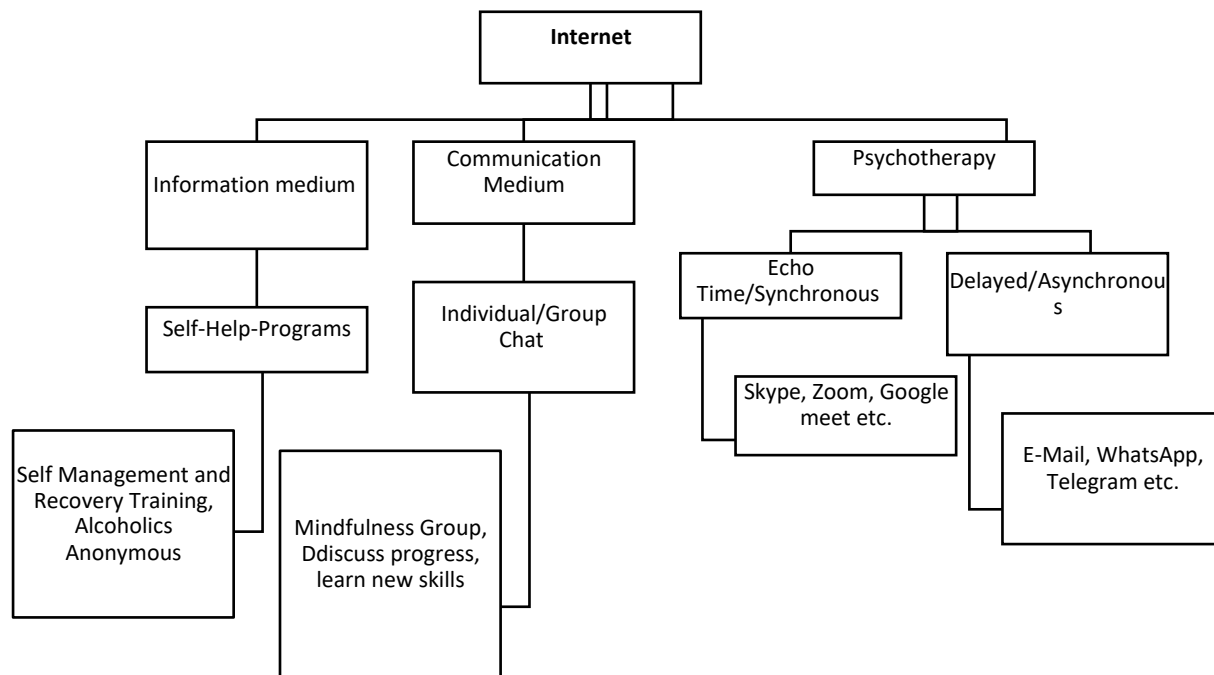


Figure 1. Some forms of Internet use in psychiatric care

Barak et al. (2009) identified the four classifications according to their following basic curricula: (1) web-based interventions; (2) online counseling and therapy; (3) online-operated therapeutic (software) programs; and (4) other online activities.

Effectiveness

Most internet-based interventions are based on cognitive behavioral therapy (CBT) approach, as studies in this area indicate the effectiveness of CBT for depression (Cuijpers et al., 2007; Vlaescu, Alasjö, Miloff, Carlbring, & Andersson, 2016; Andrews et al., 2018; Impala, Dobson, & Kazantzis, 2021; Gasslander et al., 2022). A systematic review and meta-analysis of randomized controlled trials on the effectiveness of online dynamic therapy showed that psychodynamic therapy was

effective and could be a promising treatment for depression (Lindegaard, Berg, & Andersson, 2020).

Many meta-studies and systematic reviews have been conducted on the therapeutic effectiveness of various mental and psychosomatic disorders recognizing the effectiveness of online therapy, the persistence of the effects of treatment, and the absence of significant differences between teletherapy and face-to-face therapy (Barak, Hen, Boniel-Nissim, & Shapira, 2008; Andersson & Cuijpers, 2009; Dölemeyer, Tietjen, Kersting, & Wagner, 2013; Andersson, Cuijpers, Carlbring, Riper, & Hedman, 2014; Andersson & Titov, 2014; de Bitencourt Machado et al., 2016).

Other indications with differently corroborating data include, for example, sleep disorders, pain, migraines, eating disorders, fatigue, addiction disorders (alcohol and drug abuse, smoking, gambling), anxiety, PTSD, depression, psychotherapy for tinnitus, irritable bowel syndrome, and loneliness (Hesser et al., 2012; Thorén, Öberg, Wänström, Andersson, & Lunner, 2014; Tulbure et al., 2015; Chebli, Blaszczyński, & Gainsbury, 2016; Andrews et al., 2018; Peter, Reindl, Zauter, Hillemaier, & Richter, 2019; Käll et al., 2021; Gasslander et al., 2022).

In addition, a study showed the effectiveness of treatment for non-epileptic seizures using brief psychotherapy (Bhattacharjee & Chakraborty, 2022).

In the study of Donker et al. (2013), researchers compared distance cognitive-behavioral therapy and Interpersonal Psychotherapy (IP). They found IP as an effective treatment for depression, with superiority to cognitive-behavioral therapy. Comparable results were obtained by Käll et al. (2021) in the treatment of loneliness via the Internet using (eCBT) and (eIP).

In direct comparisons of the internet-based psychodynamic approach with cognitive behavioral therapy for adolescents with depression in Sweden, the study of Mechler

et al. (2022) showed the effectiveness of both forms in the treatment of primary depression, likewise affecting depressive symptoms, anxiety, emotion regulation, and self-compassion. Salem, Bogat, & Reid (1997) looked at the benefits of the online Mutual Assistance Group for people suffering from depression and the results were promising.

In a review by Koelen et al. (2022) of thirty-one randomized controlled studies totaling 6,215 individuals, they directly compared different types and degrees of online guidance (that is, the use of texts, images, and videos to conferring the recipient with therapeutic materials consisting of psychoeducation, in-session exercises, and homework). The results showed that human guidance was slightly more effective versus electronical guidance. The effects of e-therapy compared to face-to-face therapy using cognitive behavioral therapy were similar.

The Leakage from Treatment

The problem of dropping out of treatment is one of the most common problems in psychotherapy. There is generally no agreement on the definition of leakage from treatment (Hamilton, Moore, Crane, & Payne, 2010). In general, early termination or withdrawal from psychotherapy means that the client decides not to continue treatment and stops treatment—for distinct reasons—before reaching a sufficient limit of the problems that initially prompted them to seek treatment (Leichsenring, Sarrar, & Steinert, 2019). There is difficulty predicting dropout from psychotherapy (Vöhringer et al., 2020). The percentage reaches 20% in various therapeutic forms (Swift & Greenberg, 2012). And the chances of dropping out in remote therapy are greater than in face-to-face therapy. The average dropout rate for depression in the Zou study (Zou, 2004) was 35%. In the review by Melville, Casey, & Kavanagh (2010) of 19 studies between 1990 and 2009 on dropout rates from internet-based treatment programs for mental disorders involving minimal contact with a therapist

that leakage ranged from 2% to 83%, the weighted average value was 31% of participants who stopped treatment.

Examining the characteristics of the dropouts showed traits such as being young and male with a lower level of education, mixed pathological anxiety, and unemployment (Seidler et al., 2021). As indicated by the predictive Foreigner study by Vöhringer et al. (2020) of online PTSD treatment in Arabs, the probability of divorcees dropping out is higher compared than non-divorcees, i.e., unmarried or widowed. Swift and Greenberg (2012) found no significant differences in dropout between face-to-face and online cognitive behavioral therapy interventions.

The Therapeutic Relationship

Some reservations have been raised in the past about the use of technology in psychotherapy regarding the difficulty of achieving a fruitful therapeutic relationship and the survival of the connection on the surface, as well as some ethical reservations (Williams, Bambling, King, & Abbott, 2009). Today, these reservations no longer exist in this image, especially after a large amount of evidence exists about the possibility of building a good therapeutic relationship in internet-based psychotherapy (Hanley, 2020). The therapeutic alliance was rated relatively positively compared to face-to-face therapies (Khan, Shapka, & Domene, 2021; García, Di Paolo, & De Jaegher, 2021), and the client's assessment of the online therapeutic alliance was medium to high (Horvath, Del Re, Flückiger, & Symonds, 2011). Other studies found that face-to-face therapy was more effective; therapists saw online counseling as less effective than meeting clients face-to-face in creating a therapeutic alliance and empathetically guiding them to recover during the corona period (Barker & Barker, 2021). But in general, the therapeutic alliance is evaluated positively (Knaevelsrud & Maercker, 2006; de Bitencourt Machado et al., 2016; Impala et al., 2021).

Lindquist's study (Lindqvist et al., 2022), which addressed young people's perceptions of the client-therapist relationship in internet-based psychodynamic psychotherapy of adolescent depression, found that it is possible to form a strong and meaningful relationship in this type of therapy.

Patient Characteristics

What are the characteristics of patients who resort to online therapy? Perhaps the answer will be that online therapy is available to people who have access to the Internet using a computer (Rochlen, Zack, & Speyer, 2004) or any smart device. This seems to be the most important factor (Heponiemi et al., 2020). It may not be suitable for some patients who have problems dealing with technology, are illiterate, suffer from fear of technology, or are afraid to allowing personal data online (Cuijpers et al., 2007). Stofle (2001) states that online psychotherapy is not unsuitable for patients with severe disorders who have suicidal thoughts, intellectual disorders, borderline personality disorder, or uncontrolled medical problems.

The study by De Jaegere et al. (2019), which evaluated the effectiveness of an internet-based intervention to reduce suicidal ideation showed the intervention's effectiveness compared to the waiting group. However, the results were limited by the high dropout rate.

Online therapy can help people who have problems with personal growth and fulfillment, adult children of alcoholics, as well as people diagnosed with anxiety disorders, including agoraphobia and social phobia, body image issues, and shame or guilt. Further research is needed.

Demographic characteristics, such as age, gender, education, social group, or economic status, still need to be investigated further, as these characteristics are important in predicting the success of treatment. In the study of Heponiemi et al. (2020) on the correlations of demographics, health, socio-economic status, and social

status, it was found that older people benefited less than young people, perhaps due to the difficulty of coping with technology; gender did not play a role; and those with a low level of education and lower economic status saw fewer benefits, while urban residents saw more benefit than rural residents. In any case, this has been linked to a decrease in Internet accessibility, which is an important indicator.

It is relatively clear that the severity of the disorder is not a negative indicator of the success of treatment. Patients with a greater burden of symptoms at the beginning of treatment seem to be able to receive help from internet-based interventions more than patients who were less burdened at the beginning. So far, the best indicators of treatment success have been the expectation of success and early prediction of the operation, such as patient compliance at the beginning of the internet-based intervention. The Internet can be a way for potential patients to think about treatment before making an informed decision to commit to it (de Bitencourt Machado et al., 2016).

Possible Areas of Application

The possible areas of application are diverse and include:

- Preventive measures for risk groups.
- Reduction of waiting periods under medical supervision or psychotherapy.
- Online therapy can complement face-to-face psychotherapy and/or pharmacotherapy or expand traditional treatment options in outpatient, inpatient, or day-clinic facilities.
- Relapse prevention and aftercare after successful face-to-face psychotherapy and/or drug therapy.

- Groups of patients who cannot or do not want to see a therapist due to immobility, long distances, language barriers, cultural differences, or shyness.
- Improve the prognosis in patients with underlying somatic diseases such as coronary heart disease or diabetes mellitus and concomitant pathological depression.

Advantages and Disadvantages of Existing Psychotherapies (Ethical Issues)

There is still a high need for further research to address the broader ethical and societal issues of these technologies (Fiske et al., 2019). The literature on the subject mentions convergent pro and con arguments from them, e.g. (Suby, 2013; Bucci, Schwannauer, & Berry, 2019; Naslund, Bondre, Torous, & Aschbrenner, 2020; Sander et al., 2021). The narrative review conducted by Stoll, Müller, & Trachsel, (2020) derived a set of arguments for and against online psychotherapy. This study had 24 arguments in favor versus 32 opposing arguments. Table (1) presents some of arguments for and against.

Table (1): Some arguments for and against the provision of psychiatric care via the Internet

Supporting arguments	Opposing arguments
Economic advantages: low costs	Issues of privacy, confidentiality, security, data misuse, and data protection
Intensive treatment: the possibility of doing more sessions in a brief period	The competence of the therapist and the need for special training
Convenience, satisfaction, and acceptance have increased demand for service	Relationship-building problems and the absence of body language and other communicative cues
Shortening waiting times for face-to-face psychological treatment	Gaps related to scientific research in this field
Service availability, increasing the proportion of people who have access to psychotherapy, and flexibility	Technology and communication issues Difficulty ascertaining professional licenses (or differences in service delivery systems)
Saving time and effort for therapists by quickly accessing, recording and summarizing data	increased risk of "cyberchondria"

In Germany, for example, professional regulations stipulate that treating patient exclusively by electronic or other indirect means of communication is not allowed. Personal contact is mandatory for diagnosis and treatment (Rautschka-Rücker, 2015; Rheinland-Pfalz, 2020).

Artificial Intelligence and Mental Health

Artificial intelligence applications such as ChatGPT, Microsoft Bing AI, Chinese Ernie bot, Russian YaLM, Google Bard 2.0, Chatsonic, Jasper Chat, Character AI, Perplexity AI, Korean SearchGPT, YouChat, and Chinese Ernie bot are growing rapidly. Quite a few of studies have dealt with the subject of artificial intelligence, that is, direct interaction between man and machine without a human intermediary,

and the areas of its uses in psychological care services. It is too early to assess the benefits and harms associated with this type of technology. Artificial intelligence poses various challenges in the field of psychological services, such as accurate psychological diagnosis, misdiagnosis, inappropriate counseling, psychotherapy, inability to deal with emergency crises, and the risk of inequality for people from ethnic and sexual minorities (Jain, 2023; Stoll, et al., 2020; Kormilitzin, Tomasev, McKee, & Joyce, 2023; Podina & Caculidis-Tudor, 2023; Singh, 2023).

Psychological problems and disorders arise in an individual-interactive context between genetic, birth and environmental factors, such as socio-economic conditions, upbringing methods, and interhuman interactions. Psychotherapy requires a holistic view of the variety of factors causing the disorder and reinforcing its continuity within the circumstances in which it arose, as well as understanding the function that the disorder may perform within a given context. On the other hand, psychotherapy is based on human communication, building the therapeutic alliance, and the human sense, which guarantees the success of the therapeutic technique used. Will artificial intelligence, outside of human intervention, meet these requirements? Developments include the ability of Artificial intelligence to apply Artificial intelligence in the field of depression, e.g., extracting and analyzing non-verbal auditory and visual cues to assess mental disorders (Dhelim, Chen, Ning, & Nugent, 2022).

Potential Applications of Artificial Intelligence in Psychotherapy

Indication Diagnosis

The topic of diagnostic indications has become more prominent as a result of developments in the field of psychotherapy. In this context, artificial intelligence can help provide integrated and more accurate information on indication diagnostic, with the aim of improving decision-making and selecting best practices.

The importance of evidence-based psychotherapy has been emphasized since the 1960s. Paul formulated several important questions that remain central to the therapeutic process today: "What treatment, by whom, is most effective for this person with this particular problem, under what circumstances, and how is this done?" (Paul, 1969, p. 44, cited in Hayes, Hofmann & Ciarrochi, 2020).

There are two types of agencies:

- (1) The differential or selective indication: This takes place before the start of treatment. This involves deciding between several psychological treatment options with the aim of optimally matching the patient, the therapist and the treatment method.
- (2) Prognostic indication: This answers the question: What is the most effective therapeutic method for treating the existing disorder? The assessment of the chances of success and risks of certain treatment modalities is important for the treatment decision of the patient and the therapist.

Decisions about the indication of psychotherapy are based on psychodiagnostics procedures that help:

1. Make decisions about the selective or differential indication between different types of therapy.
2. Justification of decisions on selective indication within a specific therapeutic direction.
3. Determination of the adaptive indication or procedural indication, i.e. the appropriateness of the therapy procedure in the individual case.

Margraf (2009, p.203) points out that the question of indication in psychotherapy should include answering the following questions:

- What are the specific therapy goals for a patient?
- Which patients does a therapist work best with?

- For which patients are the methods of the institution or the therapist suitable?
- Are other options for psychosocial support apart from or in addition to psychotherapy helpful or even necessary?

Based on the above, it can be concluded that from this point of view, artificial intelligence is an important means to (1) shorten the time required for the evaluation, (2) reduce the waiting times for patients, (3) optimal, evidence-based diagnostics of indications (4) guidance of psychotherapists on procedures that best serve the patient's well-being. In this way, integrating the capabilities of artificial intelligence and direct treatment is an effective method. From our point of view, it is up to future developments to clarify the mechanisms with which this procedure can be carried out in an optimal way.

The potential of artificial intelligence will undoubtedly expand significantly in the coming years, and it will have many benefits in the field of prevention, prediction, training, improvement of evidence-based practice, improved decision-making ability and integration of big data. But it will not replace humans in all fields, especially in the fields of psychotherapy and counseling, particularly about cultural differences. Perhaps different forms of inclusion - as in the use of internet-based therapy.

Conclusions

Despite the evidence-based effectiveness of online psychological services, including psychotherapy, support from a specialist is necessary, and such programs should not replace face-to-face therapy in absolute terms. Still, they should complement it with a comprehensive concept of psychological services. The different nomenclature of remote psychological services still poses a conceptual problem that needs to be more clearly framed, especially with the accelerated development of communication media, programs, and applications associated with this.

There are difficulties in physical communication in online psychological services and detecting authentic verbal and non-verbal clues is challenging. It needs beneficiaries fluent in remote communication and expressive written skills. Ethical issues still raise many questions about the extent of compliance with ethical principles and the failure to ensure the confidentiality, privacy, and accessibility of data. In addition, online therapy requires more skills for the therapist or service provider. There still needs to be more research on this aspect. A face-to-face therapeutic relationship differs from a therapeutic relationship in Internet-based therapy; the latter may confer ideal qualities imagined by the recipient.

The issues posed by artificial intelligence of psychological services - psychotherapy in particular - still need further investigation. It is unclear to what extent artificial intelligence can be one of the possible alternatives in psychotherapy in which the therapeutic alliance is an essential constituent. It will certainly be of great importance for the improvement of the diagnostic indication.

Although the online provision of psychological services in the Arab countries may be appropriate due to cultural barriers, there is a serious shortage of psychological services and chaos in the provision of services and licenses, as well as evidence-based studies. This chaos has intensified during the Corona crisis. Personal psychological services are no better than remote psychological services.

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