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Online Therapy and its Effectiveness in the Treatment of Mental Disorders

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The genesis and availability of internet based health services has metamorphosed the healthcare sector. Not only physical healthcare facilities but also mental health care is now accessible through a stable internet connectivity. The services of internet based programs with assistance of certified therapists through virtual reality, electronic mail, video conferencing, chat technology or any of these combinations (as per the demand of the situation) have emerged as a viable option to traditional in-clinic therapy sessions. Online therapy also exists as an additive to traditional face-to-face therapy. Treatments of anxiety and panic disorders, depression, post-traumatic stress disorder (PTSD) through online internet based platforms have posted their efficiency to the world at large. The times of COVID-19 further provided new challenges where internet based online therapy witnessed its establishment as the new standardized practice. The treatment of mental disorders via online therapy has been systematically reviewed in this paper.

Keywords: online therapy, anxiety, panic disorders, depression, post-traumatic stress disorder (PTSD), COVID-19

The advent of internet have revolutionized the essence of human existence. The basic commodities as well as the essential medical assistance including the parameters of mental health are now accessible through stable internet connection. Online therapy has emerged as the official term referring to the internet aided mental health services provided by a licensed therapist to his/her/their client(s) via virtual reality, electronic mail, video conferencing, chat technology or any of these combination as per the demand of the situation (Mallen & Vogel, 2005).

Terms such as e-therapy, teletherapy, telepsychology or online counselling are used interchangeably with online therapy.

Online therapy is a type of professional mental health therapy which is executed through internet. Trained professional therapists and individual who are seeking the therapist's services commute with one another through technologies aided via computer. Various therapists also give out online therapy in conjunction with conventional psychotherapy. Moreover, a growing number of individuals are showing an inclination towards online therapy as an alternative to therapist's office visits.

Online therapy involves an active, continuous professional counselling relationship facilitated through communications which are synchronous, asynchronous or a combination of both (Ainsworth, 2000; Postel, de Haan, & De Jong, 2008). It does not engirdle public forums, group emails, and blogs.

Some format of tele-psychology has been present for several decades, the advancement of internet-based video calling system along with the continuously increasing penetration of broadband services have resulted in exponential growth of therapy in the online mode (Mallen et al., 2005)

Increased accessibility, higher level of comfort as well as convenience, and less expensiveness are some of the prime advantages of online mode therapy. However, there also exist several limitations to online therapy including anonymity, issues of privacy, inadequacy in analysing the non-verbal cues of the client, insufficient knowledge regarding the therapist's credentials, and unreliable technology.

Effectuality of Online Therapy in Mental Healthcare

Since its genesis, online therapy has been under the radar and its efficiency has been questioned time and again. Preliminary evidence has supported the potentiality that online therapy may help such population who underutilize the traditional in-office counselling setup (Mallen et al., 2005). Moreover, online therapy is used in conjunction with traditional psychotherapy by various clients across the globe.

Online therapy has proved to benefit people functioning at a moderately high level (Stofle, 2001). Research has shown that complementary to ongoing psychotherapy, well-educated, artistically inclined individual is positively reinforced by text-based online therapy (Suler, 2000).

Ruwaard et al. (2012) conducted a study for assessing the effectiveness of online based cognitive behavioural therapy for different mental disorders in regular clinical procedure. For the study, 1500 adult patients with a referral of psychotherapy from a General Practitioner were receiving an online Dutch mental

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healthcare clinic for diagnostic symptoms of post traumatic stress disorder (number of participants= 478), burnout (number of participants= 470), depression (number of participants= 413), panic disorder (number of participants= 139). The duration of the given treatment showed a variance from five weeks (Post-traumatic stress online cognitive behavioural therapy) to sixteen weeks (Depression online cognitive behavioural therapy). The results of the study showcased higher levels of satisfaction in the patients upon receiving the online therapist-facilitated therapy treatment. Post-test also boasted reliable rates of improvement and recovery. Effectiveness of online therapist-facilitated cognitive behavioural therapy is established to be as much as regular clinical practice.

Online therapy has emerged to be as fruitful as traditional in-person therapy for the treatment of anxiety and panic disorders, depression, and post-traumatic stress disorder (PTSD) (Andrews et al., 2018).

Depression

Depression is more than everyday sadness. Depression, alternatively known as general depressive disorder, is a commonly occurring mood disorder (Depression (Major Depressive Disorder-Symptoms & Causes, 2018).

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) has put forward the diagnosis of depression as an individual having five or more of the following mentioned symptoms for two weeks long time period, further one of the mentioned symptoms should either be depressed mood or, loss of pleasure or interest.

- Nearly everyday depressed mood throughout the day.
- Distinctly decreased pleasure or interest in all activities, or mostly all daily chores.
- Loss of weight without dieting or significant increase in weight, or appetite which got increased or decreased significantly.
- Slowness in thoughts and decrease in physical bodily movements (which are also observed through other individuals).
- Daily fatigue along with loss of energy.
- Sense of worthlessness or inappropriately excessive guilty almost each day.
- Indecisiveness, inability to concentrate or think, almost all day.
- Recurrent suicidal thoughts and ideation with or without a specific execution plan.

Christensen (2006) carried out a study between 19 weeks dated 13 January 2005 to 26 January 2006, a randomised controlled trial was conducted upon 2794 registrant (35-44 years category of 1846 women and 948 men). Showcasing the elevated scores of 5·96 (*S.D.*=2·09) on the Goldberg Depression Scale, the registrants were randomised on one out of six versions of a CBT website. The different versions of CBT included: extended CBT, brief CBT, stress management, behaviour strategies, and problem-solving. The assigned intervention was completed by 20.4% of participants. The single, brief introductory module of Cognitive Behaviour Therapy (CBT) was ineffective in reducing depression whereas, on the other hand, the extended CBT with as well as without the inclusion of behaviour strategies was significant in reducing depression. The longer intervention was also associated with higher rate of dropouts.

Beattie et al. (2009) conducted a qualitative study on “primary-care patients' expectations and experiences of online cognitive behavioural therapy for depression”. It showcased that most out of all the 24 participants accessed therapy through their home computers was found of enormous advantage to them in terms of accessibility and daily routine fitting convenience. Online therapy increased care for patients engaging in talking or typing therapies as a fraction of their treatment.

Preschl et al. (2011) performed a study to inspect the professional, working alliance between the client and their therapist in the middle as well as at the termination of an internet based cognitive behavioural therapy treatment for depression. Participants were randomised into a 25 membered internet based treatment group or a 28-membered face-to-face group. The same cognitive behavioural therapy was given to both the groups for a time period of eight weeks. At the midst as well as at the end of the treatment, the participants were also administrated upon the Beck Depression Inventory (BDI) post-treatment and the Working Alliance Inventory. It was found that there was no significant difference between the two groups in terms of working alliance. The working alliance did not significantly foretell the BDI residual gain score for either of the groups.

Moritz et al. (2012) conducted the trial registered as “NCT01401296” for assessing the efficiency of “Deprexis”- an online self-help program for depression. The participants were randomly allotted access to the program or to a waiting list control condition. Online re-assessment was conducted after the time period of eight weeks. The participants enrolled in the online self-help program showcased significant symptom decline on Beck Depression Inventory (BDI; primary outcome), the Dysfunctional Attitudes Scale (DAS), the Quality of Life scale (WHOQOL-BREF) and the Rosenberg Self-Esteem Scale (RSE). The online treatment was most beneficial for people with moderate depressive symptoms. The online problem of online studies was also compensated through external clinical diagnosis in subgroup of 29% of the participants. Further, diagnostic status, reminders and incentives were also used.

Through their study, Howes et al. (2014) investigated “Linguistic Indicators of Severity and Progress in Online Text-based Therapy for Depression”. Transcripts from 882 Cognitive Behaviour Therapy (CBT) treatment dialogues between the patients and therapists using online based text system were used as data for this study. The transcripts were from CBT provided through “Psychology Online” delivering live therapy from certified psychologists. Additionally Patient Health Questionnaire (PHQ-9), and Generalised Anxiety Disorder scale (GAD-7) were also filled by each participant prior to each session with their respective therapist. A series of experiments investigating if the several features of the transcripts could equip automatic observation of response of the patients to the PHQ-9 were conducted. Weka machine learning toolkit (Hall et al., 2009) was used in each case to pre-process the data. Multiple classifiers were also used (LibLINEAR (Chang & Lin, 2011) decision tree classifier (J48). On the basis of classification in Kroenke and Spitzer (2002) PHQ now was binarised. Here the scores amounting to 10 or more are observed as moderate to severe levels and scores of less than 10 are considered mild. The improvement in the PHQ scores was binarised as PHQ start-now. It was found that the essential measures of symptom severity could possibly be predicted with accuracy as significant as the face-to-face data. This uses generative features of discussion topic and sentiment. On the other hand, the patients' progress can be evaluated only through fine-grained lexical features including the style and structure of the dialogue.

Vaart et al. (2014) conducted a study in which they employed a "Delphi Method" to arrive at a blended method of therapy which includes online as well as traditional face-to-face therapy. The 12 therapists as well as the 9 patients who completed the survey, perceived the blended therapy in a welcoming, positive manner. Most respondents put forward that the practical therapy (i.e., psychoeducation, assignments & diaries) must be given through online module platforms whilst process-related therapy (i.e., introduction, discussion & evaluation) should be engaged face-to-face. There was a variation in preference for blended therapy amongst therapists and patients. About 75% therapists showcased an inclination towards face-to-face therapy sessions whereas the ratio of patients preferring this method for the treatment of depression was 50-60%. The quantity as well as the ratio of online modules has to be tailor-made as per the characteristics, skills, and problems of each patient.

Stasaik et al. (2016) conducted a research on "Computer-Based and Online Therapy for Depression and Anxiety in Children and Adolescents" and found that younger generation people are resistant towards face-to-face therapy sessions. Evidence of the effectiveness of computerized interventions are ever accumulating post the randomized controlled trials (RCTs) on children and young people aged less than 18 years.

Anxiety

Anxiety disorders are diagnosed as a category of mental health disorders. American Psychological Association has described Anxiety as an "emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure" (American Psychological Association, 2022).

Individuals having anxiety disorders commonly have recrudesce thoughts which are intrusive in nature. Worry leads them in avoiding certain events and situations. Physical symptoms of trembling, increased heartbeat, sweating, or dizziness are also present in individuals with anxiety. Often anxiety is interchanged as fear, even when both are not the same. Anxiety is oriented toward the future and its response lasts longer mainly focusing on a diffused form of stress. Fear, on the other hand, is oriented toward the present and its response is short-lived targeting specific threats which are identifiable (American Psychological Association, 2022).

The efficiency of cognitive behavioural therapy (CBT) in the treatment of anxiety disorder is known to all. However, there exist several barriers in accessing psychologists. These barriers include shortage of certificate therapists, affordability as well as long waiting lists. The online CBT services emerge as an effective option in terms of accessibility and cost-effectiveness.

Sethi et al. (2010) conducted a study which aimed at assessing the effectiveness and usefulness of online CBT in the prevention as well as treatment of anxiety and depression in adolescents. For this study a sample of 38 participants was randomly assigned to four conditions- in-person, face-to-face CBT, online based CBT, combination of online and in-person CBT, and control group. The results of the study showcased that the combination of online and in-person CBT was more efficient in the treatment of depressive as well as anxiety based symptoms.

Klein et al. (2011) conducted a study with the objective of investigating the effectiveness of an online self-help therapy program named Anxiety Online. This virtual psychological clinic dealt with five e-therapeutic programs for generalized anxiety disorder (GAD), social anxiety disorder (SAD), and obsessive-compulsive disorder (OCD), panic disorder with or without agoraphobia (PD/A), and post-traumatic stress disorder (PTSD). 225 participants selected any one out of five programs for a time period of 12 weeks. The results of post-treatment assessment showed improvement in 21 out of 25 total measures in all five self-help programs. Significant clinical decrease in the diagnosis of all the five disorders was found along with improved confidence in taking care of own mental health. The participants having GAD, SAD, OCD, and PTSD showed development in the quality of their life. Reduction in the level of distress for participants in e-therapy programs of PD/A, GAD, and PTSD. Collectively the five fully automated self-help e-therapeutic programs delivered significantly promising outcomes.

Spence (2011) in their study looked into the efficiency of online (NET) cognitive behavioral therapy in comparison to clinic (CLIN) based in-person CBT for treating anxiety disorders in the adolescent population. The sample size for this study was 115 clinically diagnosed adolescents between the age group of 12 to 18 accompanied by their parent(s). There was a random assignment of participants to NET, CLIN as well as the wait list control (WLC). Equal CBT content was provided to each treatment group. Post 12 weeks clinically approx. diagnostic interviews along with questionnaires were assessed. Similar assessment was undertaken after 6 months and 12 months follow-ups. There was seen a significant decline in the symptoms of anxiety upon 12 weeks of assessment for both the treatment groups: NET and CLIN. Such conditions were either enhanced or maintained at 6-months and 12-momths follow-up. Further, at the 12-months follow up nearly 78% of the NET sample and 80% of the CLIN group did not meet the diagnostic criteria for anxiety. Thus, online based therapy emerging as an equally effective alternative to clinic-based therapy, especially for families who face difficulty in accessing clinic-based sessions.

Anderson (2012) critically analysed two studies for examining "Working Alliance in Online Cognitive Behaviour Therapy for Anxiety Disorders in Youth: Comparison With Clinic Delivery and its Role in Predicting Outcome". The Study (1) was concerned with the "quality of the working alliance in online cognitive behaviour therapy (CBT), with minimal therapist contact, for anxiety disorders in youth", and (2) the "role of working alliance and compliance in predicting treatment outcome." In the first study 73 adolescents between the ages of 12 to 18 meeting the diagnosis for anxiety disorder, along with one or more than one parents were taken. These participants were randomly allotted to online as well as clinic-based CBT sessions. After 3 sessions the working alliance between youth and parents was assessed. In the second study, 132 participants between the age groups of 7 to 18 meeting the criteria for anxiety disorder along with one or more the one parents were taken. Internet based therapist-assisted CBT program was engaged in by the youths as well as the parents. The Study 1 showcased significantly strong online and clinic based CBT working alliance. The working alliance of parents was slightly higher in the case of clinic-based CBT programs whereas no such difference was visible in the case of adolescents. The second study put forward the decrease in anxiety-based symptoms upon receiving online therapy. The role of working alliance is of significance in combating anxiety in the case of adolescents whereas no such relationships are of importance amongst younger children.

Christensen et al. (2014) provided an overview in their study

regarding the latest advancements in anxiety disorders related online interventions. Light was shed upon the various advantages of using online therapy including competitively affordable options for all sections of the society, convenience of accessing the service in the comfort of one's home, anonymity of the client could also be assured through online therapy. These provided advantages are of utmost importance for people experiencing anxiety. The undertaken meta-analysis assures the efficacy of online-based therapy. It further added to the database, empowering the status and credibility of online therapy. The trials of online treatment of anxiety under consideration were random, controlled trials.

Stasiak et al. (2016) conducted a research on "delivering solid treatments on shaky ground: Feasibility study of an online therapy for child anxiety in the aftermath of a natural disaster" where 42 adolescents and children having clinical anxiety were involved in BRAVE-ONLINE, an internet based CBT program. At the interval of 6 months, more than 55% of the participants did not meet the set criterion of primary anxiety disorder.

Panic Disorder

Panic disorder is amongst the most common disorders seen across the general population. The traditional in-clinic therapy sessions have been resource and time consuming.

Panic disorder is a sudden, unforeseen onset of acute fearfulness along with apprehension when real danger is present. Panic disorder also showcases physical symptoms such as chest panic, choking, sweating, breathing difficulty, and dizziness. Involvement of fears such as losing control, going crazy, or even dying are also present in a panic attack episode. It occurs in a discrete time period (APA Dictionary of Psychology, 2022).

Significant avoidance along with panic disorder is categorised as panic disorder with agoraphobia. Diagnostic and Statistical Manual of Mental Disorders (DSM-5) treats panic disorder and agoraphobia as entities having separate distinguished criteria. Their simultaneous presence is regarded as two diagnoses.

In their study, Bouchard et al. (2000) examined the potentiality and effectiveness of telepsychotherapy especially for panic disorder with agoraphobia was looked into. 12 sessions of cognitive behavioural therapy were received by the participant through therapist-assisted videoconferencing. Frequency, severity and other symptoms related to panic disorder were clinically and statistically reduced through telepsychotherapy. With all the concerned participants quality rapport and therapeutic relationships were established post the first session.

Klein et al. (2008) conducted a well-established intervention for panic disorder with or without agoraphobia known as Panic Online (PO) is also supported through a therapist in the form of email or face-to-face sessions. The data suggested effectiveness of PO as an independent self-guided compound. Post-treatment it was found that panic disorder as well as agoraphobia were reduced to great significance. Accessibility to human support that is "to be heard", "to answer questions", "to help motivate") was preferred by all.

Pier et al. (2008) undertook a study concerning the effectiveness of 'Panic Online'. A total of 65 participants with the diagnosis of panic disorder (78% participants also diagnosed for agoraphobia) were treated through 12 weeks therapy program using internet based Panic Online. The services of a general practitioner (*n*=34) or clinical psychologist *n*=31) also taken. As pre-test and post-test clinically diagnosed interviews through telephones were also completed. Both groups of participants showcased 20% attribution rates. Psychological strategy focused training given to general practitioners was of comparable success in providing similar assistance as clinical psychologists.

Further in the year 2009, Klein et al. conducted a randomized study with 57 people having panic disorder (inclusive of 32 with agoraphobia) were made to undergo eight weeks long internet-deployed intervention named "Panic Online". It consisted of recurring as well as non-recurring support from the psychologist. The reports of post-treatment again revealed that both the given interventions were of significance in improving the condition of panic disorder as well as agoraphobia.

Pompoli et al. (2018) conducted a meta-analysis of 72 cognitive behavioural therapy and panic disorder studies with 4064 participants. The results of the study assured efficiency of CBT full-fledged packages for panic disorder. The various therapeutic elements like restructuring of cognition, breathing, introspection, and relaxation were consistent with cognitive behavioural therapy for panic disorder. The study was inclusive of introceptive exposure and face-to-face components and excluded relaxation of muscle and virtual-reality exposure.

Ebenfeld et al. (2021) conducted a study for evaluating the effectiveness of a web-based hybrid, guided training program formed on the basis of cognitive behavioural therapy catering adults with clinically diagnosed symptoms of panic disorder. 92 participants were taken who scored a total in-between the range of 9 to 28 on the Panic and Agoraphobia Scale. These participants were either randomly allocated to the intervention group receiving the hybrid program (GET.ON Panic) or to the control group waiting list. The post-treatment analysis showed a significantly stronger reduction in the symptoms of panic disorder in the intervention group. Upon follow-ups of 3 months and 6 months, the comparison between the two groups highlighted a further decrease in panic disorder symptoms after receiving the web-based treatment.

Post Traumatic Stress Disorder (PTSD)

Post-traumatic stress disorder (PTSD) is a mental as well as behavioural disorder which could develop as a result of an individual's exposure to any traumatic event including war, sexual assault, natural calamity, road accident, domestic violence, child abuse or any other kind of threat directed to the life of the individual (Post-traumatic Stress Disorder (PTSD)-Symptoms & Causes, 2018).

Symptoms of PTSD according to Diagnostic and Statistical Manual of Mental Disorders (DSM-5) include disruptive thoughts, dreams and feelings which are related to the event, physical and mental distress triggered through cues related to the traumatic event, increased fight-or-flight response, and changes in thought patterns. The mentioned symptoms last for the time period of one month or more than one month post the occurrence of the traumatic event. An individual having PTSD is also at an increased risk of causing intentional harm and suicide.

The last few decades have witnessed an outgrowing development in treatments for PTSD, however, these treatments are not accessible to all.

Knaevelsrud and Maercker (2007) performed a study with a 95 membered German-speaking sample population in which the

effectiveness of an online therapy for Post-Traumatic Stress Disorder named Interapy, and its qualitative value of online therapeutic relationship was evaluated. These participants were allocated to two groups: a random assignment to 5-week long internet-assisted cognitive behavioural therapy (CBT), or control group intended waiting list. After the termination of the treatment and after completion of 3 months of the treatment, follow-up assessment was also conducted. As assessment from the baseline there was significant improvement in the severity of PTSD and related psychopathological symptoms of anxiety, depression and physical health. Co-morbid anxiety and depression was also reduced in treatment group. Sustenance of this recovery was also prevalent in the three month follow up assessment. During the course of the online treatment, the therapeutic alliance also improved.

Monson et al. (2011) conducted a randomised trial of cognitive behavioural therapy catering PTSD, there was a participation of seven couples. These couples met the criteria for PTSD. After the completion of the treatment, the couples reported statistically significant relationship satisfaction. Further, five of the patients amongst the couples showed significant improvement and no longer met the clinical diagnosis of PTSD.

Parish et al. (2014) carried out a study with 86 male U.S. veterans between the ages of 18 to 65. A private website was developed which supports blogs and forums, providing a platform where veterans could openly interact with one another regarding their experiences. Systematically structured assessments, feedback-oriented satisfaction surveys, library assessment and other PTSD related material is also readily available on the website. Daily supervision of an identified psychiatrist was also at disposal. Veterans already having earlier exposure PTSD treatments before joining the program engaged more actively on the website than fresh first time program recruited veterans. Further, PTSD along with its associative issues like avoiding trauma makes it hard to involve oneself in online-assistance program especially for veterans having combat-related PTSD.

Littleton et al. (2016) came up with a program named "From Survivor to Thriver" facilitates cognitive behavioural therapy for rape-related PTSD in an online based therapist facilitated interactive manner. For assessing the efficacy of the program 87 female college students with PTSD relating to rape were randomly assigned to the interactive online program (n= 46) or to another group where psycho-educational website of self-help (n=41) was the primary focus area. At the post-treatment assessment through an interview, both of these programs showed reduction in PTSD symptoms. This reduction was maintained across three months follow-up. Further, both of these programs were reported to have succeeded in medium-sized and large-sized decrease in general anxiety and depressive symptoms as reported by the participants. The analysis of the follow-up sustained that interactive online therapist facilitated program resulted in surpassing outcomes especially with participants having greater PTSD at pre-treatment level. Psycho-educational self-help website was more efficient for lower PTSD at pre-treatment level.

Evidence has proven that certified assistance from therapist involving internet-based programs is an effective measure for PTSD (Lewis et al., 2018). The spectrum of access also widens in such programs. But uncertainty about the most reliably suitable treatment for most patients is still prevalent. Ehlers et al. (2020) tested randomised experimental group (Trauma-focussing therapist guided online cognitive behavioural therapy assistance) and control group (non-trauma-focussing therapist guided online cognitive behavioural therapy assistance). Internet based cognitive behavioural therapy given to the experimental group was "internet-delivered cognitive therapy for PTSD (iCT-PTSD)". The control group received "internet-delivered stress management therapy (iStress-PTSD)". A randomised comparison of iCT-PTSD and iStress-PTSD through a controlled trial was processed along with a 13-week waiting list condition. Assessments were also taken at the interval of 6, 26, 39 and 65 weeks. 217 participants who met the DSM-5 criteria for PTSD were randomly assigned to the three groups in the ratio of 3:3:1. The foremost assessment point of this study has been the measure of PTSD symptoms' severity by "PTSD Checklist for DSM-5 (PCL-5)". Secondary measures were also employed in the form of "Clinician Administered PTSD Scale for DSM-5 (CAPS-5)" and the "Impact of Event Scale-Revised (IES-R)". Additional symptoms were also looked into with the "Patient Health Questionnaire (PHQ-9)", "Generalised Anxiety Disorder Scale (GAD-7)", "WHO (Five) Well-Being Index", "Work and Social Adjustment Scale (WSAS)", "Endicott Quality of Life Scale (QoL)", and "Insomnia Sleep Index (ISI)". Interview and questionnaire played a role in getting patients' personal experiences. Still in the trial stage registered as "ISRCTN16806208" will be the first ever study conducted to provide an analytical view of efficiency of trauma-focussed internet-based therapist-assisted cognitive behavioural treatment's efficiency and non-trauma-focused internet-based therapist-assisted cognitive behavioural treatment's efficiency.

In a qualitative research study conducted by Wells (2022) 20 former members of the United States of America's military service clinically diagnosed with Post-traumatic stress disorder (PTSD) were interviewed regarding their experiences of online therapy in video conferencing format. These veterans were transitioning into civilian life. Aaron Beck's module of cognitive behavioural therapy (CBT) served as a theoretical foundational stone for this study. The researcher used research questions which were open-ended for the purpose of examining the attitude, opinion, perception of the veterans with PTSD regarding the online therapy received before and during the COVID-19 pandemic. The findings of the study showed that video conferencing format based online therapy was significant in improving accessibility of mental healthcare treatment for retired soldiers residing in the rural, countryside area where no efficient mental healthcare is present.

Online Therapy in the Times of Coronavirus Disease (COVID-19)

The world witnessed a global outbreak of an infectious disease caused by the SARS-CoV-2 virus. During COVID-19 not only the physical health but also the mental health of people took a toll. The pandemic necessitated an instantaneous and wide-reaching uptake of online treatment targeting mental health care. Frontline workers and healthcare workers like doctors, nurses, ambulance service providers, sanitation workers, community healthcare workers, volunteers among many stood valiantly in the hours of crisis. Going to work and serving as caregivers during the times of COVID-19 have placed the workers under monumental and unparalleled pressure upon their physical as well as mental well-being.

Al-Alawi et al. (2021) conducted a study which aimed at assessing the efficacy of online therapist-facilitated therapy in comparison to self-help, internet-oriented therapy focused primarily

on COVID-19 infused symptoms of depression and anxiety among people living in the country of Oman in the times of pandemic. This study involved 60 participants with the symptoms of anxiety or depression. The time period of the study was 6 weeks. In the intervention group, the participants were randomly allocated for receiving one session of online therapy per week during the 6 week period from a certified therapist. The language of such sessions was either Arabic or English. Cognitive behavioural therapy was employed as an intervention. On the other hand, control group, participants received weekly automatic newsletters through email which contained self-help information for coping with COVID-19 associated distress. The scores of participants in the intervention group on the scales of Patient Health Questionnaire-9 (PHQ-9) as well as General Anxiety Disorder-7 (GAD-7) were reduced significantly than the scores participants of control group. Thus, therapist-assisted online therapy was concluded to be superior to self-help in reducing anxiety and depressive symptoms during COVID-19.

De Luca et al. (2021) looked into online therapy (OLST) for reducing the psychological distress of caregivers and stimulating motor and cognitive recovery of post-severe acquired brain injury (SABI) patients. For the study, 25 subjects with SABI were given intensive online therapy (OLST) accompanied by their caregivers for a period of 12 weeks. This was in continuation to the regular neuro-rehabilitation. Ad hoc battery was used for pre-treatment and post-treatment assessment. 18 patients were also given electroencephalogram recording during the resting stage. The participants with SABI showed significant refinement in motor-cognitive functional recovery. A significant reduction was found in anxiety, concerns and burden in the COVID-19 era. de Luca et al. further proposed that OLST can be propounded as an instrument that allows social conversations in a hospital setup.

Conclusion

The progression of online therapy has witnessed successful outcomes in the current world order through virtual reality, electronic mail, video conferencing, chat technology or any of these combinations (as per the demand of the situation). Online therapy serves as an alternative as well as a supplementation to traditional in-clinic therapy. Numerous researches have established the efficiency of online therapy in the treatment of anxiety and panic disorders, depression, and post-traumatic stress disorder (PTSD). The pandemic of COVID-19 has further stressed the importance of online internet-based therapy.

Further Research

There is a requirement of future research for determining the active components of efficiently designed programs that target specific groups in need of mental health care. Clarification of such issues would help in the refinement of disorder specific online-based programs, or encompassed in supportive care approaches.

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