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Telepsychotherapy: a leaflet for psychotherapists in the age of COVID-19. A review of the evidence

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ABSTRACT

COVID-19 outbreak imposes the adoption of extraordinary containment measures, including the strict necessity to limit interpersonal contact. Face-to-face psychotherapy collides with this requirement and, above all, it might endanger both therapists and patients' safety. Telepsychotherapy might come to the aid, ensuring therapeutic continuity and the possibility to reach people who might benefit of extra psychological support. Infectious outbreaks have been indeed associated with major psychopathological outcomes. The aim of the present work is to review the most recent experimental evidence about telepsychotherapy, focusing on its effectiveness, possible determinants of efficacy and therapists/patients' attitudes, to rapidly inform psychotherapists. Out of the 857 records found, 18 studies have been included in the review. Our results show that, despite therapists and public's skepticism, telepsychotherapy is a trustworthy alternative to be adopted, which can be used efficaciously to treat common mental-health disorders such as anxiety, depression and post-traumatic distress. As well as in the traditional setting, a higher number of sessions and the proper management of patients' expectations seem to be associated with better outcomes. On the contrary, low familiarity with web-based means of communication and technical issues might reduce specifically the effectiveness of telepsychotherapy.

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Introduction

On December 2019, a pneumonia of unknown cause was first reported to the World Health Organization (WHO) in China. Lately, this disease was found to be caused by a new coronavirus (SARS-Cov-2) and was named COVID-19 (World Health Organization, 2020). Since then, the new coronavirus rapidly spread worldwide and on 11 March 2020 the WHO declared COVID-19 outbreak a pandemic. Accordingly, extraordinary containment

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measures have been adopted all over the World, including the obligation for any citizen to avoid unnecessary person-to-person interactions and social gatherings, as well as limiting movements only to mandatory necessities. Total isolation of individuals infected (or possibly infected) by SARS-Cov-2 was also imposed (e.g. Italian Ministerial Decree 8 March, 2020). The COVID-19 outbreak, thus, dramatically impacts on individuals' daily routine, including the possibility to carry out certain working-activities. When applicable, smart working from home was in fact encouraged.

Health-care professionals, including psychologists and psychotherapists, have been recognized to provide an essential service to the community, therefore allowed to continue their practice. However, in-person sessions endanger both therapists and patients' safety and collide with the requirement to minimize interpersonal contacts. On the other hand, the outbreak of an infectious disease has been associated with major psychological outcomes (Brooks et al., 2020; DiGiovanni, Conley, Chiu, & Zaborski, 2004; Hawryluck et al., 2004), not mentioning the need to support people in grieving. Ensuring therapeutic continuity and reaching vulnerable people who might benefit of extra psychological support seems, thus, mandatory in the present moment.

Telepsychotherapy might come to the aid (Van Daele, Karekla, Kassianos, Compare, & Haddouk, in press; Wind, Rijkeboer, Andersson, & Riper, 2020), especially given the unknown duration of the current containment measures. However, therapists might be unfamiliar or doubtful about the adoption of telepsychotherapy. Hence, the aim of the present work is to provide an updated review of the most recent experimental evidence about telepsychotherapy, to inform professionals in need to support people in this extraordinary moment of vulnerability. Specifically, we will focus on effectiveness, possible determinants of efficacy and therapists/patients' attitudes of any kind of individual or group psychotherapy delivered towards synchronous web technology (i.e. videoconference or chatrooms). We purposely focused only on telepsychotherapy, excluding nonpsychotherapeutic on-line treatments (e.g. psychoeducational programs) and on-line selfhelp tools. These web-based interventions have been previously reported to be effective (Fiorini, De Giacomo, & L'Abate, 2015; Turvey & Roberts, 2015); nevertheless, their theoretical background, methodological approaches and depth of intervention are profoundly different than psychotherapy (e.g. concerning the amount of direct interaction and the relationship with the therapist). Thus, the inclusion of two different interventions might prevent from a clear understanding of treatment effectiveness and of its determinants. Furthermore, the mentioned on-line interventions are often delivered toward specific webbased platforms or complex interactive softwares, whereas telepsychotherapy requires only basic videoconferencing tools that can be accessed easily and quickly by the therapists.

Implications of the use of telepsychotherapy in the specific time of pandemic are discussed, as well as the possible psychological issues to deal with, according to the previously reported effects of infectious outbreaks on individuals' mental health (e.g. Brooks et al., 2020 for a review).

Methods

Research articles addressing the delivery of individual or group *psychotherapy* lead by a *licensed psychotherapist* towards *synchronous web technology* (i.e. videoconference or chatrooms) were considered eligible. Only studies involving adult participants (>18 years

old) were included. Works concerning non-psychotherapeutic psychological treatments, as well as on-line self-help tools were excluded. Interventions in which the interaction between the psychotherapist and the patient was asynchronous (e.g. e-mails exchange) were also excluded since too different from the traditional psychotherapeutic setting.

Studies were identified by searching PubMed and Web of Science databases. We searched the terms "telepsychotherapy" and "psychotherapy" in combination with "distance" or "on-line"/"online" words, according to the most frequent definitions. The search was limited to studies written in English and published between 2015 and 2020. Time restrictions were imposed since both the efficiency of technological devices and people's familiarity towards web-based means of communication exponentially increase over time, possibly modifying individuals' attitudes towards telepsychotherapy and, eventually, its effectiveness (Etzelmueller, Radkovsky, Hannig, Berking, & Ebert, 2018). The last search was run on 30 March 2020.

The selection process is reported in detail in Figure 1. One reviewer performed the search and made a preliminary eligibility check based on titles and abstracts after removing duplicates. Then, the full text of the selected papers was analyzed, and eligibility discussed with a second reviewer. The reference lists of the selected papers were screened to identify additional pertinent articles.

Data were collected by one reviewer according to an extraction sheet previously developed. The following information was collected (when applicable): i) characteristics of the sample including diagnosis and sample size, ii) type of intervention, duration and number of sessions iii) the primary outcome considered, iv) main results. All data sought were found in the original articles, no additional research was needed.

Results

The search provided 857 (PubMed: 288, Web of Science: 569) citations. Two studies were detected by manually inspecting the reference lists of the full texts considered. One study, recently published, was found in a publicly available repository. After the removal of duplicates, 683 citations remained. All of them were screened for eligibility by title and abstract. A total of 576 records were excluded since they did not meet the eligibility criteria. The full text of the remaining 107 works was analyzed. Eighty-nine studies were excluded because they did not meet the inclusion criteria (see Figure 1 for further details on the exclusion reasons). A total of 18 studies were identified for inclusion in the review (see Table 1).

Ten studies investigated a variety of aspects related to the use of telepsychotherapy in depression (Catarino et al., 2018; Egede et al., 2015, 2016; Ekberg, Barnes, Kessler, Malpass, & Shaw, 2016; Ekberg et al., 2015; Etzelmueller et al., 2018), anxiety (Catarino et al., 2018; Théberge-Lapointe, Marchand, Langlois, Gosselin, & Watts, 2015), post-traumatic stress disorder – PTSD (Wierwille, Pukay-Martin, Chard, & Klump, 2016), panic attacks (Cipolletta, Frassoni, & Faccio, 2018) and bulimia nervosa (Zerwas et al., 2016). Eight works surveyed both the attitudes towards and the use of telepsychotherapy in the general public (Apolinário-Hagen, Vehreschild, & Alkoudmani, 2017; Hantsoo, Podcasy, Sammel, Epperson, & Kim, 2017), among psychotherapists (Gilmore & Ward-Ciesielski, 2019; Gordon, Tune, & Wang, 2016; Gordon, Wang, & Tune, 2015; Pierce, Perrin, & McDonald, 2019, 2020) and comparing health-care professionals and nonprofessionals (Schulze et al., 2019).

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*main reasons of exclusion include treatments other than psychotherapy (e.g. self-help tools, psychological support or counseling, psychoeducational interventions); psychotherapy not lead by a licensed psychotherapist, questioning the reliability of the intervention; works other than original research articles (e.g. review, commentary or methodological papers); full text not available; studies focused on training or supervision of psychotherapists.

Cognitive/behavioral approaches were the most represented, including individual (Catarino et al., 2018; Egede et al., 2015, 2016; Etzelmueller et al., 2018; Théberge-Lapointe et al., 2015) and group (Zerwas et al., 2016) cognitive behavioral therapy – CBT, the behavioral activation therapy for depression (Ekberg et al., 2016), the brief strategic approach (Cipolletta et al., 2018) and the cognitive processing and prolonged exposure therapy (Wierwille et al., 2016). One of the survey-studies focused on the psychodynamic approach (Gordon et al., 2016, 2015); the others addressed attitudes towards telepsychotherapy in general (Apolinário-Hagen et al., 2017; Gilmore & Ward-Ciesielski, 2019; Hantsoo et al., 2017; Pierce et al., 2020; Schulze et al., 2019).

Effectiveness

A significant clinical improvement and symptom reduction were reported in patients affected by anxiety and depression following 6/8 weekly sessions of individual on-line CBT: a similar clinical improvement was observed in a severity-matched sample of

Table 1. The tak evaluated.	ole illustrates the	disorder treated, sar	nple size, type of psychoth	erapy adopted, duration	and frequency of sessions, and primary outcomes
	Disorder Treated	Sample	Psychotherapeutic Approach	Duration	Primary Outcome Considered
Ekberg et al., 2015	Depression	TP: 183	CBT	55 min, up to 10 sessions	Management of patients' expectations during the first and second sessions
Egede et al., 2015	Depression	TP: 120 FFP: 121	Behavioral activation psychotherapy	8 x 60 min weekly sessions	Depressive symptoms (GDS; BDI; SCID)
Théberge- Lapointe et al, 2015	Anxiety	TP: 5	CBT	14 x 60 min weekly sessions	Anxiety (SIAD-IV) Worries (PSWQ, WW-II) Intolerance of uncertainty (IUS) Negative attitudes to problem (NPOQ)
Ekberg et al., 2016	Depression	TP: 183	CBT	55 min, up to 10 sessions	cognitive avolution stateness (crvc) Management of patients' expectations during the first and second sessions in relationship to retention
Egede et al., 2016	Depression	TP: 120 FFP: 121	Behavioral activation psychotherapy	8 x 60 min weekly sessions	Quality of life (5F-36) Satisfaction (CPOSS) Treatment credibility Service delivery nercentions
Wierwille et al., 2016	PTSD	TP: 85 FFT: 136	Cognitive processing and prolonged exposure therapy	Not specified	PTSD (PCL-5) Depressive symptoms (BDI-II)
Cipolletta et al., 2018	Panic attacks	TP: 5	Brief strategic approach	3 x 50 min sessions	Relational dominance (conversation analysis)
Zerwas et al., 2016	Bulimia nervosa	TP: 16 FFP: 16	Group CBT	16 x 90 min weekly sessions	Abstinence from binge eating and purging
Catarino et al., 2018	Anxiety Depression	ТР: 2211	CBT	6/8 weekly sessions	Anxiety and depressive symptoms (PHQ-9, GAD-7)
Etzelmueller et al., 2018	Depression	TP: 15	CBT	50 min, up to 25 sessions	Perceived patients' experience
Gordon et al., 2015		176 therapists	Survey on TP	I	
Gordon et al., 2016		94 therapists	Survey on TP		
Apolinário-Hagen et al., 2017		1558 general public	Survey on TP		

Table 1. (Continued).

	Disorder Treated	Sample	Psychotherapeutic Approach	Duration	Primary Outcome Considered
Hantsoo et al., 2017	1	111 pregnant women 147 non-pregnant	Survey on TP and FFT	I	
		women			
		54 men			
Schulze et al.,	ı	1000 non-professionals	Survey on TP	,	
2019		96 physicians			
		36 therapists			
Pierce et al., 2019		1799 Psychotherapists	Survey on TP		
Gilmore & Ward-		52 Psychotherapists	Survey on TP		
Ciesielski, 2019					
Pierce et al., 2020	ı	1791 Psychotherapists	Survey on TP		Demographic, organizational and clinical predictors of
					telepsychotherapy use

for DSM-IV; SIAD-IV = Structured Diagnostic Interview for Anxiety Disorder; PSWQ = Penn State Worry Questionnaire; Why Worry II; IUS = Intolerance of Uncertainty Scale; NPOQ = Negative Problem Orientation Questionnaire; CAQ = Cognitive Avoidance Questionnaire; SF-36 = Short-Form Health Survey; CPOSS = Cognitive Avoidance Questionnaire; PCL-S = Post-Traumatic Stress Disorder Checklist – Specific; PHQ-9 = Patient Health Questionnaire; GAD-7 = General Anxiety Disorder Scale. TP = telepsychotherapy; FFT = face-to-face therapy; CBT = Cognitive Behavioral Therapy; GDS = Geriatric Depression Scale; BDI = Beck Depression Inventory, SCID = Structured Clinical Interview

individuals attending the same mental-health promoting program but not involved in the study (between groups difference: *depression symptoms*, d = 0.02; *anxiety symptoms*, d = 0.04) (Catarino et al., 2018). Similarly, Théberge-Lapointe et al. (2015) reported that individual sessions of videoconferencing CBT (60-minutes weekly sessions for 14 weeks) determined a significant clinical improvement in patients with generalized anxiety disorder both at the end of the treatment and at 3-months follow-up (effect sizes for the factor *time* in a repeated measures ANOVA (η^2) range from 0.56 to 0.78 for the outcomes considered). Qualitatively, the effectiveness of telepsychotherapy was reported to be comparable to the overall efficacy of an in-person version of the same treatment, administered in a previous study (Dugas & Robichaud, 2007).

A significant clinical improvement in depressive symptomatology was reported during and after 8 weeks of individuals videoconferencing behavioral activation psychotherapy (60-minutes weekly sessions) (Egede et al., 2015). Notably, in this case, the effectiveness of telepsychotherapy was directly compared to a traditional in-person therapy, reporting that the two treatment modalities determined comparable clinical outcomes (betweengroups differences in the percentage of patients who effectively responded to the treatment for the depressive symptomatology at 12-months follow-up were nonsignificant, ranging from -5.09% [90% Cl -17.13 to 6.95] to 2.06% [90% Cl -7.46 to 11.58]), despite a slightly slower rate of improvement in the web-based delivery (Egede et al., 2015).

A significant, clinically relevant, reduction in PTSD and depressive symptoms was also reported in U.S. veterans after individuals videoconferencing cognitive processing and prolonged exposure therapy (Wierwille et al., 2016). The effectiveness of telepsychotherapy in this study was reported to be slightly lower than in-person treatment (73.2% of patients receiving telepsychotherapy achieved clinically significant improvement of post-traumatic distress at post-treatment versus the 82.9% of patients receiving a traditional therapy, x² (1) = 0.99, p = 0.319); however, the severity of PTSD at baseline was higher in the telepsychotherapy group, possibly explaining between-group differences at post-treatment (Wierwille et al., 2016).

Only one study (Zerwas et al., 2016) compared group psychotherapy in-person and *via* chatroom in a sample of individuals affected by bulimia nervosa. Both modalities were reported to be effective in terms of improved abstinence from binge eating and purging (i.e. the primary outcome); however, the improving rate was slower in the chatroom-based psychotherapy. Differences between groups in terms of abstinence from binge eating and purging and purging were indeed reported at the end of the treatment, even though the size of the effect (d = -0.18) can be considered trivial (Cohen, 1988), but not at 12-months follow-up (d = 0.07). Furthermore, the two treatment modalities were reported to be similarly effective at both the post-treatment evaluation and follow-up also for overall symptom severity (post-treatment d = -0.11, follow-up d = -0.10; anxiety disorder: post-treatment d = -0.04), and overall quality of life (*Eating Disorders Quality of Life Questionnaire*: post-treatment d = 0.04, follow-up d = -0.08; Short-Form Health State Classification: post-treatment d = 0.04, follow-up d = -0.14) (Zerwas et al., 2016).

No differences in the perceived quality of life, satisfaction, credibility of the treatment and service delivery were observed between patients attending individual videoconferencing or in-person CBT (60-minutes weekly sessions for 8 weeks) at several timepoints from the

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beginning of the treatment (4 weeks, 8 weeks, 3 months and 12 months) (Egede et al., 2016). In line with these results, a qualitatively study evaluating the experience of 15 patients with depression attending individual videoconferencing CBT (50-minutes weekly sessions, up to 25 times) reported that a majority of them (80%) positively rated the intervention, expressing the possibility to establish a good working alliance (67%) and a close contact with the therapist (40%) (Etzelmueller et al., 2018). Many patients also emphasized the benefit of an individualized and flexible intervention (47% and 37%, respectively) reporting an improved understanding of their condition (60%) (Etzelmueller et al., 2018). Furthermore, on-line therapy was not perceived as less effective than a traditional face-to-face treatment (53%) (Etzelmueller et al., 2018). Finally, Cipolletta and colleagues (2018) qualitatively evaluated the dynamics of the therapeutic relationship during the first three sessions of a videoconferencing brief strategic therapy in 5 patients with panic attacks, reporting that they were similar to those observed in face-to-face interventions (i.e. asymmetric semantic and strategic dominance) (Lenzi & Bercelli, 2010).

Factors related to effectiveness

The post-treatment outcome among patients with anxiety and depressive symptoms was reported to be clinically relevant after at least five sessions of individual on-line CBT (Catarino et al., 2018). However, a higher severity of symptoms at baseline and comorbidity with long-term physical conditions were associated with lower clinical improvement (Catarino et al., 2018). Nevertheless, the effect of previous physical conditions might be an artifact since the psychopathological scales used for the assessment might have been too sensitive to the somatic symptoms related to anxiety and depression (Catarino et al., 2018).

Technical difficulties such as brief interruptions or complete breakdown have been claimed to be the most prominent drawback of videoconferencing psychotherapy (Cipolletta et al., 2018; Etzelmueller et al., 2018) since they favor misunderstandings that might compromise the therapeutic interaction (Cipolletta et al., 2018). Familiarity with web-technology, on the contrary, was perceived as promoting patients' compliance (67%) (Etzelmueller et al., 2018), while older age (average sample age: 36 years) was associated to a lower drop-outs rate and better clinical outcomes (Catarino et al., 2018).

Finally, an early and comprehensive management of patients' expectations about the structure of the whole therapy (i.e., on-line CBT) and the expected benefits were reported to be crucial to increment therapy retention (Ekberg et al., 2016), and eventually treatment effectiveness. Nevertheless, few therapists were reported to adopt this approach (20.5%), whereas most of them managed patients' expectations only concerning the first session of assessment (61.4%) or did not address patients' expectations at all (15.3%) (Ekberg et al., 2015).

Therapists and patients' attitudes

Survey-studies investigating attitudes towards telepsychotherapy reported that psychotherapists generally perceived videoconferencing treatments as possibly less effective than face-to-face therapies (Gordon et al., 2016, 2015; Schulze et al., 2019). Psychotherapists dealing with suicidal patients expressed specific worries about the impossibility of taking advantage of nonverbal and emotional cues during the patient's assessment and to exert a direct control

over the patient if hospitalization is needed (Gilmore & Ward-Ciesielski, 2019). Similarly, psychotherapists treating conditions possibly related to acute patients' crises (e.g. grief [Odds Ratio – OR: 0.67], bipolar disorder [OR: 0.64], antisocial personality [OR: 0.50] and addiction [OR: 1.60]) were reported to adopt telepsychotherapy to a lesser extent (Pierce et al., 2020). Possible difficulties in dealing remotely with patients' crises were also pointed out by the psychodynamic therapists interviewed by Gordon et al. (2015). Psychodynamic therapists worried the most about the possibility of an efficacious exploration of patients' mental life and psychodynamic constructions (Gordon et al., 2016). On the contrary, they were less concerned about the prospect of working on transference towards the web (Gordon et al., 2016).

In line with these results, most of the therapists (80%) interviewed by Pierce et al. (2019) do not usually use telepsychotherapy. Furthermore, the authors reported that *other people*'s attitudes and expectations about telepsychotherapy were largely associated with therapists' own perception of usefulness and ease of use that, in turn, was associated with the actual use of telepsychotherapy.

Nevertheless, therapists recognized the possibility to reach remote patients as the main advantage of telepsychotherapy (Gordon et al., 2016, 2015). Additionally, both younger age and more years of working experience were reported to be positively associated with a higher use of telepsychotherapy (Gilmore & Ward-Ciesielski, 2019). Finally, the availability of clear institutional telepsychotherapy-supportive policies (OR: 2.25) and being specifically trained to use this treatment modality (OR: 8.74) were both predictors of a higher adoption of telepsychotherapy (Pierce et al., 2020).

The general public also seems doubtful about telepsychotherapy effectiveness (Apolinário-Hagen et al., 2017; Schulze et al., 2019), the quality of the therapeutic support delivered and the compatibility with every-day life conditions (Apolinário-Hagen et al., 2017). As a result, common people expressed a low willingness to use telepsychotherapy (Apolinário-Hagen et al., 2017; Hantsoo et al., 2017), though, people with no previous history of psychotherapy were generally more opened towards the use of telepsychotherapy (Hantsoo et al., 2017). On the contrary, accessibility and the possibility to reduce waiting-lists were recognized as main advantages, especially among those individuals who reported a higher perceived stress (Apolinário-Hagen et al., 2017). Similarly, pregnant women showed a high acceptability of internet-based psychotherapy (77.5% of the sample), and 30.6% of the sample also reported that they would prefer this type of therapy instead of in-person treatments (Hantsoo et al., 2017).

Discussion

The present work aims to summarize the most recent experimental evidence about telepsychotherapy to provide useful guidance for psychotherapists facing the challenge of COVID-19 outbreak. Overall, our results show that telepsychotherapy can be used to treat successfully common mental-health disorders. Telepsychotherapy effectiveness was indeed reported to be *comparable* to in-person treatment (Catarino et al., 2018; Egede et al., 2015; Zerwas et al., 2016) despite the rate of improvement might be slightly slower (Egede et al., 2015; Zerwas et al., 2016). Importantly, the experimental evidence specifically points to the possibility to treat efficaciously anxiety (Catarino et al., 2018), depressive (Catarino et al., 2018; Egede et al., 2015), and post-traumatic symptoms (Wierwille

et al., 2016), which are the most frequent psychopathological outcomes associated to an infectious outbreak (Brooks et al., 2020).

Additionally, patients who were enrolled in telepsychotherapy treatments reported similar perceived quality of life, satisfaction, credibility of the treatment and service delivery opinions than patients attending in-person psychotherapy (Egede et al., 2016). In line with these results, patients receiving telepsychotherapy did not perceive the treatment as less effective than a traditional one (Etzelmueller et al., 2018). On the contrary, they reported good working alliance and close contact with the therapist, emphasizing the benefits of an individualized and flexible intervention in improving the understanding of their condition (Etzelmueller et al., 2018).

Different factors have been associated with telepsychotherapy effectiveness. Specifically, the length of the treatment was reported to be a crucial issue: more positive outcomes were indeed observed as the number of sessions increased (Catarino et al., 2018). This result might not be surprising and it mirrors the overall evidence of a positive relationship between the length of face-to-face interventions and the treatment effectiveness (Howard, Kopta, Krause, & Orlinsky, 1986; Knekt et al., 2008; Knekt, Lindfors, Sares-Jäske, Virtala, & Härkänen, 2013; Knekt et al., 2016; Lindfors, Knekt, Heinonen, Härkänen, & Virtala, 2015).

In this regard, a proper and comprehensive management of patients' expectations about the structure of the therapy and the benefits expected might encourage treatment retention (Ekberg et al., 2016). Additionally, in one study (Catarino et al., 2018) older age was associated with lower drop-outs rate, though the participants in that study were indeed quite young on average (i.e. 36 years old). Conversely, comorbidity with long-term physical conditions and higher severity of symptoms at baseline were reported to be related to lower clinical outcomes (Catarino et al., 2018). Notably, all these factors might conceivably affect also in-person psychotherapy. On the contrary, the experience of technical difficulties and low familiarity with the use of information technologies seem to affect specifically telepsychotherapy efficacy (Cipolletta et al., 2018; Etzelmueller et al., 2018).

Thus, the experimental evidence points to a reasonable telepsychotherapy effectiveness. In sharp contrast, both the general public and psychotherapists were reported to be doubtful about telepsychotherapy use and effectiveness (Apolinário-Hagen et al., 2017; Gordon et al., 2015; Schulze et al., 2019). In turn, they declared they would hardly choose it (Apolinário-Hagen et al., 2017; Hantsoo et al., 2017; Pierce et al., 2019). Nevertheless, this scenario was depicted when telepsychotherapy was an option. Now, it might be the only alternative. Attitudes and willingness to use telepsychotherapy seem indeed to be influenced by incidental needs. For instance, pregnant women who encountered mobility issues reported higher acceptability of telepsychotherapy than their non-pregnant counterparts (Hantsoo et al., 2017). Similarly, individuals with a higher level of perceived stress and, thus, possibly seeking treatments were more likely to adopt telepsychotherapy (Apolinário-Hagen et al., 2017). Accordingly, telepsychotherapy acceptability might be significantly shaped, and conceivably favored, by the ongoing COVID-19 outbreak. After all, the higher accessibility and the possibility to reach remote patients have been considered the main advantages of telepsychotherapy, even back when no one would have imagined a similar scenario (Apolinário-Hagen et al., 2017; Gordon et al., 2015).

However, the adoption of telepsychotherapy *during* a pandemic might also have some drawbacks, which need to be discussed. First, in the studies reviewed telepsychotherapy was adopted since the beginning of the therapeutic process. Conversely, the upsurge of an

emergency forces the transition from face-to-face therapy to telepsychotherapy. An optimal use of telepsychotherapy implies the availability of appropriate equipment (including an efficient internet connection, suitable technological devices and videoconferencing tools) and of proper location where to conduct the therapy (Van Daele et al., in press). Because of the sudden shift to telepsychotherapy, both patients and therapists might not have immediate availability of the equipment needed; more importantly, if they have no access to dedicated and private space at home, it might be challenging to recreate that intimate, reassuring and safeguarded setting experienced in face-to-face sessions.

To the best of our knowledge, no previous study investigated the effect of this setting transition; however, both patients and therapists might experience it as destabilizing. Consequently, patients' adherence to the treatment and the therapeutic alliance might be endangered, as well as the therapy efficacy might be compromised. However, a solid pre-existing therapeutic alliance might work as protective factor, favoring a smooth transition.

Furthermore, therapists might not be specifically trained to deliver telepsychotherapy: this might threaten their perceived professional self-efficacy and self-confidence. Therapists who received a specific training on how to deliver telepsychotherapy are indeed more likely to adopt this treatment modality (Pierce et al., 2020). Therefore, training programs should take into high consideration the possibility of addressing these skills, at least briefly. Not surprisingly, younger and more expert therapists were reported to be more motivated to adopt telepsychotherapy (Gilmore & Ward-Ciesielski, 2019), possibly because they felt more confident in dealing with videoconferencing and about their professional capabilities, respectively.

Moreover, lack of clear policies and regulations about the delivery of telepsychotherapy (e.g. about how to protect the patients' privacy over the internet) has been reported to be a deterrent that may further discourage psychotherapists (Pierce et al., 2020). In this regard, therapists may refer to the guidelines provided by the European Federation of Psychologists'Associations (2001) and by the American Psychological Association (2013), as well as by the International Society for Mental Health Online (2000).

Last, but not least, also therapists must face the challenge of a pandemic, meaning that they might experience a significant level of distress too. As a result, therapists might struggle to accomplish adequately their professional duties towards telepsychotherapy. Thus, supervision might be even more crucial than usual. Interestingly, *telesupervision* was reported to be as much effective as in-person (Inman, Soheilian, & Luu, 2019; Jordan & Shearer, 2019; Martin, Lizarondo, & Kumar, 2018), even when switching the supervision modality in course (Tarlow, McCord, Nelon, & Bernhard, in press).

According to the previous considerations, we suggest that the effectiveness of telepsychotherapy *during* a pandemic should be further explored: the present moment represents indeed a unique opportunity of investigation. Specifically, the implications of the setting transition, of the possible difficulties to interact over the internet and of the therapists' professional preparedness should be addressed.

Finally, although most of studies focused on cognitive-behavioral approaches, many other kinds of therapy might be successfully implemented towards videoconferencing. Furthermore, many studies in literature reported successful on-line interventions other than psychotherapy, such as self-help tools or psychoeducational interventions (Manfrida, Albertini, & Eisenberg, 2017). These techniques might indeed be helpful to face the psychological consequences of COVID-19 outbreak; however, we decided to focus on

psychotherapy as a more powerful form of psychological support, which can be easily and rapidly implemented by the therapists.

To conclude, telepsychotherapy represents a *trustworthy alternative* to be adopted, especially given the current necessity to limit face-to-face contact and, at the same time, the urgent need to provide effective support. As mentioned, infective outbreak might have a significant and specific impact on people's well-being and mental health, including increased emotional difficulties, depressive symptoms, anxiety, irritability, insomnia, post-traumatic stress symptoms, fear and anger (e.g. Brooks et al., 2020; DiGiovanni et al., 2004), as well as sense of isolation (e.g. Hawryluck et al., 2004) and possibly grieving. Thus, all these issues should be specifically considered by (tele)psychotherapists currently delivering treatments. Additionally, certain individuals might be at higher risks than others to develop mental-health disorders, requiring extra care (Jiang et al., 2020). Above all, health-care professionals have been reported to be more affected by infectious outbreaks since their greater exposure to the disease and the higher risk of being infected (Reynolds et al., 2008). Furthermore, people who survived the infection or who experienced a bereavement conceivably represent higher-risk individuals.

Future studies should further address the investigation of telepsychotherapy effectiveness: the possibility to implement efficacious on-line treatments represents indeed an extraordinary opportunity to support most vulnerable individuals even in emergency circumstances, when face-to-face contact might be prevented.

Disclosure statement

No potential conflict of interest was reported by the authors.

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