Research Support for Audio-Only Telehealth

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The following is a non-exhaustive literature review of empirical research concerning the effectiveness of telephone or audio-only telehealth psychotherapy. This includes six meta-analyses and systemic reviews as well as four additional experimental studies examining unique conditions and therapy practices.

Author(s), Year	Title (article hyperlinks)	Population	Clinical Findings	Other Findings
Irvine et a., 2020	Are there interactional differences between telephone and face-to-face psychological therapy? A systematic review of comparative studies	Meta-analysis of 15 studies comparing telephone and in-person psychotherapy.	**Telephone-delivered psychological therapy is clinically effective.** There is a lack of support for the viewpoint that the telephone has a detrimental effect on interactional aspects of psychological therapy.	These studies revealed evidence of **little difference between modes in terms of therapeutic alliance, disclosure, empathy, attentiveness or participation**. Telephone therapy had significantly **shorter session length** than those conducted in-person.
Varker et al., 2019	Efficacy of synchronous telepsychology interventions for people with anxiety, depression, posttraumatic stress disorder, and adjustment disorder: A rapid evidence assessment.	Meta-analysis of **depression, anxiety, PTSD, adjustment disorders** in adults	**Strength of the evidence for telephone-delivered therapy was rated as High.**	Telephone and Video delivered psychological interventions provide a mode of treatment delivery that can potentially overcome barriers and increase access to psychological interventions.
Turgoose et al., 2018	Systematic review of lessons learned from delivering tele-therapy to veterans with post-traumatic stress disorder	Systematic Review of lessons learned from delivering tele-therapy to **veterans** with **post-traumatic stress disorder**	Treatment outcomes are equivalent	Patients report **high satisfaction** with telephone therapy. Despite noted difficulties (e.g., technological issues), telephone did not affect ability of therapists to build rapport or impede therapy processes or outcomes.
Coughtrey & Pistrang, 2018	The effectiveness of telephone-delivered psychological therapies for depression and anxiety: A systematic review	Systemic Review of telephone for depression/anxiety	Reviewed 14 studies (9 RCTs). All but one found significant reductions in symptoms of depression or anxiety via telephone therapy.	
Bee et al., 2008	Psychotherapy mediated by remote communication technologies: a meta-analytic review	Meta-analysis with low risk of bias including ten studies of telephone therapy for depression and anxiety.	Treatment outcomes are equivalent	Technology-mediated psychotherapy provision has the potential to overcome many of the barriers to care associated with more traditional face-to-face interventions.

Mohr et al., 2008	The effect of telephone-administered psychotherapy on symptoms of depression and attrition: a meta-analysis	Meta-analysis of 12 studies (9 RCTs) examining effect of telephone psychotherapy on depression and attrition. Also compared nursed to other mental health providers.	Telephone-administered psychotherapy can produce significant reductions in depressive symptoms. **Attrition rates were considerably lower than rates reported in face-to-face psychotherapy.**	Mental health professionals produced significantly greater reductions in depressive symptoms compared with other professionals
Lovell et al., 2006	Telephone administered cognitive behaviour therapy for treatment of obsessive compulsive disorder: randomised controlled non-inferiority trial	In-person therapy comparison of **cognitive behavioral therapy** (CBT) for **obsessive compulsive disorder**	CBT delivered by telephone was equivalent to treatment delivered face to face.	Telephone intervention included first and last sessions in-person. **Patient satisfaction was high for both forms of treatment.**
Ludman et al., 2007	A pilot study of telephone care management and structured disease self-management groups for chronic depression	Follow-up study of **maintenance effects** of telephone psychotherapy for depression.	**Clinical benefits of telephone maintenance psychotherapy for depression when compared to usual care.**	
Miller & Weissman, 2002	Interpersonal psychotherapy delivered over the telephone to recurrent depressives. A pilot study	**Chronic depression** treatment using **interpersonal process therapy** (IPT)	**Telephone delivered therapy reduced depression symptoms, improved global functioning, and improved social and work functioning.**	**83% of participants in expressed a favorable attitude towards the use of the telephone** to deliver psychotherapy and 75% expressed a desire to continue treatment using telephone.
Richter et al., 2015	Comparative and Cost Effectiveness of Telemedicine Versus Telephone Counseling for Smoking Cessation	**Smoking cessation** interventions by telephone or video	**Phone participants completed more counseling sessions and less likely to use cessation medications.**	**Counseling costs were similar between video and phone.**

CONCLUSIONS BASED ON MOST RECENT RESEARCH ON TELEPHONE-BASED PSYCHOTHERAPY

- Irvine et al., 2020 analyzed studies comparing therapeutic interactions in telephone and in-person psychotherapy and found that despite common perceptions that interactions via telephone would be lacking due to absence of visual cues, the empirical evidence did not indicate negative consequences for understanding, empathy, and alliance (e.g., Bennett, 2004; Miller, 1973).
- From Irvine et al., (2020), "The telephone has a long history in counseling and crisis intervention (Coman et al., 2001; Lester, 1977; Lester et al., 2012) and is utilized in specific treatment modalities such as Cognitive Behavioral Therapy (Haregu et al., 2015; Mohr et al, 2008), Dialectal Behavior Therapy (Ben-Porath, 2015; Koons, 2011; Oliveira and Rizvi, 2018) and psychoanalysis (Bakalar, 2013; Leffert, 2003; Scharff, 2012). Telephone-based Cognitive Behavioral Therapy (CBT) is also used to address a range of physical and co-morbid health conditions (e.g. Dobkin et al., 2011; Everitt et al., 2019; Mohr et al., 2000; Muller and Yardley, 2011)."
- In Varker et al.'s 2019 meta-analysis, they found strong evidence that telephone-delivered therapy was as effective as standard in-person treatment or was better than treatment as usual on a range of outcomes.
- Varker and colleagues concluded that given the high strength, positive direction, moderate to high consistency, moderate to high generalizability, and high applicability, the use of telephone-delivered telepsychology for clients with mental health conditions was ranked as "Supported."

HISTORICAL NOTE

- "The telephone was invented by Alexander Graham Bell in 1876. The first report of telemedicine in a major medical journal, which described the use of the telephone to diagnose a child's cough, occurred three years later in 1879 ("The Telephone as a Medium of Consultation and Medical Diagnosis," 1879). The telephone quickly became a widely used tool in the practice of primary-care medicine. In contrast, providers of psychotherapy were slow to adopt the telephone to deliver mental health–related services. To the best of our knowledge, the first report of the use of the telephone in the administration of psychotherapy was published in 1949, 70 years after the first telemedicine report (Berger & Glueck, 1949). In 1996, a report developed by an American Psychological Association task force found that empirical evidence concerning telephone-administered psychotherapy was scant to non-existent (Haas, Benedict, & Kobos, 1996). In the last decade, this has changed considerably." (In Mohr, 2008)

POPULATION FACTORS SUPPORTING AUDIO-ONLY OPTION

- Data aggregator BroadbandNow estimates the number of Americans without high-speed internet at 42 million (13% of the population).
- The inability to access video visits and travel to office locations disproportionately affects low-income and medically vulnerable people.
- The Pew Research Center reported that almost a third of households with incomes of $30 000 or less lack a smartphone, and more than 40% lack a computer or high-speed broadband access.
- A quarter of Medicare beneficiaries lack both a smartphone and a computer with high-speed internet, with higher percentages among low-income, Black, and Hispanic beneficiaries, and those with disabilities, a research letter in JAMA Internal Medicine reported.

- Nearly a third of Medicare patients who received telehealth services from mid-March to mid-June 2020 did so using audio-only telephone calls because they either couldn't access video technology or weren't comfortable using it, according to the Centers for Medicare & Medicaid Services (CMS).
- New York and New Hampshire have passed legislation to expand Medicaid coverage for telephone visits after the pandemic.
- In the United Kingdom, telephone-based psychological therapy for depression and anxiety forms part of clinical guidelines (National Institute for Health and Care Excellence, 2009, 2011) and one-fifth of publicly-funded adult primary care mental health provision is delivered via this mode (Health and Social Care Information Centre, 2014).

COST NOTES

- Cost benefits from telephone therapy include empirical findings that telephone sessions are generally shorter than in-person visits.
- Provider costs associated with systems and technologies needed to deliver telephone vs video-based psychotherapy are assumed to be equal due to the fact that only those providers who exclusively deliver phone-based psychotherapy would avoid the costs of a HIPAA compliant video service. Only providers without a physical office and no video service fees would see lower costs of service delivery. As such, the general practitioner is not likely to find cost savings in practices that use a mixture of in-person, telephone, and video services (this is the overwhelming majority of providers physically located in Iowa)
- Increased utilization of medically necessary treatments should never be the basis of lowering rates or denying access to services. Increased utilization for needed care is a desirable outcome that should be shared by providers, insurance carriers, public officials, and other stakeholders.

Thank you for your consideration of this information. Please contact me if I can be of any help in interpreting these findings or providing other resources to aid your decision making.

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