Published in final edited form as:

Gen Hosp Psychiatry. 2018 ; 55: 100–101. doi:10.1016/j.genhosppsych.2018.09.002.

Perceived benefits of psychotherapy via telemedicine based on suicide risk severity

Erin F. Ward-Ciesielski, PhD^a, Olivia Peros, MA^a, Alyssa Conigliaro, MA^a, and Amanda K. Gilmore, PhD^b

^aDepartment of Psychology, Hofstra University

^bCollege of Nursing and Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina

As the 10th cause of death in the United States, suicide rates are highest in rural areas with limited access to evidence-based psychological treatments (CDC, 2018; Kegler, Stone & Holland, 2017). One in five patients discontinue treatment prior to completion (Swift & Greenberg, 2012) and dropout is relatively common in suicidal individuals (Hom & Joiner, 2017), which has potentially life-threatening consequences. Barriers to treatment, including lack of transportation, can increase dropout potential (Stewart et al., 2017).

Telemedicine is a novel technique that can address barriers to treatment, increase initial access, and reduce dropout. Suicide-focused interventions via telemedicine may help to decrease dropout and provide timely, in-vivo treatment during crises. Despite evidence of its safety and effectiveness (Kreuze et al., 2017), providers underutilize telemedicine with suicidal patients (Gilmore & Ward-Ciesielski, 2017) and commonly refer to inpatient care, which often does not reduce risk (Jobes et al., 2008). Therefore, alternative approaches are needed.

Assessing provider's attitudes is necessary to improve and increase telemedicine's usage, as well as its potential to integrate psychological and general health care for suicidal, underserved individuals. The current study assessed providers' perceived benefits of delivering treatment via telemedicine based on suicide risk level. We hypothesized there would be more perceived benefits for no- compared to low- or high-risk patients, and the most common benefits would include improving access and overcoming barriers. Furthermore, we hypothesized that providers with experience in treating suicide would perceive more benefits compared to those without experience.

Licensed professionals ($n=52$; 76.9% female; $M_{age}=42.7$) with expertise in suicide treatment, dialectical behavior therapy (DBT), and/or telemedicine were recruited via professional listserves and direct emails to complete an online survey. Attitudes toward utilizing telemedicine with patients and no-, low-, or high-risk for suicide were assessed. Participants were predominantly White/Caucasian (98.1%), and included 55.8% Doctoral-level (vs. Masters-level) providers practicing an average of 12.6 years. Following initial

response review and category identification, responses were double-coded with excellent inter-rater reliability ($\kappa = .99$).

The most common benefit identified was “increased access to psychological services,” specifically for underserved populations (see Table 1). A chi-square test of independence examined the relation between patient risk level and reporting “increased access” as a benefit. Providers were more likely to report this benefit for no-risk patients, $X^2(2, N=142) = 16.96, p < .001, \phi = .35$. The second most common response was “reduced barriers to receiving treatment” and was also more frequently reported for no-risk patients, $X^2(2, N=142) = 16.40, p < .001, \phi = .34$. The third most common benefit was “increased contact compared to usual therapy,” most frequently reported as a benefit for high-risk patients, $X^2(2, N=142) = 24.01, p < .001, \phi = .41$. The fourth most common benefit, “immediate crisis intervention,” was only reported for low- and high-risk patients. Fisher’s exact test indicated no significant difference ($p > .05$).

Participants were categorized into groups based on the number of suicidal patients treated per week (i.e., 0, 1, 2–6, 7+ patients). An ANOVA with Bonferroni correction was conducted to compare groups on the total number of telemedicine benefits identified across risk levels. There was a significant difference between groups, $F(3, 52) = 3.13, p < .05$; however, post-hoc Tukey test comparisons were non-significant ($p > .05$). A second ANOVA comparing provider groups on number of benefits with high-risk patients was also significant, $F(3, 52) = 3.73, p < .05$. A Games-Howell nonparametric post-hoc test revealed the average number of benefits were significantly lower for providers who were treating zero suicidal patients ($M=3.2, SD=1.6$) than providers with one ($M=5.1, SD=1.7$) and 2–6 suicidal patients in treatment ($M=5.1, SD=1.7$). All other comparisons were non-significant.

In sum, providers identified several benefits of telemedicine that are applicable to varying levels of suicide risk. Surprisingly, “reduced barriers” and “increased access” were more commonly indicated for no-risk, but not high-risk, patients. Providers did frequently indicate “increased contact” as a perceived benefit for high-risk patients, suggesting there are some perceived unique benefits to providing telemedicine to high-risk cases. The low number of perceived benefits for highly suicidal patients supports an unwillingness to implement it.

These findings suggest that telemedicine is perceived as immediate crisis intervention and for increased contact, not a modality to provide evidence-based protocols. Future research should target developing a telemedicine protocol to deliver evidence-based psychotherapies to high-risk, underserved patients. Furthermore, the findings suggests a need to develop a training protocol for effectively treating suicidal patients via telemedicine (e.g., using DBT [Linehan, 1993] or the collaborative assessment and management of suicidality [Jobes, 2006]) to increase comfort with the technology, particularly for providers with less suicide treatment experience.

References

- Centers for Disease Control and Prevention (2018). 10 leading causes of death by age group, United States – 2016 Retrieved July 6, 2018 from https://www.cdc.gov/injury/wisqars/pdf/leading_causes_of_death_by_age_group_2016-508.pdf

- Gilmore AK, & Ward-Ciesielski EF (2017). Perceived risks and use of psychotherapy via telemedicine for patients at risk for suicide. *Journal of Telemedicine and Telecare*
- Jobes DA (2006). *Managing suicidal risk: A collaborative approach* New York, NY: Guilford Press.
- Jobes DA, Rudd MD, Overholser JC, & Joiner TE (2008). Ethical and competent care of suicidal patients: Contemporary challenges, new developments, and considerations for clinical practice. *Professional Psychology: Research and Practice*, 39, 405–413. 10.1037/a0012896
- Kegler SR, Stone DM, & Holland KM (2017). Trends in suicide by level of urbanization—United States, 1999–2015. *MMWR. Morbidity and mortality weekly report*, 66(10), 270. [PubMed: 28301448]
- Kreuze E, Jenkins C, Gregoski M, York J, Mueller M, Lamis DA, & Ruggiero KJ (2017). Technology-enhanced suicide prevention interventions: A systematic review. *Journal of Telemedicine and Telecare*, 23, 605–617. [PubMed: 27377792]
- Linehan MM (1993). *Cognitive-behavioral treatment of borderline personality disorder* New York, NY: Guilford Press.
- Stewart RW, Orengo-Aguayo RE, Gilmore AK, & de Arellano M (2017). Addressing Barriers to Care Among Hispanic Youth: Telehealth Delivery of Trauma-Focused Cognitive Behavioral Therapy. *The Behavior therapist*, 40(3), 112. [PubMed: 28670047]
- Swift JK, & Greenberg RP (2012). Premature discontinuation in adult psychotherapy: A meta-analysis. *Journal of consulting and clinical psychology*, 80(4), 547. [PubMed: 22506792]

Table 1.

Mental health providers' perceived benefits of providing treatment using telemedicine by patient's level of suicide risk.

Perceived Benefit Category (Frequency Indicated)	Sample Responses	No Suicide Risk N (%)	Low Suicide Risk N (%)	High Suicide Risk N (%)	X ² (2, N=142)
Increased access to psychological services (83)	"Expansion of services across state (reaching traditionally underserved populations and areas)" "Reach broader population of clients"	38 (46)	28 (34)	17 (20)	16.96 **
Reducing barriers to receiving treatment (61)	"Overcomes problems of distance and costs associated with travel" "More frequent sessions if travel time is not a factor, less missed school/work due to travel to appointments"	31 (50)	19 (31)	11 (18)	16.40 **
Increased contact compared to usual therapy (40)	"More frequent clinical contact with patient" "Could possibly engage with the client more frequently"	4 (10)	12 (30)	24 (60)	24.01 **
Immediate crisis intervention (12)	"Immediate access in moments of need to help make more effective decisions" "Handling the crisis in the moment, may be able to hold off on hospitalization"	0 (0)	5 (42)	7 (58)	$p > .05^a$

Note.

**
 $p < .001$

^a Fisher's exact test