

Telemedicine in Georgian Mental Healthcare: A Survey of Mental Healthcare Providers

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ABSTRACT

Background: Within mental healthcare accessibility, this research delves into the potential of Telemedicine as a transformative solution, particularly in the Georgian healthcare landscape. It stems from recognizing the gaps and disparities in mental healthcare access and seeks to address this significant issue.

Objectives: The primary objective of this study is to conduct an in-depth examination of Georgian mental health professionals' attitudes, preparedness, and willingness to embrace Telemedicine as a viable method for delivering mental healthcare. This objective is achieved through a series of specific research questions that delve into these professionals' preferences, concerns, and expectations.

Methods: A comprehensive questionnaire was administered to psychologists and psychiatrists in Georgia. This questionnaire was designed to elicit responses that shed light on the acceptance levels, perceived challenges, and potential advantages of integrating Telemedicine into mental healthcare practice. The careful collection and analysis of data allowed us to gain a nuanced understanding of the perspectives of mental health professionals in Georgia.

Results: Our research findings unveil a noteworthy pattern: Younger mental health professionals, particularly those with 0–10 years of experience, are more open to integrating Telemedicine into their future practice. This trend hints at a shifting landscape within mental healthcare delivery, suggesting Telemedicine could be pivotal in addressing accessibility issues. However, it is crucial to acknowledge that this study represents an initial exploration, and the interpretations should be made considering its preliminary nature.

Conclusions: This research has substantial implications. The positive attitudes of younger professionals towards Telemedicine signify its potential to enhance mental healthcare accessibility in Georgia. This work contributes significantly to the broader issue of healthcare accessibility. Moreover, it sets the stage for further research and exploration as we continue to investigate the integration of Telemedicine into mental healthcare practice, ultimately aiming to bridge the existing gaps in mental healthcare accessibility.

Keywords: Georgian mental healthcare; Georgian psychiatrists; Georgian psychologists; Telemedicine.

INTRODUCTION

Telemedicine is expanding rapidly within the healthcare sector and has the potential to revolutionize the way medical treatment is provided. Telemedicine allows healthcare professionals to perform services remotely through video conferencing and other forms of communication.¹ The mental health treatment field is one area in which Telemedicine can significantly impact patients due to its communication-based and non-invasive nature. It is essential to investigate how Telemedicine can increase access and quality of mental health care, especially during the COVID-19 pandemic, where mental health disorders are on the rise due to lockdowns and social isolation policies.²

A study by Bunnell et al. found that mental health providers believe Telemedicine increases access to care and expect to use Telemedicine more in the future.³ However, more reliable information on the effectiveness of Telemedicine in various medical specialties is needed. Stratification is needed to analyze the readiness and willingness of mental health care workers to provide better

care via Telemedicine and to identify obstacles to its implementation in routine care.

The purpose of this study is to evaluate the preparedness and willingness of Georgian mental health professionals to provide mental health care using Telemedicine and determine whether a relationship exists between their opinion and their years of experience. Additionally, it aims to highlight potential implementation challenges as seen by mental health care professionals.

Implementation of Telemedicine could resolve common problems associated with delivering mental care, such as lack of physical access to mental health institutions, transportation costs, the stigma and psychological burden of visiting a mental health center, and other issues. Moreover, it might enable mental health professionals to care for more patients while investing in the same hours, which could benefit everyone involved. Telemedicine also provides the chance to conduct group therapy sessions with patients, which is a distinct advantage in a small nation like Georgia,



where mental care centers are scarce, making it challenging to gather patients with the same diagnosis.

METHODS

An anonymous, cross-sectional survey of 10 close-ended, multiple-choice questions was used. The purpose of the questionnaire was to assess the opinions of Georgian providers of mental health services on Telemedicine, including its strong and weak sides, as well as potential future applications. It evaluated if the respondents' comments varied according to their professional experience. The survey was conducted over the phone in certain circumstances and distributed physically and electronically via business emails. Members of the research team, as well as survey respondents themselves, distributed the questionnaire to coworkers who met the inclusion criteria. Three healthcare facilities in Tbilisi, one in Batumi and Rustavi, and numerous private practices were among the settings where the questionnaires were distributed. Distribution and acquisition took place in September. Licensed clinical psychiatrists and psychologists with active outpatient practice were included in the study. Stratification was achieved by dividing participants into three groups based on their experience in the field: 0-10 years, 10-20 years, and 20+ years. A chi-square was utilized to analyze the difference between the groups.

RESULTS

Fifty-five mental health care professionals were invited to participate in a survey. Out of these, 47 individuals, constituting 85% of the invited participants, willingly engaged with the survey over two months. These participants were categorized based on their professional experience, with 13 having between 0 and 10 years of experience, 14 having between 10 and 20, and 20 having 20 or more years of experience. The survey was strategically designed to elicit insights from these professionals regarding the application and provision of Telemedicine and identify their primary perceived obstacles to its implementation.

Figure 1 illustrates the results of the survey question, "Can Telemedicine be utilized to treat/manage specific patients"? Among the 47 respondents, 29 provided affirmative responses to this query. Out of these 29 positive responses, 11 were derived from the 0–10 years of experience group, accounting for 84.6% of this subgroup; 10 came from the 10–20 years of experience group, representing 71.4% of that category; and 8 emanated from the 20–plus years of experience group, constituting 40% of that subgroup. A Chi-square analysis yielded a value of 7.435 with 2 degrees of freedom, and the associated p-value was calculated as 0.0243.

In Figure 2, the survey addressed whether Telemedicine could increase the number of individuals seeking mental health assistance. Out of the 47 respondents, 32 responded

affirmatively to this question. Among the respondents who provided positive answers, 12 were from the 0–10 years of experience bracket (92.3% of this group), 12 were from the 10–20-year experience bracket (85.7% of this group), and 8 were from the 20+ years of experience bracket (40% of this group). A statistical analysis indicated a p-value of 0.0017 and a chi-square value of 12.772.

FIGURE 1. Distribution of positive and negative answers of doctors with different experiences to the question: "Can Telemedicine be utilized to treat/manage specific patients"?

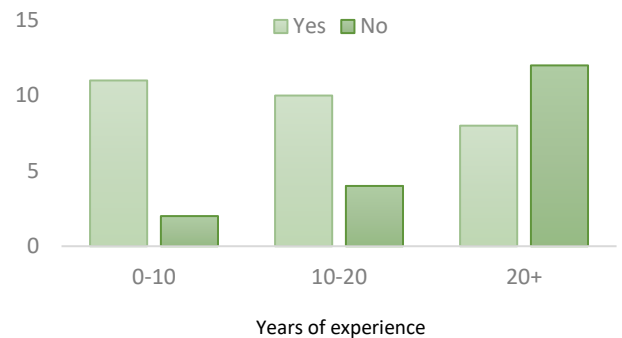
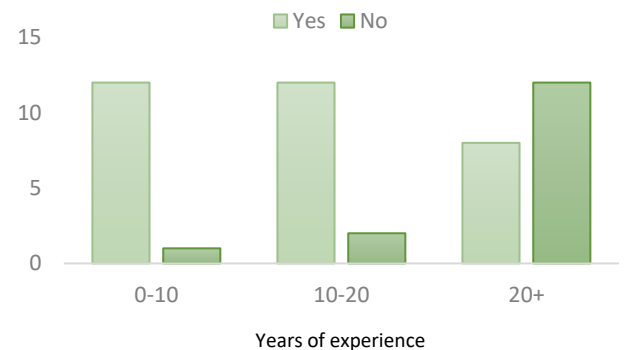


FIGURE 2. Distribution of positive and negative answers of doctors with different experiences to the question: "Can Telemedicine increase the number of patients seeking mental care"?



The third survey question, "Are you willing to incorporate Telemedicine into your practice"? (Fig.3), garnered positive responses from 25 out of the 47 participants. Within this group of affirming respondents, 11 had 0–10 years of experience (84.6% of this subgroup), 9 had 10–20 years of experience (64.2% of this subgroup), and 5 had 20 or more years of experience (25.3% of this subgroup). The chi-squared analysis resulted in a value of 12.23, with a p-value of 0.0022.

In Figure 4, titled "Does Telemedicine Increase Access to Mental Healthcare," 27 of the 47 respondents expressed affirmative views. Specifically, 11 responses originated from the 0–10 years of experience group (84.6% of this group), 10 from the 10–20 years of experience group (71.4% of this group), and 6 from the 20+ years of experience group (30%

of this group). A chi-square analysis yielded a value of 11.21, with a p-value of 0.0037.

FIGURE 3. Distribution of positive and negative answers of doctors with different experiences to the question: "Are you willing to incorporate Telemedicine into your practice"?

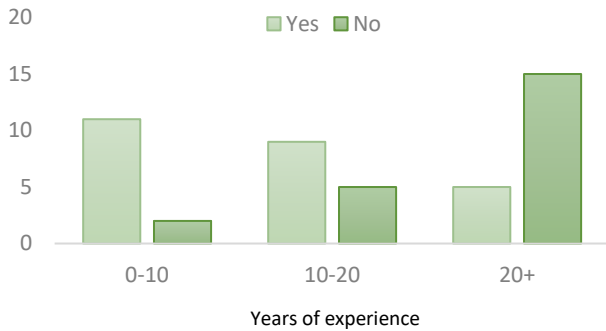


FIGURE 4. Distribution of positive and negative answers of doctors with different experiences to the question: "Are you willing to incorporate Telemedicine into your practice"?

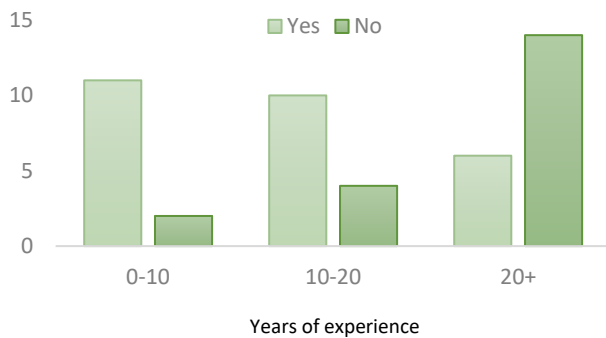


Figure 5 presents the outcomes of the survey question, "Does Telemedicine increase the number of well-managed patients"? Out of the 47 participants, 22 provided positive responses. These affirmative responses were distributed as follows: 10 from the 0–10 years of experience group (76.9% of this group), 8 from the 10–20 years of experience group (56.1% of this group), and 4 from the 20+ years of experience group (20% of this group). The chi-square value was 11.11, and the associated p-value was 0.0039.

For the sixth question, "What technical means are required to undertake telemedical practice"? (Fig.6), 42 out of 47 survey participants responded positively. This affirmative response was further broken down into 12 responses from the 0–10 years of experience group (92.3% response rate), 12 from the 10–20 years of experience group (85.7% response rate), and 18 from the 20–plus years of experience group (90% response rate). The statistical analysis produced a p-value of 0.4196 and a chi-square value of 1.737.

Regarding the seventh question, "Are you willing to use Telemedicine in the future"? (Fig.7), 40 out of the 47

respondents expressed a positive inclination. These responses were distributed among the experience groups as follows: 13 from the 0-10 years of experience bracket (100%), 12 from the 10-20 years of experience bracket (85.7%), and 15 from the 20+ years of experience bracket (75%). The chi-square value was 3.891, and the p-value was calculated as 0.1429.

FIGURE 5. Distribution of positive and negative answers of doctors with different experiences to the question: "Does Telemedicine increase the number of well-managed patients"?

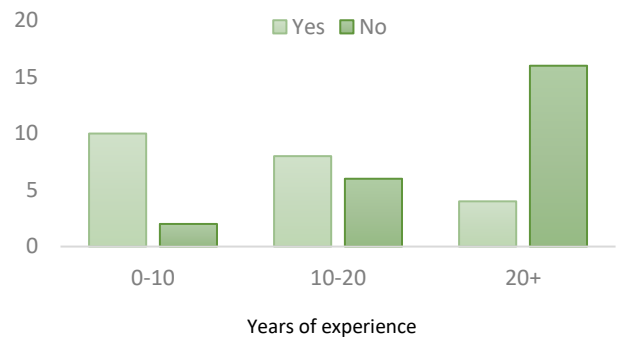


FIGURE 6. Distribution of positive and negative answers of doctors with different experiences to the question: "What technical means are required to undertake telemedical practice"?

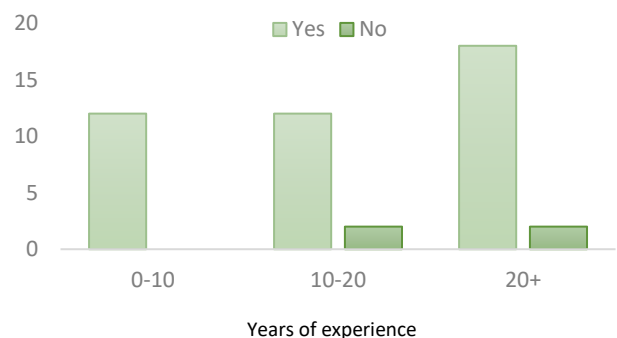
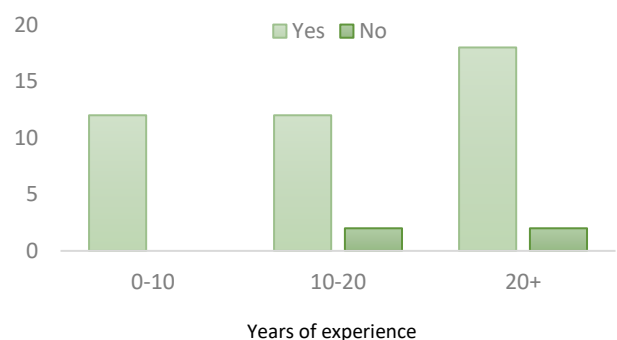


FIGURE 7. Distribution of positive and negative answers of doctors with different experiences to the question: "Are you willing to use Telemedicine in the future"?



Finally, in response to an open-ended question, participants were asked to identify the primary impediment to adopting Telemedicine (Fig.8). Out of 47 participants, 13 (28%) cited the non-effectiveness of Telemedicine as a primary obstacle to implementation. Of those, 2/13 were from the 0-10 bracket, 3/13 from the 10-20 bracket, and 8/13 were from the 20+ bracket.

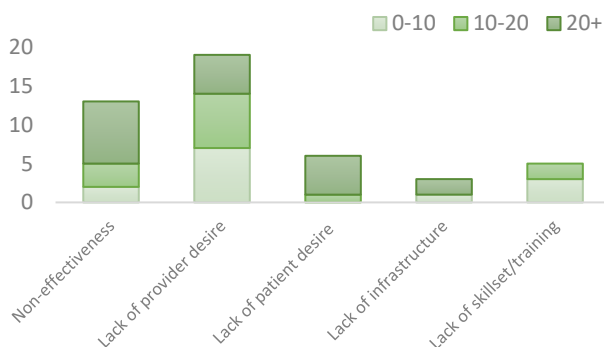
Lack of provider desire was cited as the main obstacle by 19/47 (40%) participants. Out of those, 7/19 were from the 0-10 bracket, 7/19 from the 10-20 bracket, and 5/19 from the 20+ bracket.

Lack of patient desire was cited as a primary obstacle by 6/47 (13%) participants. Of those, none were from the 0-10 bracket, 1/6 were from the 10-20 bracket, and 5/6 were from the 20+ bracket. 1/47 (2%) participants cited ethical considerations, and they were from the 10-20 bracket.

Lack of infrastructure was cited as a primary obstacle by 3/47 (6%) participants, out of which 1/3 were from the 0-10 bracket and 2/3 were from the 20+ bracket.

Lack of skillset/training was cited as a primary obstacle by 5/47(11%) participants, 3/5 were from the 0-10 bracket, and 2/5 were from the 10-20 bracket, with no citation from anyone in the 20+ bracket.

FIGURE 8. The positive and negative answers of doctors with different experiences were distributed to the question: "What is the main obstacle in implementing telemedicine in Georgia?"



DISCUSSION

The utilization of Telemedicine in developed nations, such as the United States, and developing nations, like Georgia, presents a striking contrast shaped by many factors. In developed nations, Telemedicine has seen more extensive integration into healthcare systems, driven by advanced technological infrastructure, more significant financial resources, and a well-established regulatory framework. This has enabled a more comprehensive range of medical specialties and services to be delivered remotely, leading to increased patient access, reduced healthcare costs, and improved healthcare outcomes. In contrast, developing nations often need more access to digital infrastructure, including broadband internet and smartphones, which can hinder the widespread adoption of Telemedicine.

Additionally, economic disparities may limit the affordability of telehealth services for a significant portion of the population. However, developing nations stand to benefit significantly from Telemedicine by overcoming geographical barriers and providing healthcare services to remote or underserved regions. Thus, the difference in telemedicine utilization between developed and developing nations underscores the immense potential of telehealth to bridge healthcare disparities and the pressing need for investments in digital infrastructure and healthcare policy reforms in developing nations to realize these benefits fully.

The findings of this study shed light on the attitudes and perceptions of mental health care professionals regarding the adoption of Telemedicine, emphasizing differences in acceptance and perceived barriers between practitioners in the United States (USA) and Georgia, a developing nation. These results have several implications and raise essential considerations for the future of Telemedicine in mental health care.

One notable trend that emerges from the survey results is the variation in acceptance of Telemedicine across different experience groups. Younger practitioners with 0–10 years of experience generally display a higher level of openness to the utility and integration of Telemedicine into their practice. In contrast, those with more extensive experience, particularly those with 20 or more years in the field, exhibit lower acceptance levels.

This divergence in acceptance may be attributed to differences in educational backgrounds and exposure to technology during training. Younger practitioners often receive more comprehensive education and training in digital tools and telehealth platforms, which can contribute to a more favorable view of Telemedicine. In contrast, older practitioners may have received training in a different era when Telemedicine was not as prominent, leading to skepticism or discomfort with new technologies.

The survey results indicate a positive perception among respondents regarding the potential of Telemedicine to increase patients' access to mental health care services and improve patient management. A substantial number of participants, irrespective of their experience, recognize Telemedicine's benefits in expanding mental health care reach and enhancing patient outcomes. This aligns with previous research highlighting Telemedicine's ability to bridge geographical and logistical barriers, making care more accessible to underserved populations.

Another crucial aspect of the study is the willingness to incorporate Telemedicine into practice. While many respondents express their readiness to embrace Telemedicine, there is an apparent discrepancy based on experience levels. Younger practitioners are more enthusiastic about integrating Telemedicine into their clinical work, whereas older practitioners are more cautious. This willingness to adopt Telemedicine is a key factor in the

successful implementation of telehealth services, as it suggests that the workforce may be receptive to change and adaptation.

The open-ended questions in the survey allowed participants to identify the primary impediments to adopting Telemedicine. The majority cited a "lack of interest/desire" as the main barrier. This finding suggests that addressing attitudinal and motivational factors among practitioners, particularly those with more experience, may be critical in promoting Telemedicine adoption. Additionally, fewer respondents mentioned ethical concerns, indicating the need for ethical guidelines and discussions to address these apprehensions.

His study offers valuable insights into the potential and challenges of Telemedicine adoption in mental health care. To build on these findings, future research could delve deeper into the specific concerns and reservations of practitioners with more experience, addressing their apprehensions and offering tailored training and support.

Furthermore, efforts should be made to bridge the education gap by incorporating Telemedicine training into the continuing education programs for mental health care professionals. This could reduce the technology-related barriers and enhance the willingness of older practitioners to embrace Telemedicine.

CONCLUSIONS

The positive attitudes of younger professionals towards Telemedicine signify its potential to enhance mental healthcare accessibility in Georgia. This work contributes significantly to the broader issue of healthcare accessibility. Moreover, it sets the stage for further research and exploration as we continue to investigate the integration of Telemedicine into mental healthcare practice, ultimately aiming to bridge the existing gaps in mental healthcare accessibility.

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