

CLINICAL CORRESPONDENCE

Use of telehealth and eHealth technologies in patient care by psycho-oncology service providers in low–middle-income countries during the COVID-19

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KEYWORDS

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Key points

- A high number of mental health cancer care providers from low–middle-income countries (LMICs) reported that they are working during the COVID-19 as both clinicians and researchers.
- Less than 50% of providers surveyed were taking care of patients with comorbid cancer and COVID-19. They also reported that this pandemic had drastically impacted the number of patients seen per week.
- Due to COVID-19, mental health cancer care providers from LMICs had to incorporate technology into their practice (with and without the support from an institution). Telephone, videoconferencing, text messages, and telehealth have been great resources by which to offer psychosocial support to their patients.
- Notably, despite the fact that mental health cancer care providers from LMICs have been able to offer eHealth interventions during the pandemic, they are experiencing notable challenges in delivering this type of intervention, often due to limited technology resources in their countries.
- The vast majority of mental health cancer providers from LMICs would like to be trained to offer eHealth interventions and to develop this type of supportive care resource in their countries.

The severe acute respiratory syndrome 2 (SARS-COV-2), also known as the coronavirus or COVID-19, has heralded a period of unprecedented change in our lives, with sequelae that will likely last for a long time. In the cancer care setting, clinics were forced to re-envision the way healthcare providers engaged with patients while ensuring the quality of care was maintained.¹ Different strategies were developed to better assist patients with cancer. Undoubtedly, telehealth and/or eHealth are great strategies to be used in order to keep providing care and psychosocial support to patients with cancer and their caregivers² and also to assess psychological consequences of illness.^{3,4} Moreover, individuals who are dealing with the emotional burden of the cancer journey (e.g., distress, anxiety, and depression) and possible concerns regarding infection, their health care capacity,

and potential interference with the optimal cancer care are among the beneficiaries of such assistance.⁵ In this paper, we define telehealth as an intervention that utilizes telecommunication technologies, and eHealth as “the use of emerging information and communication technology, especially the Internet, to improve or enable health and health care”.⁶ These kinds of intervention have been developed and studied over the past 2 decades, and often target specific unmet needs (e.g., pain, insomnia, fear of cancer recurrence, fatigue, anxiety).⁷ Despite this, there are still some challenges to eHealth interventions becoming a reliable option in medical and supportive care, including in the oncology setting.⁸ Whereas there has been a gradual shift over the past decade, the majority of publications in this research domain still come from

groups based in the United States, Europe, Australia, and the United Kingdom.

In view of this reality, and considering the mission of the International Psycho-Oncology Society (IPOS) “to promote global excellence in psychosocial care of people affected by cancer through partnerships, research, public policy, advocacy, and education”, two IPOS members (TE and CDB) and those of the eHealth IPOS Special Interest Group decided to conduct a cross-sectional survey study to ascertain the use of new technologies by mental healthcare providers belonging to LMICs. Mental health cancer care providers from low-middle-income countries (LMICs) were invited to participate in this study through social media (e.g., Twitter, Facebook) and also via email, from November to December 2020. The online survey was distributed via a personal link using the SurveyMonkey platform. All IPOS members from LMICs were invited ($N = 227$ from 40 countries), as well as professionals referred to us. Participants who agreed to participate answered an online questionnaire with 24 closed-ended questions. Descriptive statistics were employed to analyze the data. This study was approved by the Brazilian Research Committee (Protocol number: 39430620.3.0000.8101).

A total of 91 healthcare providers participated in this study. As described in Table 1, the majority was female gender (78%) and 60% was aged between 31 and 50 years old. One quarter had 5 or less years of practicing, and 27% had 5–10 years of practicing. Participants were mostly psychologists (70%) with a doctoral degree (53%); 25% were from Brazil. The majority (86%) reported that they were working during the COVID-19 pandemic; however, just 46% were taking care of patients with COVID-19 (Table 2). In general, these participants were seeing a smaller number of patients per week as compared to prior to COVID-19. They also reported that they were using more telehealth and eHealth in their practice during the pandemic compared to the period prior to COVID-19. Telephone (72%), videoconference (71%), and text messages (52%) were the most common types of communication used, and Zoom (80%), WhatsApp (75%), Google Meet (38%), Skype (28%), Microsoft Teams (22%), and Facetime (20%) were the most common programs used to deliver psychosocial care (Table 2).

Notably, the majority of participants (71%) felt that they were able to offer eHealth interventions, and 73% felt qualified to deliver this kind of intervention. However, 41% did report difficulties due to a lack of knowledge, and 45% due to limited technology resources in their country. The majority (70%) of participants would like to be trained to offer and develop eHealth interventions. Interestingly, 67% had resources in their countries for developing or translating this new type of intervention for their patients.

This short, novel, survey highlights some important challenges faced by healthcare providers from LMICs, including changes in their practice due to the pandemic (fewer patients seen per week and the need of incorporating technology in cancer care), lack of knowledge concerning eHealth interventions, and lack of resources and training. Further, we noted that there is a high proportion of participants from

TABLE 1 Participants' characteristics ($N = 91$)

Characteristics	N	%
Gender		
Women	71	78.8
Men	19	21.1
Age group		
21–30	9	10.0
31–40	35	38.8
41–50	20	22.2
51–60	18	20.0
61–70	8	8.8
Discipline		
Psychologist	64	70.3
Counsellor, mental health	7	7.7
Therapist	7	7.7
Nurse	7	7.7
Medical oncologist	4	4.4
Social worker	1	1.1
Patient advocate	1	1.1
Years of practicing		
<5	23	25.3
5–10	25	27.5
11–15	19	20.9
16–20	12	13.2
21–25	7	7.7
>26	4	4.4
Level of education		
Graduation	19	20.9
Master's degree	22	24.2
Doctoral degree	49	53.8
Country		
Brazil	23	25.3
Mexico	14	15.4
India	10	10.9
Peru	9	9.8
Argentina	3	3.3
Others ^a	32	35.2
Cancer setting		
Preventive behavior	34	38.2
Early diagnosis/screening	44	49.4
Hospital	69	77.5

(Continues)

TABLE 1 (Continued)

Characteristics	N	%
Survivors	57	64.0
Palliative care	63	70.7
Relatives	59	66.2
Adolescent and young adults	30	33.7
Pediatric	18	20.2

^aBolivia, Chile, China, Colombia, Croatia, Dominican Republic, Ecuador, Ghana, Jamaica, Jordan, Kenya, Lithuania, Nepal, Nigeria, North Macedonia, Serbia, Taiwan, Turkey, Uganda.

TABLE 2 Changes in providing support due to COVID-19

Variable	N	%
Working during COVID-19		
Yes	78	87.6
Take care of cancer patients with COVID-19		
Yes	42	46.6
Number of patients seen per week before COVID-19		
Less than 5	15	16.8
5-10	26	29.2
11-15	15	16.8
16-20	13	14.6
>20	20	22.4
Patients seen per week during COVID-19		
Less than 5	29	33.3
5-10	17	19.5
11-15	15	17.2
16-20	9	10.3
>20	17	19.5

LMICs interested in receiving training to increase their ability to provide such a care platform, since eHealth has become an important component of cancer care and will likely persist beyond COVID19 in some form. Undoubtedly, this is a call to action that must be addressed.

Previous studies have shown that telehealth and eHealth interventions can represent effective resources that can address patients' unmet needs and provide important psychosocial support for adolescents and adult (young, middle, and older ages) patients.⁹⁻¹¹ Despite this, there may be patients for whom such interventions are not desired, technological resources are lacking, or there remain concerns regarding privacy and security.⁹ These represent important avenues to address and that may be amenable to training and enhanced awareness surrounding security measures.

This study has several limitations; we included telehealth in the conception of eHealth. Since there is no consensus in the literature as to whether interventions facilitated through telehealth

and videoconferencing fit within the eHealth construct, we opted to include both options, as we believe that few participants are providing interventions through the Internet, mobile apps, social media, or serious games. Further, it is notable that just 19% of participants were using eHealth interventions. This provides fertile ground for future research examining the effect of such interventions, barriers to engagement among both providers and patients, as well as gaining a better understanding of the role of psycho-oncology care for caregivers during the pandemic and beyond. Second, the small number of participants from some LMICs, including China, Africa, and Latin America, may impact the generalizability of this data and these findings. This small number may be because the survey was only available in English, and thus future studies should be conducted in local languages and should better explore what resources are available among these institutions. Further studies should explore such questions as the proportion of patients who have access to eHealth, the number of patients seen per week, the number of psycho-oncologist providers, and if the mental health provider had received any type of training in psycho-oncology and in eHealth.

In conclusion, eHealth and telehealth interventions represent an alternative delivery method of supportive care that is becoming increasingly utilized amid the pandemic. It will likely continue to grow as an important resource in the provision of psychosocial care to our patients, especially given its potential to address such barriers as geographic distance, cancer-related disparities, delays in access to care, accessibility, and stigma. However, there exists a similarly growing need to develop and implement evidence-based training programs for healthcare providers from LMICs and ensure institutions have sufficient resources to provide such care. Such endeavors will enable providers globally to be more prepared and qualified to provide this kind of intervention to patients and expand the scope of eHealth options to patients with cancer.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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