Paediatric patients diagnosed with cancer will experience a myriad of different physical and psychological disturbances and/or sequelae, secondary to their disease and treatment. Concerning mental health, it is common that a sizable amount of them will experience some level of distress, feelings of fear, uncertainty about recurrence or progression, and also a certain degree of grief and loss. Despite these normal and expected reactions to cancer if circumscribed and time-limited, recent review studies indicate that up to 40% of oncology patients will end up developing depression. Similar prevalence rates have been indicated for anxiety and post-traumatic stress symptoms. Besides, these experiences can occur at different phases of the illness, from diagnosis until transition to survivorship or palliative treatment. This situation is susceptible to affect their quality of life, social participation, adherence to treatments and overall well-being. Despite the existence of psycho-oncologists, not all healthcare centres have these mental health professionals integrated full-time within the multidisciplinary teams. As a consequence, not all cancer paediatric patients and survivors receive equal evidence-based interventions for their mental health.

A growing body of evidence supports the feasibility and acceptability of online mental health interventions for a wide variety of general and clinical sample populations. Internet interventions can overcome barriers to psychosocial care, reducing the existing mental health disparities, and lowering the overload and economic burden of the healthcare system. Nowadays, more than 165,000 mHealth apps exist on Google Play and Apple Store. These apps have been developed to target different clinical (e.g., diabetes, obesity, cancer, etc.) and non-clinical populations (e.g., teenagers, adults and elderly people) and have the potential to modify existing health care delivery pathways. mHealth interventions can be customizable, personalized and scalable, and they can allow (synchronous or non-synchronous) user-provider interaction, are very useful to track and monitor progress and can adapt to different outcomes by readjusting the goals of the user, if needed. This situation might represent a promising solution to fill an important gap in quality paediatric cancer care throughout the different stages of the disease.

However, as the mHealth field matures, the challenge of establishing robust and practical evaluation methodologies remains. To date, relatively few studies have focused on designing, implementing and assessing the effects of mHealth apps which targets the mental health of paediatric cancer patients. In this sense, explicit attention has been placed on randomized controlled trials (RCTs) as the gold standard to assess the effectiveness and causal relationships between mHealth interventions and health-related outcomes. However, RCTs are expensive and often impractical evaluation methodologies for most mHealth apps. The main reasons for this are that mid-to-long sample sizes are needed to reach statistical power, the length of the studies...
is usually quite long and a high risk of app obsolescence exists before the study completion. Additional alternatives to RCTs have been put forward. These include N-of-1 trial designs, interrupted time-series, stepped-wedge or other alternative frameworks such as the Continuous Evaluation of Evolving Behavioral Intervention Technologies (CEEBIT), presented as an alternative to the gold standard of the RCTs\textsuperscript{11}.

Currently, the vast majority of available Internet resources for cancer patients consist of informative websites and online mutual support groups or social networks. Despite being very useful and interesting resources, they are not specifically designed to treat symptoms of distress, anxiety, depression or other severe psychopathological conditions that might occur relating to cancer diagnosis. Besides, almost none of these resources count on robust research assessing the specific impact on users’ mental health\textsuperscript{12–14}. Preventive and treatment mHealth interventions should be supported by empirical research. This means developing evidence-based Internet interventions as defined by Barak \textit{et al}.\textsuperscript{15}:

\[\ldots\] primarily self-guided intervention program that is executed by means of a prescriptive online program operated through a website and used by consumers seeking health- and mental health-related assistance. The intervention program itself attempts to create positive change or improve/enhance knowledge, awareness, and understanding via the provision of sound health-related material and use of interactive web-based components (page 5).

Therefore, static information websites or those based on data inconsistent with currently empirically based best practices are not considered evidence-based internet interventions. Last but not least, users’ engagement should be carefully considered. In any intervention, adherence is crucial. Given the high dropout rates of online interventions\textsuperscript{16}, some level of customization may be beneficial. Tailoring might range from providing personalized feedback based on the individuals’ scores and data, to more complex procedures that could involve generating an avatar, to modify skills building and outcome goals based on individuals’ progresses, to create adaptable lessons flow, to send immediate messages validating or reinforcing behaviour, or even to use gamification principles as a resource to enhance the user experience and his/her sustained motivation\textsuperscript{17}.

The Internet has altered enormously human interactions in the last decades. Changes are evident in every aspect of human life (\textit{e.g.}, relationships, trades, marketing, education, \textit{etc.}). Internet-supported mental health interventions are consistent with this development and follow the course of improving services while leveraging information and communication technologies, and continuously adjusting to changes in people’s needs. This commentary letter is intended to highlight the promising field that represents mHealth interventions for paediatric populations because of the increasingly ubiquitous role of mobile technology in their lives. Early studies suggest that such interventions are feasible in this population, but more rigorously designed large-scale studies are needed to examine their efficacy and support their clinical use and recommendation. Moreover, there remains a paucity of data on their effectiveness in real-world settings, especially from low- and middle-income countries and thus, more research is required to address these knowledge gaps.

Finally, it is important to note that mental mHealth interventions in no way attempt to replace traditional face-to-face psychotherapy. Rather, these solutions might allow reducing disparities of mental health access in developing countries and offer ways of approaching to different sample populations (\textit{e.g.}, remote and disabled populations, people who prefer not to be exposed, people travelling often, \textit{etc.}). Additionally, these interventions favor a broadening of the scope for different methods of interventions, especially for those who feel comfortable in the virtual environment, such as the millennials.

\textbf{Conflict of interest}

The author declares no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

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