



Medical training to prevent techno-addiction in adolescents and young people through University Extension

La formación médica para prevenir la tecnoadicción en adolescentes y jóvenes desde la Extensión Universitaria

Yanelis Jiménez Landín ^{1*}, <https://orcid.org/0000-0003-2581-8186>

Lena Alonso Triana ², <https://orcid.org/0000-0002-1567-8637>

María Elena del Huerto Marimon ², <https://orcid.org/0000-0002-2363-5346>

* **Corresponding author:** yanelisjimenez936@gmail.com

¹ Faculty of Medicine "Katyavala Bwila," Benguela, Angola.

² University of Medical Sciences of Matanzas. Faculty of Medical Sciences of Matanzas "Dr. Juan Guiteras Gener," Matanzas, Cuba.

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Dear Director:

In recent decades, the development of Information and Communication Technologies (ICT) has transformed society. "Their impact has influenced children, adolescents, and young people who use ICT as a means to learn,

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socialize, and entertain themselves, making them indispensable in daily life with a significant dedication of time."⁽¹⁾ Their introduction into society comes with great benefits but is not without health-related problems, including technology addiction. In line with this, the scientific community has raised concerns about the addictive potential of ICT.

Authors such as Echeburúa Odriozola ⁽²⁾ argue that "any excessive inclination toward an activity can lead to an addiction, whether or not a chemical substance is involved. Addiction is a pathological inclination that generates dependence and reduces human freedom by limiting the breadth of their interests."

The authors generally agree with this perspective but consider that the psychological dependence associated with excessive and compulsive use of ICT stems from the resources and content these technologies offer. "Technology addiction is therefore the inappropriate use of ICT, leading individuals to excessive and compulsive use of these technological resources due to the content they provide and their immediate gratifying effect, which interferes with their quality of life, psychological well-being, and development, creating dependence on the technological medium." ⁽³⁾

From this standpoint, what defines technology-addicted behavior is not so much the frequency of use but the time spent, which fosters a relationship of dependence, loss of control, interference with school and family duties, and limited communication with peers in formal groups and social relationships.

In line with this, international researchers highlight the lack of educational actions to prevent technology addiction. This assertion is supported by Cabero Almenara et al. ⁽⁴⁾ In national research and publications, Guevara Ponce ⁽⁵⁾ and Jiménez Landín and collaborators ⁽⁶⁾ share the view that children, adolescents, young people, teachers, health professionals, and families are provided with little information about the negative health consequences of inappropriate ICT use as a risk factor for technology addiction.

Therefore, the authors consider it essential to promote health education aimed at children and young people, their families, educators, and health professionals. The goal is to encourage appropriate ICT use focused on learning and addressing social issues like technology addiction, a priority challenge for society. This gave rise to the extension project "Interacting with ICT," which aligns with the actions of the "Chair Against Addictive Behaviors" at the University of Medical Sciences of Matanzas. Among its objectives are educational interventions in vulnerable groups and training medical students



as health promoters to prevent technology addiction in children and young people.

In the training of medical students, health promotion and education are considered permanent practices, given the high social value of health promotion as a competency for professionals in Cuba's National Health System. Graduates must influence the social determinants and risk factors affecting their community's health.

The authors argue that health promotion considers the training of medical students as health advocates, equipped to carry out actions that ensure community health. In this regard, the Ottawa Charter of 1986 ⁽⁷⁾ states that "Health promotion supports individual and collective development by providing information, health education, and enhancing life skills. Thus, it increases the options available for people to exercise greater control over their health. Empowering the population to learn throughout their lives to prepare for each and every stage is essential."

The Cuban Ministry of Public Health (Minsap) has an efficient organization and strong political will to implement health promotion and education programs. Medical universities play a leading role in this regard. In line with this, Curriculum E requires the training of well-rounded professionals, ensuring graduates can influence the psychosocial determinants affecting their community's health. ⁽⁸⁾

Similarly, Del Huerto Marimón ⁽⁹⁾ states that "health promotion should be the central focus of extension work in Cuban medical universities, which typifies and specifies the work of these institutions, helping to raise awareness and the capacity for action, both individually and collectively, through projects in fundamental areas of the university and broader community, identifying the main needs in health promotion and education."

In this context, the following key actions stand out:

1. Develop protocols for care and guidance for children, young people, families, and teachers.
2. Implement health promotion and technology addiction prevention actions among medical students at the University of Medical Sciences of Matanzas.

3. Design courses, workshops, and scientific events to contribute to the comprehensive training of medical students while preparing them as health promoters.
4. Conduct educational interventions in secondary schools in the municipality of Matanzas.
5. Develop a health promotion program in provincial media to prevent technology addiction among children and young people.
6. Participate in health fairs and community interventions.

However, the authors of this article believe that, given the learning needs of students, their role in social transformation, and the current and relevant issue of technology addiction due to the rapid development of ICT in today's technological society—along with the inappropriate use of ICT by children and young people as a risk factor for technology addiction—the following actions are proposed:

1. Design educational materials with a focus on prevention, promotion, and intervention to contribute to the teaching-learning process.
2. Promote research with student scientific groups to raise awareness of this health issue.
3. Advise and train institutions or organizations in the health and education sectors in the region to prevent technology addiction.
4. Design a University Extension Strategy to train medical students as health promoters for preventing technology addiction in children and young people.

To achieve these goals, the University of Medical Sciences of Matanzas has key strengths, such as its university processes in Teaching, Research, and Extension, the Medicine Curriculum E, and the institutional project "Psychological Sciences in Professional Training and Addressing Health Problems."

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AUTHORSHIP STATEMENT

YJL: Conceptualization, research, methodology, project administration, validation, original draft, review, editing.

LAT: Conceptualization, research, methodology, validation, original draft, review.

MEdHM: Conceptualization, research, methodology, validation, original draft, review.

CONFLICTS OF INTEREST

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