

## **Promoting sustainability: The importance of multidisciplinary education in healthcare**

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### **ABSTRACT**

The promotion of sustainability in health through multidisciplinary education has gained prominence in academic and professional debates. This theme highlights the importance of a holistic approach to health education and practice, considering clinical, environmental, social and economic aspects. The aim of this study is to understand the relevance of multidisciplinary health education to promote sustainable practices. This study is based on a literature review using the Virtual Health Library (VHL) and Scopus databases. The search strategy in the databases included the terms "Sustainability OR Sustainability AND Multidisciplinary AND Health OR Health". Research highlights the complexity and need for a multidisciplinary health education approach to address sustainability challenges. By integrating different disciplines and emphasizing collaboration between academics, health professionals, and communities, it is possible to train health professionals who are more aware and prepared to promote sustainable practices and improve the health of populations in an integrated and sustainable way.

**Keywords:** Education, Multidisciplinary, Health, Sustainability.

### **INTRODUCTION**

The promotion of sustainability in healthcare through multidisciplinary education is a topic that has gained increasing attention in academic and professional debates. This theme addresses the need for a holistic and integrative approach in health education and practice, considering not only clinical and biomedical aspects, but also the environmental, social and economic dimensions of health. The concept of sustainability in healthcare implies practices that not only benefit patients and healthcare professionals in the present, but also ensure the preservation of resources and a healthy environment for future generations.

Transdisciplinarity, characterized by effective collaboration between diverse disciplines, is essential in this context. Orozco and Cole (2008) highlight the importance of transdisciplinary sustainability education for health, particularly in resource-limited countries. They argue that this approach can sensitize trainees to the ecological, social and health problems faced by poor majorities, encouraging future work focused on sustainability for human health.

In this context, Meppem and Gill (1998) reinforce the need for a transdisciplinary approach in planning and management related to sustainability. They argue that such an approach goes beyond the

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usual interaction between partners from different disciplines, requiring a revised process to enable real cooperation on sustainability planning.

The inclusion of planetary health in clinical education is also a vital aspect within this theme, as sustainable health education can integrate planetary health into clinical training, focusing on skills needed to reduce the environmental impacts of health systems and ethical considerations (WALPOLE et al., 2019). In addition, multidisciplinary health professions education in community settings involves leadership, curriculum reflecting clinical practice, partnership councils, and faculty development, all of which contribute to sustainability in health education (HARRIS ET AL., 2003).

However, challenges of transdisciplinary research in sustainability science have been identified, such as the lack of a common terminology and variation in practitioner engagement (BRANDT et al. (2013). In addition to these challenges, Yarime et al. (2012) discuss the academic, institutional, and societal challenges in sustainability science, emphasizing the need for active collaboration with diverse stakeholders in society, as well as addressing the challenges of institutionalization in higher education institutions. They suggest bringing together education, research, and social contributions to form a systematic and integrated response to the sustainability crisis.

In the meantime, sustainable health programs emerge, which are complex systems that encompass health problems targeted by the programs and key *stakeholders*, all interacting dynamically within a given context (GRUEN et al., 2008). This approach helps to understand, measure, and improve the sustainability of health programs, especially in low- and middle-income countries.

Additionally, the practice and results of multidisciplinary research for environmental sustainability, as presented by Uiterkamp and Vlek (2007), emphasize the need for multidisciplinary collaboration since 1990, when sustainability became a key concept for a wide range of scientific disciplines. The authors discuss the importance of this collaboration in the conceptualization of the research, in the design of the project, in the main findings and in the added value for environmental policy.

In this vein, the teaching of sustainability from a multidisciplinary approach is proposed by Jabareen (2011), who suggests a new conceptual framework for the teaching of sustainability that assumes the multidisciplinary nature of sustainable development. This framework consists of ten concepts, each representing a specific sustainability-related domain, covering ethical, social, economic, ecological, spatial, design, and political aspects of sustainability.

Thus, it is necessary to incorporate sustainability into the medical curriculum, highlighting the need for health professionals to apply the principles of sustainable health to medical practice. This study investigates how to best incorporate this new learning into the medical curriculum, offering practical recommendations for implementation in any medical school (TUN, 2019).



## **OBJECTIVE**

The aim of this study is to understand the relevance of multidisciplinary health education to promote sustainable practices.

## **METHODOLOGY**

This study is based on a literature review using the Virtual Health Library (VHL) and Scopus databases. The search strategy in the databases included the terms "Sustainability OR Sustainability AND Multidisciplinary AND Health OR Health".

Data collection was carried out in March 2024. Original research articles, literature reviews, case studies, conference reports, and book chapters were included in the review. The studies were presented in a narrative way throughout the text, highlighting the main findings of authors who address the theme.

## **DEVELOPMENT**

The theoretical foundation of sustainability in health encompasses an integrated understanding of the environmental, social, and economic impacts of health practices. Orozco and Cole (2008) emphasize the importance of transdisciplinary education in sustainability, especially in contexts of limited resources, promoting a deeper understanding of the ecological and social challenges faced by vulnerable populations. This integrated vision requires that health education incorporate sustainability themes, as highlighted by Meppem and Gill (1998), who advocate a transdisciplinary approach to sustainability planning and management, encouraging participatory and interactive learning processes.

In addition, the development of health education curricula should reflect a sustainable approach. Walpole et al. (2019) discuss the inclusion of planetary health in clinical training, integrating ethical and environmental considerations. However, the implementation of a multidisciplinary education faces challenges, such as resistance to changes in curricula and a lack of resources. Harris et al. (2003) analyze the elements that facilitate and hinder sustainability in multidisciplinary educational models in the health professions.

In this context, transdisciplinary research in sustainability science is key to overcoming these challenges. Brandt et al. (2013) explore the importance and challenges of this approach, emphasizing the need for common terminology and methods to promote sustainable transitions. Uiterkamp and Vlek (2007) present cases that illustrate the value of multidisciplinary research in sustainability, showing how this approach can inform sustainable policies and practices.

Thus, the implementation of sustainable practices in health institutions becomes a necessary factor. Tun (2019) addresses the need for newly graduated physicians to apply the principles of sustainable health in medical practice, which requires innovations in the medical curriculum. Thus, the role of funders and



policies in promoting sustainability in health is also vital. Yang, Farmer, and McGahan (2010) discuss the need to reassess sustainability criteria, arguing that health is a sustainable investment and that funders are well positioned to develop integrated programs of medical interventions for sustainable outcomes.

Education for sustainable action and innovation, on the other hand, involves the implementation of innovative curricula and educational practices that promote sustainable action. Jabareen (2011) suggests a conceptual framework for teaching sustainability, considering the multidisciplinary nature of sustainable development, encompassing ethical, social, economic and ecological aspects. Finally, professional development and continuing education are essential for health professionals to maintain their sustainability competencies throughout their careers, implying regular updates of curricula and the availability of continuous educational resources for professionals already in practice.

In this context, Yang, Farmer and McGahan (2010) argue for the reassessment of sustainability criteria, proposing that health be seen as a sustainable and sustaining investment, and that funders and coordinating bodies are the most appropriate to develop integrated programs of medical interventions to achieve sustainable health outcomes.

This research highlights the complexity and need for a multidisciplinary health education approach to address sustainability challenges. By integrating different disciplines and emphasizing collaboration between academics, health professionals, and communities, it is possible to train health professionals who are more aware and prepared to promote sustainable practices and improve the health of populations in an integrated and sustainable way.

## **FINAL THOUGHTS**

Health education must transcend traditional approaches, integrating knowledge from diverse disciplines to effectively address sustainability challenges. Thus, it is understood that the incorporation of sustainability into health curricula is fundamental. It is necessary to demonstrate how the integration of planetary health into clinical education can enrich learning and foster sustainable practices.

Obstacles to the implementation of multidisciplinary health education, such as institutional resistance and resource limitations, should be recognized and addressed.

Thus, it is evident that continuous commitment to sustainable health education and practices is essential, and that the health field requires a continuous updating and development of sustainability skills, ensuring that professionals are equipped to deal with current and future challenges.

In short, promoting sustainability in healthcare through multidisciplinary education is vital and requires a collaborative, innovative, and adaptive approach. There is a need to prepare health professionals who not only understand today's health challenges, but who are also equipped to address these challenges in a sustainable manner, considering the well-being of future generations and the planet.



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