



# The importance of multidisciplinarity in health education

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#### **ABSTRACT**

In recent years, the importance of multidisciplinarity in health education has been widely recognized as crucial to address the complexity of patient care and promote a holistic approach to health. Collaboration between professionals from different disciplines allows for an integrated view of health challenges, driven by significant educational changes. The World Health Organization defines multiprofessional education as a process in which students from health-related occupations learn together to collaborate in the delivery of health services. However, questions about the effectiveness of multidisciplinary education should not be ignored, and conceptual confusion can create methodological challenges. Multidisciplinary health education is essential to prepare professionals for an ever-evolving healthcare environment, where collaboration between diverse specialties is crucial to deliver comprehensive, high-quality patient care. In addition to improving clinical outcomes, multidisciplinary education also benefits health management, innovation in health services, and effectiveness in teamwork. One example is a multidisciplinary approach to health manager education, which has been shown to increase the quality of care and make health service delivery more cost-effective and efficient.

**Keywords:** Health education, Patient care, World Health Organization.

### INTRODUCTION

In recent years, the importance of multidisciplinarity in health education has been increasingly recognized as fundamental to address the complexity of patient care and to promote a holistic approach to health (DE ARAÚJO *et al.*, 2020). Multidisciplinary education brings together knowledge from various disciplines, allowing for a more integrated and comprehensive view of health challenges. Walker (1995) highlighted that rapid changes in health care delivery, especially in the transition from acute to community-based services, have heightened the need for effective collaboration among health professionals, driven by significant educational changes such as the development of degree-level programs and the integration of single-discipline training schools into the university sector.

The World Health Organization (WHO) defines multiprofessional education as a process where students from health-related occupations, with different educational backgrounds, learn together during certain periods of their training, with the aim of collaborating in the provision of promotional, preventive, curative, rehabilitative, and other health-related health services. Sommer, Silagy, and Rose (1992) stressed

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the importance of replacing the competitive "us-them" mindset with a team approach in teaching multidisciplinary care to develop successfully.

In this context, Pirrie, Hamilton, and Wilson (1999) addressed issues and concerns related to multidisciplinary health education, questioning the ideologically optimistic assumption that multidisciplinary education is inherently beneficial. They argue that the effectiveness of multidisciplinary health education should not be assumed without questioning and that conceptual confusion around the terms used can create methodological problems at the beginning of research projects in this area.

Multidisciplinary health education is essential to prepare professionals for an ever-evolving healthcare environment, where collaboration between diverse specialties is crucial to deliver high-quality, comprehensive patient care. A recent example of this evolution is the Multidisciplinary Care Initiative, which highlights the importance of early collaboration between students from different medical disciplines to improve clinical reasoning, collaboration, and integration of necessary care for patients [(Chung, Qiu, Chaikof, & Naples, 2021).

The focus of multidisciplinary education is not limited to improving clinical outcomes, but extends to health management, innovation in health service design, and effectiveness in teamwork. For example, a recent study in Montenegro demonstrated the effectiveness of a single, multidisciplinary approach to health manager education, combining knowledge from diverse areas to increase the quality of care and make health service delivery more cost-effective and efficient (OGNJANOVIC; ŠENDELJ; AMMENWERTH, 2020).

Thus, the importance of integrating multidisciplinary education into academic curricula is necessary to develop health professionals who can adapt to changes in the sector and work effectively in multidisciplinary teams. This approach not only improves the quality of patient care but also fosters innovation and efficiency in the healthcare industry, preparing professionals to face future challenges with a broader and more integrated perspective.

Multidisciplinarity in health education not only enriches the educational process but also transforms clinical practice, making it more integrated and patient-centered. For example, in the management of chronic diseases such as diabetes and hypertension, the multidisciplinary approach, which includes physicians, nurses, nutritionists, and psychologists, has been shown to be effective in improving clinical outcomes and patient satisfaction. This interprofessional collaboration facilitates the development of personalized care plans that address not only the medical but also the psychosocial and behavioral needs of patients (KVERAGA; JONES, 2011).

In mental health education and care, the integration of knowledge from psychiatry, psychology, social work, and occupational therapy, among others, provides a more complete understanding of mental disorders and promotes more holistic therapeutic approaches. The Recovery Camp experience, for



example, showed how an immersive multidisciplinary approach can significantly improve students' understanding of mental health care and promote interprofessional practice (MOXHAM *et al.*, 2017).

In this scenario, multidisciplinarity can corroborate public health, where collaboration between epidemiology, social sciences, health policies, and management becomes essential to develop effective public health interventions. Educational programs that adopt this approach should be well equipped to respond to health emergencies and to develop prevention and health promotion strategies that are based on scientific evidence and sensitive to the social and cultural context of the populations served.

#### **OBJECTIVE**

The objective of this study is to present in a narrative way the importance of multidisciplinarity in health education.

#### **METHODOLOGY**

The methodology used to prepare this study was based on a literature review carried out through the Virtual Health Library (VHL), Latin American and Caribbean Health Sciences (LILACS) and *Scientific Electronic Library Online* (SciELO) databases. The search equation used in the databases was composed of the terms "Multidisciplinarity AND Health Education AND Interprofessional Collaboration AND Interdisciplinary Approach AND Health Education".

Data collection took place in January 2024 and there was no restriction on the period of publication of the studies so as not to limit the results. Original research articles, literature reviews, case studies, conference reports, and book chapters discussing the implementation and impacts of multidisciplinarity in health education were included in the review. The studies were described in a narrative manner throughout the text, highlighting the main findings in relation to the benefits, challenges and strategies for implementing multidisciplinarity in health education.

## **DEVELOPMENT**

Multidisciplinary health education can be seen as a means of implementing significant improvements in the quality and cost-effectiveness of patient care. Kveraga and Jones (2011) discussed various definitions of multidisciplinary education and evaluated how multidisciplinary education can be implemented in clinical areas relevant to anesthesiologists. The authors further described various implementations of multidisciplinary education within their hospital and anesthesiology department, highlighting the considerable success of multidisciplinary education in improving patient care.

The effectiveness of multidisciplinary learning among those who care for people with diabetes, in turn, is yet to be defined. Munro, Felton, and McIntosh (2002) argued that different professions learning



together can potentially improve professional relationships, collaborative working practices, and ultimately standards of caregiving. They examine current evidence to support multidisciplinary learning in both general medical education and diabetes education, highlighting the need to demonstrate the superiority of multidisciplinary learning over separate learning experiences.

In this context, one study highlighted the importance of multidisciplinary education when incorporating practical nursing training for medical students, emphasizing interprofessional collaboration. The results indicated that the students acquired significant knowledge in nursing care, support and communication activities, as well as hospitalized patient care and multidisciplinary collaboration through effective communication and coordination. This approach fostered a deeper understanding of physicians' roles in the clinical setting and reflected on what is expected of physicians in terms of interprofessional collaboration (IGARASHI, 2023).

On the other hand, a literature review explored how the conceptions of multidisciplinarity, interdisciplinarity, and transdisciplinarity are applied and defined in the public health workforce (SELL *et al.*, 2022). The review highlighted the importance of collaboration across disciplines to respond to complex and interconnected public health challenges, such as the climate crisis, emerging infectious diseases, and military conflicts. The varied definitions point to the need for a clearer understanding and practical implementation of these concepts in the field of public health.

In this line of thought, the importance of multidisciplinary clinics was evidenced in the context of neuromuscular disorders, such as amyotrophic lateral sclerosis and muscular dystrophies (GWATHMEY; HEIMAN-PATTERSON, 2023). These clinics provide comprehensive, coordinated clinical care across multiple medical disciplines and allied health professions, significantly improving patient outcomes, satisfaction, quality of life, access to medications and equipment, and survival. Despite the high costs, multidisciplinary clinics can be economically advantageous from the patient's point of view and overcome barriers, such as the distance to the clinic and the duration of visits, potentially through multidisciplinary consultations via telemedicine.

The study by De Faria Pereira (2023) presented an update on the importance of interdisciplinarity in the curricular formation of health education and its applicability in the context of health work. This study highlighted successful examples of the implementation of interdisciplinarity as a curricular model tool in health courses and discussed the challenges for its implementation, as well as the benefits for the graduates and the society that receives their services.

Madigan and Fitzgerald (1999) emphasized that multidisciplinary patient care is essential in the management of rheumatoid arthritis, a potentially disabling chronic disease. They noted that multidisciplinary care concepts continue to evolve and that while all team members can make valuable



contributions to patient care, the particular focus of this chapter is on the ongoing and changing aspects of team management, especially in relation to nursing.

In the meantime, Yarborough, McClure, and Gomez (2014) discussed how multidisciplinary education has gained more momentum over the past decade, especially in the healthcare industry. They highlighted that many administrators believe that there are traditional barriers between health providers and feel that multidisciplinary education is a great way to break down these barriers, especially when learners are from different levels of education.

Thus, the importance of multidisciplinarity in health education becomes evident through a wide range of literature that supports its value in improving patient care, promoting collaboration among health professionals, and fostering innovation in the field of health. Multidisciplinary health education encompasses several disciplines, allowing for a broader and deeper understanding of health challenges, and prepares professionals to work collaboratively, providing more effective and patient-centered care (WALKER, 1995).

In fact, the field of healthcare is constantly evolving, driven by technological advancements, new scientific discoveries, and changing demographics. These transformations require a health workforce that is flexible, adaptable, and able to integrate new knowledge quickly. Multidisciplinary education meets this need by promoting the exchange of knowledge between different disciplines and stimulating innovation (SOMMER; SILAGY; ROSE, 1992).

Thus, it is understood that multidisciplinary practice is crucial to effectively address the social determinants of health, which are multifaceted and interconnected. Through an educational approach that incorporates perspectives from various disciplines, it is possible to develop more inclusive and accessible care strategies, reducing health disparities and promoting equity.

#### FINAL CONSIDERATIONS

By concluding this study, it is understood that multidisciplinary health education contributes to the development of health professionals who are not only technically competent, but also able to work in teams, think critically, and adapt to an ever-changing health care environment. The incorporation of multiple perspectives and interprofessional collaboration enrich health education, promote innovation, and improve patient care, contributing to a fairer, more efficient, and human-centered health care system. Investing in multidisciplinary educational approaches is therefore essential to address the health challenges of the twenty-first century and to promote the health and well-being of populations around the world.

The need to integrate multidisciplinary education into health curricula is evidenced by recent global challenges, such as the COVID-19 pandemic, which has highlighted the importance of



collaboration across specialties to respond effectively to public health crises. In addition, continuous technological advancement in medicine and health care requires a workforce that can quickly adapt to new treatment tools and methods, emphasizing the importance of a comprehensive and interdisciplinary educational foundation.

In this context, health education institutions should prioritize the incorporation of multidisciplinary elements in their programs, preparing students not only to be proficient in their own disciplines, but also to understand and value the contributions of other specialties. This requires a redesign of existing curricula to include more opportunities for collaborative learning and hands-on experiences that reflect the complexities of the real health care environment.

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