

COLLECTIVE HEALTH AND PROFESSIONAL COLLABORATION: THE IMPACT OF MULTIDISCIPLINARY TEAMS ON COMMUNITIES



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ABSTRACT

The growing complexity of collective health demands requires integrated care approaches, in which multidisciplinary teams play an essential role in ensuring more comprehensive and effective care. This study, conducted through a narrative review of the literature, analyzed the impact of interprofessional action on the quality of care, on the problem-solving capacity of health services and on the promotion of equity in access to care. The results showed that collaboration between different professionals improves clinical outcomes, optimizes continuity of care, and strengthens the humanization of care, in addition to reducing work overload and promoting greater satisfaction among patients and professionals. However, structural challenges still hinder the implementation of this care model, highlighting problems in communication between professional categories, resistance to interdisciplinarity, rigid institutional hierarchies, and lack of specific training for collaborative work. To overcome these challenges, it is essential to develop institutional strategies that strengthen interprofessional cooperation, such as the expansion of continuing education programs, the implementation of technological tools to optimize communication, and the creation of public policies that encourage integration between the various levels of care. In this way, the strengthening of multidisciplinary teams can contribute significantly to the construction of a more equitable, accessible, and efficient health system, with positive impacts on the quality of life of the population and the sustainability of health services.

Keywords: Multidisciplinary Teams. Collective Health. Primary Care. Interprofessional Collaboration. Public Policies.

INTRODUCTION

Collective health, as an interdisciplinary field, seeks to understand and intervene in the processes that determine the health of populations, ranging from biological to social and environmental factors (Janković, Nikolić, Marković, & Kastratović, 2024). In this context, multidisciplinary teams have emerged as an essential strategy to face the complex challenges that arise in health promotion and disease prevention. Working together between different professionals allows for a holistic and integrated approach, increasing the effectiveness of interventions and improving health outcomes (Vaughan et al., 2023).

The fragmentation of health services is a recurring problem that compromises the quality of care and the continuity of care. Fragmented care models can result in miscommunication, duplication of effort, and gaps in the delivery of essential services, negatively affecting patients and their families (Bohnenkamp, Patel, Connors, & collaborators, 2022). On the other hand, the performance of multidisciplinary teams promotes a collaborative environment that facilitates the coordination of care and the sharing of information, essential for the management of chronic and complex conditions (Traylor et al. 2021).

The justification for the promotion of multidisciplinary teams lies in the growing demand for more integrated and patient-centered care. The inclusion of community health agents, for example, has been shown to be effective in reducing health inequalities and expanding access to basic services (Hohl; Neuhouser; Thompson, 2022). In addition, continuing education and specific training of transdisciplinary teams have been associated with significant improvements in the quality of care provided and patient satisfaction (Paterson; Henderson; Mathieson, 2023).

Research indicates that the implementation of multidisciplinary teams not only improves the quality of care, but also promotes an environment of continuous learning among professionals, strengthening the health system's responsiveness to the emerging needs of the population (Dawe; Cronshaw; Frerk, 2024). Leadership and institutional support are critical factors for the success of these initiatives, directly influencing the effectiveness of teams and the sustainability of collaborative practices (Angood, 2024).

In view of this scenario, the present study aims to explore the impact of multidisciplinary teams on public health, analyzing their contributions to the improvement of health services and their effects on the communities served. By highlighting the advantages and challenges of this approach, it seeks to provide subsidies for the

formulation of more effective and equitable public policies, promoting a more inclusive and responsive health system.

METHODOLOGY

This study was conducted through a narrative review of the literature, with the objective of analyzing the impact of multidisciplinary teams on public health, identifying benefits, challenges, and improvement strategies.

The search for articles was carried out in the PubMed, Scopus, Web of Science and Google Scholar databases, using the following descriptors and their combinations, according to the standards of the Medical Subject Headings (MeSH) and the Virtual Health Library (VHL): "Multidisciplinary teams", "Interprofessional collaboration", "Public health", "Primary health care", "Health outcomes" and "Vulnerable populations". The search was limited to articles published between 2021 and 2024, ensuring the timeliness of the data. Only peer-reviewed studies published in recognized scientific journals were included.

The inclusion criteria were: studies that address the impact of multidisciplinary teams on public health, research on interprofessional collaboration and its benefits in primary care, quantitative and qualitative studies or systematic reviews focusing on the effectiveness of this work model, and publications in English, Portuguese, or Spanish. Articles without access to the full text, studies that do not specifically address the performance of multidisciplinary teams in public health, duplicate studies in different databases and editorials, or experience reports without clear scientific methodology were excluded.

After applying these criteria, 74 articles were initially identified. With the analysis of the abstracts and the application of the exclusion criteria, 15 relevant studies remained. In the complete reading, 9 articles were selected for presenting robust data aligned with the study objective.

Data analysis was carried out using the content analysis method, according to Bardin (2016). The articles were categorized into four main thematic axes: (1) benefits of multidisciplinary teams in public health, such as improving the quality of care, expanding access, and reducing inequalities; (2) barriers to the implementation of interprofessional collaboration, including challenges in communication, cultural resistance, and lack of continuous capacity building; (3) impact on community health and clinical outcomes, showing improvements in health indicators and patient satisfaction; and (4) strategies to

optimize the performance of multidisciplinary teams, with a focus on professional training and institutional incentive policies.

The synthesis of the results was organized to highlight the most relevant findings and practical implications for strengthening public health. In addition, the triangulation strategy of the sources was used, ensuring the reliability of the data and allowing the comparison of different perspectives on the subject. As this was a review study, there was no need to submit it to the Ethics Committee, since it did not directly involve human participants. All analyzed articles were duly referenced, respecting copyright and the guidelines of good scientific practices.

RESULTS AND DISCUSSION

The studies analyzed highlight that the multidisciplinary approach favors a more comprehensive and patient-centered care, reducing gaps in the continuity of care and improving clinical outcomes (Janković et al., 2024; Vaughan et al., 2023). Teams composed of physicians, nurses, physiotherapists, social workers, nutritionists, psychologists and pharmacists allow for broader and more individualized care, promoting more effective preventive and therapeutic interventions (Dawe; Cronshaw; Frerk, 2024).

In addition, collaborative action contributes to reducing the burden on health professionals, distributing responsibilities in a more balanced way and avoiding excessive wear and tear on certain professional categories (Paterson; Henderson; Mathieson, 2023). This is reflected in the satisfaction of professionals and in the improvement of the relationship with patients, who perceive a more humanized and problem-solving care (Hohl; Neuhouser; Thompson, 2022).

Despite the benefits, the reviewed studies point to challenges in the implementation of collaborative models in public health. Communication between professionals from different areas still represents a significant barrier, often hampered by institutional hierarchies and differences in academic training (Bohnenkamp; Patel; Connors, 2022).

Another obstacle identified is the resistance of some professionals to new ways of working. The traditional model of care, based on the segmentation of functions, often makes it difficult to adopt a more integrated and participatory approach (Traylor et al., 2021). In addition, the lack of specific training for interprofessional work limits the development of collaborative skills, negatively impacting the effectiveness of teams (Angood, 2024).

The studies analyzed indicate that the presence of interprofessional teams in primary health care results in greater coverage of services and in the expansion of the population's access to essential care. The joint action of different professionals allows for more strategic planning of interventions, improving the monitoring of chronic conditions, health promotion, and disease prevention (Vaughan et al., 2023).

One of the main impacts observed is the improvement in the care of vulnerable populations, including the elderly, pregnant women, children, and people in situations of social vulnerability. Programs that integrate community health agents (CHA) with interdisciplinary teams have been shown to be highly effective in the early identification of risks, in home follow-up, and in strengthening the bond between health services and the community (Hohl; Neuhouser; Thompson, 2022). This approach facilitates communication between patients and professionals, enabling care that is closer to the reality of the population served and a more effective adherence to health promotion practices (Paterson; Henderson; Mathieson, 2023).

Another significant impact of multidisciplinary teams is the reduction of avoidable hospital admissions. Studies show that the joint work of doctors, nurses, pharmacists, and other professionals in care management results in improved control of chronic diseases, such as diabetes, hypertension, and asthma (Ruiz-Ramos et al., 2021). Through interprofessional coordination, patients receive more complete guidance on the correct use of medications, adequate nutrition, and the need for periodic follow-up, reducing complications that would lead to unnecessary hospitalizations (Dawe; Cronshaw; Frerk, 2024).

In addition to the improvement in individual care, there are also benefits for the management of public health services. The proper functioning of multidisciplinary teams allows for a better flow of care, reducing waiting times at basic health units (UBS) and organizing demand more efficiently (Vaughan et al., 2023). When there is a well-structured planning, the consultations become more resolute, minimizing the number of repeated consultations and favoring the continuity of care.

The performance of these teams also reflects positively on the promotion of equity in health. In communities where there is a shortage of doctors and specialists, the integrated work of nursing, psychology, physiotherapy and social service professionals allows the expansion of the supply of essential services, ensuring that the population has access to comprehensive care (Bohnenkamp; Patel; Connors, 2022). In this sense, models such as

Shared Care in primary care demonstrate that the distribution of tasks among professionals improves the quality of care, providing a more complete view of patients' needs and allowing more effective approaches in the prevention of health problems (Hohl et al., 2022).

Finally, the studies reinforce that community strategies based on collaborative work are essential to increase the population's awareness of the importance of preventive health. Educational campaigns on vaccination, nutrition, mental health, and prevention of sexually transmitted diseases, when conducted by multidisciplinary teams, demonstrate greater public adherence, mainly due to the diversity of approaches used by different professionals (Traylor et al., 2021). In addition, strengthening community participation in health services enables the development of actions that are more aligned with the real needs of the population, contributing to the sustainability of public health programs in the long term (Angood, 2024).

Thus, the findings of this review confirm that the integration between different professionals in primary care and public health services plays an essential role in expanding access, improving health indicators, and promoting a more efficient and equitable system. However, for these impacts to be enhanced, it is necessary to invest in structuring organizational models that favor interprofessional collaboration and ensure continuous support for these teams.

In view of the challenges identified, the studies point to strategies to improve interprofessional collaboration and strengthen the impact of multidisciplinary teams on public health. The continuous training of professionals emerges as one of the main factors for the success of this work model. Specific training programs for the development of collaborative and communication skills have shown positive results in improving integration between teams (Traylor et al., 2021).

Another recommended strategy is the implementation of technological tools to facilitate communication and information sharing among professionals. Electronic systems of integrated medical records and periodic meetings between teams can contribute to the reduction of failures in the coordination of care and in the exchange of information about patients (Hohl, Neuhouser; Thompson, 2022).

In addition, institutional policies that encourage interprofessional action and promote an organizational culture focused on collaborative work are essential to overcome resistance and ensure the effectiveness of multidisciplinary teams (Angood, 2024).

CONCLUSION

The performance of multidisciplinary teams in public health has proven to be an essential strategy for expanding access, improving the quality of care, and promoting equity in care for the population. The studies analyzed show that interprofessional collaboration favors a more comprehensive and problem-solving approach, allowing different specialties to act in a complementary way in the prevention, diagnosis and treatment of various health conditions. In addition, the multidisciplinary model contributes to the satisfaction of professionals and patients, by providing a more humanized service centered on individual and collective needs.

However, structural and organizational challenges still hinder the full implementation of this care model. Barriers related to communication between different professional categories, resistance to change, and lack of specific training for collaborative work were identified as significant obstacles. The absence of institutional policies that encourage interdisciplinarity also limits the effectiveness of these teams, making it difficult to build a more efficient and integrated health system.

In view of this scenario, the adoption of strategies to strengthen interprofessional work becomes fundamental. Investments in the education and continuous training of health professionals, the implementation of technologies to facilitate communication between teams, and the reformulation of organizational practices are indispensable measures to enhance the benefits of multidisciplinary teams. In addition, public policies that encourage collaboration between different areas of knowledge and promote integration between levels of care can contribute significantly to the improvement of the public health care model.

The findings of this research reinforce the importance of further investigations on the subject, especially studies that evaluate the implementation of strategies to overcome the identified barriers. Expanding the evidence base on interprofessional action can support the development of more effective and sustainable practices, benefiting both professionals and the population served. Thus, consolidating well-structured and qualified multidisciplinary teams not only strengthens public health services, but also contributes to the construction of a more equitable, accessible, and efficient health system.

REFERENCES

1. Angood, P. (2024). Impact of inter-professional teams on physician leadership. *Physician Leadership Journal*, 8(3), 22-30. <https://doi.org/10.55834/plj.4375344149>.
2. Bohnenkamp, J., Patel, C., Connors, E., et al. (2022). Evaluating strategies to promote effective, multidisciplinary team collaboration in school mental health. *Journal of Applied School Psychology*, 39(2), 130-150.
3. Dawe, J., Cronshaw, H., & Frerk, C. (2024). Learning from the multidisciplinary team: Advancing patient care through collaboration. *British Journal of Hospital Medicine*, 85(5), 1-4. <https://doi.org/10.12968/hmed.2023.0387>.
4. Hohl, S. D., Neuhauser, M., & Thompson, B. (2022). Re-orienting transdisciplinary research and community-based participatory research for health equity. *Journal of Clinical and Translational Science*, 6(1), 45-60. <https://doi.org/10.1017/cts.2022.15>.
5. Janković, S. M., Nikolić, L., Marković, S., & Kastratović, D. (2024). Multidisciplinary teams in healthcare. *Hospital Pharmacology - International Multidisciplinary Journal*, 11(1), 370-385.
6. Paterson, A., Henderson, L., & Mathieson, W. (2023). Improving the multidisciplinary team meeting in a community hospital. *Age and Ageing*, 52(2), 213-230. <https://doi.org/10.1093/ageing/afad104.009>.
7. Ruiz-Ramos, J., Hernandez, M., Juanes-Borrego, A., et al. (2021). The impact of pharmaceutical care in multidisciplinary teams on health outcomes: Systematic review and meta-analysis. *Journal of the American Medical Directors Association*, 22(7), 189-200. <https://doi.org/10.1016/j.jamda.2021.05.038>.
8. Traylor, A. M., Schweissing, E. J., Di Bonaventura, C., & Salas, E. (2021). Training transdisciplinary health promotion teams: Opportunities and challenges from team science. *American Journal of Health Promotion*, 35(5), 740-744. <https://doi.org/10.1177/08901171211007955>.
9. Vaughan, E. M., Cepni, A., Le, U. P. N., & Johnston, C. A. (2023). The rationale and logistics for incorporating community health workers into the multidisciplinary team. *American Journal of Lifestyle Medicine*, 17(4), 355-358. <https://doi.org/10.1177/15598276231151866>.