

Multidisciplinary education in the management of Orotracheal Intubation in emergency settings: Economic analysis of technologies

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ABSTRACT

Orotracheal Intubation (OTI) is essential in emergencies to ensure adequate ventilation and airway patency. The effectiveness of the procedure depends on the preparation and training of the multidisciplinary health team, and the Economic Analysis of Technologies (EAT) is crucial to assess the effectiveness, efficiency, and impact of these practices. This review looks at how staff education aligns with ETS principles, highlighting benefits such as reduced turnaround time and improved clinical outcomes. Research reveals that IOT education and training contribute to the efficiency of care and the optimization of hospital resources.

Keywords: Education, Emergencies, Orotracheal intubation, Multidisciplinary.

INTRODUCTION

Orotracheal Intubation (OTI) is a critical procedure in emergency situations, essential to ensure airway patency and adequate ventilation of patients. The efficient and agile performance of health professionals is essential for the success of clinical outcomes. In this context, the importance of seeking the education and training of the multidisciplinary health team in this procedure in emergency scenarios is highlighted. The relevance of this theme is amplified when analyzed from the perspective of the Economic Analysis of Technologies (EAT), which evaluates the effectiveness, efficiency, cost and impact of practices in patient care. Based on this theme, it is possible not only to improve the quality of patient care in emergencies, ensuring rapid and evidence-based interventions, but also to optimize hospital resources through more efficient management of health professionals' time and the use of medicines and equipment. In this context, the objective of this review was to analyze how the education of the multidisciplinary team is aligned with the principles of ELA in health. In the meantime, this review also focused on identifying

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the benefits, challenges, and strategies for implementing and training practices that promote interprofessional autonomy, and their influence on the efficiency and economy of health care.

MATERIALS AND METHODS

For the elaboration of this literature review, searches were made in databases such as PubMed, *Web of Science* and Virtual Health Library (VHL), using the search strategy composed of the descriptors "education AND autonomy AND health personnel OR care team AND intubation AND tracheal OR orotracheal OR endotracheal AND economic analysis OR cost-benefit analysis". These terms were elaborated from the structured vocabulary composed of the Health Sciences Descriptors (DeCS) that is used to index articles from scientific journals, books, conference proceedings, technical reports and other types of materials, as well as to search and retrieve subjects from the scientific literature. No time limitations were used regarding the period of publication of the studies. Studies were included that discussed professional autonomy in emergency situations, the role of the multidisciplinary team in intubation procedures, and economic analyses related to the implementation of autonomous practices in health settings.

RESULTS

The main results highlighted the expected benefits that include the reduction of response time in emergencies, the reduction of medical errors due to ill-informed decisions, the better use of hospital resources and the improvement of clinical outcomes for patients. Considering the results obtained through this literature review, it was mainly understood the role of the education of the multidisciplinary team in the management of critical procedures based on ETS concepts and the contribution of this study to the literature that addresses the continuous improvement of patient care in critical scenarios.

FINAL CONSIDERATIONS

This literature review synthesized the available evidence on the importance of multidisciplinary team education in the management of OTI in emergency settings, highlighting the implications for clinical practice and health management. In the meantime, this review also focused on identifying the benefits, challenges, and strategies for implementing practices that promote interprofessional autonomy and their influence on the efficiency and economy of health care. The results of the review not only highlighted the importance of the multidisciplinary team in managing critical procedures, but also provided a comprehensive analysis of how such a practice can be economically advantageous and efficient, aligning with the principles of the EAT. Thus, the study can offer recommendations for future research and for the



development of policies that promote effective and economically viable multidisciplinary and interprofessional education practices.



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