

MANAGEMENT OF DYSPNEA IN PALLIATIVE CARE: EXPERIENCE REPORT ON THE STRUCTURING OF AN EDUCATIONAL VIDEO

MANEJO DE LA DISNEA EN CUIDADOS PALIATIVOS: RELATO DE EXPERIENCIA SOBRE
LA ESTRUCTURACIÓN DE UN VIDEO EDUCATIVO

MANEJO DA DISPNEIA EM CUIDADOS PALIATIVOS: RELATO DE EXPERIÊNCIA SOBRE A
ESTRUTURAÇÃO DE UM VÍDEO EDUCATIVO

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Manuscript received on: July 30, 2023.

Approved on: July 4, 2024.

Published on: August 26, 2024.

Abstract

Palliative care aims to enhance the quality of life for patients and their families facing life-threatening illnesses by effectively managing signs and symptoms. This approach addresses physical, emotional, social, and spiritual well-being. Among the most frequently reported symptoms by these patients is dyspnea, which also stands as a common cause for emergency service visits, profoundly affecting the quality of life of both patients and their families. The objective of the study is to develop an educational video that guides patients and caregivers on the management of dyspnea in palliative care. This study is descriptive in nature and employs a methodological approach to the experience of creating an educational video using the CTM₃ method. Literature suggests that educational resources are crucial in the teaching-learning process, particularly in health education. Educational videos, being an attractive and easily understandable technology, can significantly enhance the educational process. This report aims to facilitate the creation of additional educational resources, promoting knowledge dissemination and fostering behavioral changes that enhance care adherence. Ultimately, it seeks to improve the safety and comfort of both patients and their caregivers.

Keywords: Dyspnea; Palliative care; Health education; Educational videos.

Resumen

Los cuidados paliativos tienen como objetivo promover la calidad de vida de los pacientes y sus familiares que enfrentan una enfermedad que amenaza la continuidad de la vida, a través del control de los signos y síntomas, buscando mejorar el bienestar físico, emocional, social y

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espiritual. La disnea es uno de los síntomas más frecuentemente referidos por los pacientes afectados por estas enfermedades, siendo uno de los motivos más comunes de búsqueda de servicios de emergencia e impactando en la calidad de vida de los pacientes y sus familias. El objetivo del estudio es desarrollar un video educativo para orientar a pacientes y cuidadores sobre el manejo de la disnea en cuidados paliativos. Se trata de una investigación descriptiva, de tipo estudio metodológico, sobre la experiencia de construcción de un video educativo a partir del método CTM3. Según la literatura, los recursos educativos son herramientas relevantes en el proceso de enseñanza-aprendizaje en el contexto de la educación para la salud. Los videos educativos, al ser una tecnología atractiva y fácil de entender, pueden contribuir al proceso educativo de una forma más lúdica. Se espera que este informe favorezca la construcción de otros recursos educativos, con el objetivo de difundir el conocimiento y promover cambios de comportamiento en cuanto a la adherencia al cuidado, la seguridad y la comodidad del paciente y sus cuidadores.

Palabras clave: Disnea; Cuidados paliativos; Educación para la salud; Vídeos educativos.

Resumo

Os cuidados paliativos têm por finalidade promover a qualidade de vida de pacientes e seus familiares diante de alguma doença que ameace a continuidade da vida, por meio do controle de sinais e sintomas, buscando a melhoria do bem-estar físico, emocional, social e espiritual. A dispneia está entre os sintomas mais frequentemente relatados pelos pacientes que são acometidos por essas doenças, sendo um dos motivos mais comuns por procura a serviços de emergência e de impacto na qualidade de vida dos pacientes e de seus familiares. O objetivo do estudo é desenvolver um vídeo educativo para orientar pacientes e cuidadores sobre o manejo da dispneia em cuidados paliativos. Trata-se de uma pesquisa descritiva, do tipo estudo metodológico sobre a experiência da construção de um vídeo educativo baseado no método CTM3. De acordo com a literatura, os recursos educacionais são ferramentas relevantes no processo de ensino-aprendizagem no contexto da educação em saúde. Os vídeos educativos, por se tratarem de uma tecnologia atrativa e de fácil compreensão, conseguem contribuir com o processo educativo de uma forma mais lúdica. Espera-se com este relato favorecer a construção de outros recursos educacionais, com o intuito de disseminar o conhecimento e promover mudanças comportamentais acerca da adesão aos cuidados, segurança e conforto do próprio paciente e de seus cuidadores.

Palavras-chave: Dispneia; Cuidados paliativos; Educação em saúde; Vídeos educativos.

Introduction

According to the World Health Organization (WHO, 2012), palliative care involves providing multidisciplinary assistance to patients with illnesses that are no longer curable and unresponsive to curative treatment. The primary objective of palliative care is to enhance the functionality and quality of life for patients and their families by preventing and alleviating suffering. This is achieved through the early identification, assessment, and treatment of pain and other physical, psychosocial, and spiritual symptoms (Oliveira & Medeiros Júnior, 2020; Rocha *et al.*, 2019; Silva *et al.*, 2022).

The identification and management of these symptoms are crucial for reducing complications and improving the quality of life, particularly for patients with existing physical or psychological limitations (Bittencourt *et al.*, 2021). Dyspnea, in particular, is one of the most frequently reported symptoms by patients with chronic, life-threatening, and/or life-limiting diseases. It accounts for more than 10% of the symptoms reported during inpatient consultations and is the fourth most common reason for emergency visits in the last six months of life (Kamal *et al.*, 2011).

According to the American Thoracic Society (1999), dyspnea is defined as a subjective experience of breathing discomfort encompassing qualitatively distinct sensations of varying intensity. It is a multifactorial symptom that can manifest acutely and may be either reversible or irreversible. In palliative care, dyspnea can be directly related to the underlying disease, a patient's comorbidities, cancer treatment, or arise from the interaction of other physical factors (such as cachexia and muscle weakness), psychological factors (such as anxiety and depression), and socio-environmental aspects (Cruz, Oliveira, & Capelas, 2017; Oliveira & Medeiros Júnior, 2020; Silva *et al.*, 2021).

The presence of dyspnea significantly impacts functional capacity, reducing daily living activities and increasing fatigue, sedentary behavior, and physical deconditioning, which in turn exacerbates dyspnea. These factors provoke anxiety, fear, depression, and social isolation, further deteriorating the quality of life for patients, their families, and caregivers. The management of dyspnea in palliative care emphasizes strategies that promote symptomatic relief and control through a combination of pharmacological and non-pharmacological approaches, developed by a multidisciplinary team (Severino, 2020; Silva *et al.*, 2021).

Pharmacological treatment may be necessary, particularly when the cause of dyspnea is reversible. Through individualized assessment, the physician determines the optimal approach to enhance patient comfort. Non-pharmacological interventions are also effective, low-cost, and complement the treatment. Simple measures to alleviate dyspnea include opening windows to ensure ventilation, avoiding strong odors,

employing energy conservation techniques, and using specific positioning strategies and fans directed towards the patient's face. Relaxation techniques, yoga, reiki, and meditation, while lacking strong direct evidence for dyspnea, can reduce anxiety and thereby indirectly lessen the sensation of breathlessness (Schwingel *et al.*, 2022; Silva *et al.*, 2021).

Preparing family members to recognize and manage crises can significantly aid in controlling dyspnea (Cruz, Oliveira, & Capelas, 2017; Oliveira & Medeiros Júnior, 2020). Therefore, basic guidance regarding the patient's condition and needs should be provided during hospitalization and is essential for the continuity of care at home. In this context, educational materials promote adherence to care, improve the patient's quality of life, and alleviate caregivers' insecurity and doubts (Silva *et al.*, 2022).

Educational technologies are increasingly being employed in health education due to their broad reach and ease of information dissemination. The use of educational materials not only enhances the guidance provided to patients and their caregivers but also improves comprehension, facilitates learning for care, and aids in health promotion and the prevention of complications (Dantas *et al.*, 2022; Silva *et al.*, 2022).

An educational video is a technology that employs a system of recording and reproducing images, with or without accompanying sounds, that propagate through magnetic tape (Conceito de, 2012). As an audiovisual resource, it has been widely utilized for didactic purposes because it can effectively promote teaching and learning in various educational contexts. The use of educational videos can help build knowledge related to the disease being faced or its treatment, proving to be a safe and effective strategy for health promotion (Dalmolim *et al.*, 2016; Razera *et al.*, 2014).

In this context, educational products significantly contribute to and facilitate the teaching-learning process for both health professionals and the general public. Therefore, it is essential to structure these products appropriately to enhance communication effectiveness and broaden their reach (Santos & Warren, 2020). This study aims to develop and structure an educational video to guide patients and caregivers on the management of dyspnea in palliative care.

Methodology

This research is descriptive in nature and serves as an experience report on the development of an educational product in video format, focused on the management of dyspnea for patients in palliative care and their caregivers. The project was conducted as part of the Educational Resources course in the Professional Master's Program in Health and Technology Education at a Higher Education Institution in Alagoas.

The educational video was structured following the premises of the CTM3 method. According to Santos *et al.* (2019), the CTM3 methodology enables the construction of an educational product designed with elements that facilitate communication, allowing the information to reach a broader audience. This method comprises three stages: Product Conception (C), Theoretical Framework (T), and Methodological Framework (M), the latter based on three theories.

The product conception phase involves initial planning, which includes defining the theme, target audience, dissemination medium/channel type of product to be developed, and its feasibility. The theoretical framework compiles the necessary information for the composition of the product, supporting the data on the defined theme as well as the type of product planned. The methodological framework pertains to the development of the educational resource, incorporating elements to promote effective communication with the target audience. This framework is based on the theories of Transactional Analysis, Multisensory Application, and Neurolinguistics (Santos & Warren, 2020).

Transactional Analysis theory examines interpersonal relationships and communication, grounded in personality structure and the three Ego States: Parent, Adult, and Child. Each individual embodies these three Ego States in varying proportions. The Parent Ego State is activated in contexts that invoke care, values, norms, and rules. The Adult Ego State operates in a rational, objective, and analytical manner. The Child Ego State is characterized by emotions, intuition, and creativity (Santos & Warren, 2020).

The Multisensory Application integrates elements into the educational product that stimulate the senses: sight, hearing, smell, taste, and kinesthetic. By engaging all five senses in a single resource, it is possible to enhance the interaction between individuals and their external environment (Santos *et al.*, 2019). Neurolinguistic Programming (NLP) examines and addresses the complex aspects of human thought and communication. By embedding anchors, NLP associates the content with original experiences retrieved from memory, aiming to reinforce or evoke desired actions or behaviors (Santos & Warren, 2020).

The video was validated in May 2023 during the III Educational Products Validation Session of the Professional Master's Program in Health and Technology Education at the State University of Health Sciences of Alagoas (MEST/UNCISAL). It was presented to a committee of three ad hoc evaluators with expertise in Teaching, Health Education, and Communication from UNCISAL and other Higher Education Institutions in the state of Alagoas.

Experience Report

The educational video was developed from December 2022 to February 2023, following the methodological steps recommended by the CTM3 method: defining the theme, determining the type of product, selecting the target audience and age group, choosing the dissemination channel, and assessing its feasibility.

Initially, a literature review was conducted to gather scientific evidence on the topic. Data platforms such as Lilacs, Scielo, PubMed, and Google Scholar were explored to identify studies addressing dyspnea in patients receiving palliative care. Relevant articles were included using keywords such as dyspnea, palliative care, health education, and educational videos. Additionally, images and animations were sourced from specialized websites, including Pexels, Pixabay, Freepik, and Pinterest, which offer free access to a wide range of visual resources.

Subsequently, the author developed the script, selected the images and animations for inclusion, chose the soundtrack, decided on the subtitles (type and color of the text), and recorded the audio narration. The scenes were planned to cover the

following aspects: the concept and impact of dyspnea on patients in palliative care; possible causes of dyspnea; pharmacological and non-pharmacological treatments; care and positioning strategies to reduce dyspnea; the importance of energy conservation techniques and certain cognitive-behavioral therapies; professional assistance; and the significance of support from a multidisciplinary team.

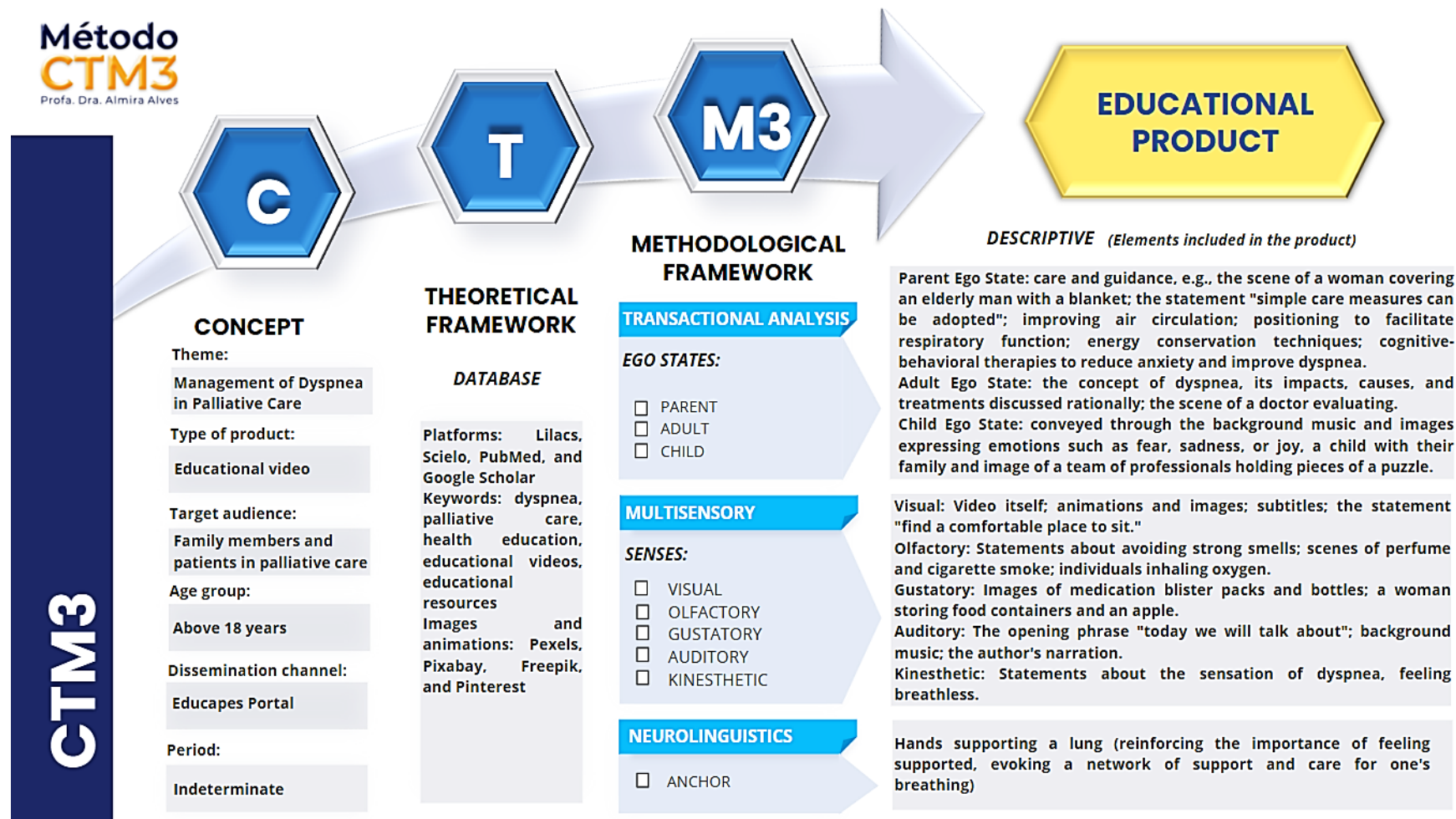
In terms of Transactional Analysis, the Parent Ego State is depicted in the video when discussing the care and guidance needed for patients, families, and caregivers. For example, a scene shows a woman covering an elderly man with a blanket, accompanied by the statement, "simple care measures can be adopted." The Adult Ego State is represented through the rational discussion of the concept of dyspnea, its impacts, causes, and treatments, illustrated by images with right and wrong symbols regarding task execution. The Child Ego State is conveyed through the background music and images expressing emotions such as fear, sadness, or joy, such as a child with their family and the final image of a team of professionals holding pieces of a puzzle.

The Multisensory Application was implemented by incorporating images and procedural words that engage all five senses. Additionally, Neurolinguistic Programming was employed by using an anchor—hands supporting a lung—to reinforce the importance of feeling supported, evoking a sense of a support network and care for one's breathing.

For the creation and finalization of the video, a graphic designer was enlisted to adjust the images, timing, and sequence of their appearance on the screen, using Adobe Premiere Pro 2021. The chosen soundtrack was "Dwell (Snowfall Remix)" by Tony Anderson, available from the YouTube library for free use. The entire process was overseen by the author, who also approved the final version of the video in MP4 format. The educational video has a duration of three minutes and forty-four seconds and is freely accessible on the Educapes platform, where it will remain indefinitely, via the link <http://educapes.capes.gov.br/handle/capes/722084>.

The diagram below outlines all the steps used in structuring the educational video, as well as the incorporation of resources included in the CTM₃ Method.

Diagram 1 - Graphical representation of the video using the CTM3 method.



Source: The author (2023), adapted from Santos & Warren.

Discussion

An educational product is a didactic-pedagogical tool designed to assist in teaching, widely used in professional master's programs (Santos; Warren, 2020). These informational materials effectively convey information to the target audience clearly and objectively, supporting daily care practices and encouraging adherence of family members and caregivers to proposed treatments (Rocha, 2023).

In this context, it is crucial to develop educational materials that address aspects of care in both hospital and home settings. In situations of vulnerability, family structures and dynamics often undergo changes that generate feelings of anguish and insecurity. These can be mitigated through resources that provide guidance and strengthen learning for care (Rocha *et al.*, 2023; Silva *et al.*, 2022). The educational video developed in this work focuses on the management of dyspnea in palliative care. It aims to enhance the knowledge of patients and their caregivers on the subject, helping them to manage this symptom safely and effectively, thereby significantly improving quality of life.

The format of the educational video was chosen for its accessibility and ability to convey information quickly and engagingly to diverse audiences. According to Dantas *et al.* (2022), educational videos are a viable and accessible strategy capable of effectively guiding and encouraging the target audience, especially when the content is tailored to meet the varied needs of patients.

To ensure the quality and reliability of the educational material's content, a comprehensive review of the scientific literature on the subject was conducted, as recommended by the CTM₃ Method. The methodological framework for structuring the educational video was based on the theories of Transactional Analysis, Multisensory Application, and Neurolinguistics. According to Santos and Warren (2020), grounding an educational product in multiple theories is essential due to the complexity and subjectivity of human beings. These theories, when well integrated, provide greater

efficacy in ensuring that the information reaches the audience in a more impactful and comprehensive manner.

The developed video underwent a validation session for educational products by an *ad hoc* committee of evaluators. According to Rosa *et al.* (2019), a validated product becomes scientifically reliable, as the validation process allows the material to be reviewed by judges who suggest corrections, additions, or modifications, thereby improving its suitability for the intended audience. One limitation was the small number of evaluators and the fact that it was not assessed by the target audience.

Health education in the digital era requires adaptations in traditional teaching-learning methods. The creation of audiovisual material presents itself as an accessible means of wide dissemination through digital media, enabling information to be shared quickly and objectively, reaching a broad audience. Furthermore, it allows patients and caregivers to view and review the content as needed, positively impacting the patient's quality of life (Grave, 2020).

Conclusion

Educational resources are vital tools in the teaching-learning process within the context of health education. However, there remains a shortage of educational tools that can safely guide patients in palliative care and their caregivers. The proposed educational video aims to bridge this gap by disseminating easily understandable information through a creative didactic approach that resonates with the target audience's daily reality. This effort seeks to facilitate the development of additional educational resources, streamline the educational process, and promote adherence to care and comfort for both patients and their caregivers. Ultimately, this contributes to an improved quality of life for those involved.

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