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Rehabilitation as a relevant factor in improvement of the quality of life in palliative patients

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Abstract

Introduction

Palliative care is a medical field focused on enhancing the quality of life for terminally ill patients rather than curing their disease. It involves a multidisciplinary team that aims to improve patients' well-being, manage pain, alleviate other physical symptoms, and ease mental suffering. The purpose of this work is to show how much rehabilitation is important for palliative patients and improves the quality of life.

State of Knowledge

The article contains different types of rehabilitation that seem to be useful in daily challenges of palliative patients. Chosen types of rehabilitation are: physical, pulmonary, speech and language and psychosocial.

Material and methods

The method obtaining the data is based on medical reviews including WHO reports about rehabilitation and palliative care showing what is a relationship between them.

Summary

All of the studies and reviews showed a strong relationship between each type of rehabilitation and improvement of quality of life of palliative patients. Each type of rehabilitation touches different areas of struggle for palliative patients as mobility, pain, communication with surrounding, anxiety, stress and social exclusion.

Key words: palliative care; pulmonary rehabilitation; physical rehabilitation; speech and language rehabilitation; psychosocial rehabilitation;

Introduction

Palliative care is a branch of medicine that includes the treatment of terminally ill people. The aim of palliative medicine is not to stop the disease process or cure it, but to improve the quality of life of people in the end-stage condition of the disease [1]. Palliative care consists of a multidisciplinary team whose tasks are: improvement the quality of life of patients, prevention (or relief) the pain, prevention of other somatic symptoms of the disease (or

alleviate them), and alleviation of mental suffering [2]. Due to the statistics, providing palliative care early, ideally 3-4 months before death, can enhance the quality of life for patients and decrease the need for intensive treatments and associated financial expenses [3]. A retrospective cohort study of community and hospital palliative care provision in a large UK city showed that receiving palliative care at least six months before death can alleviate symptoms, decrease unplanned hospital visits, limit aggressive cancer treatments, and empower patients to make informed decisions about their end-of-life care, such as opting to die at home [4]. According to the World Health Organization's definition, rehabilitation is "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment" [5]. Recently, there have been more and more scientific reports analyzing the validity and assessing the effectiveness of rehabilitation methods used in palliative care. This article emphasizes the role of rehabilitation as a very important factor improving the quality of life of patients based on medical reviews and WHO reports.

Physical rehabilitation

Pain is the most frequently reported symptom by patients with advanced cancer, which significantly reduces their quality of life [7]. Due to a survey of pain in 111 patients with advanced cancer, 85% admitted at least 1 type of pain [8]. For pain related to cancer, it is necessary to identify all types of pain occurring in the patient because pain diagnosis is a key to effective treatment with analgesic therapy and non-pharmacological treatment such as physiotherapy [9]. Physiotherapy techniques such as therapeutic exercises, electrical and thermal treatments, light therapy, mechanical therapies, manual physical therapy, and the use of assistive devices are beneficial for various serious and terminal conditions, including cancer and related complications [10]. It all combines into muscle strengthening and widening the range of movement as well as better mobility [11]. Physical rehabilitation is also used to minimize the pain and improve the general well-being and mood, referring to a proof-of-concept study showing that patients with advanced stage of cancer who experienced limitations during daily activities, after educational sessions about influence of physical activity, there was a significant increase of patients who did not meet with limitations like before [12]. It is important that rehabilitation specialists excel at helping patients establish practical and meaningful functional goals [13]. Afterall, because physiotherapy may involve another person to help with exercises, it can contribute to working on relationships with

people surrounding the patients – as it is stated, patients with cancer who feel high levels of social support can better stand their illness [13].

Pulmonary rehabilitation

More than 2 millions of people have been diagnosed with lung cancer every year [14]. The symptoms are breathlessness, hoarseness, chest pain, persistent coughing all ending with passive oxygen therapy at terminal state that seems to be a logical cause and effect sequence. Apart from that cancer, the majority of the palliative patients need passive oxygen therapy despite what disease they suffer from, eg. even 70% of patients with cancers [15]. Shallow and irregular breathing called gasping is an inherent part of agony as it is a reflex when the brain does not get enough oxygen and should be treated [16]. First signs of breath shortness arise to anxiety as a behavioral response and affect all of the aspects of daily activities [17]. To diminish the anxiety and prepare the patient how to act when breathing problems occur, a pulmonary rehabilitation is used. Pulmonary rehabilitation is an educational programme that involves improvement of quality of life of people who suffer from pulmonary diseases [18]. This type of rehabilitation depends on a series of exercises that focuses on inspiratory muscle training, psychosocial counseling and techniques to breathe easily [19]. The results, when exercising is regular, are promoting of well-being and reducing anxiety when shortness of breaths occur, quality of life and exercise capacity [20]. This type of rehabilitation is commonly used during chronic diseases of the pulmonary system but it gets more popular in other diseases, especially at palliative care [21].

Speech and language rehabilitation

Brain metastases, the most prevalent type of brain tumor, are a frequent complication of cancer. Between 10% and 26% of cancer patients who succumb to the disease will experience brain metastases [22]. The American Society of Clinical Oncology has recommended early palliative care for cancer patients because those with brain metastases require more attention and advanced support [23]. Beside the physical challenges patients need to deal with, there are also behavioral, cognitive and psychosocial. The symptoms of brain metastasis are headaches, seizures, neurologic problems including motor and language deficits [23]. A patient who cannot communicate with the world as he used to, may become depressed, anxious or even aggressive as a result of not being understood or understand others due to problems with finding words and understanding them, slurred speech or others [24][25]. To prepare himself for any problems that may occur, a speech and language rehabilitation can be

incorporated. The goal of this rehabilitation is to improve communication and establish verbal or non-verbal language [26]. The cross-sectional quantitative study showed that in palliative care given strategies of rehabilitation are the most important: making eye contact and simplifying the language and discussing one topic at the time, using simple language and deliberate pauses and using visual methods like tables, images and books with pictures [27]. Whenever therapists work on verbal language, they may focus on articulation and improve the sound of each consonant and vowel sound by exercises and teach patients to communicate in less advanced words with a natural melody [26]. If there is no possibility of conducting verbal language, non-verbal strategies are taken into consideration. Last but not least, this type of rehabilitation due to exercises made for speech, can effectively contribute to improvement of swallowing function [27].

Psychosocial rehabilitation

Depression is relatively common among those receiving palliative care, with prevalence estimates ranging from 24% to 70% [28]. In this population, depression can significantly reduce the quality of life and may contribute to a desire for an earlier death [28]. Families of patients undergoing palliative care are deeply impacted by the challenges of the illness. As unpaid caregivers emotionally connected to the patients, they endure the full journey of the illness and the progression toward death. This experience significantly affects their psychological and physical health, leading to the term "hidden patients" [29]. Therefore, they also require psychological support. The aim of psychosocial rehabilitation is to impact the mental health of patients receiving palliative care by helping to reduce symptoms, support daily activities, enhance quality of life, and assist in preparing for death [30].

Conclusion

As it is seen, palliative care is a vital medical specialty aimed at enhancing the quality of life for terminally ill patients by addressing physical, emotional, and psychological needs rather than attempting to cure the disease and rehabilitation is an important part of palliative care significantly improving the quality of life. The integration of various rehabilitation techniques within palliative care further supports this goal. Physical rehabilitation helps manage pain, improve mobility, and enhance overall well-being, whereas pulmonary rehabilitation addresses respiratory issues that come with advanced stages of cancer, alleviating anxiety and promoting better breathing and quality of life. Speech and language rehabilitation aids in communication, reducing the emotional and psychological burden of brain metastases and

other complications. Psychosocial rehabilitation plays a crucial role in supporting mental health, daily activities, and preparation for death. By incorporating these multidisciplinary approaches, palliative care provides support set up to the individual needs of patients and their families, ensuring a holistic and compassionate approach during the final stages of life.

Disclosure

Author's contribution

Conceptualization: Andrzej Czajka and Adam Kucharski; Methodology: Alicja Wawrzyniak; Software: Alicja Chrościcka; Check: Sara Michalska and Kamil Gała; Formal analysis: Konrad Pilarski and Martyna Dewicka; Investigation: Paweł Lenard and Rafał Makuch; Resources: Kamil Gała; Data curation: Alicja Chrościcka; Writing - rough preparation: Adam Kucharski and Sara Michalska; Writing - review and editing: Alicja Wawrzyniak and Konrad Pilarski; Visualization: Martyna Dewicka; Supervision: Rafał Makuch; Project administration: Rafał Makuch and Paweł Lenard; Receiving funding - no specific funding.

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Conflict of interest

The authors deny any conflict of interest.

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