

Physiotherapeutic performance in the context of palliative care: an integrative review of the literature

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Abstract: To investigate the role of the physiotherapist in the context of palliative care. This is a study of the integrative review of the literature, with the purpose of identifying the role of the physiotherapist in the context of palliative care. Held in February 2021 and May 2021. Health databases were used: SciELO, PubMed/Medline and Lilacs. The search in electronic databases resulted in the identification of 310 articles. After the initial analysis, 69 articles were identified and after reading the title and abstracts 36 articles were excluded because they did not meet the inclusion criteria. At the end of this process, according to the inclusion and exclusion criteria adopted, a total of 08 articles were selected for definitive inclusion in this review. In view of what was presented in this review article, it can be affirmed that the physiotherapist has a vast field of action before patients under palliative care, ranging from primary care to tertiary, providing support to the patient and his/her family members.

Keywords: Palliative care. Palliative care in the terminality of life.

1. Introduction

The World Health Organization (WHO), in 1990, conceived palliative care as the active and total care of patients whose disease no longer responds to curative treatment, being priority the control of pain, psychological, social, spiritual and other symptoms, aiming to provide the best quality of life for patients and their families (MELO *et al.*, 2013). It is a set of practices centered on the patient itself, having as essence not only the attention to the physical needs of the same.

This care was initially intended for cancer patients, but this type of care should extend to other chronic diseases. Currently, it is estimated that 40 million people need CP (Palliative Care) each year, of which 78% live in low- and middle-income countries. (COSTA *et al.*, 2020).

Therefore, it is necessary to understand that the decision to limit life support treatment does not mean that efforts will

be withdrawn, it means that there will be a change in the central objective of treatment, and welfare measures are adopted to the patient, being: sedation, analgesia, psychological support, family care, hygiene measures, and among other approaches that are necessary. (MÉNDEZ; RODRÍGUEZ, 2017). This responsibility is the responsibility of the entire multidisciplinary team involved in palliative care, and a therapeutic adaptation of all professionals is necessary.

This team is composed of doctors, nurses, psychologists, physiotherapists, nutritionists, social workers and occupational therapists, who together act to contribute and provide a better living condition to patients. (MELO *et al.*, 2013).

Considering the physiotherapist as a member of the team recommended in CP (Palliative Care), the professional aims to: minimize the symptom of pain, intervene in psychophysical symptoms such as stress and depression, maintain or optimize the respiratory and functional capacity

of the patient, keeping him active, so that he can perform basic activities of daily living. (MELO *et al.*, 2013).

In addition, the physiotherapist helps patients to preserve their dignity so that they can live as actively and comfortably as possible, in addition to guiding and supporting family members, including when facing illness and grief. (COSTA *et al.*, 2020). This motivation is positively reflected, because it returns to individuals the joy and will to live, a very important aspect in the palliative model.

According to the Code of Professional Ethics, the physiotherapist provides assistance to the human being, both individually and collectively, participating in health promotion and palliative care, always in view of quality of life without discrimination in any way or pretext. According to functional status and the need for symptom control, the physical therapy assistance provided takes place in the outpatient clinic, home care (AD) or hospitalization (HI). (MENDES *et al.*, 2020)

In view of the above, the aim of this study is to investigate the role of the physiotherapist in the care of patients under palliative care.

2. Methodology

This is a study of the integrative literature review, conducted from February to May 2021. The main health databases were used: SciELO, PubMed/Medline and Lilacs using the following descriptors in health science (Decs/MeSH): "palliative care", "palliative care", "palliative care", "hospice care", "physical specialty", and the boolean operator "AND" was used in the search. The inclusion criteria were: studies that report the physiotherapeutic performance in the context of palliative care. Studies published in the last ten years 2011/2021, in Portuguese and English, qualitative studies were included and addressed the theme. The studies published in this period were considered for this research to ensure current, relevant and impact information in the scientific literature. The exclusion criteria determined were: abstracts; thesis; monographs; course completion work and duplication of articles in the databases. Initially, the relevant articles were identified through the title and abstract. A second analysis was performed in the text to verify the studies that would be included in the review. A flowchart was elaborated with the descriptions of the processes of identification and selection of the articles researched (Chart 1), subdivided into the following topics: databases and search strategy, to facilitate the understanding of the study research method. A table was also elaborated to evaluate the selected studies, which covered the following characteristics of the manuscripts: authors and years, sample, intervention, study design and conclusion.

Table 1. This table refers to the collection of articles in databases

| Databases | Search strategy |
|-----------|-----------------|
|-----------|-----------------|

| | |
|-----------------|---|
| MEDLINE(PUBMED) | "palliative care" AND "physiotherapy" "palliative care in the terminality of life" AND "physiotherapy" "palliative care" AND "physical therapy specialty" |
| Lilacs | "palliative care" AND "physiotherapy" "palliative care in the terminality of life" AND "physiotherapy" "palliative care" AND "physical therapy specialty" |
| SciELO | "palliative care" AND "physiotherapy" "palliative care in the terminality of life" AND "physiotherapy" "palliative care" AND "physical therapy specialty" |

Source: Author

3. Results

The present study conducted research in the main databases to obtain the most reliable results. Initially, 310 articles were found, of which 250 were excluded, after reading the titles and because they were in duplicate in the databases. After reading the abstract, 36 articles were excluded due to non-compatibility of the theme. Finally, 24 articles were selected for full reading, 16 of which were excluded because they did not meet the eligibility criteria. Eight articles were included in the study to identify the role of the physiotherapist in the context of palliative care. The identification and selection of the articles are described in the following flowchart (Figure 1).

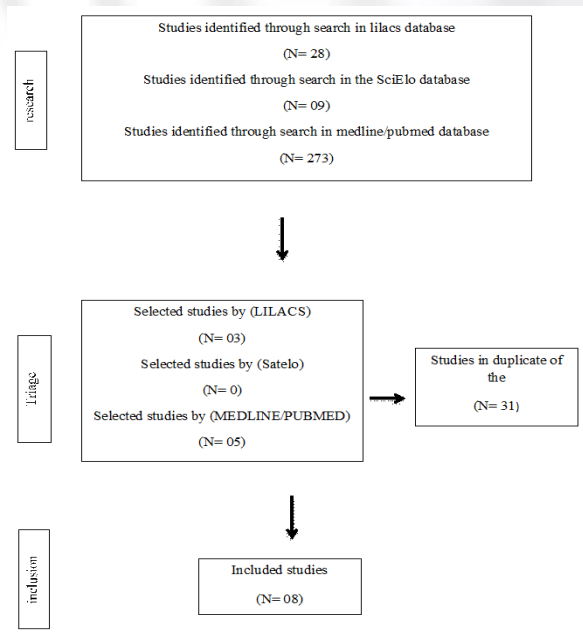


Figure 1. Flowchart of the article selection process. Source: Author database (2021).

This review included eight studies, which report the role of the physiotherapist in palliative care, addressing topics since the inclusion of this in the professional in the cp base teams, the inclusion of the subject in the undergraduate program and the approach of the physiotherapist to the various cases involved in the context of palliative care. The sample size of the included studies ranged from 01 to 165 participants.

Of the included studies, six articles report the approach of physiotherapy to patients in the context of palliative care with terminal malignancies, chronic diseases with a limiting prognosis and cancer patients who tested positive for Covid-19. An article reported the importance of the presence of the physiotherapist in the cp base teams in order to strengthen the referral of patients to physiotherapy and an article reported the advantages of inserting care in the terminality of life during the graduation of the physiotherapy course. The results are shown in the following table. (Table 1).

Table 1. Analysis of the characteristics and results of the studies.

| Author (Year) | sample | intervention | Study design | findings |
|-----------------------------|--------|---|-------------------------------|---|
| Melo <i>et al.</i> (2013) | 10 | The patients were submitted to physiotherapeutic treatment once or twice a day (according to the routine of the hospital) and after one week of treatment, they answered a guide questionnaire containing five questions related to the patient's perception of physiotherapy applied to palliative care. | Qualitative descriptive study | The physical therapy approach proved to be effective, minimizing symptoms and promoting greater interest in living. |
| Mendes <i>et al.</i> (2020) | 05 | Five physiotherapists reported the main recommendations used in the management of symptoms of | Descriptive study | It is necessary adaptations in the physiotherapeutic care in times of pandemic, considering that it is an ideally face- |

| | | | | |
|--------------------------------|-----|--|---------------------------------|---|
| Costa <i>et al.</i> (2020) | 08 | patients affected with Covid-19, who were admitted to an Intensive Care Unit. An interview was conducted with physical therapists who were working within one year and were currently working with patients affected by ALS (amyotrophic lateral sclerosis), in order to investigate the performance of physiotherapy to patients in these conditions and under palliative care in the hospital environment. | Qualitative descriptive study | Physical therapists report their possible conducts according to the involvement of patients affected with ASD. |
| Chiarelli <i>et al.</i> (2014) | 63 | A research was conducted with students enrolled in the third year of the undergraduate course in physiotherapy, in order to investigate the importance of inserting the discipline of care in the purpose of life (Palliative Care) in the curriculum of the undergraduate course. | Descriptive study | The application of concepts about palliative care in undergraduate studies favors the practice of the future physiotherapist. |
| Cobbe <i>et al.</i> (2015) | 165 | An analysis of the data of patients referred to physiotherapy in palliative care was performed, analyzing the functional level of the patient, which level of care proposed, it was also verified who performed the referral and the scope of care (hospital or home) | Retrospective descriptive study | The participation of physical therapists in the palliative care bases teams favors and enhances the referral of patients. |
| Turner <i>et al.</i> (2014) | 01 | It analyzed the case of a patient whose initial objective was to safely perform the transfer between surfaces, providing confidence to him and his caregiver. Physiotherapeutic visits were performed twice a week for two weeks and then once a week for four weeks. | Case study | The care provided by physical therapists is beneficial for patients and caregivers inserted in palliative care. |
| Pyszora <i>et al.</i> (2017) | 60 | The patients were divided into two groups, treatment group (30 individuals) and control group (30 individuals). The treatment group was submitted to active exercises and myofascial release and the control group did not perform any type of care. | Randomized clinical trial | The physiotherapy program improves fatigue, promotes well-being and reduces the severity of symptoms. |
| Wilson and | 01 | The case of a patient submitted | Case study | The physiotherapist |

| | | |
|---------------|--|---|
| Briggs (2018) | to large doses of short- and long-term opioids for pain relief was analyzed. | plays an essential role in managing the use of opioids for pain relief. |
|---------------|--|---|

Source: Author database (2021).

4. Discussion

Physiotherapy in palliative care is active in the three levels of patient care, level one or primary care, which provides educational support, counseling, joint visits and self-care, these approaches are applied to patients with limiting prognosis discovered at the beginning of the pathology, considering that they are preventive measures. Level two, provides home care focusing on the needs of patients and their families, will be applied conducts in order to avoid the progression of some existing limitation and focusing on the recovery and facilitation of activities of daily living. Level three consists of hospital care, in cases where we have late diagnoses of chronic pathologies or cancer patients with no prospect of cure.

In cases of terminal cancer patients, who present intense fatigue resulting from the interaction of two factors: those related to the pathology itself or its treatment and the reduction of physical activity (PYSZORA *et al.*, 2017). The maintenance of physical activity plays an important role in the treatment of this symptom. According to Pyszora *et al.* (2017) application of selected physical therapy approaches allows patients to increase the level of physical activity, reduce fatigue and consequently improve their functional status, which represents a direct positive aspect in their quality of life. The selection of these physical therapy approaches should be based on a careful and individual analysis in the patient, focusing on their limitations.

As reported by Melo *et al.* (2013) the main goal of oncologic physiotherapy is to show the patient the possibility of resuming basic activities of daily living and offering him conditions for this.

Knowing that palliative care is not limited to cancer cases, it is worth noting the importance of physiotherapy in PC in cases of chronic diseases with limiting diagnoses. Among them, amyotrophic Lateral Sclerosis (ALS), a degenerative neurological pathology that results in most cases of death from respiratory failure associated with infection (COSTA *et al.*, 2020).

Respiratory impairment in ALS, which is related to respiratory muscle weakness, which impairs the ability to remove secretions from the airways. Thus, some physical therapy interventions that benefit the patient in the face of this symptom are the recruitment of lung volume and airway clearance techniques.

Regarding the motor deficits found in these patients, the physiotherapy approach depends greatly on the current stage of the disease, due to the limited evidence regarding the risks and benefits of the applicability of exercises in the patient with ASS, so the physiotherapist needs to carefully monitor and adjust the mode and intensity of the exercise, respecting the stages of disease progression, avoiding excessive fatigue.

As much as ALS does not affect the main pathways of pain, the other signs and symptoms may trigger a considerable pain, they are: musculoskeletal impairments, loss of ROM, immobility, muscle weakness, difficulty positioning, edema and acute lesions such as sprains, strains and falls. Physiotherapists, in turn, perform interventions for their control and highlight the importance of avoiding immobility and prolonged positioning in bed (COSTA *et al.*,

2020).

According to the cause of pain, physical therapy interventions may include range of motion exercises (ROM), passive stretching, joint mobilizations, and guidance on adequate joint support and protection.

As highlighted by Costa *et al.* (2020) the experience of physical therapists when assisting patients with ASS under palliative care, advocates the function of establishing a plan of conducts that facilitates the adaptation of the patient to progressive physical decline and its emotional, spiritual and social implications, until death. In addition, physiotherapists in palliative care help patients and families to fill the gap between real and ideal daily life, with the aim of maximizing the safety, autonomy and well-being of all involved.

It should be noted that, when admitted to the hospital unit and verified the need for follow-up by the palliative care team, the patient in most cases receives the first contact of the nursing and medical professionals, the nurse in turn is responsible for the referral of patients to physiotherapy. The realization of this fact depends greatly on the understanding of the role of the physiotherapist applied to palliative care.

Several issues that generated in these professionals a failure to refer patients in PC to physical therapy were identified. Because there was a lack of understanding of the role of physiotherapy and the perception that physical therapists did not have palliative care skills. In addition, the nurses reported that they wanted to protect the patient from exposure to many professionals and that they felt that the involvement of physical therapy created a certain hope, a feeling that was considered inadequate.

From this perspective, as Cobbe *et al.* reports. (2015) the presence of a physiotherapist in the palliative care teams significantly increases the referral rate of patients, as it leaves well established and understood its function and importance in the face of terminally ill patients. Therefore, it is necessary the presence of this professional in the bases teams of CP (Palliative Care), since it improves trust and communication among the professionals involved, and increases the success rate in the discharge of patients.

According to Turner *et al.* (2014) when physical therapy is performed in the home environment and the patient has an active participation in the choice of conducts, a higher level of satisfaction is verified on the part of patients and their families who consider their rehabilitation program more effective. In addition, the more actively families participated in rehabilitation, the more effective, useful and satisfactory the program becomes.

Despite the physical and mental decline expected in these patients, physiotherapy at home works to promote safety, independence and quality of life for patients (TURNER *et al.*, 2014).

In view of the current condition of dissemination of Covid-19, and knowing that cancer patients are part of the risk group for infection, it is necessary to emphasize that when infected, the aforementioned patients should benefit from physical therapy follow-up with palliative approach.

Patients referred to palliative care in the face of this prognosis need to be guided on the principles of this approach, and should sign a Free and Informed Consent Form, which contains conventions on non-intubation order (ONI) and non-resuscitation order (ONR), in addition to receiving explanatory guidance on measures to manage signs and symptoms related to the underlying disease and its current

complications (MENDES *et al.*, 2020).

Dyspnea and fatigue are the most reported symptoms by patients infected with Covid-19. Since the application of NIV (Noninvasive Ventilation), it should not be the first-line approach used by the physiotherapist due to the non-viral dissemination.

The strategies proposed for the management and comfort of dyspnea are: maintenance of the quiet and ventilated environment, with open windows, cooling of the patient's face using cold compresses, use of comfortable clothing, postural adjustment preferably with elevated headboard and relaxation techniques. In relation to intense fatigue, energy conservation techniques are indicated, such as: adaptation of the environment to facilitate the development of tasks, replacement of tasks in orthostatic position for sitting, requesting help to family members and their caregivers, programming activities with different levels of requirements, always starting from the degree of lower energy expenditure to the highest according to patient tolerance and facilitating access to the materials and devices that will be used (MENDES *et al.*, 2020).

In situations of more complex clinical cases with significant functional limitations, physical therapy intervention should be traced according to the functional level of the patient.

Knowing that patients in terminal conditions can report a high level of pain, it is necessary a thorough evaluation of this pain, an evaluation that should be shared with an interdisciplinary palliative care team, considering that its origin may be physical, mental or spiritual.

Physical therapists, in turn, are able to recognize that many types of pain need pharmacological intervention with the use of analgesics and opioids. According to Wilson *et al.* (2018), the knowledge held by this professional in biomechanics practices, training skills in positioning and mobility are invaluable interventions that promote patient comfort and reduce pain.

The analgesic intervention options used by the physiotherapist may vary according to the origin of the patient's pain, among them are: gradual elevation of the head of the bed, change in the mattress and may be softer or harder to provide support for the patient's trunk, bilateral weight support in the upper limbs sitting or standing to relieve possible compressions (WILSON *et al.*, 2018).

All of the above-mentioned conducts allow an acceptable control of pain and the sufficient use of opioids/analgesics, avoiding the excessive applicability of pharmacological means, with the ultimate objective of promoting a better quality of life for patients.

Therefore, the physiotherapist plays a very important role in order to prevent excess medication and unwanted side effects that decrease cognitive ability levels.

Thus, it is note that it is essential the presence of the physiotherapist in the basis's teams of palliative care. And for this professional to present a mastery of the application of his techniques in patients with life-limiting diseases, it is necessary to include palliative care in the curriculum of the undergraduate physiotherapy program (CHIARELLI *et al.*, 2014).

According to Chiarelli *et al.* (2014), inclusion of specific training related to palliative care in undergraduate studies, demonstrated to increase students' knowledge levels, improve student preparation to work in the area and increase self-efficacy in palliative care. In addition, to increase the confidence of other health professionals in the face of referral to palliative physiotherapy.

5. Conclusions

During the preparation of the present study, it was possible to observe that physiotherapy presents a wide area of activity before patients on palliative care, ranging from primary care to tertiary, whether with chronic limiting diseases or cancer patients.

The techniques applied will vary according to the functional and emotional level of the patient, allowing pain control, promoting comfort in the face of symptoms, promoting independence within their limitations and consequently increasing the self-esteem and confidence of the patient and his/her family members.

In addition, the physiotherapist provides humanized support to the patient and his/her family members, in the face of coping with the disease and a future mourning. Thus, it is indispensable for the presence of this professional in the basic palliative care teams.

However, further research involving physiotherapy and palliative care is necessary, in view of the scarcity of studies in this field of activity.

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References

- [1] CHIARELLI, P. E., *et al.* Introducing Palliative Care into Entry-Level Physical Therapy Education. *Journal of Palliative Medicine*. v. 17. 2014.

- [2] COBBE, S. et al. A profile of hospice-at-home physiotherapy for community-dwelling palliative care patients. *Revista Internacional de Enfermagem Paliativa*. v. 19. 2015.
- [3] COSTA, T. D. C. et al. Cuidados Paliativos ao Paciente com Esclerose Lateral Amiotrófica: vivência de fisioterapeutas no âmbito hospitalar. *Revista Online de Pesquisa Cuidado é fundamental*, p.1334-1340, 2020.
- [4] MELO, T. P. T., et al. A Percepção dos Pacientes Portadores de Neoplasia Pulmonar Avançada diante dos Cuidados Paliativos da Fisioterapia. *Revista Brasileira de Cancerologia*, 2013.
- [5] MENDES, E. C. et al. Atendimento Fisioterapêutico ao Paciente em Cuidados Paliativos Oncológicos em Tempos de Pandemia por Covid-19: Recomendações de uma Unidade de Referência. *Revista Brasileira de Cancerologia*. 2020.
- [6] MÉNDEZ, M. I. G., RODRÍGUEZ, L. L. Organ donation after controlled cardiac death under Maastricht category III: Ethical implications and end of life care. *Elsevier/enfermaria clínica*, 2017.
- [7] PYSZORA, A. et al. Physiotherapy programme reduces fatigue in patients with advanced cancer receiving palliative care: randomized controlled trial. *Support Care Cancer*. v.25, p.2899-2908. 2017.
- [8] TURNER, F. et al. Impact of Patient and Caregiver Transfer Training Provided by a Physical Therapist in the Hospice Setting: A Case Study. *American Journal of Hospice & Palliative Medicine*. 2014.
- [9] WILSON, C. M., BRIGGS, R. Physical Therapy's Role in Opioid Use and Management During Palliative and Hospice Care. *Physical Therapy*. v.98, n.2. 2018.