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# Occupational therapy in adult palliative care. A rapid review

## ABSTRACT

**Introduction:** The Occupational Therapy Association of South African commissioned a task team to gather evidence that would inform the upcoming National Health policies on the role and practice of occupational therapists. This rapid review aimed to identify level 1 and 2 peer reviewed published evidence that describes occupational therapists' practice and intervention in adult palliative care.

**Method:** Systematic reviews and randomised control trails evidence was searched for through the XXX University library. CINAHL (EBSCO), MEDLINE (EBSCO), the Cochrane Library (Wiley) and OTSeeker data bases were used and hand searching of references in selected articles was done. Rayyan was used for the screening and selection of articles. The CASP appraisal tool was used for quality assessment of the selected articles. Data was captured in Excel and Word, and analysed and synthesised in Excel and Taguette.

**Results:** 15 articles were identified for data extraction in this rapid review. The quality appraisal showed a range of 65% - 90%. Occupational therapists working in palliative care were reported to address: Functionality, activity participation and quality of life, symptom management related to disease and the treatment thereof, environmental modification and adaption, assistive devices and equipment, education and caregiver support, lifestyle adaptation, return to work or higher education/training.

**Conclusion:** South Africa has a unique palliative burden of care due to diseases that shorten life expectancy. First world evidence cannot be the only source of evidence used to frame the role and intervention of occupational therapists with adult's palliative care due to South Africans varied and unique beliefs with regard to illness and end of life. Evidence to support and define the role of the occupational therapists claim this needs to be a matter of priority.

**Keywords:** life-limiting illness, terminal illness, end-of-life care, palliative intervention, ADL and iADL, cancer, quality of life, multi-disciplinary team, symptom management, assistive devices

### Implications for practice:

- Contextually relevant palliative care intervention needs to be included in the undergraduate curriculum for occupational therapists and once they go to community service, they need to be supported in this.
- Development and upskilling of occupational therapy clinicians in contextually relevant palliative practice needs to be an available and accessibility continuous professional development (CPD) activity.
- Occupational therapy clinicians working in the frontlines of palliative care need to be encouraged and supported to collect and present evidence of their practices in formats and at forums where it can be used to shape policies that affect palliative adult care locally but also globally.

## INTRODUCTION

Palliative care, as defined by the World Health Organization (WHO), is an approach aimed at enhancing the quality of life for individuals with life-limiting diseases and their families. This definition encompasses early

identification, assessment, and intervention to address the physical, psychosocial, and spiritual needs of those affected by life-limiting illnesses<sup>1</sup>. Palliative care is the broad term for persons who have a life-limiting illness or disease and it incorporates end-of-life care which is treatment, care and support for people who are nearing the end of their lives. The World Federation of Occupational Therapy (WFOT) notes that occupational therapists are globally recognised as valuable members of multi disciplinary care teams who focus on palliative intervention. The WFOT position statement<sup>2</sup> in this regard, states that occupational therapists recognise that participation in occupation is transformational and that persons who are terminally ill have the right to well-being and quality of life through engaging in meaningful occupations. They address decline in physical, emotional and physical functioning and can make a value impact in the lives of persons (and their families) from the point of diagnosis with a life limiting condition right through to facing end-of-life realities. This position is supported by an Occupational Therapy Australia position paper<sup>3</sup> on occupational therapy in palliative care and two statements on the role of occupational therapy in end-of-life care published in the American Journal of Occupational Therapy<sup>4, 5</sup>. Hammell et al<sup>6</sup>; expands on this stating that occupational therapist working in palliative care aim to enable person with life-limiting illness to participate in meaningful activities for as long as possible. That the two interrelated focuses of this occupational engagement are a balance between *focussing on life and preparing for death*.

The Constitution of the Republic of South Africa, No. 108 of 1996, upholds the fundamental rights to life and human dignity for all who live in South Africa<sup>7</sup>. Actioning this right within palliative care, a National Steering Committee on Palliative Care 2017 – 2022, was formed. Dr Dhlomo, the chair of this committee, presents the National Policy Framework and Strategy for Palliative Care that they developed with the hope that its implementation will allow *patients to live as actively as possible with good quality of life as long as possible, despite the diagnosis of life-limiting or life threatening illness*<sup>8</sup>(page4). In the introduction of this framework Motsoaledi<sup>8</sup> underscores the crucial role of integrating palliative care as an integral part of the broader healthcare service continuum, particularly when addressing the significant health challenges faced by South Africa, such as the quadruple burden of diseases (HIV/AIDS, TB, maternal and child mortality, high levels of violence and injuries and non-communicable diseases). The national palliative steering committee has estimated that approximately 50% of all individuals who pass away in South Africa could benefit from palliative care services<sup>8</sup>.

Palliative care is not confined to healthcare facilities but is delivered across all levels of the healthcare system and even extends beyond it. It encompasses a multidisciplinary approach aimed at providing care and support to individuals with life-threatening illnesses and their families. Its goal is to enhance the quality of life and uphold dignity, starting from the moment of diagnosis and continuing throughout the entire journey until the end of life<sup>9</sup>. Multidisciplinary palliative teams include doctors, nurses, dieticians, pharmacists, occupational therapists, physiotherapists, chaplains, psychologists, and social workers. Occupational therapy is a person-centred health profession concerned with promoting health and well-being through occupation, enabling people to participate in the activities they value. Occupational therapists achieve this outcome by working with people and communities to enhance their ability to engage in such occupations, or by modifying the occupation, or the environment to better support their occupational engagement<sup>9</sup>. With

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the aim of informing National Health policies the Occupational Therapy Association of South Africa (OTASA) commissioned a task team to provide evidence of occupational therapist's role in palliative care. This was to be done in the form of a rapid review.

The rapid review methodology was selected to produce timely evidence for decision-making purposes, and to address urgent and emergent health issues and questions deemed to be of high priority. Garritty et al.<sup>10</sup> defines a rapid review as a form of knowledge synthesis that accelerates the process of conducting a review through streamlining specific methods to produce evidence for stakeholders in a resource-efficient manner. This review considered Randomised Control Trials (RCT's) and systematic reviews (Level 1 and 2 evidence<sup>11</sup>) published in peer reviewed journals related to occupational therapy intervention in adult palliative care. Burns et al.<sup>12</sup>, describes these levels of evidence to be in the form of systematic reviews and randomised control trials (RCT). An adult in this current review is considered to be 18 years and older. In South Africa you are allowed to vote from the age of 18 years<sup>13</sup> and according to the Births and Deaths Registration Act<sup>14</sup>, at 18 years a person is considered to be a *major /person of age* that is the age after which a person can act independently from their parents. In general, under 18-year-old persons' occupational needs and activities, and by implication occupational therapy intervention, differ from those of adults and the same applies to persons who are *retired* or not vocationally active anymore. In South Africa adults 60 years and older qualify for the governmental older persons grant<sup>15</sup>. This was taken into consideration with this review.

### Summary of the focus for this rapid review

This rapid review considered RCT and systematic reviews that describes occupational therapists' practice and intervention in adult palliative care and were published in peer reviewed journals.

### METHOD

The OTASA rapid review task team consisted of four occupational therapists (the authors) who met online on a regular basis. They used the South African Department of Health method guide and template for rapid reviews<sup>16</sup> and the Cochran Rapid Reviews method guide<sup>10</sup>. The first author, assisted by the other authors during all phases of the review, was the principal researcher for the adult palliative rapid review. The time frame in which this rapid review was done was May – August 2023.

### Search strategy

#### Step1: Topic and review refinement

The OTASA Rapid Review Task Team collaboratively set the review question as: *What is occupational therapy's role and intervention in palliative care with adults?* Eligibility criteria for inclusion of articles were defined according to the population, intervention, context and outcome (PICO) elements.

*Population:* Adult human being, 18+ years, all gender-, and cultural groups, with life limiting illnesses.

*Intervention:* Any form of occupational therapy as per the World Federation of Occupational Therapy definition.

*Context:* All settings where palliative care is offered.

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**Outcomes:** Occupational therapy intervention in palliative care of adults' living in the face of dying, from the point of diagnosis to end of life.

Only evidence of **population** groups 18 years and older were considered. Articles that focused on paediatric palliative care, were excluded. Articles that focused on older adults and/or geriatric end of life care were also excluded. However, articles that reported younger than 18-year-olds and older adults as part of a larger research population, were included. The reasoning behind this is that in occupational therapy, paediatric and geriatric interventions are recognised and well published fields of practice<sup>17,18</sup> and have age specific interventions that differ from the occupational realities of the population group identified for this review. All forms of occupational therapy **intervention** were considered. Working within interprofessional teams, community and family structures, occupational therapists help to optimise function, promote dignity and support participation in valued activities. Occupational therapy intervention in palliative care is user focused, developed in consultation with people with life-limiting conditions, their support and care givers and acknowledges the right to die in the place of their choosing<sup>19, 5</sup>. Considering palliative care from point of diagnosis to end-of-life suggests various **contexts** for intervention. From acute specialised hospital settings to hospice long term care and even private homes. The **outcome** of interest was occupational therapy intervention that involved the acknowledgement of the inevitability of death, loss of function, and the aim to be as active as possible for as long as possible.

### **Step2: Strategy and search**

Evidence considered for this review was systematic reviews and randomised control trials that were written in English, peer reviewed journals, and published between January 2013 and June 2023 for which full text were available to the review team. The review team had access to XX University library where the following data bases were searched: CINAHL (EBSCO), MEDLINE (EBSCO), the Cochrane Library (Wiley) and OTSeeker. In addition, the first author did a hand search of the references of articles that were selected after screening, including articles that were not found in the original search.

### **Step 3: Study Screening and Selection**

Rayyan<sup>20</sup> software was used to screen articles and generate a PRISMA flow diagram (Figure 1). Two of the authors, did the screening using the blinded setting. Conflicts were resolved by discussion and consensus. Figure 1 (below) shows the results of this screening and selection.

### **Step 4: Quality appraisal and data extraction**

The first author created quantitative and qualitative data extraction templates in Excel and Word. The Critical Appraisal Skills Programme (CASP) <sup>21,22</sup>, which offers the healthcare professional with various checklists to check the quality of articles, was used. The CASP Systematic Review<sup>21</sup> and the CASP RCT<sup>22</sup> checklists were used for this study. The quality rating indicated in Table II (below) was devised by allocating scores to the three answer options: Yes = 2, Can't tell = 1, and No = 0. The higher the rating percentage the greater the quality of the research. Comments noted during the appraisal were considered in the discussion section of this article.

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### Step 5: Evidence Synthesis

Quantitative data was analysed in Excel predominantly with frequencies/percentages. The qualitative data was analysed using Taguette<sup>23</sup>. The authors met online where the results of analysis were reported and discussed. Final synthesis of the results was done by the first author.

### Step 6: Reporting and dissemination of results

The results of the rapid review were presented in the form of a report to the OTASA Council and submitted to the South African Journal of Occupational Therapy for peer review and publication.

## RESULTS

The PRISMA 2020 diagram<sup>24</sup>, Figure 1 (below), shows the results of the search, screen and selection of adult palliative related evidence for occupational therapy.

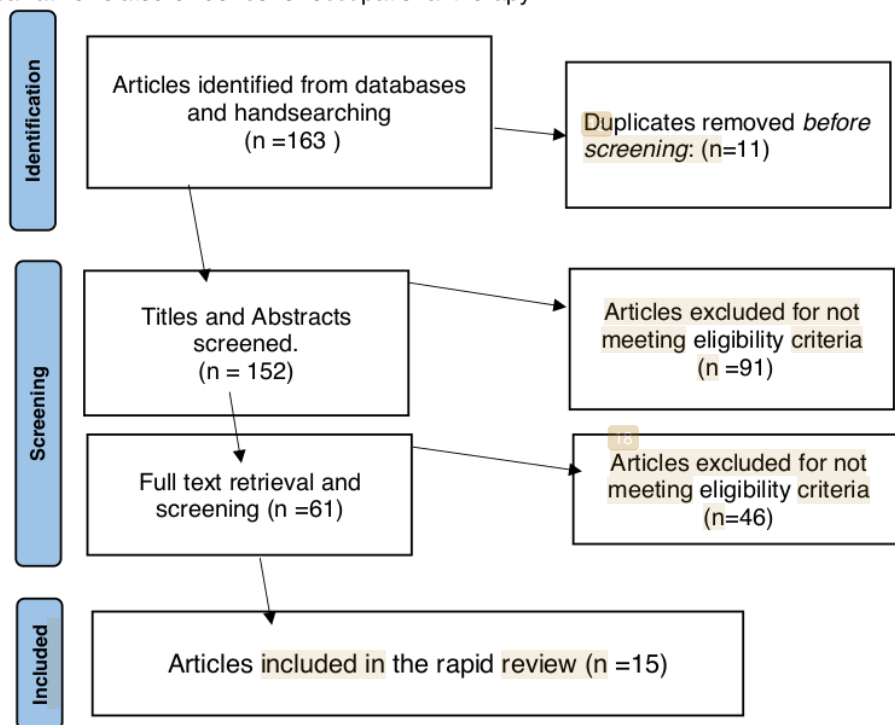


Figure 1. PRISMA2020 showing the results of the searching, screening and selection of articles.

Table I (below) lists the 15 included articles, in alphabetical order of first author's surname. There were six randomised control trials (RCT's) and nine systematic reviews. All RCT were done in the European Union: four were conducted in Denmark, one in Turkey and one from a Netherlands – Spain collaboration. The systematic reviews were predominantly, (six) executed by USA authors, with one from Australia, one from Denmark and one from Korea. There were no articles from Africa.

**Table I. Articles used in this rapid review and the country of origin.**

#	Citation	Country
1	Arbesman M, Sheard K. <b>Systematic review of the effectiveness of occupational therapy-related interventions for people with amyotrophic lateral sclerosis.</b> AJOT Am J Occup Ther [Internet]. 2014 May 3;68(1):20+. Available from: <a href="https://link.gale.com/apps/doc/A357472207/AONE?u=27uos&amp;sid=bookmark-AONE&amp;xid=cbb38d8d">https://link.gale.com/apps/doc/A357472207/AONE?u=27uos&amp;sid=bookmark-AONE&amp;xid=cbb38d8d</a> <sup>25</sup>	USA
2	Hansen A, Pedersen CB, Jarden JO, Beier D, Minet LR, Sogaard K. <b>Effectiveness of physical therapy—and occupational therapy—based rehabilitation in people who have glioma and are undergoing active anticancer treatment: single-blind, randomized controlled trial.</b> Phys Ther. 2020;100(3):564–74 <sup>26</sup>	Denmark
3	Hunter, E. G., Gibson, R. W., Arbesman, M., & D'Amico, M. (2017). Centennial Topics— <b>Systematic review of occupational therapy and adult cancer rehabilitation: Part 1. Impact of physical activity and symptom management interventions.</b> American Journal of Occupational Therapy, 71, 7102100030. <a href="https://doi.org/10.5014/ajot.2017.023564">https://doi.org/10.5014/ajot.2017.023564</a> <sup>27</sup>	USA
4	Hunter E. G., Gibson R. W., Arbesman M., & D'Amico M. (2017) <b>Systematic review of occupational therapy and adult cancer rehabilitation: Part 2 Impact of multidisciplinary rehabilitation and psychosocial, sexuality, and return-to-work interventions.</b> American Journal of Occupational Therapy, 71, 7102100040. <a href="https://doi.org/10.5014/ajot.2017.023572">https://doi.org/10.5014/ajot.2017.023572</a> <sup>28</sup>	USA
5	Huri M, Huri E, Kayihan H, Altuntas O. <b>Effects of occupational therapy on quality of life of patients with metastatic prostate cancer: a randomized controlled study.</b> Saudi Med J. 2015;36(8):954. <sup>29</sup>	Turkey
6	Hwang N-K, Jung Y-J, Park J-S. <b>Information and communications technology-based telehealth approach for occupational therapy interventions for cancer survivors: a systematic review.</b> In: Healthcare. MDPI; 2020.Vol8 No4 <sup>30</sup>	Korea
7	Lozano-Lozano M, Galiano-Castillo N, Gonzalez-Santos A, Ortiz-Comino L, Sampedro-Pilegaard M, Martín-Martín L, et al. <b>Effect of mHealth plus occupational therapy on cognitive function, mood and physical function in people after cancer: Secondary analysis of a randomized controlled trial.</b> Ann Phys Rehabil Med. 2023 Mar;66(2):101681 <sup>31</sup>	Netherlands and Spain
8	Nottelmann L, Groenvold M, Vejlggaard TB, Petersen MA, Jensen LH. <b>Early, integrated palliative rehabilitation improves quality of life of patients with newly diagnosed advanced cancer: The Pal-Rehab randomized controlled trial.</b> Palliat Med. 2021;35(7):1344–55 <sup>32</sup>	Denmark
9	Piil K, Juhler M, Jakobsen J, Jarden M. <b>Controlled rehabilitative and supportive care intervention trials in patients with high-grade gliomas and their caregivers: a systematic review.</b> BMJ Support Palliat Care. 2016;6(1):27–34 <sup>33</sup>	Denmark

10	Pilegaard MS, la Cour K, Gregersen Oestergaard L, Johnsen AT, Lindahl-Jacobsen L, Højris I, et al. <b>The “Cancer Home-Life Intervention”: a randomised controlled trial evaluating the efficacy of an occupational therapy-based intervention in people with advanced cancer.</b> Palliat Med [Internet]. 2018;32(4):744-756. Available from: <a href="https://www.cochranelibrary.com/central/doi/10.1002/central/CN-01571787/full">https://www.cochranelibrary.com/central/doi/10.1002/central/CN-01571787/full</a>	Denmark
11	Pilegaard MS, la Cour K, Baldursdóttir F, Morgan D, Oestergaard LG, Brandt Å. <b>Assistive devices among people living at home with advanced cancer: Use, non-use and who have unmet needs for assistive devices?</b> Eur J Cancer Care (Engl). 2022 Jul;31(4):e13572	Denmark
12	Sleight A, Gerber LH, Marshall TF, Livinski A, Alfano CM, Harrington S, et al. <b>Systematic review of functional outcomes in cancer rehabilitation.</b> Arch Phys Med Rehabil. 2022;103(9):1807–26	USA
13	Sposato L. <b>Occupational Therapy Interventions for Adults at the End of Life: A Systematic Review of Dignity Therapy.</b> Occup Ther Ment Heal [Internet]. 2016 Oct;32(4):370–91. Available from: <a href="https://search.ebscohost.com/login.aspx?direct=true&amp;db=cin20&amp;AN=120213555&amp;site=ehost-live&amp;scope=site">https://search.ebscohost.com/login.aspx?direct=true&amp;db=cin20&amp;AN=120213555&amp;site=ehost-live&amp;scope=site</a>	USA
14	Stout NL, Santa Mina D, Lyons KD, Robb K, Silver JK. <b>A systematic review of rehabilitation and exercise recommendations in oncology guidelines.</b> CA Cancer J Clin. 2021;71(2):149–75	USA
15	Taylor S, Keesing S, Wallis A, Russell B, Smith A, Grant R. <b>Occupational therapy intervention for cancer patients following hospital discharge: How and when should we intervene? A systematic review.</b> Aust Occup Ther J. 2021;68(6):546–62	Australia

### Quality appraisal

Two of the CASP (Critical Appraisal Skills Programme) checklists were used to assess the quality of articles identified for this rapid review: Randomised Controlled Trial Standard checklist<sup>22</sup> and Systematic Review checklist<sup>21</sup>. Articles rating was expressed in percentage in Table II (below). The sample size of each article reported the number of participants in an RCT and the number of articles included in a systematic review.

**Table II. Type of evidence, sample size and CASP rating of included articles.**

Article	Type of evidence	Sample size	CASP rating
Arbesman et al. <sup>25</sup>	Systematic review	14	65%
Hansen et al. <sup>26</sup>	RCT	64	80%
Hunter et al. <sup>27</sup>	Systematic review	86	90%
Hunter et al. <sup>28</sup>	Systematic review	52	90%
Huri et al. <sup>29</sup>	RCT	55	78%



Hwang et al. <sup>30</sup>	Systematic review	15	80%
Lozano-Lozano et al. <sup>31</sup>	RCT	78	88%
Nottelmann et al. <sup>32</sup>	RCT	288	76%
Piil et al. <sup>33</sup>	Systematic review	9	76%
Pilegaard et al. <sup>34</sup>	RCT	242	70%
Pilegaard et al. <sup>35</sup>	RCT	237	78%
Sleight et al. <sup>36</sup>	Systematic review	362	76%
Sposato et al. <sup>37</sup>	Systematic review	10	73%
Stout et al. <sup>38</sup>	Systematic review	21	66%
Taylor et al. <sup>39</sup>	Systematic review	9	70%

The palliative condition addressed in 14 out of the 15 articles was cancer and one was on a motor neuron disease (amyotrophic lateral sclerosis or ALS). The settings that the occupational therapy intervention took place in was not reported by all the articles. Settings that were reported ranged from; inpatient and outpatient hospital care <sup>26,36,39</sup>, hospice and palliative care<sup>36,37,39,25</sup>, private homes / domiciliary and community settings <sup>25,29,31,32,34,35,36,39</sup>, education and work settings<sup>27</sup>, and sheltered living<sup>34</sup>. Seven of the articles made reference to the value in palliative care of working in multi-disciplinary teams<sup>25,27,28,31,32,33,39</sup>. Arbesman and Sheard<sup>25</sup> reported evidence that people with ALS who are involved in multidisciplinary programs, have 30% longer survival, more appropriate assistive devices and higher quality of life in social functioning and mental health than those in general care. Multidisciplinary teams were noted to include physicians, nurses, occupational therapists, physiotherapists, speech and hearing therapists, dieticians/nutritionists, psychologists, social workers and chaplains <sup>25,32</sup>. Referring specifically to ALS, Arbesman et al<sup>25</sup> reports that occupational therapy is part of the palliative care team through all phases of the disease, including immediately before death.

### Occupational therapy interventions reported in the selected articles

For this review, Interventions that occupational therapists were involved in were thematically grouped into five categories: 1) Functionality, activity participation and quality of life, 2) Symptom management related to disease and the treatment thereof, 3) Environmental modification and adaption, assistive devices and equipment, 4) Education and caregiver support, and 5) Lifestyle adaptation, return to work or higher education/training. These are reported below in order of frequency as they were mentioned in the articles.

#### Functionality, activity participation and quality of life

All the articles referred to occupational therapists' involvement with functionality, activity participation and quality of life and this was the most frequently reported role and intervention. In many cases specific actions within these concepts were not expanded on. The general impression was that occupational therapists aimed to keep persons with life threatening illness as functional as possible doing activities of importance to them for as long as possible. Sposato et al<sup>37</sup> cites Hammill et al<sup>6</sup> and their own systematic review concur that individuals at the end of life should remain engaged in occupations of value to them, to maintain a sense of competence and mastery over self and their environment. This approach also prevented disuse syndrome<sup>38</sup>

and helps with the management of pain, fatigue and depression<sup>30</sup>. Huri et al<sup>29</sup> reported occupational therapy with breast cancer patients focusing specifically on quality of life through management of pain, fatigue, nausea, metastatic patients intervention, stress reducing and management programmes, the value of engagement in meaningful activities, lymphedema, vocational rehabilitation, creative and therapeutic use of activity, cognitive therapy, and changing life style with cognitive behavioural therapy.

Several of the articles noted that the occupational therapists addressed the activity participation needs<sup>25,26,27,28,30,32,39</sup> of adults faced with life limiting illness and the following are listed: activities of daily living (ADL) and instrumental activities of daily living (IADL), work, leisure, hobbies, community mobility, social participation, and rest and sleep. Sleight et al<sup>36</sup> identified functional areas as foundational to cancer rehabilitation and the occupational therapists was involved in the following: quality of life, activities of daily living, functional mobility, fatigue, cognition, and return to work. Hunter et al's<sup>27,28</sup> reviews concluded that occupational therapy practitioners are well suited to investigate occupational performance, occupation-based strategies, quality of life, and participation status to support client-centred interventions before, during, and after treatment of clients with cancer diagnoses.

#### *Symptom management related to disease and the treatment thereof*

**Fatigue, loss of energy, disrupted sleeping and rest** are common problems reported by persons with cancer<sup>40</sup> and ALS. An RCT<sup>26</sup> found that occupational therapists address fatigue with people with ALS. A systematic review of telehealth interventions<sup>30</sup> and an RCT of the BENECA mHealth app<sup>31</sup>, which monitors energy balance, reported that these occupational therapy interventions positively addressed fatigue, reduced sleep disturbances and insomnia<sup>39</sup>. Stout et al<sup>38</sup> and Nottlemann et al<sup>32</sup> reported occupational therapists addressing fatigue, energy conservation, sleep and rest through assessment, education and instruction. Other articles similarly report occupational therapist involved in fatigue and energy conservation at home, work, and community environments with practical intervention by recommending rest breaks<sup>25</sup>, lifestyle behaviour changes<sup>30</sup>, assistive devices and adaptations<sup>41,27,37</sup>.

Huri et al<sup>29</sup> reports the use of **cognitive** behavioural therapy based occupational therapy (OT-CBSM) with male cancer patients. Occupational therapy telehealth psychosocial interventions that included cognitive behavioural therapy and problem-solving were reported<sup>30</sup>: the BENECA mHealth application, the Occupational Therapy Practice Framework and the Cognitive Orientation to Daily Occupational Performance (CO-OP). Cognitive functional training<sup>31</sup> was also reported as an intervention with cancer patients. Cognitive training, cognitive behavioural therapy, home based problem solving sessions and a generic referral to cognitive therapies were other reported occupational therapy interventions<sup>27,28,33,36,38</sup>.

**Pain** symptom management is an important aspects of end-of-life care<sup>37</sup>. Hunter et al<sup>27,28</sup> reported pain management to be the most common occupational therapy symptom intervention reported in their two systematic review. Two of the RCTs noted the occupational therapy intervention they studied effectively reduced pain<sup>31,29</sup>. The management of pain in cancer palliative care was often linked to fatigue interventions<sup>30,31,39</sup>.

Hunter et al<sup>28</sup> reported strategies that occupational therapists used to address **mental health and stress** with cancer patients and listed a variety of psychosocial interventions, interventions focused on reducing anxiety and depression, spiritual well-being interventions and stress management groups. An RCT showed occupational therapy using a telehealth approach improved patients confidence, self-efficacy and reduced their depression, anxiety, distress levels<sup>30</sup>. A systematic review on dignity therapy<sup>37</sup> concluded that therapeutic approaches to help regulate troubling emotions commonly seen at the end of life (i.e., anxiety, depression, helplessness, etc.) should be part of palliative occupational therapy.

Three of the articles reported occupational therapy intervention focused on **lymphedema** management<sup>27,38,39</sup>. Hunter et al<sup>27</sup> finds that occupational therapy practitioners can feel confident in suggesting physical activity to clients with lymphedema. Stout et al.<sup>38</sup> reported the use of compression garments, progressive resistance training under supervision, manual lymphatic drainage and range of motion exercises and activity participation .

#### *Environmental modification and adaption, assistive devices and equipment*

Assistive devices facilitate performance of everyday activities and conserve energy. Occupational therapist often recommend assistive devices to enable activity participation and improve quality of life for their clients<sup>37,38,39</sup>. An RCT of an occupational therapy based intervention, the Cancer Home-Life Intervention<sup>34</sup>, investigated the efficacy of this intervention and the assistive devices that persons with advanced cancer, who still live at home, use<sup>35</sup>. This study highlighted the prevalence of assistive devices used and the importance of skilled occupational therapy assessment of assistive devices and continued provision for people with advanced cancer.

Arbesman et al<sup>25</sup> found occupational therapy practitioners can play a vital role in helping the client find positions of comfort in bed or in a wheelchair. Practitioners provided splinting to address hand contractures, grab bars, raised toilet seats, and shower seats. They also assisted other team members to enable participation in meaningful activities (e.g., visiting friends, carrying out ADLs and IADLs, and using equipment to control the environment). This study<sup>25</sup> showed that persons with ALS's most valued assistive devices and equipment, increased safety and independence for bathing and toileting, and increased dignity and independence. Occupational therapy practitioners were uniquely qualified to help people with cancer choose the correct equipment and make environmental modifications with consideration of the disease progression<sup>25,38</sup>.

#### *Education and caregiver support*

Arbesman et al<sup>25</sup> indicated triggers for initiating individual or family discussion about end-of-life issues. These triggers were: a request by the family, when a person enters hospice care. Occupational therapists educated family and hospice workers on positioning and client needs. Telehealth was used by Occupational therapists for aftercare intervention, education and guidance, supervision and support of patients, family and caregivers<sup>30</sup>. Pill et al<sup>33</sup> also found that telephonic follow-up was a useful strategy and that patients, their

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families and caregivers' need for psychosocial support was met by applying different psychosocial approaches. As part of a multidisciplinary team occupational therapist took part in early intervention education sessions<sup>32</sup>, education for goalsetting and activity scheduling<sup>39</sup>, and provided caregiver training<sup>37</sup>.

#### *Lifestyle adaptation, return to work or higher education/training*

Five studies reported occupational therapist involved in assisting persons with cancer to return to work and vocational rehabilitation<sup>36,30,29,28,27</sup>. Occupational therapists assisted clients in applying ergonomics and energy saving techniques at home and at work allowing them longer and pain-free participation in activities at home, workplace and community<sup>25,37</sup>. These were task adaptations such as sitting versus standing, taking regular rest breaks, using adaptive tools and assistive devices<sup>25,37</sup>.

## **DISCUSSION**

The World Health Organization (WHO) advocates for the enhancement of palliative care as an integral part of comprehensive healthcare<sup>42</sup>. This global commitment acknowledges that palliative care is an ethical responsibility of health systems and insists on the urgent need to include palliation across the continuum of care, especially at the primary health care level. The South African Policy, Framework and Strategy on Palliative Care 2017 – 2022<sup>8</sup>, acknowledged this and calls for appropriate and accessible care that will be responsive to the needs of patients with life-threatening illness and their families or caregivers. The policy also mentions occupational therapy as part of the package of care of a palliative patient. Globally there are position papers<sup>3,2</sup>, books<sup>43</sup> and seminal articles that position occupational therapy within palliative care providing holistic, client-centred approaches with constant reassessment of the needs of the individual, their families and carers. Occupational therapy interventions aimed to enhance independence in various aspects of daily life. This encompasses a range of strategies, such as providing assistive devices and facilitating retraining, evaluation and adjusting seating and bed requirements, as well as prescribing wheelchairs and pressure-relieving methods. Further, occupational therapists address cognitive and perceptual dysfunctions, employ splinting techniques to prevent deformities and alleviate pain, conduct home visits and assessments, and assist individuals in managing their lifestyles, including hobbies and leisure activities. They offer valuable advice and education, teach relaxation techniques, and help manage issues like fatigue and breathlessness through energy conservation methods. Additionally, occupational therapists provide support and education to caregivers, assist individuals in their psychological adjustment to their loss of function, and collaborate on setting realistic goals for their retraining endeavours. That effective occupational therapy in palliative care reduces anxiety, promotes self-esteem, maintains dignity, enables privacy, avoids dependence on others and once dependence does occur the correct way to adjust to and handle this, providing safety.

In this review Hunter et al<sup>27</sup> found that occupational therapy practitioners working with survivors of cancer of all types, stages, and points on the survivorship continuum have a body of evidence to support current and future practice. Taylor et al 's<sup>39</sup> systematic review identified that occupational therapy provides intervention for three major ICF domains; Rehabilitation (Activity and Participation), Symptom management (Body Structures and Function) and Environmental modifications. Representation in all major ICF domains is positive. Adult palliative intervention from the occupational therapist, within a multidisciplinary program or

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team was reported in nine articles<sup>25,26,27,28,32,33,35,36,38</sup>. Arbesman et al<sup>25</sup> indicates that occupational therapists within a multidisciplinary team brought a unique client-centred and occupation-based perspective to the multidisciplinary team. The multidisciplinary approach showed the potential to meet the variety of needs in palliative care<sup>33</sup>.

The South African National Policy Framework and Strategy on Palliative Care (NPFSPC)<sup>8</sup> foresees that most South Africans will receive palliative care within their communities, placing palliative care within the primary healthcare domain. At the primary care level, community-based resources and a palliative care approach are essential to support the needs of people with chronic diseases. To achieve this, it is necessary to have empowered people and communities, a PHC workforce trained in the basic approach of palliative care and the availability of medicines and health policies that integrate this focusing of the patient and the family as well as the referral of the patient when required<sup>42</sup>. All of which leads to the considering of the limitations of this rapid review.

### Limitations of the study

None of the articles' address or consider persons with HIV - Aids. With HIV being <sup>29</sup> one of the leading causes of death in South Africa<sup>44</sup> it is disconcerting that there is no occupational therapy evidence on the role.

With the exception of Turkey, which has an upper-middle income economy, all the evidence in this rapid review is from high income countries. There were no systematic reviews or RCT articles on adult palliative care from Africa or Low- and Middle-Income Countries (LMIC) such as South Africa is. Matovu<sup>45</sup> concludes her chapter on *occupational therapy in palliative care in an African setting* stating that in Africa, with its unique and varied cultural and religious beliefs around illness, death and dying occupational therapists cannot 'extrapolate western biomedical approach' (page 255) to palliative care. The latter was the only evidence found and provided by this rapid review.

### Future research and other recommendations

Motsoaledi<sup>8</sup> notes that in Africa the burden of palliative care is focused on dealing with death arising from HIV. The absence of level 1 and 2 evidence on the occupational therapist role within this context needs to be addressed as a priority. Occupational therapy <sup>32</sup> training and education in contextually relevant palliative care is essential. This should be at undergraduate and post graduate levels as well as continuous professional development activities to clinical occupational therapists. <sup>31</sup> Responsibility for the support, mentoring and equipping of community service occupational therapists and <sup>36</sup> therapists responsible for taking palliative OT services to populations with the greatest health needs <sup>46</sup> should be seen as a collective South African occupational therapy responsibility.

### Ethical considerations

Ethical clearance was not required for this review as no primary data collection was done. The quality and bias of selected articles were tested to ensure quality results to inform the question of this review.

## **Acknowledgements**

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## **CONCLUSION**

In South Africa the palliative care burden is predominantly carried by family and communities. Across South Africa, occupational therapists are actively engaged in primary healthcare and community environments, making them well-suited to meet the requirements of individuals who need palliative care and their families or communities, Occupational therapy practices transcend the healthcare sector and in palliative care this extends the professions role to schools and education facilities, the labour market, the life insurance industry, religious institutions, hospices, family homes and community settings.

Evidence to support and define the role of occupational therapists within these unique context needs to be captured and high-level research evidence seen as a matter of priority. Due to South Africans varied and unique beliefs with regard to end of life, first world evidence cannot be used to frame the role and intervention of occupational therapists within adult's palliative care. In addition, the skilling, training and support for occupational therapists offering palliative intervention needs to be recognised and made a priority by South African occupational therapy representing professional bodies, healthcare policy makers and training institutions.

## **Conflicts of Interest and other declarations.**

The authors do not have any conflicts of interest to disclose. The Large Language Model (LLM), ChatGPT, was used to assist with the language editing and paraphrasing of the final review article.

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## **Data availability statement**

Upon reasonable request from the first author.

## **Author contribution**

XXX.

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