Review Article | Palliative Medicine and Palliative Care for Incurable Cancer

Palliative care in the older adult with cancer and the role of the geriatrician: a narrative review

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Background and Objective: Palliative care can offer individuals improved quality of care and life. While many individuals would benefit from palliative care, only a minority will receive it. Integrating palliative care with geriatrics can help relieve this deficit, help with basic symptom management, advanced care planning (ACP) and develop goals of care to assure that the care provided is congruent with the individual's priorities. The purpose of this narrative review is to demonstrate the importance that the geriatrician can have when participating in the administration of palliative care; to present geriatric-specific issues that are imperative to manage when palliatively treating the older adult with cancer.

Methods: Data were identified by searching PubMed (January 2000 to July 2023) using the following search terms: palliative care, older adults, and cancer care. The search was repeated using geriatrics, pain, fatigue, anxiety, and depression. Non-English articles and observational studies were excluded. Additional review of literature was undertaken using relevant references of identified articles.

Key Content and Findings: Providing the right service at the right time for older adults with undergoing palliative care is imperative. It is important that clinicians, especially geriatricians, have basic skills in providing this level of care to older patients while working in conjunction with palliative care teams. Older adults are a heterogeneous group, thus utilizing comprehensive geriatric assessment helps the palliative care team to successfully treat individuals. Addressing goals of care, symptom management and ACP can help to maintain quality of life and independence of the older adult. The aging process can affect how the individual perceives and manage their symptoms related to their cancer care including pain, fatigue, anxiety/depression, etc.

Conclusions: Embedding primary care geriatrics in the palliative care arena helps to provide more access to this care. This integration helps providers address basic symptom management, advance care planning and work with individuals on goals of care to assure the care being provided is congruent individual's priorities. Older adults respond to symptoms different than their younger counterparts. Management of these symptoms has to be addressed in a manner commiserate with their age.

Keywords: Palliative care; older adults; cancer; pain; fatigue

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Introduction

Palliative care is not hospice care. The two are often confused however palliative care is different than end-of-life or hospice care. Palliative care is focused on people living with a serious medical illness such as cancer and works in conjunction with the patient's primary team to deliver this care. The goal of palliative care is to maintain the patient's quality of life and improve their independence by ameliorating the effects of symptoms such as fatigue, anorexia, pain and their other chronic health conditions as well as support the patient and their family/caregivers through the use of advanced care planning (ACP) (1). According to the Center to Advance Palliative Care there is growing evidence of the importance that palliative care can offer patients both with regards to improved quality of care and quality of life and the belief is that approximately six million people in the United States could benefit from palliative care (1). The Center to Advance Palliative Care has worked hard to improve the number of palliative care teams such that in 2019, the number of hospitals with greater than 50 beds having palliative care teams rose to 72%. However, 90% of these teams were found in urban hospitals while only 17% were in rural hospitals (1). Thus, there remains a concern with regards to accessing the right service at the right time for the older patient needing palliative care. Only a minority who need palliative care, approximately 14%, will receive it (2).

With the integration of palliative care into primary care, providers can help with basic symptom management, advance care planning and work with individuals on goals of care to assure the care being provided is in line with the patient's priorities (3). Thus, it is imperative that clinicians, especially geriatricians, have basic skills in providing this level of care of their older patients while working with palliative care teams whether they be in an extended care facility, at home or as an inpatient. The purpose of this narrative review is to demonstrate the importance that the geriatrician can have when participating in the administration of palliative care; to present geriatric-specific issues that are imperative to manage when palliatively treating the older adult with cancer. We present this article in accordance with the Narrative Review reporting checklist (available at https://apm.amegroups.com/article/view/10.21037/apm-23-504/rc).

Methods

The data for this narrative review were identified by searching PubMed (January 2000 to July 2023) using the following search terms: palliative care, older adults, and cancer care. The search was repeated using geriatrics, pain, fatigue, anxiety, and depression. Non-English articles and observational studies were excluded. Additional review of literature was undertaken using relevant references of identified articles (see *Table 1*).

With modernization of medicine, older adults represent a heterogeneous population that is increasing and have very complex medical and social needs. By the nature of this, these individuals are disproportionately impacted (4). Approximately 90 million Americans are living with serious illness, with this number thought to likely double over the next 25 years with the aging of the baby boomers (5). Combining these facts helps to appreciate the importance that palliative care can bring to the older adult with cancer. Cancer risk increases as one ages and older adults are more likely to contract the disease than their younger counterparts. In the United States, for those adults 65 years and older, 60% of all cancers are diagnosed and 70% of all mortalities will occur in this age group. As the older adult population continues to grow, this will increase to 70% of all cancers diagnosed being in those aged 65 years and older by the year 2030 (6,7). Of those diagnosed with cancer undergoing treatment, 60–90% will have significant physical symptoms as well as side effects from the treatment including fatigue, pain, anorexia, etc. and 25–40% will suffer with symptoms of depression and/or anxiety (8,9). Research has shown that introducing the concept of palliative care early into the trajectory of an individual's cancer treatment can improve their quality of life and may lengthen it as well. Despite this though, palliative care remains underutilized. The literature states that this is often because the patient is not aware of what palliative care is nor how to access it, fearful of what palliative care means for their life, etc. (10,11). Hoerger *et al.* in their Early Palliative Care Study, attempted to investigate this using a pre-post-test between group randomized design. Participants were randomized to intervention versus control in which the intervention group received instruction regarding palliative care, its benefits for improved quality of life, depression and survival. They hypothesized that educating patients on early palliative care would increase the preference of the subjects to utilize outpatient palliative care. While their increase was modest, they felt that the importance of early introduction/education regarding palliative care in the older adult with cancer would result in improved quality of life (8). Thus, the older adult deserves personalized care given the

Table 1 The search strategy summary

Items	Specification
Date of search	5/5/2023–7/5/2023
Database searched	PubMed
Search terms used	Palliative care, older adults, and cancer care; geriatrics, pain, fatigue, anxiety, and depression
Timeframe	January 2000 to July 2023
Exclusion criteria	Excluded non-English articles and observational studies
Selection process	B.B.D. conducted the search; all authors met to discuss and finalize the selection
Additional consideration	Additional review of literature was undertaken using relevant references of identified articles

heterogeneity of this population in terms of life expectancy, functional status, co-morbidities, polypharmacy and social and economic support (12,13).

Palliative care and geriatrics

The art of palliative care with the older adult should include goal setting, symptom management and ACP such that the quality of life is improved for the individual. Carroll and her colleagues advocate for both palliative and geriatric involvement to identify unique needs of the older adult with cancer (10). Using this approach is imperative as the older adult is prone, based on their aging, to symptom-related decline. Introducing palliative care early allows for each discipline, both palliative care and geriatrics to do assessments of the individual, allowing for an evaluation of the patient's symptoms, as well as a complete geriatric assessment that includes both cognitive and functional evaluations. This integration of teams, will allow for the early detection of problems that might impact either the oncology care or the palliative care of the individual. Carroll and her colleagues introduce the concept of frailty as an excellent example of this. Frailty is a declining in the physical reserve that influences an individual to experience an adverse occurrence. Frailty can be a result of the treatment for cancer or as a part of accumulation of the impact of co-morbidities imposed on the cancer. This in turn can lead to poor cancer-related outcomes (10). Another example would be fall-risk that may be a result of the individual's frailty or may result from neuropathy experienced while receiving treatment for the cancer. Either way, the risk of falling can lead to negative results for the older adult. By identifying and pairing shared aims, geriatricians along with palliative care professionals, can address and manage findings such as these as a team in order to promote quality of life for the older adult with cancer. Geriatricians should focus their assessment and care on managing the individual's co-morbidities, functional status, polypharmacy, nutritional assessment and interventions, and cognition. The palliative care professionals would focus on the treatment of the cancer as well as collaboration with the geriatrician on management of geriatric syndromes such as frailty, anorexia, etc.

What is most important for the care of the individual with cancer undergoing palliative care is for there to be a collaboration between oncology, palliative care specialists, and geriatrics/primary care. While each discipline has its own focus, collaboration will help to provide for the quality of care of each individual both from an oncologic and palliative perspective. Utilizing the strengths of each discipline will help to ensure holistic care to the individual with cancer undergoing palliative care including amelioration of the challenges that the older adult presents due to their inherent chronic illnesses, function, and well-being.

Unfortunately, palliative care professionals are not prevalent in the medical community and thus it is often more likely the non-palliative care professional will need to step in to provide this role. The expectation is that through training of medical students, residents, and fellows, all will have the ability to provide basic palliative care. Medical schools should make palliative care education as a part of their curriculum to develop interest and knowledge in this field. Geriatric fellowships mostly include a rotation in palliative care to help them hone these very important skills. By being trained in basic palliative care, primary care providers and geriatricians should be able to included ACP, goals of care discussions, and pain management. Thus, easing the burden on the palliative care teams such that specialist palliative care specialists are reserved to be

involved with cases that have more refractory symptoms, complex psychosocial issues, and symptom management (14).

Cancer treatment in the older adult

Treatment of cancer in the older adult is based on three factors: determination of the person's physiological age inclusive of life expectancy, their ability to tolerate the treatment or the stress it will place on them, and social support that will be available to compensate for their functional deficiency that may result from the treatment (15). In the older adult, physiological age is greatly variable as compared to chronological age. An individual's life expectancy and one's ability to tolerate the stress of treatment will vary among those of the same chronological age necessitating the adjustment of treatment plans accordingly (16,17). Performing a comprehensive geriatric assessment will help to unveil health care needs that might not otherwise be uncovered. This assessment will look at the individual's function, co-morbidities, polypharmacy, cognition, emotional status, and one's nutritional state. Geriatric assessment utilizes a holistic approach to evaluating the older adult and will reveal the need for a caregiver, nutritional support, functional status and any social support needs in addition to providing an estimate of physiological age (16). Finding that individuals are dependent for one or more activities of daily living and/or the presence of geriatric syndromes, are associated with limited life expectancy and the ability to tolerate the stress of cancer treatment. Further, a comprehensive geriatric assessment can be used to predict survival in older cancer patients helping to weigh the risks of dying from the disease/treatment of such in contrast to the risk of dying from other co-morbidities (6). Thus, assessment of physiological age is necessary for providing not only cancer care but also palliation in the older adult with cancer. This allows the patient and the practitioner to estimate the risk/benefit ratio of treatment and set realist goals of care for the patient.

Nipp and his colleagues in their study attempted to determine the use of a transdisciplinary intervention that aimed at geriatric-specific and palliative care needs of the older adult with advanced cancer. Subjects with advanced-stage gastrointestinal or lung cancer were randomized to the transdisciplinary intervention or usual care. Those receiving the transdisciplinary care met with a geriatrician twice who addressed their palliative care needs and performed a geriatric assessment. In their pilot randomized control trial, the researchers did not meet the enrollment expectations however more than half of the subjects that were approached in the study period did participate. The majority found the intervention acceptable and helpful. It was determined that the intervention group did have improved quality of life, physical and psychological symptoms and communication confidence. Finally, the data highlighted the older adult's high symptom burden, increased co-morbidities and functional impairments, emphasizing the importance of addressing the geriatric and palliative care needs of the older adult (4).

Palliative care

It is often said that palliative care focuses on "healing" versus amelioration of disease. Cure may only be possible in a select group of individuals, however focusing on healing and helping the older adult to learn to live with their disease both physically, mentally and emotionally is imperative. In order to help the individual to accomplish this, palliative care has the following objectives: goal setting; symptom management and ACP including support of the patient and family (15).

At the outset of engaging in palliative care is the setting of goals that are realistic and attainable. The key to goal setting is effective communication of prognosis and treatment options. Sometimes effective communication in the older adult can be hampered by the individual being hard of hearing, cognitively impaired, cultural issues as well as overall expectations of the individual (15). Health goals should be personal and focused on maintaining function, socialization and symptom relief that the individual wishes to achieve through their palliative care experience (18). The individual needs to decide what that they are willing and able to achieve to assure their goals of care are being met. As individuals age, goals of care will be influenced by the individual maintaining functional status, not being a burden to others, living until an important event such as graduation of a grandchild, marriage of a child, etc.

Barriers to attaining this are when disease becomes the focus of the care and decision making and not the individual. Further, there is confusion of roles and responsibilities and accountability among clinicians. Finally, not attending to patient and caregiver wishes with regards to their goals of care (18). This misalignment of the care of clinicians, both oncology as well as primary care, will not lend to individuals meeting their goals for care. It is imperative to assign to the most qualified clinician, the responsibility for an individual's

care in order to help rectify these barriers.

Symptom management is the second objective to be considered when providing the older adult with palliative care. Age seems to change how individuals respond to symptoms associated with the treatment of their cancer. Cataldo and associates looked at patients from America and Australia receiving cancer treatment who were younger than 60 years and compared them to patients who were 60 years and older. Using the Memorial Symptom Assessment Scale (MSAS), they determined that eight of eleven symptoms were the same in both age groups but the occurrence and the level of distress from the symptoms was higher in the younger age group (19). This begs the question and is deserved of further research is that are older individuals less likely to acknowledge or report their symptoms? Do the symptoms play more of an important role as individuals age? Are symptoms less as the older old are not receiving adequate cancer treatment?

What is known is that as individuals age, the treatment of their pain, which is often a reported symptom with cancer and its treatment, can be affected by the aging process. Physiological changes occur with the aging process resulting in the changes that can affect the pharmacokinetics and the pharmacodynamics of medications. Further physiological changes that occur with aging need to be considered. For example, older adults have a more blunted response to pain as they age. This may be due to changes in the brain striatal area as well as older adults have other factors that can contribute such as higher tolerance of pain, pain considered a part of aging and different adaptation to pain (15,18,20). In older adults, commonly cognitive impairment, functional issues and caregiver issues can contribute to medication errors and compliance. In order to prescribe medications for symptom management for the older adult, clinicians need to be cognizant of not only the pharmacological properties of medications as well as clinical, social, and cultural factors that can play a role (20).

Similar to the younger adult, the literature advocates for pain management to follow the World Health Organization (WHO) algorithm analgesic ladder (15,20,21). Determining the cause of the pain in the older adult is important in its treatment. For example, joint pain could be from osteoarthritis however may be related to other causes as well in the older adult. Focusing on alleviating pain using non-pharmacological measures is always the primary focus. This can include a cadre of modalities that have been shown to be helpful in the older adult such as physical therapy, heat/cold modalities, psychological and/or behavioral measures such as the use of meditation or distraction, relaxation, mindfulness training as well as therapeutic massage.

Should non-pharmacological measures not relieve the older adult's pain, using pharmacological measures would be the next focus. Similarly to the younger adult, The WHO recommends nonopioids for mild pain, milder opioids for moderate pain and high-dose opioids for severe pain when used in conjunction with nonpharmacological measures (20). According to the WHO, nonopioid medications such as acetaminophen, aspirin and non-steroidal anti-inflammatory drugs (NSAIDs) should be used "first-line" however the older adult with other chronic conditions may make the use of aspirin and NSAIDs contraindicated. The American Geriatric Society guidelines recommend that only acetaminophen be used as the "first-line" due to its safety and efficacy profile. This recommendation is based on the renal, cardiovascular and gastrointestinal adverse events of these prior two medications in the older adult (22). Acetaminophen can be used in those suffering with mild to moderate pain however because of the concern for liver toxicity, counseling of the appropriate dose (no more than 3,000 mg per day) is mandatory. Individuals and their families should be counseled regarding the fact that many over the counter medications will contain acetaminophen and individuals should be cautious when using these in combination.

NSAIDs are effective in the treatment of mild to moderate pain, especially bone pain however these medications harbor an inherent risk in the older adult and have been associated with bleeding of the gastrointestinal tract, toxicity to the kidney, heart attack, and stroke. The older adult, due to their other chronic conditions may be taking other nephrotoxic medications and/or may have underlying compromised renal function caused by aging. Thus, in this population, the use of NSAIDs should be used judiciously.

Opioids are used commonly in the management of moderate to severe cancer pain. Similar to the NSAIDs, it is important to evaluate an individual's hepatic, renal, cognitive ability, social support and any possible drug-drug interactions that may exist. While weak opioids such as codeine and tramadol, are the second step to be considered, the WHO recommends "skipping" their use and opting for lower doses of stronger opioids as they have been shown to be more effective and are pharmacokinetically more predictable and have better safety profiles when compared to weak opioids (20,21). Of greatest concern with this latter class of medications is constipation, sedation, and confusion/

hallucinations in the older adult. Constipation is a great concern in the older adult based on the aging process, so the effect of opioid-induced constipation needs to be monitored for. All patients started on opioids should be provided with a bowel regimen that includes a laxative that is a stimulant. Education of the individual and their family is imperative inclusive of the importance of eating fiber foods if able as well as encouraging fluids. The development of sedation and confusion/hallucinations can best be managed with dose reduction or changing to a different opioid preparation.

Palliative care can bring out many different emotions for the older individual. A large percentage of those receiving palliative care can develop clinical anxiety and/or depression (23). As an individual moves along the continuum of palliative care, clinicians should explore the individual's grief, actively listen, encourage coping of the individual with their illness as well as help them to communicate with their loved ones. According to Aziz and Saeed (24), anxiety and depression as well as adjustment disorders can occur in 10% to 30% of individuals with cancer. These disorders are commonly encountered in the palliative care arena and can be associated with increased morbidity and distress. McInnerney *et al.* (23) in their scoping review determined that many different interventions exist to assist the individual with their coping and dealing with these emotions. Most studies in their review did show improvement in the overall psychological well-being of the palliative care patient.

Using medications to treat anxiety and depression in the palliative care individual is to be taken with care. The use of benzodiazepines should be avoided in this population. Similarly, tricyclic antidepressants are to be used very judiciously in the older adult due to their significant anticholinergic side effects and potential for cognitive change (20). The use of anti-depressants and other safer anxiolytics may be used to better manage the anxiety that some individuals may feel. Selective serotonin reuptake inhibitors (SSRIs) have been used effectively and are usually well tolerated.

Another common symptom that those under palliative care experience is fatigue. According to Soones and colleagues estimated that chronic fatigue related to a cancer diagnosis can be up to 70% (25). Cancer-related fatigue (CRF) can be characterized by feelings of tiredness, weakness and lack of energy (20). It is differentiated from fatigue experienced by healthy individual in that it is not relieved by rest or sleep. Further, CRF can be very distressing for individuals and associated with suffering, depression/anxiety and contribute to a decreased performance status. Due to this, treatment should be addressed that targets multiple symptoms. For example, Soones and colleagues, in their narrative review, encouraging exercise would target pain, fatigue as well as anxiety/depression (25,26). Cognitive behavioral therapy has also proven effective for the same conditions. Further, the consideration of other non-traditional therapies such as acupressure and acupuncture, energy conservation measures, etc. may also be helpful.

Using medications in the management of fatigue has not proven to be helpful for the most part. The use of modafinil in the older adult with CRF has been shown to have no effect and should not be prescribed (20). Corticosteroids on the other hand have showed to improve fatigue in many studies (27). Methylphenidate has been shown to have conflicting results when it comes to assisting with treating CRF. Unfortunately, many of the studies done regarding its effectiveness have not been done in the older adult. Some studies though have found to improve short-term fatigue (20,21,28). Antidepressants have shown to have benefit in the treatment of fatigue. SSRIs are the recommended agent with the use of paroxetine showing benefit in the treatment of fatigue. Further bupropion extended release may have use in psychostimulant effects and can prove helpful in the treatment of fatigue (20,21).

Weight loss and anorexia is another concern for the older cancer palliative care individual. Weight loss in the older adult occurs about 15% to 20% of the time and is even more prevalent in the older adult with cancer. Further unintentional weight loss can be associated with an increased risk of mortality, increase in being sedentary and other co-morbidities that are associated with aging (29). The goal of nutritional support is to preserve nutrition orally by keeping food-related discomfort at a minimum and food enjoyment at a maximum through the use of dietary counseling, food selection of nutrient dense foods and oral nutritional supplements (27). Nutritional support using enteral nutrition is most prudent to consider especially in patients with a functioning gastrointestinal tract. Encouraging patients to eat three to five small meals per day is helpful. Food selections should be nutrient dense in that a small amount of food provides the maximum calories and nutrition. Nutritional supplements should be used daily and not with meals however between meals to support the individual nutritionally. Controversial is the use of cannabinoids as well as medroxyprogesterone at high doses to stimulate appetite (15). Cannabinoids, such as dronabinol

has been used to treat anorexia but has central nervous system effects such as confusion and/or somnolence. The use of megestrol has also been shown to have positive effects on appetite and weight gain, however it also has been associated with adverse events such as edema, blood clots and death (29). Most promising is the use of Mirtazapine in the promotion of weight gain however is still with some side effects. These include dry mouth, dizziness, orthostatic hypotension and sedation (20,29).

Tenants of geriatric care regarding pharmacological management include using all medications with care especially with attention to renal dosing, side effect profile and starting at a low dose with slow dose escalation. Further, avoiding as much as possible polypharmacy will help to limit interactions of medications as well as increasing the chance of an increase in side effects experience by the older adult.

The third and final objective of palliative care is ACP. ACP is a process. This process involves the individual and their surrogate decision maker regarding their values, wishes and goals of the delivery of their healthcare as they approach the end of their life. It is a dynamic process that requires active participation on the part of both individuals in order to assure that they both understand the current level of illness/disease burden; the patient's values and goals and the firm belief in the ability of the surrogate decision maker to carry out the wishes of the individual. The importance of the ACP process is well-established and remains a keep objective of palliative medicine. A review of the literature however shows the opposite to be true. The literature acknowledges the importance and value of ACP discussions however uptake of ACPs remain low (30). The literature reveals that within families, there is less likelihood of having meaningful conversations regarding overall prognosis with older adults and partial or nondisclosure continues to be prevalent amongst certain cultures (31). Providers, as well, have difficulty initiating ACP conversations within this group of the aged. A review of the literature looking at engaging specifically in conversation about ACPs with those individuals with dementia offers recommendations to clinicians. These include: engaging in early and routine initiation of ACP, ongoing evaluation of cognitive ability, having ACP conversations with individuals, including caregivers/family, and documentation of the individual's wishes and preferences including end-of-life decision making and thoughtful consideration for the optimal implementation of ACP (32). The palliative care clinician must be aware of the barriers that can exist however continue to engage in early and intentional ACP conversations. Searle and colleagues performed a systematic review of randomized control trials. They found that ACP and goals of care were found to effective to decrease hospital stays from long-term care facilities. Admittedly reasons for hospitalization and emergency department admissions are complex, their review supported the use of ACP in order to decrease unpredicted hospital stays (33). The benefits of ACP are well-established however the literature is lagging in guidelines for the clinician to use when engaging in these conversations with individuals in order to comprehensively and holistically meet their needs.

Conclusions

Embedding primary care geriatrics in the palliative care arena helps to provide more access to this care. This integration helps providers address basic symptom management, advance care planning and work with individuals on goals of care to assure the care being provided is congruent individual's priorities. Older adults respond to symptoms different than their younger counterparts. Management of these symptoms has to be addressed in a manner commiserate with their age. ACP is an integral process in the delivery of palliative care. Although it is known to be an important objective of palliative care, the opposite is found to be true. Gaps in the literature exist as there has not been adequate amount of research in this field. For example, while the benefits of ACP are well-known, the development of clinical guidelines is lagging. Also, the cohort of individuals available for research is limited because of the age of subjects, co-morbid conditions and the presence of cancer that may limit their participation. Most palliative care is provided by hospice programs in the private sector and may not be affiliated with research institutions. Recruitment of these programs to promote research in this field can help expand the recruitment and participation of subjects. Finally, future research in the importance of employing a geriatrician and/or primary care providers in the palliative care of individuals with regards to its effectiveness and improved outcomes for the patient is essential.

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Footnote

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