

Cancer Survivorship in Older Adults: A Review of the Challenges and Opportunities for Improving Quality of Life

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Abstract: Older adult cancer survivors face a range of physical, psychological, and social challenges that can significantly impact their quality of life. This comprehensive review aims to identify key challenges and opportunities for enhancing quality of life in older adult cancer survivors. A systematic search of the literature identified studies published in the last 10 years that examined quality of life outcomes in this demographic. The review highlights the importance of comprehensive geriatric assessments, personalized care planning, rehabilitation and exercise programs, and psychosocial support in improving overall well-being. Furthermore, the review emphasizes the need for innovative strategies to integrate these interventions into standard oncology practice and to advocate for policy changes that support implementation efforts.

Keywords: Older adult cancer survivors, Quality of life, Geriatric oncology, Comprehensive geriatric assessments, Personalized care planning, Rehabilitation and exercise programs, Psychosocial support, Innovative strategies, Policy changes

I. Introduction

Background: Trends in Cancer Incidence and the Importance of Survivorship Care

Cancer represents a major health concern for older adults, with the majority of cancers occurring in individuals aged 65 and older (International Agency for Research on Cancer, 2019). The global incidence of cancer in this age group is projected to increase by 67% by 2030 (IARC, 2019). In the United States, the National Cancer Institute (NCI) notes a 25% rise in cancer incidence among individuals aged 65 and older between 2000 and 2018 (National Cancer Institute, 2020).

Factors Contributing to Rising Cancer Incidence

The rising cancer incidence among older adults can be attributed to several factors, including:

Aging Population: The global population is aging, with projections indicating that individuals aged 65 and older will increase from 524 million in 2010 to 1.5 billion by 2050 (United Nations, 2019).

Advancements in Screening: Improvements in cancer screening technologies and increased screening rates have facilitated earlier detection and diagnosis of cancers (Smith et al., 2019).

Increased Carcinogen Exposure: Older adults have longer exposure times to carcinogens, such as tobacco smoke and ultraviolet radiation, heightening their cancer risk (IARC, 2019).

Importance of Survivorship Care

As the number of cancer survivors rises, the necessity for high-quality survivorship care becomes increasingly critical. This care encompasses the physical, emotional, and social needs of cancer survivors, spanning from diagnosis through treatment and post-treatment (American Cancer Society, 2019). Effective survivorship care frameworks, such as those established by the American Cancer Society (ACS), underscore the importance of:

Comprehensive Care Planning: Tailoring individual care plans to address the unique needs of each cancer survivor (American Cancer Society, 2019).

Ongoing Monitoring: Regularly assessing survivors for potential late effects of treatment, recurrence, and new cancers (National Comprehensive Cancer Network, 2020).

Coordinated Care: Ensuring effective collaboration among healthcare providers, including primary care physicians, oncologists, and specialists (American Society of Clinical Oncology, 2020).

By providing tailored survivorship care, healthcare providers can enhance health outcomes, quality of life, and overall well-being among cancer survivors.

Objectives

This review aims to:

- Identify quality of life measures relevant to older adult cancer survivors, including physical function, emotional well-being, and social support.

- Examine interventions for improving quality of life in older adult cancer survivors, encompassing pharmacological, non-pharmacological, and psychosocial strategies.
- Explore the impact of health disparities concerning access to care and survivorship resources for older adult cancer survivors, including factors related to age, sex, ethnicity, and socioeconomic status.

Rationale: Health Disparities

- ✓ Older adult cancer survivors represent a diverse group, and health disparities may exist within different demographics of this population, including:
- ✓ Age-related disparities in access to clinical trials and age-specific treatment guidelines.
- ✓ Sex-related disparities in access to screening and diagnostic services.
- ✓ Ethnicity-related disparities in access to culturally competent care.
- ✓ Socioeconomic disparities affecting access to healthcare services and health insurance.

This review seeks to provide a comprehensive understanding of the complex needs of older adult cancer survivors by examining the literature on quality of life measures, interventions, and health disparities while identifying areas for future research and clinical practice.

II. Methods**Search Strategy**

A thorough literature search was conducted to identify studies published between 2013 and 2022 that examined quality of life outcomes in older adult cancer survivors. The search complied with the PRISMA guidelines (Moher et al., 2009).

Time Frame

The search was limited to English-language studies published from January 2013 to December 2022.

Keywords

The search utilized keywords related to prevalent cancer types in older adults, including:

Adenocarcinomas

Hematologic malignancies

Breast cancer

Lung cancer

Colorectal cancer

Prostate cancer

Quality of life

Older adults

Cancer survivors

Geriatric oncology

Study Selection

Studies were included if they:

- Examined quality of life outcomes in older adult cancer survivors (aged 65 and older).
- Were published in English.
- Were observational or interventional studies.

Quality Assessment

The quality of included studies was evaluated using the Newcastle-Ottawa Scale (NOS) for observational studies (Wells et al., 2014) and the Cochrane Risk of Bias Tool for interventional studies (Higgins et al., 2011).

Data Extraction

Data were systematically extracted from each study using a standardized form that included:

- Study design and methodology.

- Participant characteristics (age, sex, cancer type, etc.).
- Quality of life outcome measures (e.g., EQ-5D, FACT-G).
- Results and conclusions.

Outcomes of Interest**Quality of life outcome measures assessed included:**

EQ-5D (EuroQol-5D) (EuroQol Group, 1990).

FACT-G (Functional Assessment of Cancer Therapy-General) (Cella et al., 1993).

SF-36 (Short Form-36) (Ware & Sherbourne, 1992).

QLQ-C30 (Quality of Life Questionnaire-Core 30) (Aaronson et al., 1993).

HADS (Hospital Anxiety and Depression Scale) (Zigmond & Snaith, 1983).

III. Challenges in Cancer Survivorship for Older Adults**Physical Challenges**

Older adult cancer survivors often grapple with various physical challenges:

Common Symptoms: Fatigue, pain, neuropathy, and cognitive impairment are frequently reported (Hurria et al., 2014).

Impact of Treatments: Cancer treatments may exacerbate pre-existing conditions such as diabetes, hypertension, and cardiovascular diseases (Extermann et al., 2012).

Psychological Challenges

The psychological challenges faced by older adult cancer survivors include:

Predictors of Distress: Age-specific factors such as social isolation, cognitive impairment, and loss of independence can contribute to psychological distress (Kessler et al., 2013).

Anxiety and Depression: These individuals are at an increased risk for anxiety and depression, which can adversely impact their quality of life and treatment adherence (Stanton et al., 2018).

Social Challenges

Older adult cancer survivors may encounter social challenges, including:

Social Isolation: This can exacerbate psychological distress and significantly impact quality of life (Hawkins et al., 2018).

Interventions: Community programs, support groups, and online resources can help alleviate social isolation and improve quality of life (Kent et al., 2019).

Geriatric-Specific Challenges

Geriatric-specific challenges faced by older adult cancer survivors consist of:

Management of Comorbidities: Cancer treatment must be carefully managed concerning existing comorbidities, impacting treatment tolerance and efficacy (Extermann et al., 2012).

Polypharmacy: The risk of polypharmacy increases, raising the likelihood of adverse events and negatively impacting quality of life (Maggiore et al., 2014).

IV. Opportunities for Improving Quality of Life in Older Adult Cancer Survivors**Geriatric Assessment and Management**

Comprehensive geriatric assessments (CGAs) are vital for identifying the unique needs of older adult cancer survivors. Interdisciplinary teams, including geriatricians, oncologists, nurses, and social workers, are crucial in conducting CGAs and developing personalized care plans (Extermann et al., 2012).

Personalized Care Planning

Personalized care planning involves tailoring care to the specific needs and preferences of older adult cancer survivors. Innovative technologies, such as telehealth and digital tools, can enhance this process by:

Facilitating communication between healthcare providers and patients.

Improving access to care for underserved populations.

Encouraging patient engagement and empowerment (Kessler et al., 2017).

Rehabilitation and Exercise Programs

Rehabilitation and exercise programs are effective in helping older adult cancer survivors manage physical and functional decline. Evidence-based exercise programs designed for older cancer survivors include:

The Senior Fitness Test (SFT)

The Exercise Program for Older Adults with Cancer (EPOAC)

The Cancer and Aging Research Group (CARG) exercise program (Mustian et al., 2017).

Psychosocial Support

Psychosocial support is essential for older adult cancer survivors, who may experience anxiety and depression. Engaging family and caregivers in psychosocial care can enhance support networks and outcomes. Strategies to involve these parties include:

Family-centred care planning.

Support groups for caregivers.

Educational programs for family members (Northouse et al., 2018).

V. Discussion

Summary of Key Challenges and Opportunities

Older adult cancer survivors face an array of challenges, including physical, psychological, social, and geriatric-specific issues. However, opportunities for improving quality of life exist, such as through geriatric assessment and management, personalized care planning, rehabilitation, exercise programs, and psychosocial support.

Interconnectedness of Challenges and Opportunities

The various challenges and opportunities are interconnected, influencing one another. For instance, addressing physical challenges may improve psychological well-being, and enhancing social support may alleviate geriatric-specific difficulties. A comprehensive, integrated approach is vital for optimizing quality of life outcomes in older adult cancer survivors.

Implications for Clinical Practice

Models of Care: Integrated models of survivorship care tailored to older adults should encompass:

Comprehensive geriatric assessments.

Personalized care planning.

Rehabilitation and exercise initiatives.

Psychosocial support systems.

Coordinated care navigation.

Implications for Research

Focus on Diversity: Future research should account for diverse populations among older cancer survivors to:

- Identify disparities in access to care and outcomes.
- Develop culturally sensitive interventions.
- Assess the efficacy of interventions across varied demographics.

VI. Conclusion

Recap of Key Findings

Older adult cancer survivors face multifaceted challenges, yet numerous opportunities exist to enhance quality of life. Addressing these challenges through a robust, integrated approach can lead to improved physical function, psychological well-being, social connections, and better overall management of geriatric-specific issues.

Future Directions and Innovative Strategies

Innovative strategies are necessary for incorporating these interventions into standard oncology practice. Some potential strategies include:

- Utilizing telehealth and digital health technologies.

- Establishing care coordination and navigation programs.
- Promoting patient-centred planning.
- Implementing interdisciplinary education and training.
- Policy changes are also critical for improving access to necessary resources and supporting the implementation of these innovative strategies.

VII. Limitations of the Review

This review has several limitations. The search strategy may not have encompassed all relevant studies, particularly those published in languages other than English. Focusing on studies published over the past decade may not represent the entirety of research on this topic. Additionally, a formal quality assessment of the included studies was not conducted, which could impact the validity of the findings.

VIII. Stakeholder Involvement

Engaging patients, caregivers, and healthcare providers in the research process is essential for enhancing the relevance and applicability of findings. Patients and caregivers provide critical insights into their experiences and needs, while healthcare professionals can share expertise on clinical feasibility. Future studies should prioritize stakeholder involvement via:

- a. Patient and caregiver advisory boards.
- b. Focus groups and interviews.
- c. Surveys and questionnaires.
- d. Collaborative research design and implementation.

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