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Derya ÇINAR Orcid: 0000-0002-4926-335X	Navigation and Roles of Navigator Nurse in Geriatric Hematology	
	Geriatrik Hematolojide Navigasyon ve Navigatör Hemşirenin Rolleri	
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Keywords:

Geriatric; haematology; navigation; navigator nurse.

Anahtar Sözcükler:

Geriatri; hematoloji; navigasyon; navigatör hemşire.

ABSTRACT

Although cancer affects all age groups, from a global perspective, 60% of cancer diagnosed cases and 80% of cancer-related deaths occur in individuals aged 65 and over. Haematological malignancies constitute more than half of the cancers in the geriatric population. Geriatric haematology patients constitute the patient group that is characterized by disease burden, complex treatments and difficult care process. In this context, geriatric haematology patients constitute the patient group that is characterized by disease burden, complex treatments and difficult care process. They need decision-making help, support, forward guidance and advocacy from healthcare professionals.

Nowadays, the roles and responsibilities of the "Navigator Nurse" have been defined to meet the needs of cancer patients and to provide care coordination. Navigator nurse guides patients at every stage of the disease with clinical experience, knowledge, and skills that require expertise. As the roles, responsibilities, standards, competencies and training of the navigator nurse are defined in today and the future, it is inevitable that navigator nurses will have a positive effect on reducing some of the burdens that geriatric patients with haematological malignancies will encounter on their cancer journey with contributions to cancer care.

This review, it is aimed to present the navigator nurse care model and the roles of navigator nurses in the care process of geriatric haematology patients.

ÖZ

Kanser her yaş grubunu etkilese de küresel bir perspektiften bakıldığında; kanser tanısı konulan vakaların %60'ı, kansere bağlı ölümlerin de %80'i, 65 yaş ve üzeri bireylerde gerçekleşmektedir. Geriatrik popülasyonda görülen kanserlerin yarıdan fazlasını ise hematolojik maligniteler oluşturmaktadır. Geriatrik hematoloji hastaları; hastalık yükü, karmaşık tedaviler ve zorlu bakım süreci nedeniyle özellik arz eden hasta grubunu oluşturmaktadır. Geriatrik hematoloji hastalarının sağlık profesyonellerinden karar verme konusunda yardım almaya, desteğe, ileriye yönelik rehberliğe ve savunuculuğa gereksinimleri vardır. Geriatrik hematoloji hastalarının tandan itibaren hastalık sürecinin her aşamasında, güncel tedavi yaklaşımı ve bakım stratejileri ile hastalara rehberlik eden, alanda uzmanlaşmış hemşirelere gereksinim duyulmaktadır.

Günümüzde, özellikle kanser hastalarının gereksinimlerini karşılayabilmek ve bakım koordinasyonunu sağlamak amacıyla "Navigatör Hemşire" rol ve sorumlulukları tanımlanmıştır. Navigatör hemşire, uzmanlık gerektiren klinik deneyimi, bilgi ve becerileri ile hastalığın her aşamasında bakım sürecinde hastalara rehberlik eder ve yönlendirir. Günümüzde ve gelecekte navigatör hemşirenin rol ve sorumlulukları, standartları, yetkinlikleri ve eğitimi tanımlandıkça, navigatör hemşirelerin hematolojik maligniteli geriatrik hastaların kanser bakımına sundukları katkıları ile hastaların kanser yolculuklarında karşılaşacakları bazı yüklerin azalmasında olumlu etkileri olacağı kaçınılmazdır.

Bu derlemede, geriatrik hematoloji hastalarının bakım sürecinde navigatör hemşire bakım modeli ve navigatör hemşirelerin rollerinin sunulması amaçlanmıştır.

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INTRODUCTION

Navigation has been defined as "finding the way"(https://sozluk.gov.tr). In health care, navigation is used as a guide in processes from disease prevention, diagnosis, screening, and treatment to end-of-life care (Karadakovan, 2019). The purpose of the navigation is to reduce cancer morbidity and mortality by removing psychosocial, financial, cultural, and bureaucratic barriers in access to healthcare services, communication, and transportation, and by providing timely access to cancer care (Oncology Nursing, 2018).

Geriatric haematology patients constitute the patient group that is characterized by disease burden, complex treatments, and difficult care processes (Akgul Baskale, 2015; Pesut et al., 2017). Navigator nurses should guide geriatric haematology patients at every stage of cancer and during the care process with the clinical experience, knowledge, and skills that require expertise (Pautasso, Lobo, Flores and Caregnato, 2020).

It is considering the dissemination of navigator nursing will inevitably contribute to cancer care as cost-effective care by ensuring the coordination and continuity of care outside of the health institutions of geriatric haematology patients. This review, it is aimed to present the navigator nurse care model and the roles of navigator nurses in the care process of geriatric haematology patients.

Historical Process of Navigation

Patient navigation is designed to promote access to timely diagnosis and treatment of cancer and other chronic diseases by removing barriers to patients' access to health care (Freeman and Rodriguez, 2015).

The differences and inequalities in the access to health care of different groups such as women, the elderly, the disabled and the people living in rural areas have led to the birth of the navigation program (Coşkun, Şentüre and Kavaklı., 2016; Freeman and Rodriguez, 2015; Pesut et al., 2017). Navigation programs were first implemented in countries such as America, Australia, Denmark, Sweden and Canada (Pautasso, Zelmanowicz, Flores and Caregnato, 2018). The patient navigation program was started to be implemented in Harlem Hospital in New York in 1990 to reduce the mortality rates due to breast cancer in a group of women who could not get adequate health care services. In the following years, patient navigation has been widely used in the United States to improve cancer care outcomes by increasing treatment compliance (Freeman and Rodriguez, 2015; Pautasso et al., 2018; Pautasso et al., 2020). Navigation programs have become a widely used strategy in cancer care in many countries around the world (Pautasso et al., 2018). In the field of oncology, optimal results such as early diagnosis and treatment, increase in knowledge of patients and informal caregivers, improvement in compliance with treatment and quality of life, decrease in emergency service admissions have been achieved and healthcare service costs have been reduced (Case, 2010; Oncology Nursing, 2018).

Navigator Nurse

Navigator nurses offer integrated care in harmony with supportive and coordinated care in the care journey aiming to improve the quality of life of patients (Byrne et al., 2020). It serves in a multidisciplinary team of health professionals such as medical oncologists, radiation oncologists, surgeons, radiologists, pharmacists, general practitioners and nurses, and other service providers such as social workers and financial navigators (Malignancies, 2019). Navigator nurse's main roles and responsibilities are care coordination, communication, education and professional roles (Oncology Nursing, 2018) (Table 1). The navigator nurse acts as a care coordinator, as a bridge with the patient and team members, thanks to her communication skills and clinical knowledge (Pautasso et al., 2020). In their educational roles, they train patients, their families, and caregivers in facilitating decision-making, and about treatment and care plans. To fulfil these roles, they must have sufficient knowledge about constantly renewed practices such as cancer treatment modalities, protocols and management (Oncology Nursing Society, 2017).

The role of the navigator nurse emerged as a result of the pilot study of the patient navigation program designed and implemented in 1990 (Brown et al., 2012). Navigator nurses have ensured the continuity of care coordination in Acquired Immunodeficiency Syndrome (AIDS), diabetes, cardiovascular diseases and oncology (Pesut et al., 2017; Pruitt, and Sportsman, 2013; Sullivan et al., 2015; Thygesen et al., 2012; Zibrik, Laskin and Ho, 2016a; Zibrik, Laskin and Ho, 2016b). The American Nursing Society (ONS) has clearly defined the primary roles of oncology nurses, defined as navigator nurses (Baileys et al., 2018; Brown et al., 2012; Oncology Nursing Society, 2013; Oncology Nursing Society, 2017). According to this definition:

Oncology navigator nurse: A professional nurse who offers individualized care with clinical knowledge in oncology that will help patients, their families, and caregivers to overcome barriers to access to the healthcare system. Using the nursing process, it provides timely access to quality psychosocial care at all stages of the disease and education and information to facilitate decision-making.

Lay (non-healthcare professional) navigator: Non-professional, educated or volunteer individuals who offer individualized assistance to patients, their families, and caregivers in overcoming barriers to access to the health care system and ensuring timely access to quality psychosocial care at all stages of the disease from pre-cancer diagnosis.

Identifying possible barriers to maintenance and providing access to services and resources required to reduce them	
To create a care plan with a multidisciplinary team, patient and family	
To provide individualized care considering the physical, cultural, biopsychosocial and spiritual needs of patients	
Supporting patients for the organization of necessary appointments and other procedures for their treatment	
Helping patients participate in consultations and other tests and procedures required for treatment	
Supervising the execution of the navigation program	
Implementing improvements and / or new processes to improve the quality of care	
Evaluating maintenance results	
Strengthening the bond between patients, their families/caregivers and the care team by acting as a bridge	
To provide training for the patient/family and caregivers in line with evidence- based guidelines on diagnosis, treatment, management of side effects, prevention of complications and other care problems	
To guide patients in creating healthy lifestyle behaviours that aim to increase the quality of life during treatment.	
Increasing and supporting patients' compliance with treatment through education	
To ensure the patient/family and caregivers access to healthcare services and available resources	
To promote effective communication between the multidisciplinary team and patients	
Providing direct access to psychological and/or social support for the needs of the patient/family and caregivers	
Ensuring that communication is culturally compatible with the understanding and cultural level of patients and family members	

 Table 1. Roles of Navigator Nurse (Baileys et al., 2018; Oncology Nursing, 2018)

Novice navigator nurse: A nurse who has worked for a maximum of two years in the role of a navigator nurse, requiring oncology navigation experience, nursing knowledge, and academic preparation to develop the role of a navigator nurse.

Senior navigator nurse: A competent nurse who has worked for at least three years in the role of a navigator nurse, using critical thinking and decision-making skills in evaluating navigation processes, with training and experience in the role of a navigator nurse (Baileys et al., 2018).

By conducting identification studies for the role of the ONS navigator nurse, the need to determine competencies to ensure standardization has arisen. Navigator nurse competencies were defined by the ONS in 2013 (Oncology Nursing Society, 2013) and were supported by a consensus on Navigator Nurse Basic Competencies in 2017 (Oncology Nursing Society, 2017). Within the scope of Navigator Nurse Basic Competencies, competencies that require basic and advanced knowledge, skills and expertise of navigator nurses have been determined (Baileys et al., 2018; Pautasso et al., 2018; Oncology Nursing Society, 2017; Oncology Nursing, 2018). In summary, ONS navigator nurse competencies are:

•Providing coordination of care for cancer patients

• Helping cancer patients, their families, and caregivers to overcome barriers in the health care system

•Timely access to quality psychosocial care at all stages of cancer, and education and information to facilitate decision-making (Oncology Nursing Society, 2017).

The navigating nurse must have the knowledge and skills to coordinate quality, patientcentered care through effective leadership of an interdisciplinary cancer care team. Some of the knowledge and skills required for navigation nurses to provide clinical support, such as the holistic assessment of patients, their families, and caregivers, general and focused training and decision-making support, and success in improving patient care outcomes, are given below:

•Strong knowledge of oncology

- •Basic information about insurance reimbursement systems
- •Financial difficulties and working knowledge within the payer scope
- •National, regional and social resources working knowledge
- •Working knowledge of self-care strategies and resources
- •Critical thinking skills
- •Strong leadership skills
- •Strong interpersonal communication skills
- •Collaborative relationships development skills
- •Ability to work as a team
- •Ability to work autonomously
- •Strong oral and written communication skills
- •Strong organizational skills
- •Quick problem-solving skills

•Basic computer skills (Baileys et al., 2018; Karadakovan, 2019; Toprak and Vural, 2016; Oncology Nursing Society, 2017; Oncology Nursing, 2018).

ONS standardized the responsibilities of the navigator nurse in its report on Basic Competencies of Navigator Nurse published in 2017. These responsibilities;

•Navigation programs should start with cancer prevention and screening, and coordination of care including diagnosis, treatment, survival, and end-of-life care.

•Navigator nurse should reflect its care, communication, education, and professional role to its practices within the framework of the basic competencies determined by ONS.

•Navigator nurse, while providing individualized care in line with patient care needs, must also comply with the competence principles defined by ONS.

•Navigator nurse should have strong oncology knowledge as evidenced by oncology nursing certification.

•The navigator nurse provides care in line with evidence-based clinical practice guidelines and takes part in collecting and analysing data required to improve patient outcomes (Oncology Nursing Society, 2017; Oncology Nursing, 2018).

Studies about the role of navigator nurse reported that it increases patient satisfaction with the continuity of care, reduces the level of distress in inpatients, reduces cancer-related symptoms, decreases the duration of hospitalization, is effective in early diagnosis, improves the quality of life, increases compliance with treatment, and is cost-effective care (Karadakovan, 2019; Pesut et al., 2017; Pruitt and Sportsman, 2013; Sullivan et al., 2015; Thygesen et al., 2012; Toprak and Vural, 2016; Zibrik et al., 2016a; Zibrik et al., 2016b).

Navigator Nurse in Geriatric Haematology

Cancer is a serious and chronic disease that adversely affects patients and their families due to reasons such as a complex and challenging treatment process, the risk of recurrence and spread of the disease, and uncertainty in life expectancy (Akgul Baskale, 2015; Thygesen et al., 2012). Although cancer affects all age groups, from a global perspective; 60% of cases diagnosed with cancer and 80% of cancer-related deaths occur in individuals aged 65 and over (Çınar and Tas, 2015; Ovayolu and Ovayolu, 2017). According to these data, it is predicted that approximately 70% of cancer cases will be seen in individuals aged 65 and over in 2030. Considering the global ageing process, it is predicted that cancer incidence will increase in geriatric individuals in the next decades. More than half of cancers in the geriatric population are haematological malignancies (Howlader, Noon and Krapcho, 2020; Krok-schoen et al., 2018; Ovayolu and Ovayolu, 2017).

Although the incidence of cancer is high in the geriatric population, individuals aged 75 years and over are not well represented in clinical studies setting standards of treatment and care. Therefore, there are insufficient data on the efficacy and safety of cancer treatments in this age group (Blanquicett, Cohen, Flowers and Johnson, 2019; Freedman et al., 2017; Mohile, Klepin, and Rao, 2018). Besides, individuals in the geriatric age group cannot tolerate cancer treatments compared to other age groups, and treatment processes can be complicated by increasing toxicities (Blanquicett et al., 2019; Hurria et al., 2016; Mohile et al., 2018). Geriatric haematology patients go through a tiring treatment process with side effects such as myelotoxicity, cardiotoxicity, neuropathy, mucositis, neutropenia, thrombocytopenia and cachexia (Mohile et al., 2012).

Comorbidities and polypharmacy present in this group of patients also make treatment decisions challenging (Goede and Stauder, 2019; Leger et al., 2018). Cognitive, physical, and functional impairments that can also develop in geriatric individuals are potential barriers to treatment and care (Blanquicett et al., 2019). Also, in the geriatric population; Geriatric problems such as dementia, depression, delirium, and geriatric syndromes such as malnutrition,

sarcopenia, falls, osteoporosis, incontinence, and frailty also constitute important obstacles for treatment (Abel and Klepin, 2018; Goede and Stauder, 2019; Leger et al., 2018). This group of patients may also have difficulties in care coordination. They may face obstacles in accessing healthcare services, especially due to disease and medication management, access to healthcare facilities and communication problems with healthcare professionals. Besides, the fact that the geriatric patient group is mostly informal caregivers with their spouses or children working in a job can also complicate care management. They need decision-making help, support, forward guidance and advocacy from healthcare professionals (Akgul Baskale, 2015; Pesut et al., 2017).

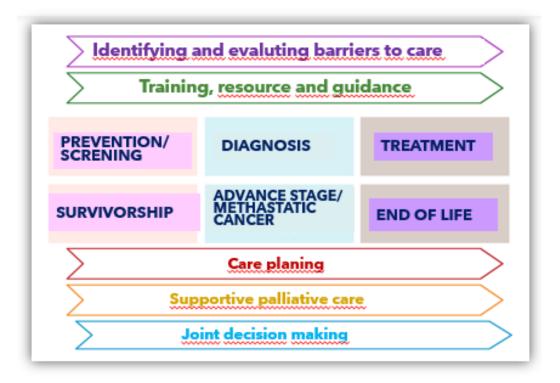


Figure 1. Navigator Nurse Care Model (Baileys et al., 2018; Oncology Nursing Society, 2017)

In this context geriatric haematology patients need nurses who are specialized in the field, who guide patients with up-to-date treatment approaches and care strategies at every stage of the disease process from diagnosis. Therefore, it is necessary to apply care strategies that take into account the physiological, psychological, socio-cultural and socioeconomic changes that develop due to ageing and are suitable for the general condition of the patient in terms of haematology. Navigation program strategies are implemented in cancer care in many countries. The navigator nursing care model defined by the ONS can be adapted to geriatric haematology patients (Baileys et al., 2018; Oncology Nursing Society, 2017) (Figure 1).

The roles and responsibilities of the navigator nurse at every stage of the care process of geriatric patients with haematological malignancies are summarized in Table 2. Diseases (such as leukaemia, lymphomas, myelomas, myelodysplastic syndromes) in geriatric haematology are quite heterogeneous. They are malignancies with different pathophysiology, aetiology, prognosis, and survival processes (Goede and Stauder, 2019; Malignancies, 2019). Because of these differences, the navigator nurse should know the haematological malignancies and their subgroups very well and their patients should be well informed. There are several new modalities in the treatment of haematological malignancies, including simultaneous and combined therapies (Loh, Christofyllakis, Huang and Mims, 2019).

The navigator nurse needs to have information about the new treatment strategies, side effects and toxicities that can be applied to the geriatric patient group, used in clinical practice and developed. The knowledge and competence of the navigator nurse about different malignancies, treatments, treatment processes (such as remission and relapse periods), side effects, toxicities and complications are very important components in the education of patients with haematological malignancies (Malignancies, 2019).

CARE PROCESS	ROLES OF NAVIGATOR NURSE	
	Emotional support and coordination to the patient and family	
	Guidance for necessary control and monitoring	
DIAGNOSIS	Information/education about the disease	
	Orientation to the appropriate unit (for diagnostic methods)	
	Comprehensive geriatric assessment	
	Planning of care with multidisciplinary cooperation	
	Drug management (Chemotherapy, target treatments, immunotherapy)	
	Symptom management (Treatment toxicities)	
TREATMENT	Prevention of delays in treatment	
	Patient education (treatment, side effect management and interventions to be applied)	
	Providing education and support during repeated hospitalizations and outpatient treatment (chemotherapy, radiotherapy)	
PALLIATIVE CARE	Follow-up in the supportive care unit	
	Coordination with cancer care providers	
	Determining and removing barriers to benefiting from supportive and palliative care services	
	Guiding institutions and organizations that exist in society	
	Planning the hospice care	
END OF LIFE CARE	Doing grief counselling to the family of the patient	

 Table 2. Roles of Navigator Nurse in the Care Process of Geriatric Haematology Patients (Goede & Stauder, 2019;

 Malignancies, 2019)

The first meeting between the navigator nurse and the geriatric individual should be made face-to-face at the time of diagnosis or before the diagnosis, subsequent meetings should be planned according to the stages of the care process and the patient's needs, and should also be made by phone (Karadakovan, 2019; Toprak and Vural, 2016). During the first interview, the training and care needs should be determined by making a comprehensive geriatric evaluation. Also, obstacles to the geriatric individual from receiving health care services such as physical, psychosocial, economic, logistical and support insufficiency and problems should be identified. In this context, it should be in communication with patients and their relatives to remove obstacles and ensure care coordination by cooperating with the multidisciplinary team. Patient education should empower them with many resources and materials to increase compliance with disease management and treatment in line with evidence-based guidelines.

Navigator nurses face difficulties due to the heterogeneity of haematological malignancies and geriatric patients with advanced age and geriatric syndromes. Within the cancer care team, the navigator nurses play an important role in informing, supporting, guiding patients in this group and obtaining optimal patient care results (Malignancies, 2019). As the

roles and responsibilities, standards, competencies, and training of the navigator nurse are defined today and, in the future, geriatric patients with haematological malignancies will inevitably have positive effects on reducing some of the burdens they will encounter during their cancer journey.

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