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Research paper

What do orthopaedic nurses think about frailty? A qualitative analysis

Cigdem Canbolat Seyman [a,*], Yasemin Sara [b]

[a] Department of Surgical Nursing, Faculty of Nursing, Hacettepe University, Ankara, Turkey
[b] Department of Surgical Nursing, Faculty of Nursing, Selçuk University, Konya, Turkey

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ABSTRACT

Background: Frailty is a complex geriatric syndrome. Frail people frequently experience orthopaedic problems such as falls and fractures. Therefore, orthopaedic nurses often care for frail elderly patients.
Aim: To provide deep insight into the orthopaedic nurses' perspectives regarding frailty.
Method: Data were collected using semistructured interviews with 18 orthopaedic nurses in one institution in this descriptive qualitative study. The interviews were transcribed and analysed using the MAXQDA software.
Findings: Two main themes and six subthemes were identified. The main themes were: (i) conceptualisation of frailty and (ii) how to cope with frailty. The findings explicated nurses' awareness and perceptions about the frailty concept.
Discussion: Orthopaedic nurses heard the concept of frailty for the first time during this study. Understanding more about the perspectives of acute care providers such as orthopaedic nurses can help to guide care planning, improve care of frail people, and make better health care outcomes.
Conclusion: Knowing more about the perspectives of orthopaedic nurses can help identify frailty and activate multidisciplinary care. Educating nurses about frailty may promote caring strategies for frail people with complex care needs.

Summary of relevance

Problem or Issue

There is relatively little information in the literature about what nurses think the concepto of frailty .

What is already known

Frailty is a common age-related syndrome. Frail people frequently experience orthopaedic problems such as falls and fractures. Therefore, orthopaedic nurses often care for frail elderly patients.

What this paper adds

Our findings put forward the known, unknown, wrong, or under-known situations related to frailty among orthopeadic nurses and their handling methods. This study might be used to empower new caring strategies which are most likely to evaluate frailty, promoting individualised care interventions. Moreover, this study may lead to the inclusion of the concept of frailty in nursing curricula.

1. Introduction

Frailty is a complex elderly syndrome that includes negative health outcomes such as decreased physiological reserve, stress intolerance, slowness, weakness, low physical activity, burnout, and decrease in body mass index, and even result in death (Clegg, Young, Iliffe, Rikkert, & Rockwood, 2013). Frailty develops as a consequence of the age-related cumulative decline in which apparently minor stressor events are associated with severe adverse health outcomes (Harrison, Clegg, Conroy, & Young, 2015). According to the literature, the prevalence of frailty has increased in the older population. The rate of frail patients varies from 9% to 90% depending on the region and measurement tools used (Özdemir, Öztürk, Türkbeyler, Şirin, & Göl, 2017; Thillainadesan, Scott, & Le Couteur, 2020; Thompson et al., 2018). Growing numbers of frail older adults have increased hospitalisation with complex health problems and acute care needs (Lang, Michel, & Zekry, 2009). Frail older adults are more at risk for admission to the hospital because of problems such as decreased daily living activity, slowdown in walking speed, presence of comorbid diseases, use of multiple drugs, fatigue, weakness, and dependency on others (Chang, Lin, & Cheng, 2018; Clegg et al., 2013; Harrison et al., 2015). When the reasons for the hospitalisation of older adults are examined, it is identified that orthopaedic problems, especially fractures, are

* Corresponding author at: Hacettepe University, Sıhhiye Campus, 06100 Altındağ, Ankara, Turkey.
E-mail address: cigdem_canbolat@hotmail.com (C. Canbolat Seyman).

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1. What does the concept of frailty mean to you?
2. Thinking about what frailty means to you, can you define frailty clinically?
    - Who is frail?
    - How does frailty develop and how does it progress?
    - What can be done to prevent people from becoming frail?
    - What can be done after a person has been identified as frail?
3. Can you explain whether frail patients in your clinic have different needs from other (non-frail) patients?
4. What can orthopedic nurses do to improve the treatment and care of frail patients?
5. What do you think about the concept of frailty screening?
    - Is frailty screening necessary?
    - What are these screening' benefits/harms?

Fig. 1. The interview guide.

at the forefront (Curtis, Moon, Harvey, & Cooper, 2017). Fatigue associated with musculoskeletal problems such as osteoporosis, low muscle strength, low physical activity, and impaired balance in frail older adults can cause these individuals to fall, develop fragility fractures, and increase the risk of disability and mortality (Cheng & Chang, 2017; Ravindrarajah et al., 2018). According to reports, 95% of hip fractures seen in older adults occur as a result of falling, 4% with hip fractures die when they are first admitted to the hospital, 10%-35% die from complications within the first year of injury, and 30% experience re-fracture within the first year (AHRQ. HCUPnet 2012).

According to frailty research, frail older adults frequently experience orthopaedic problems (Cheng & Chang, 2017; Ravindrarajah et al., 2018). Therefore, it is crucial to evaluate the frailty of orthopaedic patients and to take necessary precautions, considering that the hospitalisation period of frail patients is prolonged, and their perioperative care needs, and the rate of complications increase (AHRQ. HCUPnet 2012; McIsaac et al., 2020). Thus, the preservation and restoration of the functional capacity of frail orthopaedic patients is a primary goal for the entire interdisciplinary team including orthopaedic nurses, who provide uninterrupted care and spend the most time directly with patients (Archibald et al., 2017; Friedman, Mendelson, Kates, & McCann, 2008). Orthopaedic nurses frequently provide nursing care to frail patients, because most patient populations are over 65 years old, and they have patients who come with fragility fractures. Frailty is not a visible condition for nurses and other health care professionals (Brent et al., 2018; Harrison et al., 2015). Consequently, orthopaedic nurses' awareness and identification of frailty have the potential to enhance postoperative care strategies and speed up the recovery process. Postoperative prolonged bed rest and immobility have a significant impact on orthopaedic patients leading to loss of muscle function and strength, less efficient respiration, and increased risk of respiratory infections, pressure injuries, orthostatic hypotension, and thromboembolic complications. To cope with these effects, orthopaedic nurses must adequately prepare for, recognise, and provide skilled nursing care to frail individuals (Brent et al., 2018). Therefore, international guidelines and experts agree that early frailty identification and appropriate intervention will improve frail persons' quality of life and reduce health care costs (Dent et al., 2019; Martin, 2017; Morley et al., 2013). In the last decade, despite an increased interest in frailty, a lack of literature reveals what older adults think about frailty (Archibald, Lawless, Ambagtsheer, & Kitson, 2020; Canbolat Seyman & Şara, 2021). The belief is that this qualitative study will illuminate to what orthopaedic nurses, who routinely care for frail people, know, and think about frailty. (Fig. 1)

2. Methods

2.1. Design

This qualitative research was conducted using a descriptive design based on a phenomenological approach. The main reason for conducting this study is that qualitative research provides deep insight and perspective on the subject to be examined (Denny & Weckesser, 2019). Indeed, a phenomenological approach is a research method that investigates people's experiences to reveal what lies 'hidden' in them (Matua & Van Der Wal, 2015). The study followed the consolidated criteria for reporting qualitative research (COREQ) checklist (Tong, Sainsbury, & Craig, 2007). The study procedures were approved by Hacettepe University Non-Interventional Clinical Research Ethics Committee (No.2020/20-31). This study was conducted between January and March 2021 at the Orthopaedics and Traumatology Clinic of a university hospital that provides inpatient services to approximately 5000 patients per year in Turkey. The research group consisted of nurses working in the Orthopaedics and Traumatology Clinics at a university hospital in the capital city of Turkey.

2.2. Participants

Eighteen orthopaedic nurses were recruited from inpatient orthopaedics and traumatology clinics that provided skilled nursing care to patients of all age groups with musculoskeletal problems, mostly older adult patients who had undergone surgery. Nurses participated in the study according to the purposeful sampling method. The eligibility criteria for orthopaedic nurses were as follows: having a minimum of one year of experience working in orthopaedics and traumatology clinics, and providing informed consent. Participants could withdraw from the study at any time without stating a reason.

2.3. Data collection

Participants were selected using the purposive sampling method. Once potential participants were identified and deemed eligible, the researcher explained all study procedures and received signed informed consent. The sample size was determined by achieving theoretical saturation, which is considered to indicate that adequate data have been collected for a detailed analysis (O'reilly and Parker, 2013). The researchers continued sampling and analysing data until no new data appeared, and all the concepts were well-developed (Flick, 2018). Sixteen participants were interviewed. However, two additional partici-

Table 1
Sociodemographics of orthopaedic nurses.

Age	32.4 ± 8	
Total work duration in orthopaedic and traumatology clinic (year)	8.7 ± 6.9	
	n (18)	%
Sex		
Female	16	88.9
Male	2	11.1
Marital status		
Single	7	38.9
Married	11	61.1
Education level		
BSc	17	94.4
MSc	1	5.6
The state of knowledge on frailty		
Yes	6	33.3
No	12	67.7
The source of knowledge		
No	12	67.7
From scientific congress	3	16.7
From scientific articles	3	16.7
Talking about frailty with colleagues		
Yes	4	22.2
No	14	77.8
Evaluation of frailty in your patients		
No	18	100
Observing fatigue in your patients		
Yes	16	88.9
No	2	11.1
Having more than one chronic disease in your patients		
Yes	18	100
Having polypharmacy in your patients		
Yes	18	100
Evaluation of weight loss in your patients		
Yes	18	100
Evaluation of dependency level in your patients		
Yes	15	83.3
No	3	16.7
Evaluation of emotional status in your patients		
Yes	13	72.2
No	5	27.8
Evaluation of incontinence in your patients		
Yes	18	100

pants were interviewed to substantiate that data saturation was achieved. A semistructured interview guide was developed based on the frailty literature (Archibald et al., 2020; Clegg et al., 2013; Martin, 2017; Sezgin, O'Donovan, Cornally, Liew, & O'Caoimh, 2019). Figure 1 presents the questions that were used. Eligible orthopaedic nurses who met the inclusion criteria were identified by the researchers. Written informed consent was obtained from all participants prior to the interview. When consent was obtained, the time and place for the interview was decided upon. The researchers first collected sociodemographic data from nurses with a personal information form. This form consists of the characteristics of the participants, including age, gender, educational level, total work duration, and frailty knowledge status. The sociodemographic data are presented in Table 1. Using the semi-structured interview guide, the researchers collected sociodemographic data from 18 orthopaedic nurses in face-to-face in-depth audio-recorded interviews conducted in a private meeting room in the orthopaedics and traumatology inpatient clinic. Both interviewers were women. One interviewer (CCS) had a PhD and worked as a assistant professor in the surgical nursing department of a university. The other interviewer (YS) had an MSN degree and worked as a research assistant in the surgical nursing department of a university. Further, CCS had no experience in the orthopaedic ward and YS had two years of experience in the orthopaedic ward. Both interviewers were aware of possible inequality in power dynamics between interviewer and interviewee during the conversations; therefore, they focused on exhibiting respectful and empathic behaviour (Malterud, Siersma, & Guassora, 2016). There were no prior relationships between the interviewers and the interviewees. Each interview lasted an average of 45 minutes. The transcripts were not provided to the participants for their comments. The researchers who were experienced in the qualitative methodology conducted all interviews. Participants and interviewers were not known to each other prior to the study. All interviews were conducted in Turkish. To avoid unintended interpretation, translation from Turkish to English took place after the interviews were completed. The translation was made by a researcher (CCS) and then professionally edited by Hacettepe University Technology Transfer Centre.

2.4. Ethical considerations

All procedures adhered to the principles of the Declaration of Helsinki. The study procedures were approved by Hacettepe University Non-Interventional Clinical Research Ethics Committee (No.2020/20-31). Permission to conduct the study was also obtained from the hospital. All participants were informed of the voluntary nature of their participation. Verbal and written informed consent were obtained from each participant. All written material and audio copies generated during the study were stored in locked safe by the researchers.

2.5. Data analysis

Interviews were audio-recorded, professionally transcribed verbatim by both researchers separately, and managed using MAXQDA

11.0 qualitative data analysis software (Udo Kuckartz, Berlin, Germany). Descriptive qualitative design made it easier for us to explore and analyse in-depth accounts of individual experiences. In line with the Colaizzi's descriptive qualitative method, we coded the quotes of participants (Morrow, Rodriguez, & King, 2015). Subsequently, each transcript was analysed independently by the researchers to ensure credibility and trustworthiness. Finally, all codes were reviewed and summarised, and themes and subthemes were generated (Marshall & Rossman, 2014). The aim of this study was to guide the thematisation process. When necessary, subthemes were used for complex themes. To ensure rigour and to avoid discrepancies, the researchers looked over the emerging themes and subthemes, and where necessary, referred back to the transcripts to make a final judgement on themes and subthemes. In addition, descriptive data (e.g., age, gender, educational level) obtained from participants were analysed using IBM SPSS Statistics version 23 (IBM Corp. Released 2015. IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp). The number and percentage of each parametre was calculated.

2.6. Rigour

The validity and reliability of qualitative research is ensured through credibility, transferability, reliability, and verifiability (Lincoln & Guba, 1986). In this study, the relationship between the themes and subthemes obtained for reliability was controlled and integrity was achieved. After completion of the interviews with the participants, the voice recordings of the participants were transcribed independently and without any additional comments on the meaning by the two researchers. Using MAXQDA, researchers grouped similar quotes containing the same keywords, metaphors, or transitions. After that it assigned preliminary codes to data in order to describe the content. A purposeful sampling method was used for transferability (applicability), and homogeneity was considered. For reliability (consistency), the data were analysed independently by two researchers, and the reliability of the findings was double-checked. Researchers searched for patterns or themes in all codes across the different interviews. During the coding process, the researchers provided feedback on the compatibility of the codes obtained from the data (Kvale and Brinkmann, 2009). Additionally, to ensure the confirmability and dependability of the study, the researchers organised several meetings to discuss the codes, refine the analysis, and reach a consensus on themes and subthemes. Eventually researchers defined and named themes and subthemes.

3. Results

3.1. Sample characteristics

Overall, 18 orthopaedic and traumatology nurses were interviewed. Their average age was 32.4 ± 8 years; work duration in orthopaedics settings was 8.7 ± 6.9 years, 88.9% were female, 61.1% were married, 94.4% graduated at BSc level, 67.7% had no knowledge on frailty, 77.8% never talked about frailty with colleagues, and none of the nurses evaluated frailty in their patients. All nurses were appraised for comorbidity, polypharmacy, incontinence, dependency level and weight loss in patients.

3.2. Main findings

Two main themes and six subthemes were identified (Fig. 2). The main themes were: (i) conceptualisation of frailty and (ii) how to cope with frailty. The researchers also assigned codes to differentiate the anonymised orthopaedic nurses, combining unique identity numbers with their age and gender to link the participants to their statements. For example '(N1, 32Y, F)' referred to 'Nurse 1, 32 years old, female'.

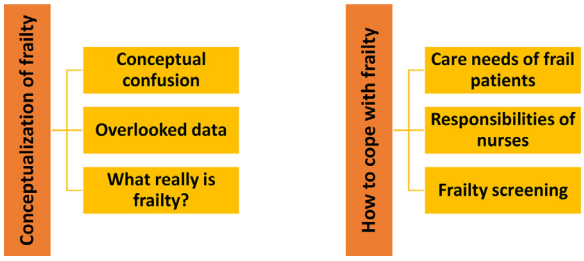

Fig. 2. Themes and subthemes.

3.3. Conceptualisation of frailty

This main theme consists of three subthemes; 'conceptual confusion', 'overlooked data', and 'what really is frailty?'. Orthopaedic nurses' feedback showed that there were different emotions, thoughts, and experiences related to frailty and frail patients. Most participants (67.7%) stated that they heard about the concept of frailty for the first time during this study. Therefore, they could not theoretically provide an exact and clear definition. Orthopaedic nurses, who have never heard of frailty, have tried to elucidate this term based on their personal experiences. Those who had heard about the concept of frailty from scientific congresses or read it in scientific articles tried to interpret this term. However, since frailty is a new term for orthopaedic nurses, it has not been evaluated and revealed. Consequently, there is great confusion regarding the concept of frailty. This situation requires clarification of what frailty really is.

3.3.1. Conceptual confusion

Orthopaedic nurses tried to clarify the concept of frailty with psychological and physical symptoms based on the verb 'to be frail', which is the root of the word 'frailty'. Most participants expressed frailty as psychologically more emotional, touchy, fragile, sensitive, and even irritable. Some of them described frailty physically as a multidimensional condition involving ageing, a slowing down of daily living activities, susceptibility to fractures, presence of incontinence, comorbidities, and multiple drug use. Orthopaedic nurses frequently repeated psychological symptoms while explaining the concept of frailty. They commented on the following:

> *Frailty often reminds me of things related to the patient's psychological state such as sensitivity, frailty, irritability. But I think of the patients I care for in the orthopaedics clinic, frailty is a bone fracture, pathological fracture. (N6, 32Y, F)*

> *Since I work in orthopaedics, I first think of older patients with osteoporosis and their susceptibility to fractures, or that some patient groups are more sensitive. (N1, 42Y, F)*

Orthopaedic nurses suggested that the concept of frailty was related to chronological age but developed independently of chronological age. In addition, a few participants suggested that frailty is only seen in older persons and in those without social support and that it progresses over the years.

> *If I compare a 40-year-old who can't walk, has chronic diseases, uses a lot of medication, is depressed, and a 70-year-old person who is independent in mobilization, has no chronic disease, has a good socioeconomic status, and has no psychological problems, of course, the 40-year-old patient is frailer. (N9, 26Y, F)*

I think frailty is seen in the older persons, especially those who live alone, those who do not have family or relatives, and those who live in nursing homes are frailer. (N17, 46Y, M)

3.3.2. Overlooked data

Most orthopaedic nurses reported that they did not know what frailty was. However, when we questioned the subdimensions of frailty, it was observed that they evaluated them in patients. The participants argued that they collected data about their patients' chronic diseases, medications, physical capacity, emotional status, weight loss, and dependency level; however, they did not use this to determine frailty. This contradiction is expressed as follows:

As it is asked in the nursing observation form, we evaluate the patient's height, weight, chronic diseases, medications, nutritional status, independence status, whether he has osteoporosis, whether he has urinary-fecal incontinence. These data are collected not only by me but also by all orthopaedic nurses working in this ward. However, this information does not show us a way about frailty. (N7, 36Y, F)

My patients are mostly older persons, with comorbidities, dependent on mobilisation, so their participation in active life both socially and physically is very low. But I don't know how to use these abnormal findings, what support resources to activate. (N8, 31Y, F)

3.3.3. What really is frailty?

Orthopaedic nurses in our sample were generally not familiar with the term 'frailty', nevertheless, there were those who knew frailty and the defining risk factors. Orthopaedic nurses, who were aware of frailty, stated that they evaluated patients from this perspective and activated other health care professionals such as dietitians, physiotherapists, and social support specialists when needed to provide better care to them. It is understood from what nurses said that this awareness wasreflected in their care and interventions.

Frailty is a complex condition in which resistance decreases, especially if people over a certain age have certain risk factors. These risk factors are dependent on mobilisation, comorbidity, polypharmacy, and involuntary weight loss. Thus, frailty is a consequence of these risk factors. For example, if I am caring for a frail patient in this ward and the patient has nutritional problems, I definitely call a dietitian. (N4, 32Y, F)

Surprisingly, nurses emphasised that frailty could develop if a patient's care needs were not met at home or in the hospital and if they did not receive enough attention and support, even if they were not frail. This surprising expression shows that few nurses who know about frailty have ideas about the development of frailty.

As orthopaedic patients' social and physical participation in life decreases, the likelihood of developing frailty increases. When their needs are not met at home or in the hospital, this situation may lead to the development of frailty. (N13, 22Y, F)

3.4. How to cope with frailty

This main theme consists of three subthemes; "care needs of frail patients", "responsibilities of nurses" and, "frailty screening". In this study, orthopaedic nurses conveyed that frailty is a dynamic process and nurses play a key role in managing this process. In addition, the participants pointed out that identifying different care need of frail patients compared to non-frail patients would prevent the progression of frailty. They affirmed that it is also critical to detect frailty in the community before it results in disability or even death.

3.4.1. Care needs of frail patients

Orthopaedic nurses argued that they thought frail patients had different demands compared to those who were not frail, such as needing help in meeting their self-care requirements, needing an assistive device or a support person in mobilisation, needing to be informed of different training methods as their cognitive status varies. According to our participants, frail patients may have very basic needs such as walking, going to the toilet, bathing, eating, and opening the window of the room.

The information needs of these patients are high. When I give training, I have to confirm whether they understood what I have said correctly or I give written and visual materials to both the patient and their relatives. (N11, 44Y, F)

It seems strange to us nurses, but the patient just wants to open the window to get fresh air, which is very normal and humanistic, but the patient may need someone else's help even with such small things. If frail patients cannot walk alone, we need to provide assistive tools for mobilisation or we have to accompany their mobilisation. (N10, 42Y, F)

Additionally, orthopaedic nurses declared that patients whom they defined as frail wanted to communicate with nurses more and were more demanding.

I think the needs of frail and non-frail patients differ. For example, I have a patient in the clinic right now that I think is frail. She needs more nursing care, she wants attention, and wants me to stay with her longer. Even if she doesn't express this verbally every time, she shows it by asking about the time for medicine, calling us as we pass by the door, and trying to talk. (N15, 38Y, F)

3.4.2. Responsibilities of nurses

Orthopaedic nurses indicated that patients whom they had defined as frail needed nursing care more. They stated that they spent more time and effort on these patients. Furthermore, orthopaedic nurses declared that they take more precautions against the risk of falling in frail patients, accompanying each mobilisation in the postoperative period, regulating their medications, monitoring their nutrition level, communicating more to eliminate their lack of information, and are more encouraging to prevent complications related to immobilisation. In addition, nurses suggested that it is very important to provide discharge education, home care, and follow-up in frail patients, directing the patients to the support resources they will need (such as physiotherapists, dietitians, and home care nurses), and inform the patient and their family. Orthopaedic nurses pointed out that they had primary responsibilities in improving the quality of life of frail patients. However, since the number of nurses is low, they stated that frail patients take up most of their time and they can care less for other patients. Although nurses who knew about frailty wanted to take care of their patients, their workload was heavy and other routine nursing skills were expected from them by the administrator. In addition, nurses emphasised that all nurses who cared for frail patients should be competent and equipped to meet these needs.

Frail patients need a little more support. Because they have many chronic diseases, they are more in need of healthcare, they demand more information from us, and we even recommend that there be someone to accompany the frail patient since there are often too few nurses and too many patients. For this aspect, nurses actually have a lot of power to improve the treatment and care of frail patients. (N5, 37Y, F)

Do you know that frail patients use the nurse call system more? They need nursing care more than non-frail patients. As orthopaedic nurses, we spend more time and effort on these patients. If we have five frail patients in the 25-bed ward, we will have to

canalise all the nursing workforce to those patients. Therefore, as nurses, we first need to know frailty and know how to approach frail patients in our clinic. (N7, 36Y, F)

3.4.3. Frailty screening

None of the participants were aware of the existence of measurement tools for frailty screening. At the same time, almost all nurses who know frailty recommended that the frailty levels of individuals should be identified in primary health care services and registered in the electronic medical records. Orthopaedic nurses, who argued that primary health care services were more accessible, suggested that frailty screening should be performed in these centres and on a community basis. This is because frailty screening is seen by nurses as a public health service.

Everyone should benefit from this screening, not only those who apply to the hospital, but also individuals living in the community. For example, a patient with urinary incontinence is being cared for at home, a 4th-degree pressure ulcer has developed, and relatives do not know how to care. If the patient lives far from the hospital, the patient's frailty progresses because it cannot be evaluated. For this reason, frailty screening can be performed by general practitioners in family health centers and registered in electronic medical records. (N18, 24Y, F)

Most participants indicated that frailty screening was beneficial. They affirmed that if screening was done, falls and traumas at home, infections, and health care costs would decrease. As a result, they emphasised that the quality of life of older persons may increase and the whole society will receive more accessible health services because of the effective use of health services. A nurse commented as follows:

If the risk groups determined by the screenings are worked on, the quality of life and life satisfaction of the patients will increase. Thanks to the frailty screening for elderly individuals, the healthcare services that will be provided will have a positive effect not only on the group served but also on the whole society. If the older people develop, society will develop. (N14, 24Y, F)

Another view of the respondents was that frailty screening would not be useful. Some orthopaedic nurses suggested that frailty screening could create a roadmap for nurses, but they needed a clinical guide regarding this. To them, the most important thing began after determining that the individual was frail. Considering the disease-oriented health care policies in the country, they argued that they thought that the planning of post-screening services could not be done.

Will we be able to change the person's lifestyle after the screening, of course not. Will we be able to change the diseases he/she has, of course not. Thus, we have determined the frailty, as long as we cannot provide services such as follow-up, home care, rehabilitation, change in living conditions, social support, we will only be screening. We cannot provide a truly preventive and supportive care service. (N12, 23Y, M)

4. Discussion

Being aware of frailty and meeting the needs of frail patients is critical to provide relevant, effective, and responsive nursing care in orthopaedic and traumatology clinics. To our knowledge, this qualitative study is the first to investigate orthopaedic nurses' perceptions of frailty in Turkey and reveals important limitations about what orthopaedic nurses think about frailty.

Orthopaedic nurses in our sample generally did not know the concept of frailty. However, nurses stated that frailty consisted of the interaction of psychological, physical, and socioeconomic factors. Our findings are consistent with the multidimensional and multisystem nature of frailty, including physical, sensorial, social, cognitive, psychological, and nutritional domains that need to be considered in its definition, management, and prevention (Coker, Martin, Simpson, & Lafortune, 2019; Gobbens, Luijkx, Wijnen-Sponselee, & Schols, 2010; Gustafsson, Edberg, & Dahlin-Ivanoff, 2011). 67.7% of our participants stated that they heard about the concept of frailty for the first time during this study. On the contrary, orthopaedic surgeons in Australia had a positive understanding of frailty and often evaluated their patients for frailty (Archibald, Lawless, Gill, & Chehade, 2020). In other study conducted with different specialties in Singapore (nurses and doctors from orthopaedic, general surgery and emergency), the knowledge level of frailty among participants was distributed widely. It was found that one-third of participants explained the definition of frailty comprehensively, but the remaining two-thirds had insufficient knowledge about frailty (Liu et al., 2022). These different results may be due to different occupational groups, different education levels and different cultural structures.

There were data that nurses overlooked when defining frailty. In fact, it was understood that although orthopaedic nurses could not define frailty conceptually, they knew the subdimensions and questioned them in their patients. However, they emphasised that they did not know how to overcome these questioned subdimensions. Although nurses' lack of knowledge about frailty has been demonstrated in previous studies (Avgerinou et al., 2021; Britton, 2017), their need for a guide to lead care has not been investigated. Nursing care strategies related to frail patients, after revealing frailty, can be focused on nutrition, mobilisation, regulation of multiple drug use, fall prevention, pain management, and cognitive intervention (Santy-Tomlinson, Hertz, & Kaminska, 2018; Uchmanowicz, Jankowska-Polańska, Wleklik, Lisiak, & Gobbens, 2018). Therefore, it would be useful to create guidelines that health care professionals can easily use so that data on frailty are not overlooked.

In this study, a few orthopaedic nurses were able to describe frailty clearly and completely. After identifying frailty, these nurses focused on the development of frailty and how they could intervene. Likewise, to manage frailty, the importance of being aware of frailty, determining the level of frailty, and understanding of a multidisciplinary team has been pointed out in other studies (Briggs & McElhaney, 2015; Coker et al., 2019; Gwyther et al., 2018).

In this qualitative study, orthopaedic nurses explained their feelings and thoughts on how to deal with frailty in patients who were defined as frail. This section shows the viewpoint of orthopaedic nurses on the needs of frail patients, nurses' responsibilities toward these needs, and frailty screening. Orthopaedic nurses stated that they could identify frail patients' basic needs and use their nursing skills to manage frailty, as they frequently encountered older patients who were at risk of frailty. As Santy-Tomlinson clearly stated, it is known that orthopaedic nurses play a key role in the care of frail patients. This nursing specialisation is called orthogeriatric nursing, which is a branch of adult nursing that requires skills both in the care of older persons and orthopaedic and trauma patients (Santy-Tomlinson et al., 2018). Therefore, the participants focused on the basic needs of the patients and the special needs of the orthopaedic ward. Chan and Frost reported similar findings, indicating that the care needs of frail patients are a balanced diet, eating, exercise, social interaction with others, and communication (Chan et al., 2012; Frost et al., 2017). Orthopaedic nurses emphasised particularly that frail patients wanted to communicate with nurses more and were more demanding. In this case, communication skills are important when caring for frail older patients. Meeting the information needs of frail patients with effective communication is crucial for increas-

ing the motivation of frail patients, increasing their participation in health promotion services, and coping with their frailty needs.

It has been suggested that orthopaedic nurses have more nursing care responsibilities for hospitalised frail patients in the orthopaedics and traumatology clinic than non-frail patients. The nurses shared a common opinion that more well-equipped nurses were needed to fulfill these responsibilities. Further, they declared that the number of nurses in orthopaedic wards should be increased. Frail patients pose a great challenge not only to nurses but also to the entire health care team. This challenge is particularly problematic for teams of nurses who struggle to provide adequate nursing care due to the global shortage of nurses, even in wealthier health care systems (Brent et al., 2018). The Fragility Fracture Network (FFN) is a global organisation founded to create a multidisciplinary network of experts, including nurses, to improve treatment and prevent fragility fractures. In addition, FFN claimed that nurses who spend more time with the patient than all health care professionals have vital responsibilities in preventing complications related to frailty (FFN 2022). It is known that fragility hip fractures have a high incidence of morbidity, disability, and mortality, leading to a challenge for nurses in managing complex multifactorial issues such as advanced patient age, frailty, sarcopenia, reduced physical reserves, and cognitive impairment (Lisk & Yeong, 2014). Sahota and Currie point out that "…looking after hip fracture patients well is a lot cheaper than looking after them badly," and it may well be the nursing resource that is significant in this (Sahota & Currie, 2008). From this point of view, it is thought that raising nurses' awareness of frailty and improving working conditions to provide adequate care to frail patients will make a difference in health care outcomes.

Warnier et al.'s findings underscored that, in which their thoughts and experiences about the frailty assessment tool in hospitalised patients were investigated, they stated that nurses used the frailty assessment tool in daily practice, but they did not use the total score due to lack of knowledge. It has been observed that frailty screening models cannot be fully implemented in older hospitalised patients (Warnier, Du Moulin, Schols, & Kempen, 2021). Similarly, other studies have shown that nurses do not have knowledge of frailty screening (Britton, 2017; Moffatt, Moorhouse, Mallery, Landry, & Tennankore, 2018). In line with the frailty screening studies, most of our respondents were not familiar with the term frailty, and none of them knew of the existence of frailty screening tools. In the literature, it has been understood that frailty screening is generally performed on older persons in primary care by general practitioners, in places where the older persons stay in nursing homes, hospices, or on a community basis through medical records (Gwyther et al., 2018; Vellas et al., 2013; Woo et al., 2015). Surprisingly, all of our participants underlined that this screening is unnecessary in the orthopaedics and traumatology clinic, and that it should be done in primary health care services and in a way that covers the whole society.

The orthopaedic nurses who participated in our study suggested that the quality of life of frail patients may increase because many problems that can be taken care of will be detected earlier when frailty screening is performed. It is obvious that frailty affects patient outcomes. Comparing the frail and non-frail groups show that frail patients apply to hospitals more frequently and experience more complications after surgery (Gleason et al., 2015; McIsaac et al., 2020). Therefore, frailty screening is an intervention that protects and promotes health status (Frost et al., 2017). Nevertheless, the nurses made some unfortunate statements about the fact that frailty screening could not be done due to the current disease-oriented health policies in Turkey, and even if it was, adequate treatment and planned care could not be provided to frail patients. For these reasons, this screening seemed to be a useless attempt by nurses. In parallel with our findings, Warnier et al. indicated that this screening can be a workload and without awareness and action, it will not reach its real purpose (Warnier et al., 2021). Furthermore, in Eamer et al.'s study, nurses stated frailty screening barriers included institutional, health system, professional knowledge, and patient/family barriers (Eamer et al., 2017). Dissemination in the use of frailty assessment tools through health care professionals' education and addressing barriers to its implementation can detect risk groups and improve frail patient care.

4.1. Limitations

This study had some limitations. The first of these is the hermeneutic paradigm, which examined a small number of nurses' views on frailty, preventing the results from being generalisable. Second, this sample contained data only from orthopaedic nurses working in one centre in the major city of Turkey. Third, orthopaedic nurses with different educational statuses and different scientific backgrounds (e.g., BSc, MSN) might report different frailty perspectives. Despite these potential limitations, we achieved data saturation and provided a detailed picture of the perspectives of orthopaedic nurses regarding frailty. Moreover, to our knowledge, this study is the first to investigate these perspectives in Turkey.

5. Conclusions

This study sought to contribute to our understanding of orthopaedic nurses' views on frailty. Our qualitative findings put forward the known, unknown, wrong, or under-known situations related to frailty among orthopaedic nurses and their handling methods. Knowing more about the perspectives of orthopaedic nurses who frequently care for frail older patients can help identify frailty and activate multidisciplinary care. Educating nurses about frailty may promote caring strategies for frail patients with complex care needs.

Authorship contribution statement

Cigdem Canbolat Seyman: Conceptualisation, Methodology, Data Collection, Analysis, Writing, Original Draft, Review & Editing, Supervision.

Yasemin Sara: Conceptualisation, Data Collection, Analysis, Writing, Original Draft.

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Ethical statement

All procedures adhered to the principles of the Declaration of Helsinki. The study procedures were approved by Hacettepe University Non-Interventional Clinical Research Ethics Committee (No. 2020/20-31). Permission to conduct the study was also obtained from the hospital. All participants were informed of the voluntary nature of their participation. Verbal and written informed consent were obtained from each participant. All written material and audio copies generated during the study were stored in locked safe by the researchers.

Conflict of interest

None.

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