



Research Article

Assessment of Elderly Perceptions toward Frailty at Geriatric Home Resident in Baghdad, Iraq

Ammar Abbas Okab*

Technical Nursing Department, Technical Institute-Suwaira, Middle Technical University, Iraq

Received: 25 September 2024; Revised: 10 November 2024; Accepted: 17 December 2024

Abstract

Background: Frailty is a multifaceted phenomenon characterized by a decline in physical, psychological, and social capacities, which are commonly observed in the elderly and have negative implications for overall well-being. Clinical manifestation of phenotype refers to a specific clinical condition characterized by reduced physiological reserves and heightened susceptibility to stresses. **Objective:** To assess perceptions of frailty among the elderly, quantify the extent of these perceptions, and examine the relationship between these perceptions and socio-demographic information. **Methods:** A descriptive study was carried out at Geriatric Home Resident in Baghdad City. Including 100 elderly people who chose from AL-Rashad and Al-Sulaikh Geriatric Home Resident, the questionnaire contains sociodemographic information and perceptions towards frailty. **Results:** 69% of the elderly were 65-70 years old, 67% were male, 38% had a secondary educational level, there was a fair level of perceptions toward frailty (60%), and there was a high significant relationship between elderly perceptions toward frailty and age, gender, lifestyle, and regular exercise. **Conclusions:** The study reveals the elderly hold equitable opinions of the concept of "frailty" and possess distinct interpretations of the term compared to the definition commonly employed in medical literature. Elderly people who possess a state of physical vulnerability are inclined to engage in conversations regarding frailty as a medical condition with their healthcare providers, albeit with a preference for avoiding explicit terminology associated with frailty.

Keywords: Assessment, Elderly, Frailty, Geriatric, Perceptions.

تقييم تصورات كبار السن تجاه وهن الشيخوخة في دار المسنين المقيمين في بغداد ، العراق

الخلاصة

الخلفية: وهن الشيخوخة ظاهرة متعددة الأوجه تتميز بانخفاض القدرات الجسدية والنفسية والاجتماعية، تحدث بشكل شائع عند كبار السن ولها آثار سلبية على الرفاهية العامة. يشير المظهر السريري للظاهرة إلى حالة سريرية محددة تتميز بانخفاض الاحتياطات الفسيولوجية وزيادة التعرض للإجهاد. **الهدف:** تقييم تصورات وهن الشيخوخة بين كبار السن، وتحديد مدى هذه التصورات، وفحص العلاقة بين هذه التصورات والمعلومات الاجتماعية والديموغرافية. **الطرائق:** أجريت دراسة وصفية في دار المسنين في مدينة بغداد شملت 100 من كبار السن من دار الرشاد والصلبخ للمسنين، يحتوي الاستبيان على معلومات اجتماعية ديموغرافية والتصورات تجاه وهن الشيخوخة. **النتائج:** 69% من كبار السن تتراوح أعمارهم بين 65 - 70 عاماً، 67% من الذكور، 38% لديهم مستوى تعليمي ثانوي، وكان هناك مستوى معتدل من التصورات تجاه وهن الشيخوخة (60%)، وهناك علاقة ذات دلالة إحصائية بين تصورات كبار السن تجاه وهن الشيخوخة والعمر والجنس ونمط الحياة وممارسة الرياضة بانتظام. **الاستنتاجات:** أن كبار السن لديهم آراء عادلة حول مفهوم "وهن الشيخوخة" ولديهم تفسيرات متميزة للمصطلح مقارنة بالتعريف المستخدم بشكل شائع في الأدبيات الطبية. يميل كبار السن الذين لديهم حالة من وهن الجسدي إلى الانخراط في محادثات بشأن وهن الشيخوخة كحالة طبية مع مقدمي الرعاية الصحية، وإن كان ذلك مع تفضيل تجنب المصطلحات الصريحة المرتبطة بوهن الشيخوخة.

* **Corresponding author:** Ammar A. Okab, Technical Nursing Department, Technical Institute-Suwaira, Middle Technical University, Iraq; Email: ammarabbas@mtu.edu.iq**Article citation:** Okab AA. Assessment of Elderly Perceptions toward Frailty at Geriatric Home Resident in Baghdad, Iraq. *Al-Rafidain J Med Sci.* 2024;8(2 Special):S29-33. doi: [https://doi.org/10.54133/ajms.v8i\(2S\).1416](https://doi.org/10.54133/ajms.v8i(2S).1416)© 2025 The Author(s). Published by Al-Rafidain University College. This is an open access journal issued under the CC BY-NC-SA 4.0 license (<https://creativecommons.org/licenses/by-nc-sa/4.0/>).

INTRODUCTION

Frailty is a multifaceted phenomenon characterized by the decline in physical, psychological, and/or social capacities, which is commonly observed in the aging population and has negative implications for overall well-being. The disorder has a public health concern due to its numerous clinical and social ramifications, as well as its ever-changing characteristics [1]. The senior population has experienced significant growth in size because of the increase in average life expectancy. Older individuals prioritize a good lifestyle over mere longevity, given their extended lifespan. They also prioritize the pursuit of self-

sufficiency and productivity. The concept of successful aging is predicated on the notion of leading a healthy lifestyle [2]. Syndrome of phenotypic frailty, the other name for physical frailty. Clinical manifestation of the phenotype refers to a specific clinical condition characterized by reduced physiological reserves and heightened susceptibility to stresses. The clinical identification of the state is characterized by the manifestation of at least three out of five primary clinical indicators: muscular weakness, reduced gait velocity, diminished physical activity levels, feelings of fatigue or extreme tiredness, and unintended loss of body weight [3]. The prevalence among those individuals aged 65 years and

more shows variation among different populations. Typically, the prevalence of this condition in older people living in the community falls within the range of 7% to 10%. However, this ratio increases dramatically to over 25% of those who are 85 years old and above [4]. A diagnosis of frailty is established when a constellation of three or more criteria is present. This diagnostic framework has undergone validation and has demonstrated its ability to predict various adverse outcomes. The consequences encompass fatality, impairment, diminished self-reliance, accidental falls, admission to the hospital, compromised effectiveness of therapies aimed at specific diseases, increased vulnerability to negative outcomes after surgery, and prolonged recuperation from illnesses [3]. In accordance with a clinical syndrome, the observed phenotype is associated with distinct pathophysiological mechanisms. Physical frailty frequently manifests in the absence of clinical ailments or disability; nevertheless, it may also coincide with the presence of sickness and disability [5]. The deficit accumulation idea derived from clinical observations indicates that when a patient encounters multiple clinical problems, there is an increased probability of experiencing adverse outcomes, such as mortality and institutionalization. The concept is described as a "frailty index." The tests encompass a range of factors such as diseases, symptoms, signs, impairments, disabilities, quantified functional restrictions, social situations, physical activity, mental health, cognitive status, self-assessed health, and occasionally laboratory values [3]. The occurrence and frequency of frailty are linked to alterations in energy metabolism, impacting both metabolic systems. The changes encompass disturbances in the dynamics of glucose and insulin, impaired ability to process glucose, reduced sensitivity to insulin, and alterations in energy-regulating hormones such as adiponectin, leptin, and ghrelin. Furthermore, changes in the functioning of the musculoskeletal system, including the effectiveness of energy usage, the creation of mitochondria, and the number of mitochondrial copies, have also been suggested as factors. Notably, in these systems, people who are physically weak show abnormal energy generation and consumption [6]. The objective of this study was to assess the perceptions of frailty among the elderly, quantify the extent of these perceptions, and examine the

relationship between these perceptions and socio-demographic information.

METHODS

A descriptive study was conducted at Geriatric Home Resident in Baghdad City. Consist of (100) older adults who chose from (AL-Rashad and Al-Sulaikh) Geriatric Home Resident selected according to the Krejcie & Morgan method [7] to assess their perceptions toward frailty. The sampling technique of the study is purposive sampling. The content validity of development instruments is established through a panel of seven experts, each with over five years of expertise in their respective fields, who evaluate the clarity, relevance, and adequacy of the questionnaire. The reliability of the questionnaire is determined by split-half reliability, with a correlation coefficient of 0.784. Direct interviews with elderly participants were done to collect data from them during the period extending from 12th of June 2023 to 20th September 2023. The study was granted ethical approval by the Baghdad governorate, namely the Department of Special Needs. Additionally, the study received consent from the administrative managers of the geriatrics facilities in Baghdad, AL-Rashad, and Al-Sulaikh. In addition, each elderly person was verbally asked if they would be willing to participate in the study before any information was collected. It was made clear that the elderly had the right to decline or end the interview. The questionnaire form contains sociodemographic information and perceptions towards frailty. Collected data was analyzed by using the Statistical Package for Social Sciences (SPSS) version 28.

RESULTS

Findings of elderly participants from socio-demographic characteristics: (69%) of older adults were (65-70) years, (67%) were male, (38%) had a secondary educational level, (75%) were married, (42%) did not know the lifestyle is not healthy and not unhealthy, (60%) the socioeconomic status is barely sufficient, (55%) of them were suffering from diseases, and (81%) were not practicing exercise regularly (Table 1).

Table 1: Distribution of Socio-demographic information of participants (100) elderly

Age (year)	65-70	69(69)	Gender	Male	67(67)
	>70	31(31)		Female	33(33)
Education level	Reads and writes	10(10)	Marital status	Single	2(2)
	Primary	33(33)		Married	75(75)
	Secondary	38(38)		Divorce	10(10)
	Institute	7(7)		Widow	13(13)
Lifestyle	College	12(12)	Socioeconomic status	Insufficient	19(19)
	Healthy	28(28)		Barely sufficient	60(60)
	Not healthy and not unhealthy	42(42)		Sufficient	21(21)
Suffering from diseases	Not unhealthy	30(30)	Doing regular exercise	Yes	19(19)
	Yes	55(55)		No	81(81)
	No	45(45)			

This table shows the elderly perceptions toward frailty; the table indicates the elderly show most of their answers are known (Table 2).

Table 2: Elderly response about Perceptions toward physical frailty

Perceptions toward physical frailty	Know n(%)	Not sure n(%)	Don't know n(%)
The frailty of a sudden loss of balance	39(39)	41(41)	20(20)
The frailty is arm weakness	30(30)	60(60)	10(10)
The frailty is leg weakness	27(27)	55(55)	18(18)
The frailty gets dizzy when you rise from a seated position	60(60)	16(16)	24(24)
The frailty is unexplained weight loss	29(29)	12(12)	59(59)
The frailty is a loss of appetite	52(52)	20(20)	28(28)
The frailty difficulty finding the right word when you are speaking	80(80)	15(15)	5(5)
The frailty is difficulty paying attention	31(31)	48(48)	21(21)
The frailty is difficulty remembering things	34(34)	39(39)	29(29)
The frailty is often forgotten where you put things	28(28)	32(32)	40(40)
The frailty is difficulty reading a newspaper	59(59)	21(21)	20(20)
The frailty is difficulty recognizing a friend from across the street	53(53)	24(24)	23(23)
The frailty is difficulty reading signs at night	55(55)	24(24)	21(21)
The frailty is difficulty hearing on the phone	44(44)	36(36)	20(20)
The frailty is difficulty carrying on conversation in a noisy room	27(27)	37(37)	34(34)
The frailty is difficulty hearing a normal conversation	33(33)	60(60)	7(7)

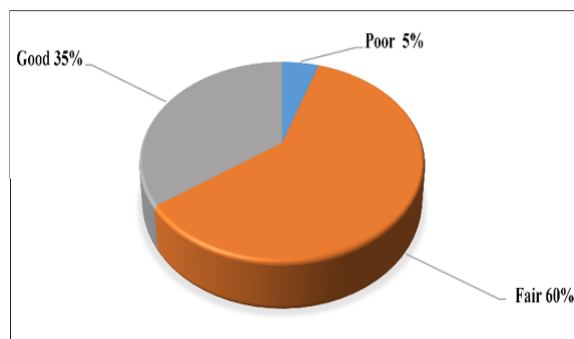


Figure 1: Overall Assessment of Elderly Perceptions toward Frailty. M.S: Mean of score, Poor (1-1.33), Fair (1.34-1.67), Good (1.68-2).

The table shows a highly significant relationship between elderly perceptions toward frailty and socio-demographic factors—age, gender, regular exercise, and suffering from diseases—and presents a significant relationship between elderly perceptions toward frailty with regular exercise and suffering from diseases, while showing no significant relationship between elderly perceptions toward frailty and marital status and socioeconomic status (Table 3).

Table 3: Association between Elderly Perceptions toward Frailty with socio-demographic information

Socio-demographic information		p-value
Age		0.001
Gender		0.004
Education level		0.04
Marital status	Perceptions toward frailty	0.566
Socioeconomic status		0.246
Lifestyle		0.002
regular Exercise		0.005
Suffering from diseases		0.05

DISCUSSION

The outcomes of our study yielded several noteworthy findings: The findings of the study indicate that elderly perceptions towards frailty are generally good. This phenomenon can be attributed to the fact that a significant proportion of individuals, when queried about frailty, possess a comprehensive understanding

Figure 1 illustrates that more than half of the elderly (60%) show a fair level of perception toward frailty.

of the nuances and distinguishing features that set weakness apart from frailty. The study conducted in the United States concludes that the user's text does not include enough information to be rephrased in an academic style. An increasing body of scholarly literature indicates that biological aging or frailty significantly influences health-related outcomes. However, it is likely that the general populace possesses limited information and awareness regarding frailty. The conceptual model posits that adults' ideas and opinions are influenced by stereotypes, aging knowledge, and culture [6,8]. It is noteworthy that the study reveals a significant finding on the perceptions of frailty among the elderly. Specifically, the study participants, who were elderly, showed a considerable level of awareness and understanding of frailty, with over 60% exhibiting such perceptions. This is due to their acquisition of information or participation in educational courses or seminars pertaining to frailty in a broad sense and its associated fields. Consequently, their degree of comprehension is insufficient. The study in Canada showed that the perceived impact of the FACT tool among renal nurses was generally positive, as it was believed to enhance effectiveness and comprehension of frailty. This improvement was attributed to the implementation of a standardized approach for identifying frailty within the patient population, which in turn fostered a greater sense of team confidence in delivering enhanced care [9,10]. According to the correlation between perceptions and age, the research was conducted in the United Kingdom and demonstrates a significant correlation between age and frailty. This is because advancing age increases the likelihood of experiencing morbidity, leading to a decline in independence and an increase in healthcare and social care costs [11,12]. The study conducted in the United States examines the association between perceptions and gender, revealing that women exhibit a larger incidence compared to males. This disparity is likely attributed to the increased likelihood of women experiencing frailty as they age, in contrast to men [13,14]. The correlation between perceptions and

lifestyle can be ascribed to the direct influence that lifestyle exerts on the development of frailty, as demonstrated by the study conducted in the Netherlands. After controlling lifestyle factors and socio-demographic characteristics, the researchers found a link between higher alcohol intake, regular physical activity, nutritious eating habits, and decreased smoking with lower overall, physical, psychological, and social frailty. The results were significant even after controlling age, gender, marital status, education, and income. Physical exercise correlated with both overall and physical frailty, while other lifestyle characteristics had no effect [15]. There is a notable positive correlation between elderly perceptions of frailty and their educational attainment, as well as their experience of chronic diseases. This can be attributed to the fact that higher levels of education are associated with a decreased risk of developing chronic illnesses. The statement aligns with a study conducted in the Netherlands. The study findings indicate that there is a correlation between education level and frailty among older individuals in the population. Specifically, individuals with lower levels of education exhibited higher rates of frailty [16].

Study limitations

Difficulty in reaching all the elderly in nursing homes due to their psychological and emotional state, difficulty in communicating with the elderly participating in the study because some of them sometimes do not want to continue the study, and difficulty in reaching all the elderly and involving them in the study due to their health condition. Attempting to psychologically rehabilitate and educate the elderly about the importance of participating in the study, involving a larger number of elderly to assess their perceptions of frailty.

Conclusion

The study indicates that elderly individuals have varying interpretations of the term "frailty" and hold equitable opinions towards it in comparison to the definition that is frequently used in medical literature. Individuals who are physically vulnerable are more likely to engage in discussions with their healthcare providers about frailty as a medical condition, although they tend to avoid the explicit terminology associated with frailty. Furthermore, it was contended that interventions are the primary informational requirement. The findings emphasize that, despite the growing body of scholarly research on frailty, there are still substantial deficiencies in the effective implementation of physical frailty as a clinical diagnosis. Prior to the widespread implementation of frailty syndrome as a clinical entity in routine practice, two critical areas necessitate attention: the development of effective interventions for treating frailty and the improvement of the understanding of appropriate methods for communicating the concept of frailty syndrome to patients. These areas include the development of health education programs and

brochures on the subject, as well as the emphasis on electronic publishing on social media sites for the purpose of health education and learning about frailty.

ACKNOWLEDGMENTS

The author expresses gratitude to the older adults who participated in this study.

Conflict of interests

No conflict of interest was declared by the author.

Funding source

The author did not receive any source of funds.

Data sharing statement

Supplementary data can be shared with the corresponding author upon reasonable request.

REFERENCES

1. Faller JW, Pereira DD, de Souza S, Nampo FK, Orlandi FD, Matumoto S. Instruments for the detection of frailty syndrome in older adults: a systematic review. *PLoS One*. 2019;14(4): e0216166. doi: 10.1371/journal.pone.0216166.
2. Furman D, Campisi J, Verdin E, Carrera-Bastos P, Targ S, Franceschi C, et al. Chronic inflammation in the etiology of disease across the life span. *Nature Med*. 2019;25(12):1822-1832. doi: 10.1038/s41591-019-0675-0.
3. Fried LP, Cohen AA, Xue QL, Walston J, Bandeen-Roche K, Varadhan R. The physical frailty syndrome as a transition from homeostatic symphony to cacophony. *Nature Aging*. 2021;1(1):36-46. doi: 10.1038/s43587-020-00017-z.
4. Siriwardhana DD, Hardoon S, Rait G, Weerasinghe MC, Walters KR. Prevalence of frailty and prefrailty among community-dwelling older adults in low-income and middle-income countries: a systematic review and meta-analysis. *BMJ Open*. 2018;8(3):e018195. doi: 10.1136/bmjopen-2017-018195.
5. Bandeen-Roche K, Gross AL, Varadhan R, Buta B, Carlson MC, Huisingh-Scheetz M, et al. Principles and issues for physical frailty measurement and its clinical application. *J Gerontol Series A*. 2020;75(6):1107-1112. doi: 10.1093/gerona/glz158.
6. Parish A, Kim J, Lewallen KM, Miller S, Myers J, Panepinto R, et al. Knowledge and perceptions about aging and frailty: An integrative review of the literature. *Geriatr Nurs*. 2019;40(1):13-24. doi: 10.1016/j.gerinurse.2018.05.007.
7. Krejcie RV. Determining sample size for research activities. *Educational Psychol Meas*. 1970. doi.org/10.1177/001316447003000308
8. Archibald MM, Lawless M, Gill TK, Chehade MJ. Orthopaedic surgeons' perceptions of frailty and frailty screening. *BMC Geriatr*. 2020;20:1-1. doi: 10.1186/s12877-019-1404-8.
9. Moffatt H, Moorhouse P, Mallery L, Landry D, Tennankore K. Using the frailty assessment for care planning tool (FACT) to screen elderly chronic kidney disease patients for frailty: the nurse experience. *Clin Intervent Aging*. 2018:843-852. doi: 10.2147/CIA.S150673.
10. Heger I, Deckers K, van Bostel M, de Vugt M, Hajema K, Verhey F, et al. Dementia awareness and risk perception in middle-aged and older individuals: baseline results of the MijneBreincoach survey on the association between lifestyle and brain health. *BMC Public Health*. 2019;19:1-9. doi: 10.1186/s12889-019-7010-z.
11. Castro-Herrera VM, Lown M, Fisk HL, Owen-Jones E, Lau M, Lowe R, et al. Relationships between age, frailty, length of care home residence and biomarkers of immunity and inflammation in older care home residents in the United Kingdom. *Front Aging*. 2021;2:599084. doi: 10.3389/fragi.2021.599084.

12. Ganta N, Sikandar S, Ruiz SJ, Nasr LA, Mohammed YN, Aparicio-Ugarriza R, et al. Incidence of frailty in community-dwelling United States older veterans. *J Am Med Direct Assoc.* 2021;22(3):564-569. doi: 10.1016/j.jamda.2020.10.019.
13. Gordon EH, Hubbard RE. Differences in frailty in older men and women. *Med J Australia.* 2020;212(4). doi: 10.5694/mja2.50466.
14. Fan Y, Huang J, Zhou Y, Gu X, Gong D. Does the impact of frailty on all-cause mortality in older persons differ between women and men? A meta-analysis. *J Am Med Direct Assoc.* 2021;22(3):606-e1. doi: 10.1016/j.jamda.2020.05.059.
15. van Assen MA, Helmink JH, Gobbens RJ. Associations between lifestyle factors and multidimensional frailty: a cross-sectional study among community-dwelling older people. *BMC Geriatr.* 2022;22:1-3. doi: 10.1186/s12877-021-02704-x.
16. Delbari A, Zanjari N, Momtaz YA, Rahim F, Saeidimehr S. Prevalence of frailty and associated socio-demographic factors among community-dwelling older people in southwestern Iran: a cross-sectional study. *J Diabet Metab Disord.* 2021;20:601-610. doi: 10.1007/s40200-021-00787-2.