

Validation of the Falls Efficacy Scale – International in a sample of Portuguese elderly

Validação da Falls Efficacy Scale International numa amostra de idosos portugueses
Validación da Falls Efficacy Scale International en una muestra de ancianos portugueses

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ABSTRACT

Objective: to translate and adapt Falls Efficacy Scale – International (FES-I). To analyze the psychometric properties of the FES-I Portugal version. **Method:** psychometric study. Sample consisting of 170 elderly people residing in the Autonomous Region of Madeira. A two- part form was used (sociodemographic characterization and FES-I Portugal). The cross-cultural adaptation was performed and the following psychometric properties were evaluated: validity (construct, predictive, and discriminant), reliability (Cronbach's alpha), and inter-rater reliability. **Results:** the results allow us to verify a dimension of less demanding physical activities and another of more demanding physical activities. The inter-rater reliability study was 0.62, with an interclass correlation coefficient of 0.859, for a 95% confidence interval. The internal consistency of the Portuguese version was 0.962. **Conclusion:** the validity and reliability of the FES-I Portugal are consistent with the original version and proved to be appropriate instruments for evaluating the “impaired walking” and “risk of falls” nursing diagnoses in the older people. **Descriptors:** Fear; Accidental Falls; Risk Factors; Aged; Validation Studies.

RESUMO

Objetivo: traduzir e adaptar Falls Efficacy Scale Internacional (FES-I). Analisar as propriedades psicométricas da versão FES-I Portugal. **Método:** estudo psicométrico. Amostra constituída por 170 idosos a residir na Região Autónoma da Madeira. Utilizou-se um formulário com duas partes (caracterização sociodemográfica e FES-I Portugal). Fez-se a adaptação transcultural e avaliaram-se as propriedades psicométricas: validade (constructo, preditiva e discriminante), confiabilidade (α de Cronbach) e fiabilidade interobservador. **Resultados:** os resultados permitiram verificar uma dimensão de atividades físicas menos exigentes e outra de atividades físicas mais exigentes. O estudo de fiabilidade interobservadores foi de 0,62, com um coeficiente de correlação interclasse de 0,859, para um intervalo de confiança de 95%. A consistência interna da versão portuguesa foi de 0,962. **Conclusão:** a validade e a confiabilidade da FES-I Portugal são consistentes com a versão original e revelam ser instrumentos adequados à avaliação dos diagnósticos de enfermagem “andar comprometido” e “risco de quedas” em idosos. **Descritores:** Medo; Acidentes por Quedas; Fatores de Risco; Idosos; Estudos de Validação.

RESUMEN

Objetivo: Traducir y adaptar Falls Efficacy Scale Internacional (FES-I). Analizar las propiedades psicométricas de la versión FES-I Portugal. **Método:** Estudio psicométrico. Muestra constituída por 170 ancianos residentes en la Región Autónoma de Madeira. Se utilizó un formulario compuesto por dos partes (caracterización sociodemográfica y FES-I Portugal). Se realizó la adaptación transcultural y se evaluaron las propiedades psicométricas: validez (constructo, predictiva y discriminante), confiabilidad (α de Cronbach) y fiabilidad interobservador. **Resultados:** Los resultados permitieron verificar una dimensión de actividades físicas menos exigentes y otra de actividades físicas más exigentes. El estudio de fiabilidad interobservadores fue de 0,62, con un coeficiente de correlación intraclase

de 0,859, para un intervalo de confianza de un 95 %. La consistencia interna de la versión portuguesa fue de 0,962. **Conclusión:** La validez y la confiabilidad de la FES-I Portugal son consistentes con la versión original y se revelan como instrumentos adecuados para la evaluación de los diagnósticos de enfermería «deterioro de la deambulacion» y «riesgo de caídas» en ancianos.

Descriptores: Miedo; Accidentes por Caídas; Factores de Riesgo; Ancianos; Estudios de Validación.

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INTRODUCTION

The increased longevity of people in the last decades presents new challenges to health policy, in addition to the condition of vulnerability of elderly people⁽¹⁾. There is a reflection around the disabilities associated with older people, including falls⁽²⁾ and possible repercussions⁽³⁾. Fall is defined as an unintentional event, which leads to a change in the initial position of the individual to a lower level⁽⁴⁾. The possibility of the muscle strength and flexibility decrease, associated with postural changes, can lead to fear of falling, even in older people that never had a fall⁽³⁾. The fear of falling is associated with physical frailty, decline in activities of daily life, and history of previous fall. Regardless of fall history, the fear of falling is a predictor of institutionalization^(3,5). In addition to the increased prevalence of fall, the fear of falling is also related to the physical and cognitive decline^(3,6).

Clinical practice must resort to evaluation tools culturally adapted and validated, which allows ensuring the reliability and validity of results⁽⁷⁻⁹⁾. The most widely used scale in Portugal to evaluate the risk for falls, focused on hospitals contexts, is the Morse Fall Scale⁽¹⁰⁾. However, there is no instrument to evaluate the fear of falling in older people living in community. To measure the fear of falling, Tinetti created a scale with ten items entitled Efficacy Scale (FES)⁽¹¹⁾. In 2005, FES International (FES-I) was released, containing sixteen items to represent a direct relationship between the fear of falling and its self-efficacy. The evolution to the FES-I was also because of the evaluation itself, whose term evolved from “confident”^(3,5) to “worried.”^(3,12).

OBJECTIVE

This study aimed to translate and adapt the FES-I version to the Portuguese context and examine the psychometric properties of the FES-I Portugal version in a sample of older people residing in the community.

METHOD

Ethical aspects

We requested permission to conduct the study to the Ethics Committee of the Health Service of the Autonomous Region of Madeira (ARM), Public Enterprise (SESARAM, EPE), obtained in December 2014. We also requested permission to the author of the FES-I (Lucy Yardley), via e-mail, which was granted in May 14, 2015. During the study, we questioned the author about the name to assign to the scale, and the author agreed with FES-I Portugal.

Each employee (Nurse Specialized in Rehabilitation Nursing [NSRN]) and to each participant (elderly people) was requested to sign the informed consent form, after duly

informed, ensuring the confidentiality of the data and the right to withdrawal without prejudice to the participant. The assessment tool was applied independently.

The questionnaires were returned in opaque envelope (formerly provided with no deductible answer) via mail. The data was entered by two people (one typing and the other validating).

Study design, place and period

Psychometric study⁽¹³⁾, performed in Integrated Health Centers in SESARAM, EPE. The data collection was from May 18 to June 14, 2015.

Sample and inclusion and exclusion criteria

The sample consisted of elderly people, with more than 65 years, living in the ARM, and it was selected through a non-probabilistic, convenience process. We considered as inclusion criteria: people aged 65 years or more who appealed to health centers of the SESARAM, EPE between May 18 and June 14, 2015, needing nursing care either on the health center or at home. Exclusion criteria were: elderly people who resided in the city of Porto Santo, because of the difficulty of access to participants residing in Porto Moniz, since there was no NSRN in that municipality. It resulted, thus, in ten municipal health centers, which represents a total of 40 health centers.

We chose NSRN because they were considered the most academically capable to do so. Three months before, we made a visit to each one of the sites that would participate in the study, where some of the people involved met and where it was left documentation. The contacts were maintained throughout this period to provide additional information, as well as to answer any questions that were emerging.

The criteria for inclusion of the employees were that they had the expertise in NSRN and that they provided care to elderly people.

The sample was created by 170 older people who met the eligibility criteria, which meets the recommended to validate an instrument – specifically, a minimum of ten people *per* item to validate⁽⁹⁾, being FES-I composed of sixteen items⁽¹²⁾.

Study protocol

For the collection of data in the period stipulated, we used a form composed of two parts: sociodemographic characterization (among the possible variables, we selected “age,” “sex,” “who do you live with?,” “where you spend the day?,” “occupation of leisure time?,” “personal history,” “medication,” “walking is important in your life?” and “have you ever fell?,” and the FES-I Portugal⁽¹⁴⁾).

By integrating the FES-I Portugal into the instrument of data collection of the study, we preserved the possibility of the elderly person not be able to do certain activity, for example, someone who would shop or someone who would cook for them. In such

cases, the participant was asked to answer by imagining that he/she would have the possibility to perform the activity. We asked them to make a stand regarding their concern about the possibility of falling on a scale from 1 to 4 (1 = not worried; 2 = somewhat worried; 3 = very worried and; 4 = extremely worried). The total score varies between 16 (not worried) and 64 (very worried)⁽³⁾.

Analysis of results and statistics

The data were processed using the SPSS, 20.0 version.

In the cultural adaptation, the recommendations of the original FES-I⁽¹²⁾ were followed, as were the suggestions and procedures of other authors for validating the scale in other countries^(3,8-9).

In the evaluation of the psychometric properties, the trust study was held through Cronbach's alpha, and to assess the stability, we used the inter-rater reliability, calculated through Cohen's kappa. We adopted the minimum value of 0.70, considered as reasonable internal consistency⁽⁹⁾.

For the validity of content, we decided to follow the recommendations for the translation and cross-cultural adaptation of instruments^(8-9,15-16). We first selected two translators who met the following conditions: have nationality for which the translation would be made and have semantic, conceptual, and cultural domain of the original language, as well as meeting the objectives of the study⁽¹⁶⁾. Between the translation, with inclusion of cultural adaptation, and the back-translation, the synthesis of the translations was performed and reviewed by someone else. This version did not lose the sense of the original instrument, defended by the authors⁽¹⁶⁾. The review by the commission of judges/experts, a total of three, was performed by bilingual experts who had knowledge of the phenomenon under study and of the indicators of the instrument⁽⁸⁾.

In the study of construct validity, it was assessed the internal structure of the FES-I Portugal through the exploratory factor analysis (EFA), which allowed not only to determine the validity of the construct, but also to interpret the factors. We opted for the exploratory factor analysis, since the population of the study presents particularities different from the population for which the instrument was originally validated⁽¹²⁾. In the EFA, we used the principal factor method for the estimation of loadings, with orthogonal rotation of the factors according to the varimax rotation. The adequacy was evaluated by the Kaiser-Meyer-Olkin (KMO) and the Bartlett's sphericity test.

The association between the two domains (factors) that compose the FES-I Portugal was evaluated based on the correlation coefficient, which, in this study, was the Spearman's rank correlation coefficient, since it refers to ordinal qualitative data.

We resorted to the sensitivity and specificity to verify whether the FES-I Portugal would be able to correctly discriminate elderly people with history of falling (regardless of the number of falls). To identify this ideal criterion and the general effectiveness of the classification system, we used the Receiver Operating Characteristic curve (ROC)⁽¹⁷⁾. The best cutting point was found using the ROC curve, and the definition of the predictive validity of the scale was based on the calculation of the sensitivity and specificity, the positive and negative predictive value, the Area Under the Curve (AUC) ROC and, yet, through Youden Index (J), the option chosen in the validation of the Morse scale in Portugal⁽¹⁰⁾.

The J Index may vary between 0 and 1, which means that values close to 1 are the perfect accuracy. The cutting point was determined from the best index obtained⁽¹⁸⁾.

We performed the discriminant validity by gender, age, and history of falls, to meet what was done by other authors⁽¹⁹⁾. We also considered the daily consumption of medication, impaired balance, impaired vision, impaired hearing, and decreased health, to follow what the literature presents as related to the fear of falling⁽³⁾. The significance level of 0.05 was considered.

RESULTS

In the first part of the study, the linguistic and cultural adaptation and translation were performed, resulting in a Portuguese version of the FES-I, with sixteen items: (1) to clean the house (e.g. to wash the floor, to vacuum); (2) to dress or undress; (3) to prepare simple meals; (4) to take a bath or a shower; (5) to go shopping; (6) to sit or get up from a chair; (7) to climb up or down the stairs; (8) to walk around the neighborhood; (9) to get something above head or ground level; (10) to answer the phone; (11) to walk on slippery surface (e.g. wet floor); (12) to visit a friend or relative; (13) to walk in crowded places; (14) to walk on uneven surface (with stones or holes); (15) to go up or down a slope street; and (16) to attend a social event (e.g. religious act, family reunion or meeting at the club).

The study of inter-rater reliability in this sample was 0.62, between NSRN and generalist nurse (GN), and the interclass correlation coefficient for the total score was 0.859, with a confidence interval of 95% (0.810; 0.896).

Regarding the characterization of the sample, we highlight the average age of 71.1 years, predominance of women (81.2%), 75.3% with a history of previous fall, of which 40.4% with a fall last year and 28.1% with recurrent falls in the same period.

Concerning the study of construct validity, we obtained 0.95, so there was no need to remove items after validation. Both the scree plot obtained by NSRN as the percentage of the total variance explained by the factors (~ 66%) corroborate the assignment of two factors for this scale. Factor loadings correspond to the correlation between each one of the sixteen items and each factor, being generally referred to as loadings of the factors. Each question presented a factor load, presented in Table 1.

In this study, we considered significant the factorial loads above 0.5. This way, it is possible to associate the questions 1, 2, 3, 4, 5, 6, 10, 12, and 16 to the domain "concerns of the elderly person regarding less demanding activities, at a social and physical level" (Factor 1), and the questions 7, 9, 11, 13, 14, and 15 to the domain "concerns of the older person regarding more demanding activities" (Factor 2)⁽¹⁴⁾.

The percentage of variance explained by the Factor 1 was 34.4% and by Factor 2, 30.8%, which amounts to a total of 65.2%. With this method, there was no need to opt for the lowest loading. The observed correlation was 0.839.

The author of the FES-I found that there was a unique unifactorial solution aiming to allow the use of a single measure obtained by the aggregation of all items⁽¹²⁾. Table 2 presents the results to the FES-I Portugal.

Table 1 – Factor analysis regarding the Falls Efficacy Scale Internacional Portugal with two factors, Lisbon, Portugal, 2017

Questions of the FES-I Portugal	Factor 1	Factor 2
Factor 1		
1: To clean the house (e.g. wash the floor, to vacuum)	0.552	0.464
2: To dress or undress	0.786	0.236
3: To prepare simple meals	0.760	0.269
4: To take a bath or a shower	0.641	0.429
5: To go shopping	0.698	0.387
6: To sit or get up from a chair	0.717	0.389
8: To walk around the neighborhood	0.598	0.568
10: To answer the phone	0.690	0.234
12: To visit a friend or relative	0.670	0.428
16: To attend a social event (e.g. religious act, family reunion or meeting at the club)	0.617	0.576
Factor 2		
7: To climb up or down the stairs	0.468	0.680
9: To get something above head or ground level	0.489	0.549
11: To walk on slippery surface (e. g. wet floor)	0.251	0.792
13: To walk in crowded places	0.469	0.680
14: To walk on uneven surface (with stones or holes)	0.315	0.844
15: To go up or down a slope street	0.294	0.806

Note: FES – Falls Efficacy Scale; Factor 1 – Less demanding physical activities; Factor 2 – More demanding physical activities. The color gray was highlighted, the factorial loads corresponding to the factor that best represents each item, i.e., the factorial load with higher value for each item.

Table 2 – Factor analysis regarding the Falls Efficacy Scale Internacional Portugal with one factor, Lisbon, Portugal, 2017

Questions of the FES-I Portugal	Factor 1*
Factor 1	
1: To clean the house (e.g. wash the floor, to vacuum)	0.723
2: To dress or undress	0.727
3: To prepare simple meals	0.732
4: To take a bath or a shower	0.762
5: To go shopping	0.774
6: To sit or get up from a chair	0.789
7: To climb up or down the stairs	0.806
8: To walk around the neighborhood	0.827
9: To get something above head or ground level	0.735
10: To answer the phone	0.660
11: To walk on slippery surface (e. g. wet ground)	0.712
12: To visit a friend or relative	0.783
13: To walk in crowded places	0.807
14: To walk on uneven surface (with stones or holes)	0.793
15: To go up or down a slope street	0.754
16: To attend a social event (e.g. religious act, family reunion or meeting at the club)	0.847

Note: * The appointment was made considering factorials above 0.5. FES – Falls Efficacy Scale.

All items fit in a system with one dimension. The percentage of the total variance explained by a single factor is 58.6%.

The correlations between the sixteen items were also calculated, whose mean was 0.5842 (minimum of 0.3644 and maximum of 0.8114).

On the predictive validity of the FES-I Portugal, we obtained the results shown in Table 3.

Thus, for the NSRN, the cutting point of the FES-I Portugal was 32 (sensitivity of 73.55% and specificity of 95.92%). From the perspective of the elderly person (via NSRN), the cutting point of the FES-I Portugal was 35 (70.64% of sensitivity and 91.94% of specificity). The cutting point for the FES-I Portugal from the perspective of the GN to predict the

occurrence of fall is 32 (sensitivity of 65.32% and specificity of 70.21%).

The J Index of the FES-I Portugal ranged between 0.3554 and 0.7184.

Finally, regarding the discriminant validity, the variables sex, age, history of falls, impaired balance, daily consumption of medication, impaired vision and decreased health were analyzed (Table 4).

The FES-I can discriminate by age, history of fall, impaired balance, daily consumption of medication, impaired vision and decreased health. The fear of falling increases in people aged over 75 years, with a history of falling, who daily consume medication, with impaired balance and vision, and decreased health.

Table 3 – Sensitivity and specificity of the Falls Efficacy Scale Internacional Portugal, Lisbon, Portugal, 2017

FES-I Portugal (variables to be compared)	AUC	Sensibility %	Specificity %	Cutting point	J	p value
GN/Fall	0.694	65.32	70.21	32	0.3554	0.0001
NSRN/Fall	0.692	71.32	58.54	29	0.2985	0.0001
Impaired Walk/GN	0.864	77.67	83.82	33	0.6149	0.0001
Impaired Walk/NSRN	0.867	71.70	90.77	35	0.6247	0.0001
Impaired Walk/Elderly People by GN	0.854	75.00	84.13	33	0.5913	0.0001
Impaired Walk/Elderly People by NSRN	0.866	70.64	91.94	35	0.6258	0.0001
Risk for Falls/GN	0.909	73.55	95.92	32	0.6947	0.0001
Risk for Falls/NSRN	0.924	77.19	94.64	32	0.7184	0.0001
Risk for Falls/Elderly People by GN	0.864	74.14	83.33	32	0.5747	0.0001
Risk for Falls/Elderly People by GN	0.925	77.88	94.64	32	0.7252	0.0001

Note: FES – Falls Efficacy Scale; Area Under the Curve (AUC); Yoden Index (J); p-value allows to evaluate the statistical significance of the J Index.

Table 4 – Discriminant validity of the Falls Efficacy Scale Internacional Portugal, Lisbon, Portugal, 2017

Variables	Score of the FES-I		Significance	
	Mean	Standard Deviation		
Sex	Female (n = 138)	36.27	13.862	0.670
	Male (n = 32)	35.09		
Age	≤ 75 years (n = 117)	34.32	13.261	0.016
	> 75 years (n = 53)	39.85		
History of falls	Yes (n = 128)	38.29	13.897	0.000
	No (n = 42)	29.21		
Impaired balance	Yes (n = 91)	43.96	12.254	0.000
	No (n = 69)	26.83		
Daily consumption of medication	Yes (n = 139)	37.38	14.005	0.021
	No (n = 20)	29.75		
Impaired vision	Yes (n = 93)	40.13	13.529	0.000
	No (n = 67)	31.63		
Impaired hearing	Yes (n = 51)	39.49	13.143	0.070
	No (n = 109)	35.20		
Decreased health	Yes (n = 82)	42.73	13.094	0.000
	No (n = 79)	30.09		

Note: FES – Falls Efficacy Scale;

DISCUSSION

The need for this validation was due to the critics that the Tinetti scale was more related to the vulnerable elderly people and that it did not assess the fear of falling when performing activities of social life⁽³⁾. The advantages of this scale are multiple, with the main ones being: the fact of including a wide range of activities and using short and indicative sentences of the context⁽¹⁹⁾, which determines a better acceptance of its use in clinical practice.

We obtained a version very similar to the Brazilian one as a result of the translation⁽¹⁷⁾.

Inter-rater reliability in this sample was 0.62, i.e., a relevant result⁽²⁰⁾. This instrument is reliable when used in elderly adults, and it can be performed by nurses and care specialists. Obtaining the value of 0.95 of KMO as construct validity, which is considered very good, indicates that it is possible to

proceed with the factor analysis⁽²¹⁾. As for the percentage of variance explained by the “factor 1” (34.4%) and by “factor 2” (30.8%) corresponds, as described in the results, to a total of 65.2%, that is, before valid measures. This result is consistent with the reference that this scale has excellent psychometric properties⁽¹⁹⁾. The observed correlation was 0.839, which reflects a high association between the two domains.

Yardley and his collaborators⁽¹²⁾ performed PA from which arose a unitary underlying factor, with two dimensions that evaluate the concern about less demanding physical activities, especially at home, as well as the concern about more demanding physical activities, especially out of the house.

Regarding one dimension, we verified that all items fit one-dimensional system. The percentage of the total variance explained by a single factor is 58.6%. This value is lower than when we considered two factors, which means that “the two factors can better reflect the characteristics of the data that

were expressed by the differentiation of the questions⁽¹⁴⁾. This scale is valid when considered that it is two-dimensional or one-dimensional. We can use the two valid measures obtained with this scale: concern with less demanding physical activities and concern with more demanding activities. However, it is also appropriate to use only one dimension, such as fear of falling, as used in the original study. Concerning these results, it is highlighted that, to score above 24, it is necessary to inform to the elderly about risk factors for falls and introduce strategies to reduce them, but the restriction of physical and social activities, due to the fear of falling, must be avoided⁽³⁾. The FES-I is inconsistent to assess elderly people with lower levels of concern about falling (this effect probably results in low sensitivity and changes in interventions)⁽¹⁹⁾.

Concerning the predictive validity in the study developed by Leung⁽⁷⁾, the FES-I presents appropriate criterion validity (accuracy between 0.70 and 0.90); in the study of Delbaere et al.⁽¹⁹⁾, Australian version, the investigators found the following reference values in relation to cutting points: low concern (16 to 19), moderate concern (20 to 27), and high concern (28 to 64). In the Brazilian FES-I, the cutting point to differentiate elderly people who have fallen from the ones who have not was the point 23 (47% of sensitivity and 66% of specificity), and to the score 31 joined the recurrent fall (100% of sensitivity and 87% of specificity)⁽¹⁷⁾. In the Turkish FES-I, the cutting point to differentiate people with fear of falling and people without fear of falling was the point 24 (AUC 0.70, sensitivity of 70% and specificity of 65%)⁽²²⁾.

The cutting point of the FES-I Portugal was 32 for both the NSRN and the generalist nurse; as from the perspective of the elderly, via specialist nurse, the cutting point to predict the occurrence of fall was 35. Angst and his collaborators⁽²³⁾, to support us in the interpretation of the data, defined that an AUC of 0.50 means inability of the model to differentiate, that is, there is no better than by chance, while an AUC of 0.70 is usually classified as moderate, and an AUC of 0.80, as high, indicating that the instruments can classify well and have a good performance.

The FES-I can distinguish by age, history of fall, impaired balance, daily consumption of medication, impaired vision and decreased health. There were similarities with other studies, in which were found higher scores in the FES-I in participants with history of fall^(19,24-25). We did not obtain confirmation regarding gender as in other studies^(19,22,24-25). In this study, we found that the FES-I presents discriminant validity for age, history of fall, impaired balance, daily consumption of medication, impaired vision and decreased health. Higher values in the score of this scale are relate to elderly people with history of fall, impaired balance, who consume medication daily, with impaired vision and decreased health.

The fear of falling leads to decrease, or even loss, of confidence in performing daily activities and to the restriction of social activities, as well as to increased dependence, which may result in deconditioning^(5,26). The fear of falling increases with age, varies with gender, in addition to be associated with the risk for falls and injuries resulting from the fall, as the decreased walking speed, balance, and physical alteration⁽²⁷⁾. However, the reduction of muscle mass, strength, power and

physical performance contribute independently to the fear of falling, while the decrease in muscle mass and physical performance contribute to the deterioration of the quality of life in the elderly. Interventions to improve muscular health must be developed⁽²⁸⁾. To recover the ability to walk, particularly in the elderly, can be decisive in the acquisition of independence to life activities⁽¹⁴⁾. Decreased ability to walk may lead to increased risk for falls⁽³⁾.

Limitations of the Study

There were no restrictions regarding translation and cross-cultural adaptation of the instrument, since there was agreement when the synthesis of the translations/adaptations was made. As for the pre-test, there was no opportunity for it to be performed, but it was possible to consult some managers of the health centers where it would be applied.

On the sample, although it had the appropriate number, one aspect deserves to be highlighted: a total of 138 female participants to just 32 male participants.

Regarding the psychometrics, it should be noted that a sample with 170 individuals not allowed even more robust tests.

Contributions to the area of nursing and public health

This study aims to provide a validated instrument that can support nurses in clinical decisions related to this phenomenon, particularly in the care for of elderly people. The fact of having FES-I Portugal, which proved to be a clear and understandable instrument – evaluating the fear of falling, validating the Portuguese elderly population living in community, – contributes to clinical reasoning, as well as to get more accurate nursing diagnostics. To objectively assess the fear of falling may, consequently, evaluate one of the dimensions of risk for falls.

This validation makes it possible to individualize the interventions of the nurse before the fear of falling and decrease the prevalence of falls and injuries arising from/associated with the fall.

A timely intentional intervention of measures that control the fear of falling, by nurses, can have positive impact on the reduction of activity restriction, preventing physical and cognitive decline, increasing the quality of life of the elderly people, especially those who already suffered previous fall.

CONCLUSION

This study contributed to the validation of the FES-I Portugal (in European Portuguese), offering contributions to increase the evidence regarding elderly people living in the community. The “fear of falling” is present as a factor related to the nursing diagnosis “impaired walking,” or the “risk for falls,” or even the “risk for frail elderly syndrome”.

From the psychometric properties of the scale, we highlight the inter-rater reliability of 0.62, the interclass correlation coefficient of 0.859, for the total score, with a 95% confidence interval, and the Cronbach’s alpha of 0.962. The data collected respond to the purpose of the study.

The FES-I Portugal was validated for the elderly population, and we hope it to be relevant, since it will allow its future

use in clinical practice in the elderly people population. The instrument was adapted and linguistic and culturally validated to ensure the reliability of the results obtained. The FES-I is valid to evaluate the fear of falling in elderly people living in

the community and is a reliable measure when used by GN and NSRN.

It is recommended, in the future, the validation of the FES-I Portugal in other populations.

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