RESUMO

Objetivo: prevenir as quedas da pessoa idosa integrada em uma Equipe de Cuidados Continuados Integrados (ECCI). Método: estudo descritivo, transversal, com abordagem quantitativa, realizado na Comunidade de Albufeira – Portugal. A amostra foi constituída por 53 pessoas, com idade igual ou superior a 65 anos. Utilizou-se como instrumento de coleta de dados a escala de medida. O estudo foi realizado de acordo com a Declaração de Helsinque que determina as normas fundamentais para a ética em pesquisa internacional. Resultados: os resultados apontam que 86,8% da amostra apresenta risco de queda. Destes, 49,1% têm um perfil de risco baixo e 37,7% apresentam risco elevado. Apenas 13,2% foram tipificados sem presença de risco. Conclusão: os resultados mostram que os idosos da ECCI estão sujeitos a determinados fatores que a literatura caracteriza como representativos riscos de quedas, os quais podem ser minimizados ou eliminados através da implementação de medidas preventivas de gestão de risco e promoção da segurança da pessoa idosa na comunidade. Descritores: Enfermagem em Saúde Comunitária; Idosos; Acidentes por Quedas.

RESUMO

Objetivo: prevenir las caídas de los adultos mayores en un equipo de cuidados continuados integrados (ECCI). Método: estudio descriptivo, transversal, con abordaje cuantitativa, realizado en la comunidad de Albufeira - Portugal. La muestra fue constituida por 53 personas, con edad igual o superior a los 65 años. Se utilizó como instrumento de recolección de datos la escala de medida. El estudio fue realizado de acuerdo con la Declaración de Helsinki que determina las normas fundamentales para la ética en pesquisa internacional. Resultados: los resultados muestran que los adultos mayores de la ECCI están sujetos a determinados factores que la literatura caracteriza como riesgos representativos de caídas, los cuales pueden ser minimizados o eliminados a través de la implementación de medidas preventivas de gestión de riesgo y promoción de la seguridad del adulto mayor en la comunidad. Descritores: Enfermería en Salud Comunitaria; Adultos mayores; Accidentes por Caídas.

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THE ELDERLY PERSON IN THE EQUIPE DE CUIDADOS CONTINUADOS INTEGRADOS: NURSING PROGRAM FOR PREVENTION OF FALLS

O IDOSO NA EQUIPE DE CUIDADOS CONTINUADOS INTEGRADOS: PROGRAMA DE ENFERMAGEM PARA PREVENÇÃO DE QUEDAS

EL ADULTO MAYOR EN EL EQUIPO DE CUIDADOS CONTINUADOS INTEGRADOS: PROGRAMA DE ENFERMERÍA PARA LA PREVENCIÓN DE LAS CAÍDAS

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ABSTRACT

Objective: to prevent falls in the elderly person integrated to the Equipe de Cuidados Continuados Integrados (ECCI). Method: It is a descriptive and cross-sectional study, with a quantitative approach, performed in the Community of Albufeira - Portugal. The sample was comprised of 53 people, aged 65 years old or over. We used the measurement scale as a tool for collecting data. The study was conducted according to the Declaration of Helsinki that determines the key standards for ethics in international research. Results: the results points that 86.8% of the sample shows a risk of falling. Of these, 49.1% have a low risk profile and 37.7% have high risk. Only 13.2% were sorted without the presence of risk. Conclusion: the results show that the ECCI elderly are subject to certain factors that literature characterizes as representative risks of falls, which can be minimized or eliminated through the implementation of preventive measures of risk management and promotion of safety of elderly person in the community. Descriptors: Community Health Nursing; Elderly People; Fall Accidents.

RESUMEN

Objetivo: prevenir las caídas de los adultos mayores en un equipo de cuidados continuados integrados (ECCI). Método: estudio descriptivo, transversal, con abordaje cuantitativa, realizado en la comunidad de Albufeira - Portugal. La muestra fue constituida por 53 personas, con edad igual o superior a los 65 años. Se utilizó como instrumento de recolección de datos la escala de medida. El estudio fue realizado de acuerdo con la Declaración de Helsinki que determina las normas fundamentales para la ética en pesquisa internacional. Resultados: los resultados muestran que los adultos mayores de la ECCI están sujetos a determinados factores que la literatura caracteriza como representativos riscos de quedas, los cuales pueden ser minimizados o eliminados a través de la implementación de medidas preventivas de gestión de riesgo y promoción de la seguridad del adulto mayor en la comunidad. Descritores: Enfermería en Salud Comunitaria; Adultos mayores; Accidentes por Caídas.
INTRODUCTION

Population aging is a reality. The increase in the number of elderly when associated to the changes in the family role and, particularly, of women leads to the appearance of difficulties for those who need care. Most people of 65 years old or over suffer from at least one chronic disease, which may limit their autonomy and reduce the quality of life.1

Regarding the weakening of the family in supporting their older members, it is particularly the growing inclusion of women in the labor market that places a greater dilemma.1 This truthfulness when combined with the demographic aging, increases more and more, the need for the existence of a process of substitution of informal caregivers, by means of the provision of health services and social services rendered by institutions. These services seek to fill a gap resulting from the alteration of the traditionally role played by the family and reinforced by neighborly relations.

The situation previously described has required a restructuring and appropriateness of health and social cares. In the last decades, it should be observed the creation of health care services with new typologies and several organizational models that aim to meet the needs of this age group.

For achieving this aim, the Programme of the XVII Constitutional Government, through Decree-Law n° 101/2006 of June 6th, sets as a goal the establishment of health policies and social security which allow to develop actions closer to people in situation of dependency, leveraging local resources by means of approach community services, in order to adjust or create appropriate responses to diversity that characterizes the individual aging and the changes in functionality.

In consonance with this policy, and supported by the aforementioned legislation, the ECCI were created, which provide home care of multidisciplinary characteristic of a preventive and curative nature, of rehabilitation and palliative actions.

Nurses, through home visits performed within this team and supported by analysis of the Integral Assessment Index - Índice de Avaliação Integral (IAI), data collection instrument filed for admission to the user, observed a high incidence of elderly patients who suffered at least one fall in the last year, some of whom showed recurrent episodes.

Indeed, in the elderly population, the multiple chronic pathology, the multidrug usage, the domestic accidents, the institutional hospitalizations and changes in family structure are some of the factors that determine health, autonomy, independence and quality of life.2 The same source describes that in people aged over 65 years old, the most common domestic accidents are falls and more than 65% of these accidents occur in their own home.2

Faced with this reality and knowing that nurses have developed significant expertise in health promotion and disease prevention, through the provision of nursing care based on educational programs for health, this problem shows itself extremely important in the field of action of these professionals, in order to reach a greater welfare and quality of life to the elderly, families and caregivers.

Nursing cares help a person to manage the community resources with regard to the health and promote learning in order to increase personal, family and community resources to deal with the health challenges.3

The tenor of the functional content of the nurse, in point b) of Article 9 of the Decree-Law 248/2009 of September 22nd, notes that the nurse has the task to perform nursing interventions required by the individual, family and community, in the ambit of health promotion, disease prevention, treatment, rehabilitation and functional adaptation.

Given the evidences and knowing that the ECCI nurses provide cares to the elderly population subject to several weaknesses, it proved to be pertinent to carry out a study in order to determine the risk of falling in the elderly population that is integrated into the ECCI.

Our purpose was settled because falls represent different consequences for the health and quality of life of older people, in addition to behave costs with diagnostic auxiliary means, medications and hospitalizations that could be avoided or minimized through nursing interventions that promote safety and risk management of older people in community.

METHOD

This study began with a conduction of a descriptive study, cross-sectional and with quantitative approach, which led to the diagnosis of health regarding the identification of the risk of falling in the elderly population admitted to the ECCI. The study took place at the Community Care Unit of Al-Buhera, in Albufeira (Portugal).

The sample universe was comprised of seniors admitted to the ECCI of Albufeira, in...
the period from January 1st to December 31st, 2011, corresponding to a total of 72 people. As inclusion criterion in the sample, we considered: the people admitted to the ECCI in year of 2011; aged 65 years old or over. 53 elderly people complied with the criteria of the study.

For data collection, we used the measurement scale. The instrument consists of questions that allow the sociodemographic characterization of the sample and other issues related to the predisposing factors for falls, described in the National Programme for the Health of Older People and by the Morse Scale. The completion of data collection was based on the query of clinical records reported in the process of the user and performed at the date of admission to the ECCI. Data were collected by the researcher in the period between August 21st and 31st, 2012, and were treated on the basis of statistical, descriptive and inferential procedures to enable the interpretation of the information through the software SPSS, version 17.0 and presented in format of tables.

RESULTS AND DISCUSSION

The sample is characterized by the supremacy of the female gender (58.5%), which reproduces the national statistics that show that the average life expectancy of women is higher than of men. With regard to the age group, it is found that the age group with smaller representativeness (5.7%) is between 65-69 years, increasing exponentially from 69 to 89 years (20.7% between 70-79 years and 49.1% between 80-89 years); the values decrease to 24.5% in the elderly aged 90 years old or more, indicating that the long-lived elderly are predominant in the survey.

The results according to the variables available to the risk of falling, in compliance with the National Programme for the Health of Older People reveal with regard to cohabitation that: 39.6% of the elderly people live with a spouse, followed by 30.2% that live with children, 15.1% with spouse and children, 7.5% alone and 7.5% with other people that do not match any of the degrees of kinship presented above; regarding to the medication, 35.8% of elderly people have prescription of psychotropic drugs and 64.2% did not take this kind of medication; the chronic diseases such as arthrosis, depression and chronic lung disease, which are identified as triggering for risk of falling, are present in this population. Arthrosis are found in 17% of the sample, 13.2% has diagnosis of depression, 1.9% suffer from chronic lung disease and 67.9% show other diseases; With regard to the decrease of visual acuity, 92.5 % of the population has vision impairment, in contrast to 7.5% which does not mention changes in this organ.

The results according to the variables available to the risk of falling, in compliance with the Morse Scale, show that in only 13.2% of the sample there is no risk of falling, as opposed to 49.1% that have low risk and 37.7% that demonstrate a high risk.

Table 1 is a result from the aggregation of the six variables that constitute the scale Morse, which description is presented in the following paragraphs:

1. Backgrounds of falls in the last 3 months: there have been not records of sudden falls or occurred during the period of 3 months in 56.6% of the elderly, in contrast to 43.4% that report backgrounds of this event in the period.

2. Associated secondary diagnosis: in terms of pathologies, there was a predominance of elderly people who have a secondary diagnosis (67.9%) compared to those who only have a diagnosed pathology (32.1%). This evidence confirms the prevalence of multiple pathologies in the target population.

3. Need of help to wander: as for the life activity locomotion, the data show that 69.8% did not wander, is bedridden in bed or move by means of a wheelchair, 28.3% wander with a cane, walker or crutches and 1.9% walk supported in furniture.

4. Intravenous Medication (IV) and / or use of heparin: the vast majority (84.9%) is not medicated by intravenous mean (IV) / use of heparin, as opposed to 15.1% of the sample.

5. Capacity to walk / transference: this is the group in which this life activity is considered normal / bed rest / motionless
that has the highest representativeness (58.5%); after it, there are the elderly who have weak capacity to walk / transference (35.8%) and subsequently those whose capacity to walk / transference is hampered, representing 5.7% of the sample.

6. Mental state: there are not significant differences. The population that presents itself oriented to its own capacity is 50.9%, and one that forgets the limitations is 49.1%, this last group is more likely to fall.

By analyzing the sum of the target population of the study, we concluded that 86.8% of the ECCI elderly show risk of falling. The interpretation and analysis of these results support a literature review regarding the phenomenon.

Indeed, it is known that aging is a process of endogenous and irreversible deterioration of the functional capabilities. The most striking characteristic of aging is the decrease in capacity of adapting of the body against the changes of the environment.4

Moreover, from the aging process, it emerges some necessities that do not come exclusively from normal physiological changes, but of associated pathologies and other factors such as isolation, difficulties of family and social support, and the fact that some elderly people care for other ones. Often, it is possible to find elderly subjects who are living with a spouse or with a spouse and children, the latter are often absent during part of the day – for work reasons. This indicator is important, particularly because falls are more common in the elderly who live alone and are observed with greater frequency in women than in men.5

Some characteristics related to the aging process also constitute susceptibility for the occurrence of adverse events in the elderly people, where the falls are representative. The WHO defines a fall as a consequence of a happening that leads the individual to fall to the ground against its will. The falls are associated with a wide range of risk factors. There are several variations that are within these factors, however, in this current study, we have considered the following 3 categories:4

- Intrinsic factors;
- Extrinsic factors;
- Risk exposure.

In the category related to intrinsic factors, the same source mentions that the risk is associated with the following requirements:

- Previous history of occurrence of fall;
- It increases with age;

- It is more frequent in women than in men;
- It is more common in the elderly who living alone;
- It predominates in Caucasians;
- The cognitive deficit and fear of falling are risk factors;
- The presence of circulatory diseases, chronic obstructive lung disease, depression, arthritis, diabetes, thyroid dysfunction and incontinence of sphincters;
- The impairment of muscle strength, balance, difficulty in gait and in transfers;
- Nutritional deficiencies with the presence of low body mass index;
- Cognitive deficit (demonstrated through the mental status questionnaire (25), score <26 (49) or <24 (54) in the Mini-Mental State;
- Visual deficiency: visual acuity, contrast sensitivity, visual field, cataract, glaucoma, macular degeneration; all of these factors contribute to the risk of falls;
- Use of multifocal eyeglasses (impair perception of depth, contrast and distances to the detection of obstacles in the environment);
- Foot problems: deformities of the fingers, ulcers, deformed nails;
- The use of medications such as benzodiazepines associated with older people increases the risk of falling by 44%;
- The use of psychotropic medicinal drugs, antiarrhythmics, digoxin, diuretics, sedatives;
- The association of more than four drugs, regardless of pharmacological group increases the risk by nine times. This factor is particularly significant, because polypharmacy is very frequent in the elderly people.

In light of this panoply of factors, it is considered appropriate that the assessment of risk factors includes objective questions in the anamnesis addressed to a prior history of falls, their circumstances, usage and recent therapeutic review, musculoskeletal diseases, functional capacity and the presence of extrinsic risk factors described in the following paragraphs. Consider these extrinsic factors (involving environmental risks) becomes relevant and essential, since studies show that between 30% and 50% of falls among the elderly living in the community are due to environmental factors, pointing to the bad lighting , slippery floors, uneven surfaces, inappropriate footwear and clothing, inadequate technical aids or misused.6

To consolidate previous ideas, it reinforces that many environmental factors affect the likelihood of falls, verifying that one elderly
person for every four suffers serious injuries\textsuperscript{7}, constituting itself as one of the leading causes of traumatic brain injury.\textsuperscript{8}

This type of accident shows consequences with different levels of severity. The National Programme for the Health of Older People\textsuperscript{4} states that the main consequences of the falls are traumas, whose body parts most often injured are the head and limbs. It also notes that the length of hospitalization is exponential to the age, verifying the average of 11 days for people aged 75 years old and over.

After look carefully at the risk factors associated with the occurrence of falls, we are able to make an analysis of the preventive measures, given that the studies conducted have shown that the incidence of falls can be significantly reduced through prevention programs that address a performance on the risk factors.\textsuperscript{9}

The prevention of falls is a challenge to the population aging and consequently to geriatric nursing. The prevention of domestic accidents, and particularly the falls, can be implemented through effective preventive measures based on the development of good practices that will contribute to the quality of health services, and contribute to health gains envisaged in the National Health Plan of Portugal (2011-2016).\textsuperscript{10}

The nurse of Primary Health Care evaluates health of the user/ family and its physical, psychological, social and environmental contexts. To promote health, nurse optimizes the entire family unit as a target of the care process. In decision-making, it identifies care needs, outlines the prescription of interventions in order to avoid risks, early detects potential problems and minimizes or solves the actual problems identified.\textsuperscript{10} Thus, the development of a preventive nursing program bases its focus on the identification of the measurable predictive factors.\textsuperscript{11}

This fall prevention program to be developed by nurse involves the nursing care, emphasizing the promotion of health and prevention of accidents, presenting like principle the identifying of intrinsic risk factors, through the application of assessment tools on the mental and functional state and guidelines that allow identifying predisposing factors for falls, which are pointed out in literature. Regarding the extrinsic and environmental factors, it is essential to assess risks inherent to the housing in which the elderly lives and its surroundings. Thus, an effective prevention program involves the study on the following areas: physical activity, mobility, sensory deficiency, cognition, pharmacological therapy and environment. If a risk associated with any of these areas is found, interventions should be planned to allow correction of the identified risk or factor associated with the disease process.\textsuperscript{12}

The European Network for Safety among Elderly (EUNESE)\textsuperscript{13} argues that an effective intervention includes a combination of risk analysis followed by environmental changes, the promotion of physical activity and balance training.

To provide care taking into consideration the above mentioned aspects, it is appropriate to conduct an effective and adequate needs assessment. On this assumption, the home visit reveals itself like the most appropriate field by allowing knowing the entire context of the person, which is unique, singular and individual.\textsuperscript{14} The home care procedures are components of a comprehensive health care in which health services are provided with the purpose of promoting, maintaining or restoring health, or for maximizing the level of independence. In this methodology, there is an interest of adopting strategies that allow the involvement of family / caregiver, because they increase the success of the intervention, favoring the achievement of desired goals.

During the home visit will be made the diagnosis of the situation by means of objective examination, through which it aims to raise awareness with regard to the identified risk factors and drawing joint strategies for their reduction / elimination. The intervention plan will be developed in order to reach the goals previously established and discussed with the elderly / family / caregiver. Furthermore, in the planning of nursing care to the elderly, the nurse must consider that falls can result, in a peculiar way, in serious physical and psychological consequences in the life of that person, considering pertinent to map out the diagnosis – risk of falls – to support interventions associated with its prevention.\textsuperscript{15}

In practice, the nurse emphasizes its intervention by providing guidance on the safety and autonomy, reinforcing ideas through written information mentioned in catalogues, brochures or other support material that meets the achievement of the desired objective. Beyond this nursing care, whenever it can be justified, the nurse refers to another professional of the health team (doctor, physiotherapist, social service technician or other). This conjecture is justified, because currently a multidisciplinary and interdisciplinary approaching reinforces the complementarity of skills and all the...
challenges that show themselves in every profession, which are closely linked to the binomial health-disease, particularly, with regard to the new health issues related to lifestyles, aging and chronic illness.16

CONCLUSION

The results show that older people integrated into the ECCI are subject to various risk factors for the occurrence of falls.

In this sense, the development of prevention programs directed at the elderly population is important in that it allows reducing the risks and consequences associated with falls, which can significantly compromise the health and quality of life. By encouraging preventive health care to the old person, the nurse is, simultaneously, promoting the health of family and caregivers.

Moreover, the falls cause several costs, especially with diagnostic auxiliary examinations, treatment and hospitalization, which can be minimized by implementing appropriate programs that can contribute to the reduction of mortality and morbidity of the elderly population.

It is believed that the maintenance of a safe environment at home, in relation to the management of risk of falling, should be considered a priority intervention and target of studies at the community level. Some studies have demonstrated that inadequate environment presents itself as one of the most significant factors in the occurrence of this event, beyond the changes due to age and medication use.17

Knowing that the causes associated with this incident may be intrinsic and / or extrinsic to the person, the strategies to be developed goes through for individualized assessment of the causes / factors that each elderly person is submitted.

Nurses due the skills they perform and by their experience in providing care in the community are the quintessentially professionals who are enabled to develop prevention programs entered in the field of care for the elderly. These professionals with expertise in community health and social issues, by exercising functions in primary care, have a privileged position in promoting appropriate health care and/or upgrading, which reduce the number of hospitalizations and medicinal drug consumption, respecting the environment of care which is considered.18

However, knowing that the causes that determine the predisposition of falls are multifactorial and involve skills framed within other health disciplines, it is a task of this professional to diagnose and, whenever it can be justified, reference for professionals of the multidisciplinary team, in order to reduce or eliminate identified risk factors, through a comprehensive approach of the identified needs.

With regard to the diagnosed needs, at this stage of development, it should be noted the study's limitations related to the fact that the Morse Scale does not constitute itself as a validated instrument for implementation in the community; in addition, we did not find such kind of studies conducted with the elderly integrated to the ECCI. Another aspect to be mentioned concerns the absence of a diagnosis of community health, which limits knowledge of the needs and prevents the elaboration of a problem tree that constitutes itself like a reference for the development of projects that meet the priority needs of the population in question.

Nevertheless, this project can establish itself as a starting point of interest for the development of studies in this area, through its replication in teams with similar typologies, contributing to the promotion of good practices in safety and risk management of the elderly person in the community, revealing itself as an innovative nursing program for the region.

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