



Risk assessment of ulcer development by pressure in elderly institutionalized in Brazil

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ABSTRACT. This study aimed to evaluate the risk of developing pressure ulcers (PU) and related factors in elderly residents in LTI of a medium-sized municipality in southern Brazil. The method applied was a cross-sectional study with elderly residents in a long-term institution (LTI) in Brazil, using sociodemographic questionnaire, health conditions questionnaire and Braden Scale. The data was analyzed using descriptive and inferential statistics. The results showed that most seniors had some degree of risk (57.2%) to develop PU, but no elderly presented the condition. Among the elderly at risk for PU, 54.5% of them rate their health as good, 46.7% participate in activities and 52.6% are satisfied with the institution. Conclusions: The absence of PU and positive evaluations of the elderly may be a result of the care offered by the LTI. The Braden Scale is an instrument that enables the planning and implementation of actions to improve the health of institutionalized elderly.

Keywords: elder, health of institutionalized elderly, pressure ulcer.

Avaliação do risco de desenvolvimento de úlcera por pressão em idosos institucionalizados no Brasil

RESUMO. Avaliar o risco de desenvolver úlcera por pressão (UP) e os fatores relacionados em idosos residentes em ILP em município de médio porte na região Sul do Brasil. Estudo transversal realizado com idosos residentes em uma instituição de longa permanência (ILP) no Brasil, utilizando de questionário sociodemográfico e de condições de saúde e escala de Braden. Análise dos dados por meio de estatística descritiva e inferencial. A maioria dos idosos possuía algum grau de risco (57,2%) para desenvolver UP, contudo nenhum idoso apresentou UP. Dos idosos com risco para UP 54,5% avaliaram a saúde como boa, 46,7% participaram de atividades e 52,6% manifestaram-se satisfeitos com a instituição. A ausência de UP e as avaliações positivas dos idosos podem ser resultado do cuidado oferecido pela ILP. A escala de Braden é um instrumento que viabiliza o planejamento e a implantação de ações para melhoria da saúde do idoso institucionalizado.

Palavras-chave: idoso, saúde do idoso institucionalizado, úlcera por pressão.

Introduction

Population aging is a phenomenon that has been occurring in all countries of the world, so it is estimated that by the year 2050 there will be two billion elderly, mostly in developed countries, and that in 2020 the number of people with 60 or more will exceed the number of children (World Health Organization [WHO], 2014). In developing countries like Brazil, where this phenomenon has been occurring more rapidly, the impact of this new age profile is still under-recognized and poorly managed.

Population aging is a result of an improvement in living conditions of the population, since it

reflects the fall in mortality rates and increased life expectancy. However, most studies on this subject points out that aging is also a consequence of a decrease in population fertility rates, and this factor raises the need for the creation and maintenance of social conditions and subsidies which ensure balanced support (Alves, 2014).

In Brazil, it is already evident the aggravating lack of societal preparation in regard to offer adequate support to the elderly population, such as family abandonment and lack of social support to overcome financial difficulties and specific care needs (Marin, Miranda, Fabbri, Tinelli, & Storniolo, 2012).

Many older people need permanent care, since physiological changes, chronic diseases, functional

disability, falls and even abandonment are conditions that become more prevalent among the elderly. These conditions demand a kind of support that many families, even when present and willing, cannot meet (Duca, Thumé & Hallal, 2011).

In this context, the demand for Long-Term Institutions (Long-Term Institutions or Long-Term Institutions for the Elderly - LTI or LTIE) is increasing. Such institutions in Brazil, may be governmental and non-governmental organizations, and must be, according to legislation, collective residential character, directed at elderly people with some kind of dependence, with or without housing, with or without family support (Aires, Paz, & Perosa, 2009; Nunes, Menezes, & Alchieri, 2010).

It is worth mentioning the risk of developing skin lesions by the elderly. The elderly dependency frame can present several degrees, and skin fragility is present in all of them and may result in ulcer formation, in particular to pressure ulcers (PU). Such ulcers can worsen the functional framework of the elderly in the LTI; require specialized care and lead to an increase of the institutionalization costs (Ahn, Cowan, Garvan, Lyon, & Stechmiller, 2016; Kwong, Lee, & Yeung, 2016).

The appearance of skin fragility of the elderly is resulting of both common physiological changes in aging and as part of cultural issues, social, emotional and healthcare quality. The insufficient thermoregulation, decreased lubrication of skin and immune mechanisms of protection, lower grade skin elasticity, reduced gastrointestinal motility, changes in taste, social isolation among many other aspects commonly neglected in the care of dependent elderly, are characteristics which favors the formation of PU (Vieira, Sá, Madeira, & Luz, 2014).

There are few population-based studies on the prevalence of PU in LTI, unlike studies of hospitalized seniors which demonstrate that aging is a positive predictor of the prevalence of PU (Cox, 2011). Despite being potentially preventable, the PU constitutes one of the most common complications in institutionalized elderly and is associated with increased morbidity and mortality. In an Italy study, carried out from 10 long-term units in Rome, a 27% PU prevalence rate was found (Capon, Pavoni, Mastromattei, & Di Lallo, 2007).

The North American National Pressure Ulcer Long-Term Care Study (NPULS) on prevalence of PU in residents of long term care facilities nationwide, found a prevalence rate of 29% (Posthauer, Banks, Dorner, & Schols, 2015). In Brazil there are few studies that support for an estimated prevalence of PU in institutionalized

elderly (Souza, Maciel, Méier, Danski, & Lacerda, 2010). Exploratory studies are needed, especially in developing countries, until the issue of prevalence of PU and quality of care of the elderly in LTI are effectively addressed at the national level.

Outside the LTI of environment, the welfare care to PU is widely discussed in nursing practice, in which it is common the use of assessment tools and management that qualify care. The Braden Scale is among the most used tools in the Americas and Europe to assess the PU risk. The assessment of PU, in turn, enables the planning of care and interventions to reduce or even eliminate the risk factors for the development of this condition (Araújo, Araújo, & Caetano, 2012; Marsden et al., 2015).

However, the use of the Braden scale occurs mostly in hospital settings and in a more systematic way in intensive care units, reflecting the lack of scientific research of its use in institutionalized elderly.

It should be noted that despite the lack of studies that address the issue of PU in the elderly in LTI, especially in Brazil, the Braden Scale has been validated in this scenario by de Souza et al. (2010). The study showed that the scale has good predictive validity of PU risk in elderly residents of LTI.

Based on the exposed, this study aimed to evaluate the risk of developing PU and factors associated through the Braden scale, validated in Brazil, in the elderly aged 60 or older, living in LTI in medium-sized municipality in Southern Brazil.

Method

This was a descriptive, exploratory, cross-sectional study carried out with elderly aged 60 or over, residents at a Long-Term Institution (LTI), located in a city of south-central Parana State, Brazil, during the months of November 2013 to January 2014.

The studied institution was of philanthropic type and was established in March 1973 with the mission of welcoming elderly with decent shelter needs in the last years of their lives, not offered by their families, either by lack of bond, financial condition, abandonment and risk situation (Ribas & Varaschin, 2013).

The inclusion criteria for participants were: having 60 years old or more; consent to participation in the study, and, in the case of older people unable to understand and sign the informed consent, an informed consent was requested to the LTI manager, who legally responded by the institutionalized elderly.

The participants were all institutionalized elderly in the period of data collection, totaling 21.

Since it is a research involving human subjects, the guidelines and regulatory standards have been met by Resolution n° 466/2012 of the National Health Council, and the research was submitted to the Ethics Committee in Research of the State University of Midwest / UNICENTRO and approved on the advice n° 455.931 (2013).

Two instruments were used in this study to collect data: the first was a questionnaire prepared by the researchers to characterize the socio-demographic profile, health condition and the evaluation of the service provided by the LTI. The questionnaire aimed to collect information about the age, education, origin, marital status, religion, income, self-assessment of health status and satisfaction with the service provided by LTI. For evaluating the health status, the elderly had to classify their own health as excellent, good, fair, poor or very poor. Those who considered excellent or good were grouped and classified as 'good health' and those who rated it as fair, poor or very poor were grouped as 'not good health'.

The second instrument used was the Braden scale, validated in Brazil and available in the literature for health professionals to use to identify PU risks. The scale offers subsidy for objective identification of patients at risk of developing PU. The scale consists of six domains: sensory perception, moisture, activity, mobility, nutrition, friction and shear (Paranhos & Santos, 1999; Souza et al., 2010).

The subscale perception determines the ability to sense and report the discomfort of pressure. The subscales activity and mobility are evaluated separately, but they are associated. While the activity measures locomotion out of bed, mobility assesses the ability to changes in bed position in order to decrease the pressure. The level of moisture exposure to the skin is measured by subscale humidity; and for this, it is considered the bladder and bowel control, wound drainage and perspiration. The food intake by the patient is measured by sub-scale nutrition, which assesses the usual pattern of food consumption; that is, if the patient eats most of the meals offered or refuses them, and it also evaluates the number of meals and the act of eating between meals. The friction and shear assess an individual's ability to move so that their body does not slip on surfaces where the patient is in contact (Paranhos & Santos, 1999).

The subscales sensory perception, activity, mobility, moisture and nutrition are scored between one and four, while the friction and shearing the

score varies between one and three. The maximum total of the sum is 23.

The risk of developing PU is evaluated through the oscillation of the final score, which can range from 6 (high risk) to 23 points (no risk), and the patients were classified as follows: very high risk (scores equal or lower than 9), high risk (score 10-12 points), moderate risk (score 13-14 points), low risk (scores 15-18 points) and without risk (score 19-23 points) (Paranhos & Santos, 1999).

Data from the instrument sociodemographic, health and Braden Scale were organized, tabulated and calculated in database using software *Microsoft Office Excel 2007* (version 2007) and *SPSS* (version 18.0), and then analyzed using descriptive statistics with absolute values and percentages. A comparison was made between the groups (with risk and no risk), testing the association between nominal variables using Fisher's exact test, considering the 5% significance level.

Results

The following data presents the descriptive characteristics of the socio-demographic profile of the studied population of institutionalized elderly. The data show that there was no proportional differences in relation to sex; 66.6% were between 60 and 79 years; 52.4% of white race/color; 52.4% were single, and 61.9% had no children. It is noteworthy that 57.1% were illiterate and that 81% of them could not read and write. The vast majority (95.2%) had income. It can be highlighted that 66.7% of the elderly studied were institutionalized because of family abandonment (Table 1).

In their self-assessment of health status and care provided by the institution, most of the elderly (52.4%) rated their health condition as good, and in addition, 90.5% of them were satisfied with the service offered in LTI and participated (71.4%) of social groups or physical activities offered by the LTI, such as stretching oriented by physical therapist, or light physical activities guided by physical educator. All study participants had some kind of disease and were taking medications (Table 2).

The data in Table 3 show classification of risk for PU development of institutionalized elderly. Most of the elderly were classified as without risk (42.8%) and low risk (33.3%) to PU development.

Most seniors do not have limitations in sensory perception (47.6%), mobility (38.1%), and problems of friction and shear (47.6%), with satisfactory nutritional status, since 52.38% were classified as excellent and 42.8% as adequate. However, they have the occasional damp skin (38.1%), and 42.8% are restricted to a wheelchair (Table 4).

Table 1. Socio-demographic profile of institutionalized elderly. Palmas, Paraná, Brazil, 2014.

Variables	N	%
Gender		
Male	10	52.4
Female	11	47.6
Age		
60-69	7	33.3
70-79	7	33.3
80-89	4	19
90 or over	3	14.3
Number of children		
No children	13	61.9
1 to 5 children	6	28.6
More than 5 children	2	9.6
Race/color		
White	11	52.4
Black	6	28.6
Yellow	1	4.8
Dark	3	14.3
Marital status		
Single	11	52.4
Widow	7	33.3
Divorced	3	14.3
Read/write		
No	17	81
Yes	4	19
Schooling		
Without schooling	12	57.1
From 1 to 6 years	8	38.2
15 years	1	4.8
Income		
No income	1	4.8
With income	20	95.2
Reason for institutionalization		
Family abandonment	14	66.7
Disease of the elderly	6	28.6
Family violence	1	4.8

Adding up the scores that had some type of change in each subscale, it can be highlighted the moisture with 66.6, 76.4% activity and mobility with 61.88%. Of all seniors who rated their health as good, + 54.5% presented risk of developing PU.

Table 4. Score from Braden subscales for risk of pressure ulcer development in institutionalized elderly. Palmas, Parana, Brazil, 2014.

Variables	Score of Braden Scale							
	1		2		3		4	
	N	%	N	%	N	%	N	%
Sensorial perception	2	9.5	2	9.5	7	33.3	10	47.6
Moisture	1	4.8	5	23.8	8	38.1	7	33.3
Activity	1	4.8	9	42.8	5	23.8	6	28.6
Mobility	2	9.5	3	14.3	8	38.1	8	38.1
Nutrition	-	-	1	4.8	9	42.8	11	52.4
Friction and shear *	6	28.6	5	23.8	10	47.6	NA	NA

*Maximal score of item: 3. NA: does not apply.

Table 5. Institutionalized elderly risk for developing PU according to health assessment participation in groups/activities and satisfaction with the service. Palmas, Parana, Brazil, 2014.

Variables	Risk for developing PU			P value
	Yes (%)	No (%)		
Health assessment				
Good	6 (54.5)	5 (45.5)		0.428
Not good	4 (50.0)	4 (50.0)		
No answer	2 (100.0)	-		
Participation in groups/activities				
Yes	7 (46.7)	8 (53.3)		0.148
No	5 (83.3)	1 (12.7)		
Satisfaction with the service				
Yes	10 (52.6)	9 (47.4)		0.314
No	-	-		
No answer	2 (100.0)	-		

Table 2. Profile and institutionalized elderly health care. Palmas, Paraná, Brazil, 2014.

Health conditions	N	%
Health assessment		
Not good	8	38.1
Good	11	52.4
No answer	2	9.5
Satisfied with the health service		
No	-	-
Yes	19	90.5
No answer	2	9.5
Participation in groups/activities		
No	6	28.6
Yes	15	71.4
Has a disease		
No	-	-
Yes	21	100
Makes use of medicines		
No	-	-
Yes	21	100

Table 3. Classification of pressure ulcer risk in institutionalized elderly. Palmas, Parana, Brazil, 2014.

Risk classification of PU	N	%
No risk	9	42.8
Low risk	7	33.3
Moderate risk	1	4.8
High risk	3	14.3
Very high risk	1	4.8
Total	21	100.0

From the subjects participating in group activities it was found that 53.3% had no risk for developing PU. With regard to satisfaction with the service provided in the LTI, 52.6% of satisfied seniors presented risk of developing PU. No significant associations were found between the risks of developing PU and analyzed nominal variables (Table 5).

Discussion

This study represents a breakthrough in understanding the risk of PU in the elderly in the context of the LTIS in Brazil, given the scarcity of studies on the subject. And yet, it has as main results: the description of an elderly profile in the LTI studied without family support as possible picture of the elderly community, which will increasingly require this type of institution. In addition, the results of this study show that the institutionalization is not a *sine qua non* condition for reduction of health status, since the elderly gave good evaluation of their health and expressed satisfaction with the service provided in the LTI.

In regard to the PU, the results reveal that most seniors showed no risk or low risk presented for the development of PU. In addition, the study results demonstrate that the use of the Braden Scale is valid and relevant in the institutionalized context, outside the hospital.

In designing the socio-demographic profile, the data from this study differ from other studies that have shown that women are the majority among the institutionalized elderly (Nunes et al., 2010; Oliveira, Gomes, & Paiva, 2011).

Regarding age, marital status and education this study is consistent with the reality of other researches in the area (Nunes et al., 2010; Santos, Alves, Alves, Teles, & Fonseca, 2012).

As for the race, there are few studies that analyze this characteristic among institutionalized elderly. Gonçalves et al. (2010) when delineating the socio-demographic profile of institutionalized elderly of Rio Grande do Sul, southern Brazil, showed that 90% of the elderly were white. Similarly to the present study, this data reflects the majority race profile in this region.

Another important aspect of this study refers to income, as two studies conducted in Brazil have shown that institutionalized elderly had no source of income (Santos et al., 2012; Vivan & Argimon, 2009).

It should be emphasized that in this study it was considered as a source of income the social benefit provided by the Brazilian social security system, which ensures the continued payment of a minimum wage to all elderly who have no income or family support. Although not considered a form of retirement, this social benefit is guaranteed until the end of life of the elderly and may help to meet the economic needs for the institutionalized elderly (Lei n. 8.742, 1993).

However, it should be noted that the minimum wage may be insufficient to meet the specific needs

of elderly health, leisure and others. Especially for elderly bedridden with illnesses that require continuous and specialized care, as in the cases of PU. Thus, a tool such as the Braden Scale can help prevent injury, which would increase costs, and to qualify the care provided to institutionalized elderly.

In Brazil, 67% of LTI for older people are philanthropic, only 6.6% are public and the funding source thereof is mostly from residents or family members. The national survey conducted by Camarano and Kanso (2010) pointed out that the government public financing is 20% in the context of LTIS, and it is considered inexpressive and insufficient.

Regarding religion, the Catholic majority reflects the national population profile and confirms the higher prevalence of Catholics found in the study of Vivan and Argimon (2009). The importance of religion for coping with complex health conditions is widely recognized (Vivan & Argimon, 2009). A literature review study found that this population maintains a close relationship between quality of life and spirituality, with a positive impact on aging and health of the elderly (Lucchetti, Granero, Bassi, Nasri, & Nacif, 2011).

The identification of the causes for institutionalization showed the family abandonment as the main reason (62.7%). In situations of abandonment and functional limitations, LTIS represent a benchmark for the elderly maintain dignified life. The family abandonment of the elderly may show three important aspects that should be considered: 1) the need for qualified LTIS to this demand of the elderly; 2) the small number of LTIS in most municipalities that are lacking in clarity, and as result, the lack of effective health policies and regulation of existing services for the institutionalization of the elderly and, 3) the elderly resilience may explain the positive self-assessment of health, even in situations of abandonment, and even determine the coping profile of this situation, making them satisfied by the mere fact of being institutionalized and count on some kind of support, not necessarily the ideal to meet their needs.

In Brazil, the literature shows that non-institutionalized elderly have more consolidated network of social support, especially by family members, and that this network constitutes a positive aspect to the quality of life of the elderly (Rodrigues & Silva, 2013). A study conducted in a LTI in the southwestern region of Brazil identified that the main reason (51.6%) for institutionalization is the lack of family support, i.e. the unwillingness to take care of the elderly family member, followed by

disease of the elderly with 29%, which corroborates this study (Silva, Cristianismo, Dutra, & Dutra, 2013).

Participation in groups or activities was reported by 71.4% of the elderly, even though 100% of them reported having a chronic disease and medication use. Paradoxically, in the study of Menezes and Bachion (2008), only 37.9% of the institutionalized elderly participated in the activities regularly.

This finding is positive, since the participation in activities is beneficial for both the functional capacity and autonomy of the elderly, as for the interaction with other seniors. In addition, the lack of activity and mobility is a risk factor for diseases and disorders, including the PU (Souza & Santos, 2007).

Similarly to the results of this study, Aires et al. (2009) showed that the use of medication is widespread among the elderly. In their study, 83.9% of institutionalized elderly reported the presence of morbidity and the same percentage of elderly patients used medication.

It is known that the use of drugs, although they are often required in aging, should have adequate monitoring, as it increases the risk of falling and other health problems in the elderly. In a study that related institutionalized elderly age to drug use, Oliveira and Novaes (2012) demonstrated that the greater the age, the greater the number of prescription drugs. Elderly of 60 to 64 years old consumed one to three medications, and seniors over 65 took more than three medications, in increasing proportion with advancing age.

The large number of drugs consumed by the elderly may be related to the lack of preparation of the professional who prescribed, of the health services and even of the general public to work with the elderly and the characteristics of aging, using only medications to treat conditions. They are frequent among the elderly such as insomnia, anxiety and depressive disorders (Oliveira & Novaes, 2012).

Moreover, Nogueira et al. (2010) showed that the increase in the number of drugs leads to an increased impairment of functional capacity in the elderly. In this context, despite the widespread use of drugs among the elderly evaluated in this study, with more than half of them presenting some risk for the development of PU, none of the elderly had pressure ulcer. This demonstrates that, despite the risk, there are interventions that can prevent the emergence of this disease.

It should be noted that it is not possible to profile the prevalence of PU in LTIS in Brazil, as few studies have been conducted on this topic. In

Fortaleza/CE/Brazil (Freitas et al., 2011) it was found a PU prevalence of 18.8% in institutionalized elderly. In São Paulo, two studies published in 2009 showed a prevalence of 10.95 and 25.9% (Chacon, Blanes, Hochman, & Ferreira, 2009), and such data are contrary to this study.

The PU expand the financial costs for the institution, worsens the health status of the elderly and leads to a decrease in the quality of life of these, due to pain, increased risk of infections, smelly, discomfort, among other things that directly affect their way of living and along with others (Chacon et al., 2009; Freitas et al., 2011). Thus, preventing PU is of paramount importance to the quality of life of institutionalized elderly. It is emphasized in this study that 52.4% of seniors rated their health as good and no elderly has PU, i.e. this data can be linked.

The results of this study demonstrate that the Braden Scale is a resource that should be employed in the elderly daily care in LTI for both the prevention of PU and for its proper management. The scale of usefulness is not limited to its total score; in contrast, it is increased with the analysis of its subscales that has the ability to define the risk factor for the development of PU (Zambonato, Assis, & Beghetto, 2013).

Analysis of the subscales showed that, in this study, moisture, activity, and mobility were the most affected and responsible areas for higher degree of risk for development of PU by the institutionalized elderly. The identification of these factors favors the investigation and intervention in their determinants.

Among the complications that may be related to skin moisture are urinary and fecal incontinence and excessive sweating, which require great attention from the staff. It is known that there is an important link between humidity and occurrence of PU, because the prolonged skin exposure to moisture can lead to maceration and weakening of the superficial skin layers (Fernandes & Caliri, 2008).

By studying adult patients admitted at the Clinical Hospital of Porto Alegre, Rio Grande do Sul State, Brazil, the researchers found that any reduction in activity level increased by eight times the risk of developing PU (Zambonato et al., 2013). In another study in an LTI, the sub-scale activity was the second largest predictor of PU, second only to friction and shear (Lahmann, Tannen, Dassen, & Kottner, 2011). In the present study, 71.43% of seniors were participating in community groups and activities offered by LTI (stretching, walking outdoors), fact which may be related to the not presence of PU, although more than half of the elderly had some degree risk.

The shortage of mobility is one of the most important risk factors for the development of PU due to continuous pressure on bony prominences, which causes tissue destruction (Marin et al., 2012).

Despite not having been the subscale with more changes, it is noteworthy that no sensorial perception makes the elderly worthy of greater attention, since they often are unable to report the discomfort and therefore become more vulnerable to developing PU (Silva et al., 2013).

The proper nutritional status of older people positively contributes to the non-appearance of PU (Fernandes & Caliri, 2008). The results obtained by Braden scale in this study show that the nutritional factor is suitable for most seniors, which corroborates the literature (Fernandes & Caliri, 2008).

The shear strength is related to mobilization or incorrect positioning, leading to damage in the deep tissue (Paranhos & Santos 1999; Souza et al., 2010). In this study the majority of patients (47.6%) had no problems with friction and shear, which contributes to the non-appearance of PU, and may also be related to good assistance to those elderly with respect to care placement and mobilization.

This study also compared the elderly with and without risk to develop PU with the assessment of health, group participation and satisfaction with the LTI. It was shown that even at risk for developing PU, these seniors evaluate their health as good, participate in groups and activities and are satisfied with the service provided in the LTI. This shows that self-perception about the health status involves complex subjective aspects that may favor the confrontation of risk situations, despite the installed conditions for the risk of PU development by the elderly.

The literature suggests that good health of the elderly is related to the improvement in quality of life, which also suffers positive impact when the elderly participate/perform some activity (leisure and/or physical) and social interaction (Llobet, Àvila, Farràs, & Canut, 2011; Santos, Alves et al., 2012), emphasizing that this activity interferes with the preservation of functional capacity (Aires et al., 2009; Cipriani, Meurer, Benedetti, & Lopes, 2010), which reduces the risk of developing PU.

The use of the Braden Scale (BS) as a tool to prevent the onset of PU is indispensable, since the BS allows to recognizing the risk of each patient and so on can be implemented in advance nursing actions appropriate to this risk (Gomes, Bastos, Matozinhos, Temponi, & Velásquez-Meléndez, 2011).

Finally, the study has limitations that should be highlighted. First, due to the reduced elderly population under investigation, the relationship between cause and effect cannot be inferred, but its advance is not limited to the number of individuals, since this study do not intend to set standards for pressure ulcer evaluations. Furthermore, there is the possibility of overestimating the responses of some variables such as health satisfaction.

Conclusion

The results of this study reveal a public health problem and provide reflections on the risk assessment of PU in institutionalized elderly. In addition, showed that although more than half of seniors surveyed have some degree of risk for developing PU, none of them presented the grievance. It indicates that the participation of older people in community groups and activities can improve the degree of activity of the elderly and facilitate mobility, influencing in reducing the risk of developing PU. In addition, the absence of PU and the positive evaluations of the elderly may be a result of the assistance provided.

The Braden Scale becomes an important instrument for determine the degree of risk for developing PU, and identify the factors that affect the appearance of this disease. Its results also enable the planning and implementation of actions to improve the health condition of the elderly, especially in institutionalized elder who presents poor health and low socio-demographic conditions, as well as providing support for future studies about the prevalence of PU in this audience.

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