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TRANSLATION AND CROSS-CULTURAL ADAPTATION OF THE EVALUATION OF SIDERAIL USAGE INSTRUMENT

TRADUÇÃO E ADAPTAÇÃO TRANSCULTURAL DO INSTRUMENTO *EVALUATION OF SIDERAIL USAGE*

TRADUCCIÓN Y ADAPTACIÓN TRANSCULTURAL DEL INSTRUMENTO *EVALUATION OF SIDERAIL USAGE*

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Objective: to translate and adapt cross-culturally the Evaluation of Side Rail Usage instrument to the Brazilian Portuguese. Method: methodological research with four-step translation and cross-cultural adaptation of an instrument. Results: in the first stage, two translations were performed; in the second, a consensual meeting was held with two translators and the authors of the study to discuss discrepancies and generate a synthesis version; in the third stage, the synthesis version was backtranslated into English by two translators to verify equivalence with the original version; and in the fourth stage, a committee of 25 professional judges from the health area analyzed the synthesis version. The results showed an instrument Content Validity Index of 0.97 and a Content Validity Coefficient of 0.93. Conclusion: the translation and adaptation of the Evaluation of Side Rail Usage instrument into Brazilian Portuguese presented good content validity indexes.

Descriptors: Bed. Falls. Patient Safety. Physical Restriction.

Objetivo: traduzir e adaptar transculturalmente o instrumento Evaluation of Siderail Usage *para a língua portuguesa do Brasil. Método: pesquisa metodológica de tradução e adaptação transcultural de um instrumento em quatro etapas. Resultados: na primeira etapa foram realizadas duas traduções; na segunda, foi realizada uma reunião consensual com duas tradutoras e as autoras do estudo para discutir discrepâncias e gerar uma versão síntese; na terceira etapa, a versão síntese foi retrotraduzida para o inglês por duas tradutoras para se verificar a equivalência com a versão original; e na quarta etapa, um comitê de 25 juízes profissionais da área de saúde analisaram a versão síntese. Os resultados demostraram um Índice de Validade de Conteúdo do instrumento de 0,97 e um Coeficiente de Validade de Conteúdo de 0,93. Conclusão: a tradução e adaptação do instrumento* Evaluation of Siderail Usage *para a língua portuguesa do Brasil apresentou bons índices de validade do conteúdo.*

Descritores: Leito. Quedas. Segurança do Paciente. Restrição Física.

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Objetivo: traducir y adaptar el instrumento Evaluation of Side Rail Usage *al idioma portugués brasileño. Método: investigación metodológica de la traducción y adaptación transcultural de un instrumento en cuatro pasos. Resultados: en la primera etapa, se realizaron dos traducciones; en la segunda, se realizó una reunión consensuada con dos traductores y los autores del estudio para discutir discrepancias y generar una versión de síntesis; en la tercera etapa, la versión de síntesis fue retrotraducida al inglés por dos traductores para verificar la equivalencia con la versión original; y en la cuarta etapa, un comité de 25 jueces profesionales del área de salud analizó la versión de síntesis. Los resultados mostraron un índice de validez de contenido del instrumento de 0,97 y un Coeficiente de Validez de Contenido de 0,93. Conclusión: la traducción y adaptación del instrumento de* Evaluation of Side Rail Usage *al portugués brasileño presentó buenos índices de validez de contenido.*

Descriptores: Cama. Caídas. Seguridad del Paciente. Restricción Física.

Introduction

Studies show that falls in hospitalized patients are associated with increased indiscriminate use of lateral bed railings. In addition, the use of side rails provides severity in adverse events related to falls[1]. Furthermore, adverse events substantially increase health care expenses, with estimated 13 to 16% of hospital costs[2].

Patient safety is a policy and practice instituted to reduce the risks of unnecessary damage associated with care and health[3]. In Brazil, a study conducted in four hospitals, three public and one of the supplementary network, showed a prevalence of adverse events of 12.8%, of which 42.7% were considered preventable[4].

Adverse events are incidents that result in damage to health and are also defined as unintentional injuries resulting from the care provided to patients, not related to the natural evolution of the underlying disease, and which cause measurable lesions in the affected patients, death or prolonged hospitalization time[1].

Since 2004, the theme of patient safety has been systematically developed by the National Health Surveillance Agency (ANVISA, in Portuguese), and has been reinforced with the publication of the guidelines established by the National Program for Patient Safety (PNSP, in Portuguese). To institutionalize safe practices, health facilities were determined to build local patient safety plans through the formation of Commissions, which are the Patient Safety Centers. Among the protocols mentioned, falls that result in damage and are a prevalent patient safety problem stand out[5].

Containment measures have been used to prevent falls and control patients with behavioral or motor disorder. To allow continuity of treatment in the hospital environment, mechanical restraint has been performed mainly by the use of side rails to avoid falls[6].

A study observed that most of the reported falls were caused by loss of balance (26.92%), disorientation (17.31%), failure/misuse of equipment (17.31%) and weakness (15.38%)[7].

Bedside rails are also considered a form of restraint when they restrict freedom of movement and prevent the person from leaving the bed when he/she wishes, regardless of his/her ability to do this safely. Side rails have been correlated with adverse events that include agitation, urinary and fecal incontinence, damage and deaths from imprisonment[8].

Evidence in the literature suggests that side rails should not be used as mechanical restraint; however, this fact has been frequently ignored, compromising patient safety, dignity and autonomy[9].

Damage is more frequent and occurs when patients try to climb the bars to get out of bed[10]. The increased use of side rails did not result in a decrease and recurrence in the number of falls, but increased the fall with severe injuries.

The present study aims to translate and adapt cross-culturally the Evaluation of Side Rail Usage[9] instrument to the Brazilian Portuguese.

Method

This is a methodological research of translation and cross-cultural adaptation of the Evaluation of Side Rail Usage instrument with quantitative approach.

The Evaluation of Side Rail Usage instrument was developed in the United States (US) to evaluate the use of protection side rails in long-term institutions. It is subdivided into four parts, namely: patient (or resident) preference; determination of the risk of damage (e.g., history of falls and presence of bruises and injuries caused by the side rails); risk of bed fall (which considers factors such as mobility difficulty, balance, mental confusion, among others); and evaluation of alternatives (recommendations to reduce the need to use containment and side rails).

The instrument was chosen due to its free availability by electronic means, without burden, and by the possibility of using it in different cultural contexts. To start the process of translation and cross-cultural adaptation, it was necessary to contact the lead author, Dr. Elizabeth Capezuti, by e-mail to obtain her authorization. The author allowed the research to be carried out in Brazil and the results obtained were submitted to the author's consent.

The study complied with the following steps: translation of the instrument, synthesis of versions, back translation and review of synthesis by experts[11-12].

Step 1 – Instrument's translation

Translating an instrument from the source language to the target language is a complex process, which requires care, to obtain a final version suitable for the new context and that does not modify the characteristics of the original version.

It is suggested that the translation be performed by at least two bilingual translators, minimizing the risk of linguistic, psychological, cultural and comprehension biases[12].

The original version of the instrument from English to Portuguese was translated by two bilingual translators separately, whose mother tongue was the Brazilian Portuguese, fluent in the English language. Then came the two versions T_1 and T_2.

One of the selected translators is a representative of the health area, so she had knowledge about the theme. The other translator had a degree in Language and had no technical knowledge about the subject. At this step, each translator elaborated a version of the instrument.

Step 2 – Synthesis of the versions

With both translations, the synthesis of the versions was created. For this, the two translations were compared as to the existence of semantic, idiomatic, conceptual, linguistic and contextual discrepancies. In person, the researchers and the two translators performed the synthesis of the two translations T_1 and T_2, resulting in version T_{12} after consensus meeting.

Step 3 – Back translation

After the new translated version and without the influence of the original version, the instrument was back translated into the original language (English). This step is necessary to ensure the validity of the instrument and for it to accurately reflect the content of the original version.

Two back translations were performed by bilingual translators who have the English language as their mother tongue. The back translators should not be informed about the subject addressed in the instrument and, preferably, should not be in the health area. Thus, information bias was avoided, as well as unexpected meanings of the items of the instrument emerged[14-15].

In this study, the synthesis version of the instrument in Portuguese was back translated into English by two independent, foreign translators, who have English as their mother tongue and fluency in Portuguese. The translators did not participate in the initial translation, did not have access to the original version of the instrument

and were not informed about the research objective.

This step verified whether the Portuguese version reflected the content of the original version, resulting in the English version of the instrument constructed by the translators individually. This version was sent to the author of the scale for evaluation.

Step 4 – Review of the synthesis by experts

In this step, cross-cultural equivalence of the instrument was performed by a committee of experts. All versions of the instrument, including instructions, were consolidated, and the pre-test version was obtained. The discrepancies found were resolved by consensus.

The committee evaluated the equivalence between the translated versions and the original instrument in each of the following areas: semantics, idiomatic, experiential and conceptual.

The experts' committee was composed of nurses, health professionals and scholars from the restraint area who met at least two of the following criteria: minimum experience of three years in teaching or practicing Mechanical restraint, Prevention of falls, and Patient safety; mastery of Portuguese and English languages; domain of research methodology; and have participated in research in the nursing area and in the area of construction and validation of scales and instruments.

In view of the lack of a recommendation regarding the number of experts for the type of validation desired, a number of 30 participants were stipulated (minimum number indicated for statistical analyses). The experts were selected in person or by e-mail after research in the Lattes curriculum. Twenty-five health professionals agreed to participate in the study. Experience and qualification in the subject studied were considered.

The experts participated in a meeting to present the research, fill out an evaluation form of the instrument in English and Portuguese, individually, and clarification of doubts. The form used a Likert scale, with the following options: (1) strongly disagree, (2) partially disagree, (3) partially agree, (4) strongly agree, and a space for observations and suggestions.

Data analysis

For data analysis, a database was constructed using the Microsoft Excel 2013 program and statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS) program, version 22.0.

To characterize the sample of the judges, descriptive statistics based on graphs, frequency distribution and calculation of statistics (mean, median, standard deviation, maximum and minimum, coefficient of variation) of quantitative variables were used.

For content validation for each item and for the global instrument, the Content Validity Index (CVI) was calculated. The CVI measures the proportion or percentage of judges who agree on certain aspects of the instrument and its items[16].

In addition to the CVI, the Content Validation Coefficient (CVC) was calculated to quantify and interpret the judgment of items and scales by a group of experts in the construct that the instrument proposes to measure[16]. CVC values accepted to consider the quality of an aspect or a judged item should be greater than 0.80.

This study was approved by the Research Ethics Committee, under Opinion n. 3.013.114/2018, following the recommendations of Resolution n. 466/12 of the National Health Council.

Results

The study had a sample of 25 judges, among whom 4 were male (16.0%) and 21, females (84.0%). Judges-nurses predominated in the sample 20 (80.0%), medical judges 2 (8.0%) and 1 judge of each of the respective courses: Law, Physiotherapy and Pedagogy. The majority had 7 to 11 years of education (39.1%).

The judges evaluated 40 items of the questionnaire, answering each item according to a Likert scale, for analysis of the CVI and CVC, presented in Table 1.

Table 1 – Distribution of content validity index and content validity coefficient indexes for each item and global. Rio de Janeiro, Rio de Janeiro, Brazil – 2019 (continued)

Items	CVI	CVC
Patient/Room	0.92	0.87
Patient preference	1.00	0.93
Is the patient able to voice their choice about siderails?	1.00	0.92
Has the patient signed a preference form indicating their informed choice?	1.00	0.92
If 2 = yes, how many rails does the patient prefer?	1.00	0.94
Injury Risk Determination	0.96	0.96
Does the patient have a history of falls in general?	1.00	0.98
Does the patient have a history of falls from the bed?	0.96	0.96
Does the patient make attempts to climb over or around side rails?	0.96	0.93
Has the patient ever become entrapped in the side rail or between the mattress and the side rail?	0.96	0.96
Has the patient sustained bruises, skin tear or laceration from a metal side rail?	1.00	0.89
Fall From Bed Risk	1.00	1.00
Is the patient immobile (comatose, paralyzed, or no spontaneous movement)?	1.00	0.98
If immobile, does the patient lean to one side?	1.00	0.93
If immobile (lower body) or mobile, does the patient use rail to adjust position in bed?	1.00	0.96
If mobile, does the patient make any attempts to get out of bed at all?	1.00	0.96
If mobile, can the patient get in and out of bed safely without any human assistance or assistive device?	1.00	0.95
If mobile, does the patient have difficulty with balance, trunk control?	1.00	0.94
If mobile, does the patient have decreased safety awareness, due to confusion or judgment problem?	0.96	0.89
Individual concerns	1.00	0.95
Additional assessment	1.00	0.98
Department/Assessment Indication	0.92	0.92
Nursing: Nighttime monitoring of patient's movements with both rails raised?	0.96	0.88
Nursing: Nighttime monitoring of patient's movements with or without one rail?	0.92	0.87
Occupational Therapist/Physical Therapist evaluations for transferring and/or ambulation skills?	0.92	0.85
Assessment of side rails usage	0.96	0.97
Assessment of alternatives	1.00	0.94
Problem	1.00	0.94
Provide ringer within reach	0.92	0.91
Schedule bathroom assistance at night	0.92	0.90
Reduce time in bed	1.00	0.94
Increase monitoring frequency	0.96	0.95
Place bedside support devices	1.00	0.95
Restorative care to increase standing and walking skills	1.00	0.96
Use half or a quarter of a side rail for bed mobility or to enable transfer	1.00	0.95
Provide pillows or cushions as bed boundary markers	1.00	0.96
Provide cushion or padded protector on the side rail (See item 1 or 2)	0.96	0.95
Provide bed alarm	1.00	0.97
Keep bed low	1.00	0.98
Keep a mat on the floor near the bed (See item 1 or 2)	1.00	0.96
Others	1.00	0.97
Recommendations of the Committee for Prevention and Reduction of Restraint and Use of Side Rails	0.96	0.90
No side rails are indicated because the resident is able to get in and out of bed safely	1.00	0.88
The side rails are indicated because the patient is immobile and makes no attempt to leave or turn to the side	0.96	0.93

Table 1 – Distribution of content validity index and content validity coefficient indexes for each item and global. Rio de Janeiro, Rio de Janeiro, Brazil – 2019 (conclusion)

Items	CVI	CVC
Recommendations of the Committee for Prevention and Reduction of Restraint and Use of Side Rails	0.96	0.90
An entire side rail is indicated to aid mobility in bed. Indicate right and left	0.96	0.91
Both (entire) side rails are the least restrictive restraints.	0.92	0.90
Both (entire) side rails are not used as restraint, as the patient is immobile	0.88	0.88
Alternative to side rails	1.00	0.99
Multidisciplinary assessments for bed problems and/or maintenance (locks, side rail flush with the mattress)	0.84	0.80
Signatures of participating members of the prevention and restraint reduction committee	1.00	1.00

Source: Created by the authors.

Legend:
CVI: Content Validity Index.
CVC: Content Validity Coefficient.

A general CVI of 0.97 was observed. The CVC to evaluate the degree of agreement of the experts of the global study was 0.93.

Also during the meeting of the committee of judges, qualitative contributions were obtained with suggestions for the validation of the instrument presented in Chart 1.

Chart 1 – Qualitative suggestions from the committee of judges. Rio de Janeiro, Rio de Janeiro, Brazil – 2019 (continued)

BT1-2 **Version**	**Suggestions from the committee of judges**
Resident/room	Patient/bed
Capable of	Able to
Preference form	Informed consent form
None Previous, 0.1.2	Add 3 and 4 side rails
Risk determination	Risk assessment
History	Medical chart
Go over/around	Climb/enter
Imprisoned	Stuck
Features	Adds or already presented
From a Rail/Presents	Caused by a side rail (removed the metal term/ already presented)
Leans	Leans over
Mobile	With mobility
Human assistance	Help
Balance, trunk control	To balance or control the trunk
Decreased Safety Awareness/Confusion/ Judgement Issues	Reduction in the perception of Safety/Cognitive/ difficulties in judgment
Individual concerns/anything/find it/useful/ side rails	Individual considerations or observations/ Something/think/that might help/add how much/ remove side
Department/Assessment	Sector/Unit
Monitoring	Monitoring in
A side rail	One of the side rails
Occupational Therapist and Physical Therapist Assessments or Walking Skills	Multidisciplinary assessments/and/or walking abilities

Chart 1 – Qualitative suggestions from the committee of judges. Rio de Janeiro, Rio de Janeiro, Brazil – 2019

(conclusion)

BT1-2 Version	**Suggestions from the committee of judges**
Occupational therapist/physiotherapy/ equipment problems/describe	Multidisciplinary assessments/maintenance issues/ locks/Indicate
Describe	Indicate
Refer to numbers	Locate the numbers
Alternative interventions	Alternatives of interventions
In-Range Call Bell or Bulb Bell	Provide ringer within reach
Programmed?	Schedule
Decreased time in bed?	Reduce time in bed
Increased?	Increase
Placing?	Put on
Care?	Add institute care
Half?/allow	Add Use half/enable
Pillows	Add Provide pillows
Cushion?	Add Cushion
Low bed?	Keep bed low
Mat	Mattress
Restriction/recommendations of the prevention committee and bed rail reduction	Recommendations of the Committee on prevention and reduction of restraint and use of side rails
Side bar	Side rail
Is the resident immobile and making no attempt to leave or lean to one side?	Side rails are indicated because the patient is immobile or makes no attempt to leave or turn
An entire side rail indicated to aid mobility in bed?	Is an entire side rail indicated to aid mobility in bed?
Full length	Entire
Are both full-length side rails not used for restraint, as the resident is immobile?	Both (entire) side rails are not used as restraint because the patient is immobile

Source: Created by the authors.

Note:
BT1-2 Back translation: first and second versions.

Discussion

The evaluated instrument allowed a detailed and comprehensive approach to evaluate patients regarding the use of side rails. It requires nurses to fill out a form about the physical and psychological state of the patient, considering the organization of the environment, and despite its objective, it requires some time from nurses to carry out the investigations. Another limit of the instrument is that it was not designed for repeated use, and the nurse must decide when to reapply it. However, future time studies may help in this deepening. In addition, it also has a qualitative evaluation, that is, it does not categorize or gives weight to indicate the use of side rails[10]. This can both be positive and give the nurse freedom of decision.

The study demonstrates that the translation and the process of cultural adaptation produced an instrument capable of assisting nurses in deciding the use of bedside rails, evaluating the lowest possible degree of mechanical restraint to the patient. It takes into account the patient's preference, the risk of fall/injury, mobility and the need for side rails, in addition to proposing to the nurse possible interventions for the non-use of the side rails.

According to the qualitative suggestions of the judges, some terms were modified and others, added. "Patient" was chosen in place of "resident" and "bed" instead of "room", which are the most used terms in the hospital area. In the item referring to the signature of a preference form on side rails, the judges preferred to use "informed consent form", which is understood as a voluntary decision, performed by an autonomous and capable person, after informative and deliberative process, aiming at the acceptance of specific treatment or experimentation, knowing its nature, its consequences and its risks[18].

Regarding the item risk determination, the judges chose only to adapt the term for risk assessment. The construct deals with the evaluation of risks in general, to which the patient is submitted when using the rails, such as falls, skin lesions and entrapment.

Rails can pose an inherent risk to patient safety, particularly when the patient is elderly and disoriented, since they are susceptible to being trapped between the mattress and the rail, in addition to sliding between the rails and their segments or slipping between the end of the bed and the raised side rails. Evidence indicates that half rails and whole rails represent a risk of entrapment, as well as falls, because they lead patients to climb the rails to leave[19]. When trying to get out of bed by any of these routes, the patient runs the risk of being trapped, getting hitched or falling from a higher height because of the elevated railings, with the possibility of suffering a major injury or even death, compared to a fall resulting from a lowered bed, without raised side rails.

When it came to the risk of bed falls, the item "If mobile, does the patient have decreased safety awareness, due to confusion or judgment problem?" was changed to "If mobile, does the patient have a low perception of safety due to (mental) confusion or judgment problems?". Impaired mental status, confusion and disorientation are often cited as causes of falls in elderly inpatients[20].

The decision to use bed rails should be made in conjunction with the patient's will, based on the principles of safe care and restraint mitigation. The evaluation of the patient by the health team should include: the problem presented (the need for using rails) and alternative strategies; the individual risks of damage to the patient regarding the use of rails; and the reduction of damages if the decision is made to use the rails[21].

In the item evaluations of occupational therapist/physical therapist assessment or walking skills, the judges chose to use multidisciplinary assessments/and/or walking abilities, in order to expand the possibility of qualified professionals who could perform this evaluation.

The qualitative suggestions of the judges were valuable and helped the cross-cultural adaptation of the instrument. We mention, for example, that in all items that presented the word "resident", it was replaced by "patient", since the instrument is being adapted for use in the hospital area. In the pre-test phase of the instrument, performed with nurses from hospital practice and with hospitalized patients, it was important to observe the understanding, difficulties, doubts about the instrument, clarity and results that the instrument is able to generate when applied to the expected profile. It is suggested that, in the future, the instrument can be tested with a larger sample.

Each nurse was asked to decide how many rails the patient should use and then use the instrument in the same patients. When measuring the coefficients of agreement between the items How many rails does the patient prefer? and Subjective evaluation of nurses in relation to the rails, it was observed a weak agreement.

The highest correlations were presented in the item "no lateral rail is indicated and in the patient's choice by no rails (zero rail)". This is because this would be the assessment with the lowest degree of discrepancy and the easiest conceptually and clinically to be correlated.

In the patients' profile, women have a higher risk of being restrained. This can be explained because women have greater health impairment and age, as well as the issue of gender, which deserves to be better investigated.

Concerning the nurses' profile, there was no characteristic that validly associated the decision

to use lateral rails. Specialist training was only the most common and probably happened at random.

On the construct analysis, some significant values were observed that, when confronted with the values of the content validity index, helped in the decision to remove items for the construction of the final instrument. Finally, the feasibility of the instrument was evaluated.

Practicality is one of the criteria that helps in the evaluation of the quality of instruments. In general, practicality problems include problems with administration, such as very short time available for answers or excessive number of items, complicated instructions and confusing descriptions of the items, generating problems with interpreting the questions and recording the score[20].

The results of the feasibility of the Brazilian version of the instrument "Evaluation of the use of rails" showed that the nurses strongly agreed that it would be interesting to count on this instrument in their clinical practice. Asked about the understanding of the filling instructions, 86.7% were in agreement, indicating the need to review the items. However, it is important to report that no nurse marked the item "I have no opinion", which demonstrates that all pre-test participants were willing to contribute to the research.

It is important to highlight that the application of the instrument refers to the analysis of the risks and benefits of using rails, with evidence that about 20.0% of all hospital falls are from the bed. Patients have positive attitudes towards the use of rails when necessary for their safety, but excessive use of rails, as well as their abolition without proper evaluations, increases the risk of falls and injuries, making the instrument a relevant strategy for clinical decision-making of nurses[22].

On the other hand, the rails are inadequate and ineffective for patients who want to get out of bed and can be actively harmful to patients who combine severe confusion with sufficient mobility. Moreover, the rails are not suitable for independent patients with mobility and for confused patients due to the risk of climbing the rails[22].

The risks and benefits of using rails should be analyzed by individual evaluation of each patient. The rails have several functions including safety in transportation, comfort and safety for the patient, physical barrier to remember the limits of the bed, support for bed mobilization, repositioning and help to get in and out of bed[22].

An individualized evaluation is necessary, which can be obtained through the instrument to assess the need for using side rails, proposed in this study.

The items that should be part of this assessment: reviews of the history of the resident/patient (mental status, sleep, mobility, incontinence, pain, history of falls and injuries), reasons why professionals decided on the use of rails, with record in the medical charts; physical examination (height to check if the patient has short legs, weight, vision problems, amplitude movements, if he/she needs to go to the bathroom at night, pain assessment); features of the bed/bathroom environment, lighting; identify specific risk factors for the patient[10].

A care plan should be developed after this assessment. The rails are not indicated for adults or the elderly who are confused, since they do not understand their proposal or when they report that the rails leave them cornered[23].

The side rails are not considered restraint if they are used in a patient who is not functionally capable of making voluntary or involuntary movements (although their function may be questioned in this case); if the patient wishes to use the side rails as an aid in mobility (for example, a side rail to aid in rotation) and can do so competently; if the patient who requests them as a suggestion of assistance in the environment (to remember not to get up without help) and uses them for this.

On the other hand, the rail is considered restraint if the patient is trying to get out of bed or wants to get out and is prevented from doing so by the use of both side rails (regardless of mobility competence); if the patient or companion insists on side rails for any reason, but the patient has

difficulty to get out of bed safely; or whether the rail prevents or limits the patient from getting out of bed[21]. Those who received sedation of any kind and are not showing continuous signs of attempts to leave the bed without help, as well as obese or using pneumatic mattresses, should also not use rails[23].

The rails can be used for patients who struggle in bed due to delirium, epilepsy or are in an induced coma. Although the patient's state of confusion is not a contraindication to using rails, confusion combined with sufficient mobility may be a risk of the patient climbing the bed rails. Even so, most policies in the United Kingdom recommend a very careful evaluation for the use of rails in patients with cognitive disorders[22].

This study has relevance to the clinical practice of nurses, contributing to decision-making based on reasoning/judgment directed to the quality of care, based on the best practical evidence. It also contributes to the Patient Safety Policy in the implementation of goal 6 (reducing the rates of fall), by producing a useful instrument for assessing and determining the risks inherent to patients related to falls and the use of lateral bed rails. The limitation of the instrument requires nurses to fill out a form on the physical and psychological state of the patient considering the organization of the environment. Despite being objective, it requires some time from nurses to be completed. Moreover, the instrument is not designed for routine use, and nurses must decide when they can reapply it. However, future time studies may help in this deepening. As it also has a qualitative evaluation, it does not categorize or assign weight to indicate the use of rails. This can be both positive, by providing freedom of decision to nurses, and it can be a limitation.

Conclusion

The translation and adaptation of the Evaluation of Side Rail Usage instrument into Brazilian Portuguese resulted in an instrument for evaluating the use of side rails in hospitalized patients. The instrument presented good content validity indexes. Its validation in the clinical practice of nurses can help in the decision-making and evaluation of patients regarding the use of side rails, thus contributing to their use with an adequate evaluation.

Collaborations:

1 – conception, design, analysis and interpretation of data: Teresa Cristina Brasil Ferreira, Rosimere Ferreira Santana and Thalita Gomes do Carmo;

2 – writing of the article and relevant critical review of the intellectual content: Márcia Veríssimo de Souza, Priscilla Alfradique de Souza and Thalita Gomes do Carmo;

3 – final approval of the version to be published: Teresa Cristina Brasil Ferreira, Rosimere Ferreira Santana, Thalita Gomes do Carmo, Márcia Veríssimo de Souza and Priscilla Alfradique de Souza.

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