

The practice of containment in the elderly: an integrative review

A prática da contenção em idosos: revisão integrativa

La práctica de la contención en ancianos: revisión integradora

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Keywords

Aged; Restraint physical; Geriatric nursing; Nursing care; Health of the elderly

Descritores

Idoso; Restrição física; Enfermagem geriátrica; Cuidados de enfermagem; Saúde do idoso

Descriptor

Anciano; Restricción física; Enfermería geriátrica; Atención de enfermeira; Salud del Ancian

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Abstract

Objective: To analyze the literature evidence on the practice of containment in the elderly.

Methods: Integrative literature review, searching for primary studies published from 2013 to 2017, conducted in the electronic databases of LILACS and MEDLINE, in the months of May and June of 2018. The searches were obtained by crossing the descriptors and words: containment; restriction; physical restraint; and elderly.

Results: A total of 17 articles were included, and the analysis indicated that the available evidence in the literature reports to the practice of restraints in the daily life of the elderly, the consequences for use of restraints in the elderly, and alternative techniques to the use of restraints.

Conclusion: The use of restraints, mainly physical and chemical, is permeated by a higher probability of cognitive decline of the elderly, as well as physical and psychological health consequences, and can even result in death. Intervention programs and policies designed to reduce the use of restraints in the elderly are shown as alternative strategies, contributing to the qualification of care.

Resumo

Objetivo: Analisar as evidências da literatura sobre a prática da contenção em idosos.

Métodos: Revisão integrativa de literatura, com busca dos estudos primários publicados de 2013 a 2017, realizada nas bases de dados eletrônicas LILACS e MEDLINE, nos meses de maio e junho de 2018. As buscas foram obtidas pelo cruzamento, nas bases de dados, dos seguintes descritores e palavras: contenção; restrição; restrição física; e idoso.

Resultados: Foram incluídos 17 artigos e, a análise indicou que as evidências disponíveis na literatura reportam à prática de contenções no cotidiano de idosos, às consequências frente ao uso de contenções em idosos, e a técnicas alternativas ao uso das contenções.

Conclusões: O uso de contenções, principalmente físicas e químicas, é permeado por maior probabilidade de declínio cognitivo do idoso, além de consequências à saúde física e psicológica, podendo, até mesmo, resultar em óbito. Programas de intervenção e políticas designadas à diminuição do uso de contenções em idosos mostram-se como estratégias alternativas, contribuindo assim, para a qualificação da assistência.

Resumen

Objetivo: analizar las evidencias de la literatura sobre la práctica de la contención en ancianos.

Métodos: revisión integradora de literatura, con búsqueda de los estudios primarios publicados de 2013 a 2017, realizada en las bases de datos electrónicas LILACS y MEDLINE, en los meses de mayo y junio de 2018. Las búsquedas fueron obtenidas por el cruce de los siguientes descriptores y palabras en las bases de datos: contención, restricción, restricción física y anciano.

Resultados: se incluyeron 17 artículos y el análisis indicó que las evidencias disponibles en la literatura se refieren a la práctica de contenciones en el cotidiano de los ancianos, a las consecuencias frente al uso de contenciones en ancianos y a las técnicas alternativas al uso de contenciones.

Conclusiones: el uso de contenciones, principalmente físicas y químicas, está impregnado de una mayor probabilidad de deterioro cognitivo del anciano, además de consecuencias en la salud física y psicológica, lo que puede, inclusive, derivar en óbito. Programas de intervención y políticas designadas a la reducción del uso de contenciones en ancianos se muestran como estrategias alternativas y, de este modo, contribuyen a la cualificación de la atención.

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Introduction

The health of the elderly is a research priority and a social concern, due to the vertiginous global aging of the population.⁽¹⁾ According to projections, the total number of elderly people in Brazil, between 60-64 years of age, in 2018, accounted for approximately eight million; by 2060 it is expected to grow to more than 15 million.⁽²⁾

The elderly population is the segment most exposed to non-communicable and chronic diseases. The demand for care and support for these individuals is greater, considering the repercussions on their functional capacity and activities of daily living.⁽³⁾

Associated with work overload, physical requirements, and the need for specific knowledge, caring for the elderly often leads to the use of containment methods. This practice, understood as acts of holding, maintaining, tying, removing and preventing action, is often seen as a support in the care given to the elderly person, in order to control agitation, prevent the removal of catheters, drains and tubes, and it is supposed to prevent falls. However, negative repercussions have been associated with the use of restraints, which indicates the need to evaluate the consequences of omissions or negligence, and to observe the principles of individual care.⁽⁴⁾

Containment, whether physical, mechanical, pharmacological/chemical, or environmental, is present in the scenarios of care to the elderly, showing it to be a natural or common practice. Physical restraint refers to the use of the strength of professionals; mechanical restraint is the use of any device that can restrict the individual's ability to take care of himself and move around. Chemical restraint indicates the use of medications to control patient behavior. Precluding someone from leaving a physical space refers to environmental restraint.⁽⁴⁾

The international literature shows that physical and mechanical restraints have the same meaning: the use of devices that limit the individual's ability for self-care and which prevent locomotion. Physical restraint, in Brazil, is used in order to sustain the

mechanical method, and is applied in sequence.⁽⁴⁾ It is believed that to identify the evidence on this practice, by means of an integrative literature review, enables a deepening of knowledge and contributes to care with quality and dignity.

The present study focuses on restraint of the elderly in different care settings, and includes different types of existing restraints. The results can contribute to the recognition of the practices used for containment, and enable reflection on alternative strategies. In view of the problem, the objective was to analyze the literature evidence on the practice of containment in the elderly.

Methods

This was an integrative literature review, guided by the research question: what evidence is available in the literature about the practice of restraint in the elderly? For the formulation of the review question, the elements of the PICO strategy were used (P= population/patient - elderly; I= intervention - practice of containment, C=comparison - did not apply, and O= outcomes - evidence).⁽⁵⁾

Data collection was comprised of the search results from the electronic databases, Latin American and Caribbean Literature in Health Sciences (LILACS), and the Medical Literature and Retrieval System Online (MEDLINE), via PubMed, accessed by means of the CAPES portal. Descriptors were searched using Descriptors in Health Sciences (DeCS) and Medical Subject Headings (MeSH). The search strategy in LILACS included the use of the terms: “*contenção*” OR “*restrição*” [words] OR “*restrição física*” AND “*idoso*” [subject descriptor]. For MEDLINE, we used “contention” [All Fields] OR “restraint” [All Fields] AND “Aged” [Mesh Terms].

As inclusion criteria, all primary publications that addressed the proposed theme, answered the research question, and were available in full text online, and for free, were considered. In order to include national and international productions, no specific languages were selected. The study was con-

ducted in May and June of 2018. Initially, 173 articles were selected from the LILACS database, and 2.583 were identified in the MEDLINE database, totaling 2.756 records.

In order to perform the selection of the primary studies, and aiming to minimize eventual selection bias, which consists of an error of interpretation of the results, two reviewers were present, one principal (reviewer 1), and one secondary (reviewer 2)⁽⁶⁾ The reviewers individually selected the studies according to the established criteria; later in the comparison of the developed phases, possible divergences about the inclusion of the primary studies were identified, and consensus was established in relation to the selected studies.

The reviewers followed pre-established steps in the selection process, inclusion, and exclusion of the articles.⁽⁶⁾ Initially, the titles and abstracts were read, and the articles that met the inclusion criteria were subsequently included, totaling 74 articles. In view of the large number of publications, the criterion of analytical feasibility was adopted, which considered only articles published in the last five years (2013 to 2017), accounting for 17 articles (Figure 1).

The analysis of the results was based on the development of the synthesis of the primary studies and comparisons on the main findings that answered the initial question, showing the differences and similarities between the studies.⁽⁶⁾ Thus, the analysis and synthesis of the results of this integrative review, in the descriptive form, were based on the data that answered the research question.

Results

The characterization of the articles that composed the body of this study indicated that, among the 17 studies analyzed, ten (58.7%) were from the Netherlands, Spain, Canada, Belgium and Norway; each country published two studies. On the other hand, Switzerland, Taiwan, Australia, the United States, Japan, and Korea had one publication, respectively (35.4%). One multicenter study was conducted, which included the Czech Republic, England, Finland, France, Germany, Israel, Italy, and the Netherlands (5.9%).

As for the period, according to the analytical feasibility criterion, studies published in the year 2013 (six articles) predominated. With regards to the study design, five were qualitative (29.4%), six quantitative (35.3%), and six mixed (35.3%). Regarding the knowledge subareas, 11 studies were in the category of medicine (64.7%), and six were in nursing (35.3%).

The article analysis indicated that the evidence available in the literature was related to the practice of containment in the daily life of the elderly, to the consequences of the use of restraints in the elderly, and alternative techniques to the use of restraints. According to the of levels evidence,⁽⁷⁾ a strength of evidence hierarchy was constructed, considering the type of clinical question from the primary studies. The types of containment, main evidence, and article classification are described in chart 1.

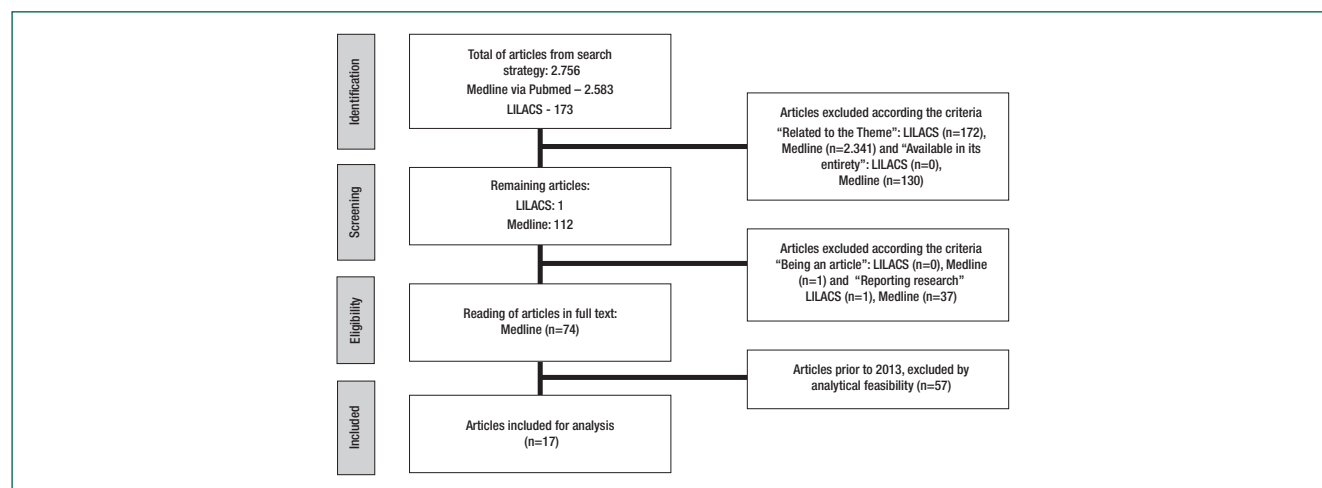


Figure 1. Flowchart of the search process and study selection

Chart 1. Summary and levels of evidence from studies/articles

Nº	Type of contention	Level of evidence	Main evidence
Bleijlevens et al. ⁽⁸⁾	Mechanical	N6*	Proposes an educational program to reduce the forms of containment in Dutch nursing homes.
Enns et al. ⁽⁹⁾	Physical	N2*	Highlights the implementation of strategy to reduce the use of physical containment in the elderly
Fariña-López et al. ⁽¹⁰⁾	Physical	N4**	From a professional perspective, most did not agree with the signature of the terms of consent for containment of the elderly.
Foebel et al. ⁽¹¹⁾	Physical and pharmacological /chemical	N2***	Chemical containment (use of antipsychotic medications) was higher than the use of physical restraint.
Gagnon et al. ⁽¹²⁾	Mechanical and environmental	N2**	Listening and communication was evidenced, as alternatives to containment.
Goethals et al. ⁽¹³⁾	Physical	N2**	The practice of restraint in the elderly is based on the decision-making processes of the nurse
Gulpers et al. ⁽¹⁴⁾	Mechanical	N6*	An intervention program for decreasing the use of restraints may change attitudes towards reduction of its use.
Hofman et al. ⁽¹⁵⁾	Physical	N4***	The rate of restraint use in elder care settings varies, depending on the scenario and type of containment involved. The use of physical restraints can be one of the most prevalent in the nursing homes.
Huang et al. ⁽¹⁶⁾	Physical	N4***	The main reasons for use of restraint included to prevent the removal of devices (enteric, orotracheal, and vesical tubes and tracheostomies, among others)
Konetzka et al. ⁽¹⁷⁾	Physical and pharmacological /chemical	N4***	United States implemented the addition of rates of antipsychotic use to the reports of long-stay institutions for the elderly, in order to match the transparency of physical and pharmacological / chemical restraint.
Kurata et al. ⁽¹⁸⁾	Physical	N4***	The knowledge and perception of physical restraints used in the elderly living in the home differs between familiar caregivers and professional caregivers in home care.
Øye et al. ⁽¹⁹⁾	Physical	N4***	Residence time, degree of dependence, limitation of mobility, and some organizational characteristics can be associated with restraint use
Bellenger et al. ⁽²⁰⁾	Physical	N2***	The practice of containment can result in death, as a consequence of mechanical asphyxia, and the main justification for containment is the prevention of falls.
Kong et al. ⁽²¹⁾	Physical	N2*	The containment reduction program has effectively improved the team's perceptions and attitudes about the use of restraints in the elderly
Muñoz et al. ⁽²²⁾	Physical	N2*	Physical restraints can be almost completely eliminated while maintaining reasonable levels of safety.
Gjerberg et al. ⁽²³⁾	Physical	N2**	Relatives of the elderly accept the use of restraint, because they believe that the health team always acts in the best interest of the patient.
Scheepmans et al. ⁽²⁴⁾	Mechanical	N4***	The use of mechanical containment in the elderly is justified by the guarantee of safety.

* Clinical question driven to treatment/intervention; ** Clinical question driven to meaning; *** Clinical question driven to prognosis or etiology

Discussion

The results of the scientific publication of this review were related to cultural containment, and rou-

tinely present in different places of coexistence and care to the elderly, and demonstrated, in addition to protection and safety, the consequences of use, time of utilization and lack of monitoring. The fact that this study considers two databases is a limitation. Further studies that include other databases are necessary, in order to analyze other available studies based on the subject matter.

The use of different types of containment⁽¹⁹⁾ was associated with the residential and organizational characteristics of long-stay institutions for the elderly. Being female, and being older than 85 years, were presented as factors which predisposed an individual to the use of physical or chemical restraint.^(18,23) Restraint use was justified by the clinical characteristics of the elderly (aggressiveness, agitation), institutional routines, insufficient professional staffing in relation to the number of elderly people needing care, and, as a safety measure, mainly to prevent falls and removal of devices.

An analysis of using restraints in nursing homes, cared for by a nursing home organization in Belgium,⁽²⁴⁾ demonstrated that no patient evaluation occurred after initiating the use of restraints. The consequences of lack of assessment include imminent ethical issues.⁽²⁵⁾

It is necessary to have a reliable documentation in the elderly patient's chart or work report, in this case a nursing report, including: the time the restraint was initiated, justification for restraining the elderly individual, vital signs and other clinical patterns, the period of restraint use, and possible complications, such as limb edema.

Sometimes professionals do not record the use of some types of restraints in patients' charts, such as the use of side rails (bed guards).⁽²⁶⁾ The consequences for the lack of assessment, in addition to the ethical issues, are those related to the physical and even the psychological well-being of the elderly individual. As evidenced,^(9,12,16) among the main consequences related to the use of restraints are: pressure injuries, reduction of limb muscle strength, implications for well being and safety, aggression, falls, psychological suffering, poor nutrition, and urinary incontinence.

Bilateral and unilateral bed guards (with a side of the bed against the wall) were the most common-

ly used types of restraints, followed by wheelchairs, seat belts, and sleep suits/vests.⁽¹⁵⁾ Elevated bed rails are used in hospitals and long-stay institutions for the elderly in Brazil, in the interest of care and safety, for prevention of falls from the bed, however, as shown in multicenter studies,^(15,26) elevated guardrails are synonymous with physical containment. Therefore, in different cultures, different meanings are perceived for the same practice.

To elucidate methods to reduce or suppress forms of restraint in the diverse environments in which the elderly live, alternative strategies to the use of restraints, educational programs and policies designed to reduce their use have been proposed,^(8,9,12,17-19,21,22) such as a multicomponent intervention program called *Expelling Belts* (EXBELT),^(8,14) developed in nursing homes in the Netherlands. The EXBELT proposal, and other multicomponent programs and strategies are aimed at disseminating results of changes in the policy of containment, especially after raising the awareness of the nursing team about this practice.

Conclusion

The use of restraints varies according to the scenario, different professional categories, and type of containment involved. Antipsychotic medications are configured as a type of chemical restraint; being female and older than 85 years, and the length of stay in an institution, influence the use of restraints. The use of physical restraints and antipsychotic medications increases the likelihood of cognitive decline, and can result in physical and psychological impairment, and even death. Among the alternative strategies to the use of restraint, we highlight the intervention programs and policies designed to reduce the use of restraints in the elderly, contributing to the qualification of care, particularly in nursing. This integrative literature review aimed to contribute to theoretical and practical nursing knowledge, because auxiliaries, technicians and nurses play important and significant roles in care for the elderly, either at home (counseling the caregivers)

or in direct care in hospitals and long-stay institutions for the elderly. We hope that this study can support other professions and society, and address statistical and demographic data, both at present and in the future, which indicate an increase in the elderly population worldwide, contributing to improving the quality of life of the elderly person.

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