INTEGRATIVE REVIEW ARTICLE

SCIENTIFIC PRODUCTION ON ELDERLY IN EMERGENCY CARE UNITS

PRODUÇÃO CIENTÍFICA SOBRE ANCIANOS EN UNIDADES DE PRONTO ATENDIMENTO

PRODUCCION CIENTÍFICA SOBRE ANCIANOS EN UNIDADES DE PRONTA ATENCION

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RESUMO

Objetivo: analisar a produção científica sobre idosos em unidades de pronto atendimento. Método: revisão integrativa, com busca de artigos entre os anos de 2003 a 2015, nas bases de dados LILACS, MEDLINE e na biblioteca virtual SciELO. O processo de análise ocorreu pela leitura, descrição dos dados e construção da figura, e agrupamento dos dados por semelhança e organizados em categorias temáticas. Resultados: oito publicações atenderam aos critérios de inclusão e a análise destes revelou duas categorias temáticas: motivos da procura por atendimento em UPAs e implicações avaliativas do atendimento a idosos. Conclusão: há necessidade de reestruturação no atendimento ao idoso em toda a rede de saúde, para que minimizem a procura por condições sensíveis a atenção primária e haja articulação entre os pontos de atenção; ainda, a capacitação dos funcionários na área de geriatria, visando a contribuir para ações de melhorias no atendimento à população idosa. Descritores: Serviços Médicos de Emergência; Serviços de Saúde para Idosos; Assistência Integral à Saúde; Enfermagem geriátrica; Idoso; Revisão.

RESUMEN

Objetivo: analizar la producción científica sobre ancianos en unidades de urgencias. Método: revisión integradora, con búsqueda de artículos entre los años de 2003 y 2015, en las bases de datos LILACS, MEDLINE y en la biblioteca virtual SciELO. El proceso de análisis se realizó mediante la lectura, descripción de datos y construcción de la figura, agrupamiento de datos por semejanza y organización en categorías temáticas. Resultados: ocho publicaciones respondieron a los criterios de inclusión y su análisis reveló dos categorías temáticas: motivos de la búsqueda por atención en las UPAs e implicaciones evaluativas de la atención al anciano en las UPAs. Conclusión: es necesaria la reestructuración de la atención al anciano en toda la red sanitaria para minimizar la búsqueda de condiciones sensibles a la atención primaria y se haya coherencia entre los puntos de atención; además, la capacitación de los funcionarios en el área de geriatría para contribuir a acciones de mejora en la atención a la población de ancianos. Descritores: Servicios Médicos de Urgencia; Servicios de Salud para Ancianos; Enfermería Geriátrica; Anciano; Revisión.

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**INTRODUCTION**

Globally, population aging has been accelerating in most recent decades. In Brazil, a contingent of 32 million elderly people is projected for 2025, making it the sixth country in terms of the elderly population.\(^1\) And when considering the typical decline of senescence, the elderly has a combination of factors that lead to greater vulnerability to chronic-degenerative diseases, among other weaknesses that also deserve attention.

In the meantime, the demand for health services increases and, therefore, the adequacy of care becomes indispensable to all points of attention,\(^2\) especially to those services that are in great demand of the elderly, such as the UPAs.\(^3\) The UPAs are non-hospital healthcare facilities of medium-complexity, which are linked to the component of healthcare system, instituted by the National Politics of Attention to the Urgencies (PNAU). The purpose of these services is to collaborate in the organization of integral care networks to urgencies and emergencies, responsible for the care of acute or chronic patients, with or without immediate risk of life.\(^4\)

Once they are important entry point for many patients, the UPAs has been the subject of discussion among state and municipal managers, and also to public health professors and researchers on the field of public healthcare, who consider the topic as a priority for debate in the political agenda on the management and organization of the SUS.

Considering the complexity of the aging process associated to the high demand of the elderly in all the attention spots, especially the UPAs,\(^5\) it becomes relevant to carry out the synthesis of knowledge regarding the care given to the elderly population in this management scenario. In this research, it is believed that the acquisition of this information constitutes a peculiarity and inherent wealth in the organization of health services, better articulation between the Health Care Network (RAS) and a qualified service to this population.

In view of the considerations presented, it is asked: what is the scientific knowledge produced about the elderly in UPAs?

**OBJECTIVE**

- To analyses the scientific production on elderly in UPAs.

**METODOLOGY**

Integrative review from the following steps: (1) identification of the theme and selection of the study question, (2) establishment of the criteria for sample selection/research into the literature, (3) bibliographic research, (4) definition of information to be extracted from the studies selected, (5) evaluation of the studies included in the review, (6) interpretation of results and (7) presentation of the review.\(^4\)

In the first step, the formulation of the question was guided by the strategy PICo,\(^4\) being “P” the population, which in this study refers to the elderly, “I” to the phenomenon of interest, ie, the UPAs and “Co” is of the expected result, that is, the scientific knowledge produced about the service to this population. Thus, the guiding question of this research was: “What was the scientific knowledge produced about the elderly in UPAs?”

In the second step the following inclusion criteria were defined: primary studies, published between January 2003 and December 2015, the date for the beginning of the review is justified by the fact of the implementation of the law that restructures the services of urgency and emergency in Brazil; no definition of languages; realized with 60 years old people or higher for national studies and with 65 years old people or higher for international studies; restricted to the urgency and emergency areas, that allowed answers to the research questions.

In addition to these criteria, it was decided to select the studies supported by methodologies that would bring strong evidences to the understanding of the problem of this research, in accordance with the standardization adopted by the Critical Appraisal Skills Programme. In the selection process, priority was given to publication classified in levels I to VI: level I, meta-analysis of multiple controlled studies; level II, individual study with experimental design; level III, a study with a near-experimental design as a study without randomization with a pre and post-test single group, time series or case-control; level IV, non-experimental design as correlational and qualitative descriptive research or case studies; level V, case reports or systematically obtained data of verifiable quality or program evaluation data; level VI, opinion of respectable authorities based on clinical competence or opinion of expert committees, including interpretations of non-research-based information.\(^5\) Chapters of books, reflective
articles, doctoral theses, master's dissertations, monographs and technical reports were excluded.

In step three, a large electronic bibliographic research was made in the databases Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Medical Literature, Analysis and Retrieval System Online (MEDLINE) and also on the virtual library Scientific Electronic Library Online (SciELO). The descriptors “Serviços de Saúde para Idosos” (Health Services for the aged), “Emergência” (Emergency), “Serviços Médicos de Emergência” (Emergency Medical Services), “Idoso” (Aged) and the keywords: “Atendimento de Emergência” (Ambulatory Care), “Unidades de Pronto Atendimento” (Emergency Care Units) e “Pré-Hospitalar” (Pre Hospital Care) were combined in different ways to guarantee a wide search.

The data collection was conducted between January and February 2016, obtaining 612 studies in the MEDLINE database, 278 in LILACS and 265 in SciELO, totaling 1155 publications. Next, the selection was made considering, firstly, as potentially eligible, the papers whose titles and summaries reported having as subjects 60 years old individuals or older and that had been developed in UPAs. It should be noted that for the internationals publications, the units that do not make up the hospital context, being considered as medium complexity services were considered as UPAs.

After an initial analysis of the inclusion criteria and considering the exploratory reading (title and abstract), an initial quantitative of 56 researches was obtained, of which five studies were excluded, since they were repeated in the databases. Thus, 51 publications were elected and they were integrally read. After this analysis, 42 studies were excluded, three because they were literature reviews and 39 because they were about hospital urgency and emergency services.

In order to favor the validation of the publications selection, the potentially elected articles were evaluated by two reviewers, through independent selection according to the inclusion criteria and guided by the research question. With the use of a study quality assessment instrument, the Reliability Test JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research, each reviewer recorded their assessment and justification for inclusion or exclusion of the papers on a form that contained the respective titles, abstracts and database.

The results of this stage were compared and the disagreements resolved by consensus among the reviewers, in which a study was excluded. This process of validating the selection of the final sample of the publications allowed the inclusion of research that presented consistency and contributed to the achievement of the objective. It is worth mentioning that eight studies remained at the end. The process of publications selection is shown in figure 1.
For the data collection and analysis, a validated instrument was utilized, which was adapted to attend the objective of the study. This corresponded to step 4, in which the instrument was adopted to extract the topics of interest: year of study publication, institution in which the study was realized, database or virtual library and journals, type of publication, authors, sample, study design and methodological rigor, title of the article objectives, results and conclusion of studies. The subsequent steps corresponding to the analysis of the studies included in the revision, the interpretation of the results and the presentation of the review follow in the results and discussion of the present work.

The process of analysis occurred in two moments: the first phase was carried out by reading, describing the data and constructing the synoptic table (figure); and in the second phase the data were grouped by similarities and organized into thematic categories. The presentation of the results and analysis of the data obtained was done in a descriptive manner.

Of the eight papers analyzed, it was identified that six were carried out in Brazil, one in the USA and one in England. As for the databases, two studies were found in both MEDLINE and in SciELO and four in LILACS. Regarding the journal, four different types were verified: “Kairós Gerontologia”, “BMC Geriatric”, “BMJ Journal”, with highlight to the “Revista Ciência e Saúde Coletiva” with five papers.

It is noteworthy that half (four) of the studies were published in 2010 and the main methodological framework adopted was the triangulation of methods, the quantitative stage of these being carried out through information extracted from the database, which suggests the importance of adequate registration of elderly care in these services to analyses the epidemiological data of these events.

Figure 1 presents a summary of the studies included in the review, which constituted the corpus of this study and represented the...
The essence of the collaboration of results, discussion and respective conclusion on the topic of care for the elderly in UPAs.

<table>
<thead>
<tr>
<th>Year/ Journal/ Database</th>
<th>Authors/ Sample/ Study type</th>
<th>Level of evidence</th>
<th>Objective</th>
<th>Results</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 LILACS</td>
<td>Conte M et al.</td>
<td>V</td>
<td>To put in discussion a phenomenon, little known, that is the attempt of suicide in the elderly.</td>
<td>Suicide attempt (reasons for seeking care in UPA).</td>
<td>Comprehensive health care through the expanded clinic design that privileges the user's uniqueness.</td>
</tr>
<tr>
<td>2012 LILACS</td>
<td>Araújo CLO e Silva AC.</td>
<td>IV</td>
<td>To characterize the socio-demographic and pathological profile of the elderly that frequent an UPA in a city in the Paraíba Valley (SP).</td>
<td>Sociodemographic characteristics and the demand for care (reasons for seeking care in UPA).</td>
<td>Implementation of public policies focused on the needs of the elderly in emergency service.</td>
</tr>
<tr>
<td>2011 MEDLINE</td>
<td>Kaskie et al.</td>
<td>II</td>
<td>To examine the use of emergency services from a population perspective.</td>
<td>Elderly from different groups, according to the severity of the case frequently seek urgency and emergency service (reasons for seeking care in UPA).</td>
<td>Strategies should be deployed to manage chronic health conditions and also to replace non-serious care for primary services.</td>
</tr>
<tr>
<td>2010 LILACS</td>
<td>Deslandes SF e Souza ER.</td>
<td>IV</td>
<td>To analyse the capacities, obstacles and potentialities of the care given to the elderly victims of violence and accidents by the prehospital system of five capitals.</td>
<td>Analysis of prehospital and fixed hospital care services, differences were found and also difficulties of the teams in the care of the elderly victimized (implications of service evaluation of the elderly).</td>
<td>Professional qualification.</td>
</tr>
<tr>
<td>2010 LILACS</td>
<td>Mello ALSF e Moysés SJ.</td>
<td>IV</td>
<td>To perform a diagnostic analysis of prehospital health systems for elderly victims of accidents and violence in Curitiba (PR).</td>
<td>Incipience in the treatment of accidents and violence against the elderly in the actions developed by the services researched (implications</td>
<td>Implementation of protocols with a preventive approach.</td>
</tr>
</tbody>
</table>

**References:**

1. Comprehensive health care through the expanded clinic design that privileges the user's uniqueness.
2. Construction of a care line based on strategies, such as the Unique Therapeutic Plan.
3. Investments in lifelong education on the theme of active aging and reception in the crisis, through the articulation of the intersectoral network.
4. Strategies should be deployed to manage chronic health conditions and also to replace non-serious care for primary services.
5. Professional qualification.
6. Improvement in preventive actions, in the involvement of the family on the case.
7. Assistance to the aggressor.
8. Promotion of articulation and partnerships between services.
The analysis of the results allowed to identify as main aspects of relevance to the care provided to the elderly in UPAs, the reasons that lead the elderly to seek assistance in these establishments and evaluation of the elderly care, which involves the evaluation of the services related to the care provided to this population.

It should be emphasized that the analysis of the reasons for the demand and evaluation of the care given to the elderly in UPAs have repercussions on the health care of this population. Therefore, such perspective is recognized as the guiding axis of the discussion of results.

♦ Reasons why people look for UPAs

Regarding the reasons for service in the UPAs, it was identified that the elderly has frequently sought urgency services to follow up chronic injuries, such as hypertension, Diabetes mellitus and low back pain, for suicide attempts, falls and, above all, accidents and victims of violence.

One of the studies included this review, which was carried out at an UPA in the countryside of São Paulo, it reveals that elderly patients attended had comorbidities of the cardiovascular and endocrine systems. These comorbidities can be interpreted in two ways: the first one is that for control and life quality of its patients, it is primordial to carry out longitudinal and integral follow-up in

<table>
<thead>
<tr>
<th>Year</th>
<th>Authors</th>
<th>Database</th>
<th>Study type</th>
<th>Sample</th>
<th>Services</th>
<th>Service type</th>
<th>Objectives</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Lima et al.</td>
<td>LILACS</td>
<td>IV</td>
<td>24h UPA</td>
<td>4 services</td>
<td>Triangulation of methods</td>
<td>To carry out a diagnostic analysis of the health systems in relation to the attention to the elderly victims of accidents and violence in Recife (PE).</td>
<td>The policy guidelines studied are only partially covered (implications of service evaluation of the elderly).</td>
</tr>
<tr>
<td>2010</td>
<td>Santos et al.</td>
<td>SciELO</td>
<td>IV</td>
<td>24h UPA</td>
<td>8 services</td>
<td>Triangulation of methods</td>
<td>To describe the service in the Manaus SUS network to the elderly victim of an accident or violence in three levels of care.</td>
<td>Obstacles that hinder qualified care for the elderly victims of violence and accidents in the three levels of network care (implications of service evaluation of the elderly) were identified.</td>
</tr>
<tr>
<td>2003</td>
<td>Shaw et al.</td>
<td>BMJ</td>
<td>III</td>
<td></td>
<td></td>
<td>Prospective Cohort</td>
<td>To determine the efficacy of multifactorial intervention after a fall in elderly patients with cognitive impairment and dementia assisted in the emergency department.</td>
<td>Multifactorial intervention is not effective in preventing falls in elderly people with cognitive dysfunction and dementia after falling (implications of service evaluation for the elderly).</td>
</tr>
</tbody>
</table>

Table 1. Characteristics of the studies included in the review according to year of publication, the journal, the database, the authors, the samples, the study design, the level of evidence, the objectives and the main result and recommendations. Maringá (PR), Brazil, 2016.
Primary Health Care (PHC); on the other hand, the second aspect refers to pathologies that can lead to serious and irreversible complications and through PHC the individual must be referred to the UPA.

Accidents and violence are aggravated by causes and consequences involving multiple spheres of social organization, as well as being an object of attention of health professionals.\textsuperscript{12,3} Due to the increasing mortality rate by accidents and violence against elderly, the thematic has attracted the attention of researchers. This characteristic is proven by half of the sample of this review to consist of studies that deal with situational analysis of services and care for the elderly victims of the diseases in question\textsuperscript{9,12}. The scientific community demonstrates its concern with creating or electing strategies to prevent this type of injury and promote appropriate training for professionals that facilitate the differentiation of symptoms from senescence and those that are characteristic of victims of accidents and violence.

Before the aging of the population and the wide variety of diseases that affect the elderly, it is expected that the care offered at all points of attention will provide resolution of these demands in accordance with SUS principles. However, there is a biomedical model with actions that are exclusively curative and fragmented\textsuperscript{7,8} which, associated with the gaps in care, insufficient funds transfer and incoherent service distribution becomes a daily challenge for the elderly in emergency and urgency services.\textsuperscript{14}

The situation becomes even more peculiar the elderly person experiences the acute process of a chronic condition. At this moment, when seeking care in the emergency service, besides needing humanized care, this individual need care with high technological densities, since it is considered that the association of several diseases contributes to poor health status and recovery of the elderly. A research conducted in the USA points out that many elderly people with acute chronic complaints often return to emergency services, being the main outcome prolonged hospitalizations\textsuperscript{15}.

Several risk factors have been identified in the elderly population for the high demand for emergency services, such as those with disabilities, comorbidities, who make use of polypharmacy and those who live alone are in great demand for the emergency service when compared to the elderly who do not have such factors. However, these aspects are not consistent in all studies, although in most cases the consequences after liberation from the unit are hospitalization, admission to nursing homes and evolution to the time of death\textsuperscript{19}.

The frequent use of emergency services is perceived by users as synonymous with agile and easy access. Besides, factors such as the difficulty in attendance and follow-up in APS associated to the characteristics of the UPA, such as the guarantee of obtaining a consultation, the possibility of performing exams in the same day, the availability of injectable drugs, among others, favor the users to overvalue these services\textsuperscript{16}, which results in a worldwide phenomenon that is the overload of work in these establishments. It is worth noting that many health complaints referred to when searching UPA do not require adequate care at this point of attention.\textsuperscript{17,8}

The relevance of the healthcare system reform should be highlighted, beginning by the PHC, so the access and resoluteness can improve, welcoming the patient in acute, unforeseen and unplanned situations, in order to provide comprehensive health care for the population.\textsuperscript{19} An European study suggests that the implementation of systems that promote shared responsibility with guaranteed access to users and continuity of care in PHC could prevent 4,000 emergency services per year.\textsuperscript{20} These results highlight the divergence between access and continuity of care, and has involved fragmentation of care for the elderly population, which requires careful evaluation of services in order to implement effective strategies to improve care for this age group.

\textbullet\ Implications of the evaluation on the care of the elderly

With regard to the evaluative implications of the service for the elderly care in UPAs, the studies that make up the present review point out the difficulties faced by this population through the diagnostic analysis of prehospital health systems for victims of accidents and violence in Brazilian capital,\textsuperscript{9-12} besides the evaluation of the efficacy of multifactorial intervention after elderly patients suffer a fall.\textsuperscript{8} Quality evaluation has been taking place for a long time and, over the years, has undergone changes in its focus and the means to achieve it. There is great importance in analyzing health services, above all the Public Health ones, by providing alternative planning and by providing technical and social control of services and programs provided to society, especially to the elderly.\textsuperscript{21}
As an intention of getting to know the role played by the component of the Network of Attention to Urgencies and to evaluate its performance in the health care system, the National Council of Health Secretaries (CONASS), with support from the Ministry of Health and the PAHO, promoted a study called “Network of Attention to Urgencies and Emergencies: Evaluation of the Implantation and Performance of the UPAs”.

The study presented by CONASS was performed in seven states (Mato Grosso do Sul, Minas Gerais, Paraná, Pernambuco, Rio de Janeiro, São Paulo and Sergipe) and had coordinators, professionals and users as observative subjects. The study mentioned sought to know factors that favor and hinder the implantation process, the performance and the solubility of UPAs. It was evidenced in this work that the offer of this service is based on the diagnosis and clinical conditions, fulfilling the role expected by these units in the system. However, it points out that states and municipalities are overwhelmed with succession of federal norms for RAS, which has generated insufficiency to finance actions.

Another challenge in these units is people management, referring to the selection and recruitment of appropriate professionals, in which one of the most acute problems is the insufficiencies in the capacitation and qualification for them to act in the components. It is concluded from the collected data that there are three important challenges to be overcome: financing issues, strengthening of state management and professionalization of resources for network management and operation.

A Brazilian study that belongs to this review had the objective of analyzing the characteristics of the prehospital care to the elderly victims of violence and accidents of five states, and identified the same finding by CONASS research, the existence of a diversity of professional categories, once the work teams are distinct and some do not have the minimum quota required by law.

The analysis carried out in the health services in Recife pointed out that the guidelines of the National Policy for the Reduction of Morbidity and Mortality by Accidents and Violence and the National Policy of Health Care of the Elderly are only partially contemplated and there is a necessity to improve the structure of services in number of beds, transportation and transfer of patients, reference, counter-reference and adequate structure for the companion of the elderly. It is also necessary to promote professional training.

In the capital of Paraná it was concluded that the assistance to the elderly victims of accidents and violence is premature in the services surveyed due to the lack of planning for care and protocols with preventive actions. It is important to consider the organization of data, the flows between the services that make up the system and to develop prevention, care and rehabilitation programs for the elderly victimized by the various situations to which they may be subjected.

In Amazonas, the recent hierarchy of the local health system results in overcrowding of emergency care services and hospital emergency services. The most fragile aspect for the care of the victims is the recording of data and cases notification, which is a basic condition to solve the problem, besides establishing preventive measures. Regarding the structure of the services, it is noteworthy that the UPAs presented the best physical structure among the units analyzed.

On the other hand, the Institute of Applied Economic Research (IPEA) published in 2011 a household survey conducted with Brazilian families to verify how the population evaluates public utility services, among which emergency services obtained the most negative evaluations. According to this data, a study carried out in Chile to evaluate the most important factors in the evaluation of the health system showed that the greatest problem identified by the population was the under performance of the services.

The present review identified an international publication whose objective was to evaluate the effectiveness of interventions performed by the physiotherapist accompaniment of elderly people assisted in emergency services after suffering falls. The results show that there were no significant differences, concluding that the multifactorial intervention was not effective for this issue. In other words, preventive interventions, especially related to falls, should be performed in primary services, preferably at home, due to the greater contact and bond with the population, the knowledge of their reality, customs and beliefs.

Considering that the population aging is a global phenomenon associated with the peculiarities inherent in aging, it is of paramount importance that UPAs seeks to offer quality health care to these individuals. An alternative would be the implementation of more comprehensive and effective models that allow the expansion of health care
equipment and repertoires, such as harm reduction and building spaces for individuals to speak about their experiences, as the Expanded Clinic and the Unique Therapeutic Plan.’

This review has as main limitation the use of descriptive design that restricts the in-depth analysis of the results found. However, this fact did not prevent the collection of essential information regarding the care provided to the elderly in UPAs, so it is expected that this information will be incorporated into clinical practice, contributing to an evidence-based practice.

**CONCLUSION**

This study presented the scientific production on the elderly attended at UPAs. The studies analyzed discussed the sociodemographic and pathological profile of this public, the frequency of demand in these services, the attendance to elderly victim of violence and accidents, as well as falls and suicide. The great demand for care in UPAs has been a reality in the country, which causes the space to be crowded, stress for the professionals and, consequently, difficulty in providing care. It was verified the need to restructure service flows, fill in the data, expand the multiprofessional team, especially with goals that avoid the biomedical model.

Only one of the studies carried out in Brazil on diagnostic analysis identified an adequate structure in the UPAs, the others present deficiencies in the care of the elderly, and the precepts are not used as recommended by the public policies ruling in the country. Therefore, the training of employees, especially in the gerontogeriatric area, is of paramount importance.

There is a need for commitment of managers, professionals, health-care institutions, so that the elderly can receive assistance in accordance with their specificities and fragilities, above all, in services of medium complexity, once the quality of prehospital care is essential to individuals, especially the elderly. It is evident that there is a necessity to realize new studies in order to list strategies that improve the care of the elderly in UPAs.

**REFERENCES**


Scientific production on elderly in emergency...

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