

## NURSING DATA COLLECTION FOR ADULTS AND HOSPITALIZED ELDERLY: AN INTEGRATIVE REVIEW

### COLETA DE DADOS DE ENFERMAGEM DIRECIONADA AO ADULTO E AO IDOSO HOSPITALIZADO: UMA REVISÃO INTEGRATIVA

### RECOLECCIÓN DE DATOS DE ENFERMERÍA DE LOS ADULTOS Y ADULTOS MAYORES HOSPITALIZADOS: REVISIÓN INTEGRADORA

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#### ABSTRACT

**Objective:** To identify, in the scientific literature, how nursing data collection has been performed directed to the adult and/or hospitalized elderly. **Method:** Integrative review carried, between December 2020 and March 2021, in the databases: *PubMed*®, LILACS, *Scopus* and *Web of Science*. **Results:** Six studies comprised the review and revealed the need for the collection to be based on a theoretical framework, with systematization of the anamnesis and physical examination; in addition to mentioning, among other aspects, the main recommendations when the collection involves an adult and/or hospitalized elderly. **Conclusion:** The approaches were considered comprehensive and do not characterize the specificities that involve data collection directed to an adult and/or elderly patient in the hospital context. Therefore, it is suggested the development of research related to the identification of such specificities in clinical practice.

**Descriptors:** Nursing Process; Data Collection; Adult; Aged.

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## RESUMO

**Objetivo:** Identificar, na literatura científica, como vem sendo realizada a coleta de dados de enfermagem direcionada ao adulto e/ou idoso hospitalizado. **Método:** Revisão integrativa realizada, entre dezembro de 2020 e março de 2021, nas bases de dados: *PubMed*®, LILACS, *Scopus* e *Web of Science*. **Resultados:** Seis estudos compuseram a revisão e revelaram a necessidade da coleta ser fundamentada em um referencial teórico, com sistematização da anamnese e do exame físico; além de citarem, dentre outros aspectos, as principais recomendações quando a coleta envolver um adulto e/ou idoso hospitalizado. **Conclusão:** As abordagens foram consideradas abrangentes e não caracterizam as especificidades que envolvem a coleta de dados direcionada a um paciente adulto e/ou idoso no contexto hospitalar. Sugere-se, portanto, o desenvolvimento de pesquisas relacionadas à identificação de tais especificidades na prática clínica.

**Descritores:** Processo de Enfermagem; Coleta de Dados; Adulto; Idoso.

## RESUMEN

**Objetivo:** Identificar, en la literatura científica, cómo se ha realizado hasta ahora la recolección de datos de enfermería de los adultos y/o adultos mayores hospitalizados. **Método:** Revisión integradora realizada, entre diciembre de 2020 y marzo de 2021, en las bases de datos: *PubMed*®, LILACS, *Scopus* y *Web of Science*. **Resultados:** La revisión estuvo compuesta por seis estudios que revelaron que es necesario que la recolección se base en un marco teórico, que se sistematicen la anamnesis y el examen físico; y que además mencione, entre otros aspectos, las principales recomendaciones cuando la recolección involucra a un adulto y/o adulto mayor hospitalizado. **Conclusión:** Se considera que los enfoques son generales y no determinan las especificidades que tiene la recolección de datos de un paciente adulto y/o adulto mayor en el contexto hospitalario. Por lo tanto, se sugiere que se realicen investigaciones relacionadas con la identificación de dichas especificidades en la práctica clínica.

**Descriptorios:** Proceso de Enfermería; Recolección de Datos; Adulto; Adulto mayor.

## INTRODUCTION

The Nursing Process (NP) is characterized as an instrument for guiding nursing practices and a method for developing the Systematization of Nursing Care.<sup>1</sup> The five stages of the NP facilitate the path between the detection of altered responses to the choice of a care strategy and, thus, contribute to the organization of care and the achievement of better results.<sup>2</sup>

In data collection, the first stage of the NP, all information on the individual, family or community is collected.<sup>3</sup> Some researchers consider that this survey

comprises three phases: interview, observation and physical examination<sup>4</sup>; others consider two, these being the anamnesis or interview and the physical examination.<sup>5</sup>

Anamnesis can be defined as a gathering of information about the person being assisted, with a view to clarifying their past and current health status. This gathering of information occurs through a primary source (with the patient) and secondary (family members, health professionals, exams and records) and should encompass the validation and

certification of the data collected. The physical examination, on the other hand, is configured as an anatomical and functional assessment of the body, aiming to identify possible abnormalities through semiological techniques.<sup>6</sup>

When a person is admitted to a hospital setting, he or she undergoes a screening based on a brief data collection for recognition of their health condition. During your admission to a specific sector or during a nursing consultation, a more careful assessment is carried out. At this point, in addition to data involving anamnesis and physical examination, it is possible to identify impressions and make comparisons.<sup>5,7</sup>

Such information is essential for an individualized assessment of health needs and the elaboration of a care plan. Therefore, in order to guide their actions during data collection, nurses can make use of their own or institutional instruments, guided by theoretical-philosophical bases.<sup>3</sup>

Researchers, when conducting a study in an intensive care unit, concluded that a data collection instrument aimed at critically ill patients must consider the particularities of these units, the equipment available and the impact that a clinical decision, under those conditions, has on the maintenance of the patients' health status.<sup>8</sup>

In this sense, it can be said that targeted data collection streamlines clinical

reasoning and optimizes the organization of the data obtained. Therefore, when obtaining information about a particular individual, it is essential that nurses adapt their data collection to the context of those under their care.<sup>6</sup> In the case of children, for example, a different conduct is required from that directed at an adult or a child, being essential a playful approach.<sup>9</sup>

With regard to adults and the elderly, the moment of collection can generate some discomfort, given the need to manipulate the body. In this way, privacy and intimacy, patient rights and professional ethical commitment must be ensured. In addition, adults and the elderly have a greater understanding of the meanings of hospitalization and already carry with them a vast experience of life, commonly linked to the consequences on their health status. These factors can limit the acquisition of information during anamnesis and physical examination and impact the quality of collection.<sup>10</sup>

That said, this study aimed to identify, in the scientific literature, how the collection of nursing data aimed at hospitalized adults and/or elderly people has been carried out.

## **METHOD**

An integrative literature review was carried out between December 2020 and March 2021.

With an Evidence-Based Practice approach, this method gathers knowledge from different sources of scientific literature and is based on the answer to one or more guiding questions.<sup>11,12</sup>

To guide the research, based on the PICO strategy – hospitalized adults and/or elderly people (P: population), collection of nursing data aimed at adults and the elderly (I: intervention), collection of nursing data (C: control) and particularities that involve data collection aimed at adults and the elderly (O: outcomes) – the following

guiding question was elaborated: “How has the collection of nursing data directed to hospitalized adults and/or elderly people been carried out?”.

The criteria for inclusion of articles were: articles available in full text, in Portuguese, Spanish and English, published in the last ten years.

Searches were carried out in PubMed®, LILACS – Latin American and Caribbean Literature, Scopus and Web of Science. The search strategies in the databases are presented in Table 1.

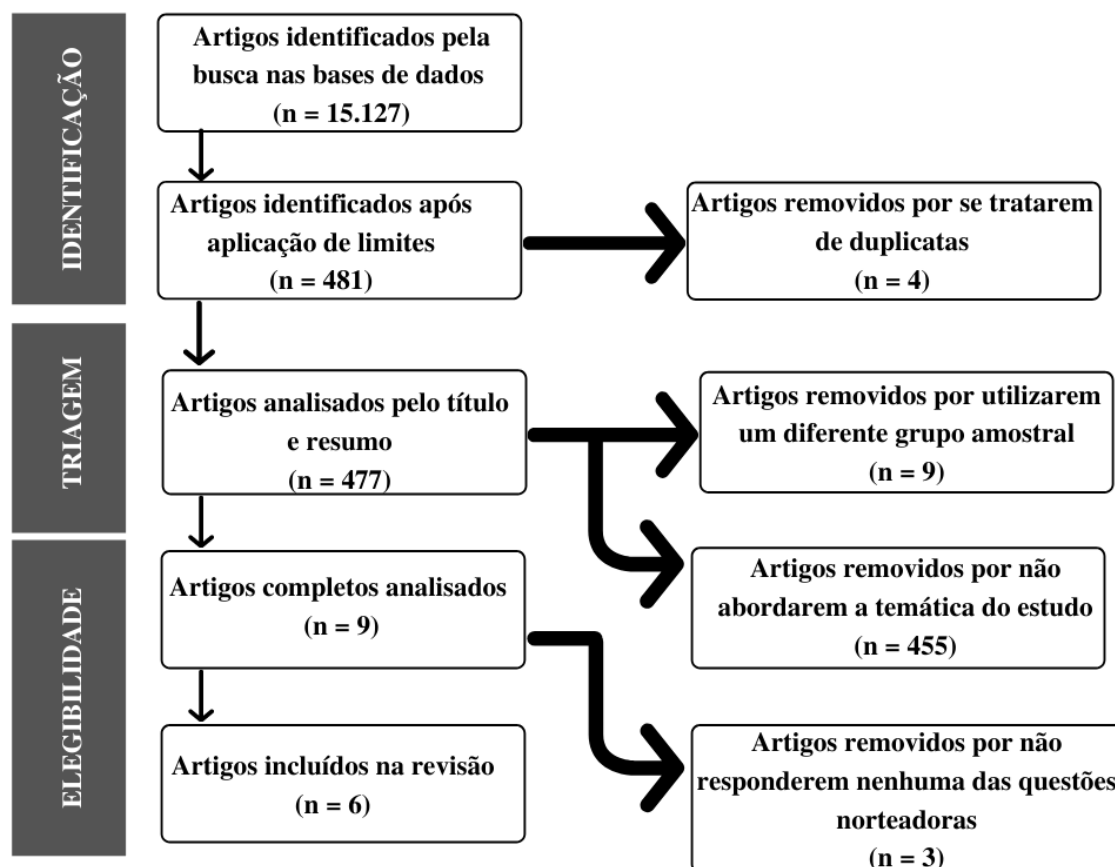
**Table 1**– Search strategies applied in the databases, Rio de Janeiro, RJ, Brazil, 2021.

DATA BASE	SEARCH STRATEGY
PUBMED	(data collection[MeSH Terms]) AND (nursing process[MeSH Terms]) AND ((adult)[Text Word] OR (aged)[Text Word])
LILACS	Data collection [Subject descriptor] AND nursing process [Subject descriptor] AND ((adult) OR (elderly)) [Words]
SCOPUS	TITLE-ABS-KEY (data NAD collection) AND TITLE-ABS-KEY (adult OR aged)
WEB OF SCIENCE	AK=(data collection) AND AK=(nursing)

After applying the eligibility criteria, 477 records were identified for reading the title and abstract – 252 from PubMed®, four from LILACS, 199 from Scopus and

22 from Web Of Science. However, in the selective analysis, nine were elected for full reading. Thus, after critical analysis, six articles composed this review (FIGURE 1).

**Figure 1**– Selection flowchart of the articles that composed this review. Rio de Janeiro, RJ, Brazil, 2021.



Both the search and the analysis of the articles were carried out by two researchers, independently, and in the presence of divergences, a third researcher was consulted.

For data extraction, an electronic form was created in Excel 2019 (version 16.0) composed of items related to the article identification elements (authors, title, year and place of publication), general characteristics (objectives, methods, population, results and conclusions) and specific characteristics that aimed to answer the proposed guiding question.

The studies were classified according to the level of evidence, being level I, evidence from systematic reviews or meta-analysis of randomized controlled trials; level II, evidence from randomized controlled trials; level III, evidence from non-randomized randomized controlled trials; level IV, evidence from cohort and case-control studies; level V, evidence from descriptive studies; level VI, evidence of opinion reports or expert consensus.<sup>13</sup>

## RESULTS AND DISCUSSION

Of the six articles that composed this review, all were original studies published in Brazilian journals; three were published in 2012<sup>14, 15, 16</sup>, and the others in 2004, 2013 and 2018.<sup>17, 8, 18</sup>

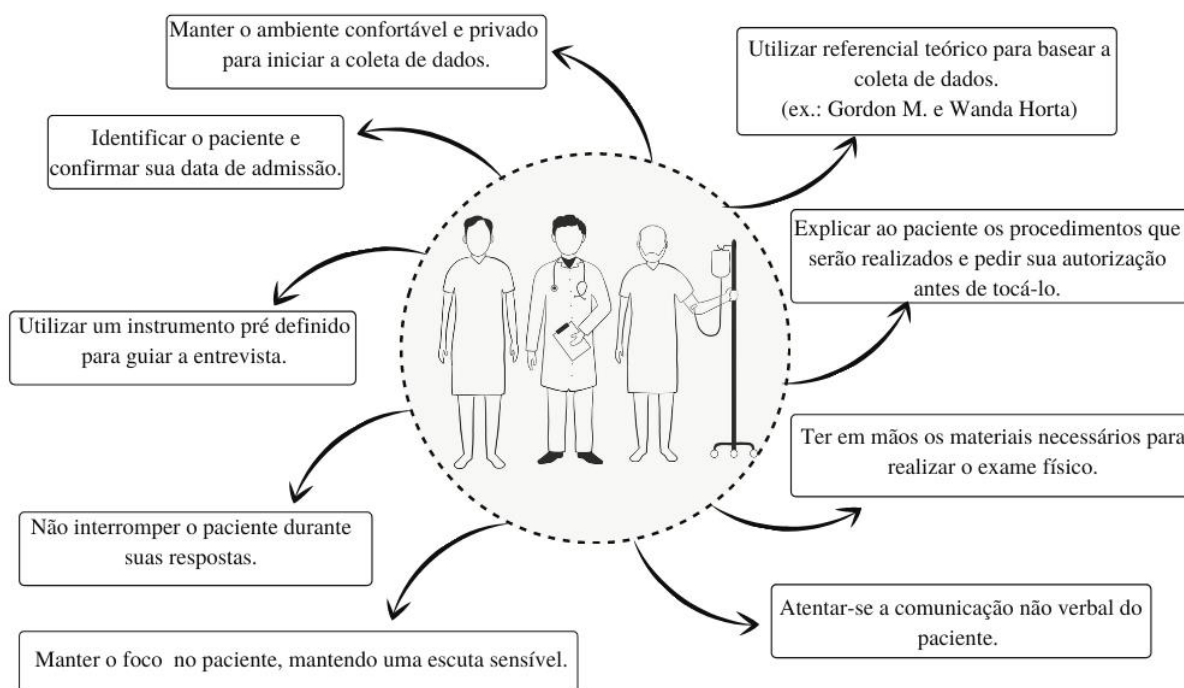
As for the level of evidence, the six were classified as belonging to level V, since they were methodological studies with a descriptive approach.<sup>13</sup> In all articles, the term “data collection in nursing” was characterized as obtaining information related to the health of the person being cared for.<sup>17, 14, 16, 15, 8, 18</sup>

It is important to point out that, in two articles, the importance of the nursing

professional having theoretical and practical knowledge for the implementation of data collection aimed at adults and/or elderly was reported, since it is necessary to master the anatomy and of physiology in the face of the various aspects that involve human development, in addition to knowledge about clinical workup, such as inspection, palpation, percussion and auscultation techniques.<sup>17,16</sup>

Figure 2 presents, based on the findings of this review, the main recommendations for carrying out the collection of nursing data aimed at adults and/or elderly people.

**Figure 2-** Main recommendations, from the findings of this review, for carrying out the collection of nursing data aimed at adults and/or elderly. Rio de Janeiro, RJ, Brazil, 2021.



In this sense, the collection of nursing data, regardless of the stage of development of the person being cared for, is the fundamental basis for the development of professional practice.<sup>17</sup> From a systematized instrument, it is possible to provide a survey of the patient's complaints, individual, family or community, recognizing their state of health.<sup>15, 8, 18</sup>

However, only two articles indicated the need to base the collection on a theoretical framework.<sup>16,15</sup> In these, possibilities were presented to structure the collection instrument in basic human needs, based on the theory proposed by Wanda de Aguiar Horta<sup>19</sup> and in functional health patterns, as suggested by Marjory Gordon's theory.<sup>20</sup>

Four of the six articles in this review, presented the data collection subdivided into two stages.<sup>17, 14, 16, 18</sup> As for the authors of these studies, for other scholars<sup>13</sup>, such steps are called “interview or anamnesis” and “physical examination” – which is in line with what is proposed in teaching materials on the subject.<sup>6, 21</sup> It is common, however, for authors to use other denominations, such as Barcelos and Ferreira who consider “anamnesis” as “collection of subjective data”; and, the “physical examination”, as “objective data collection”.<sup>14</sup>

With regard to the “anamnesis”, it is recommended that the introduction, body

and closing phases be covered. The introduction is the moment in which the professional introduces himself to the adult/elderly and explains the purpose of that conversation and of obtaining information about him. The body consists of the interview itself, which should ideally be based on a pre-established guide instrument or material. While closing occurs when the adult/elderly person is signaled that the conversation is coming to an end, giving the opportunity to verbalize something that has not yet been addressed.<sup>21</sup>

Regarding the “physical examination”, the suggestion is that it be performed, preferably, in the cephalocaudal direction. In addition, it is recommended that the general condition be evaluated at the first moment so that it is possible, based on the professional's interpretations, to conduct the observation and measurement of other topics that involve the physical examination.<sup>21,6</sup>

For Silva et al<sup>16</sup>, the collection must be accompanied by sensitive listening and focused observation, avoiding interruptions, since during the anamnesis and physical examination, clinical signs and symptoms that are fundamental to care can be identified. Furthermore, at this time, postures, gestures and facial expressions should be the focus of attention, as they can reveal unidentified information through verbal communication.

It is important to note that, when data collection is directed to an elderly patient, some particularities must be considered. Based on the degree of dependence, the elderly may present cognitive and physical alterations, which can generate specific demands in the anamnesis and physical examination. Thus, under these conditions, it is essential to conduct data collection in the presence of a companion. In addition, in the face of hospitalization, the elderly can present significant behavioral changes, being common the presence of aggression and mental confusion. Such behaviors can compromise the nurse-patient interaction and, at the same time, lead to misinterpretations regarding the collection findings.<sup>22</sup>

Some topics related to the physical examination of the elderly patient should also be considered, such as the presence of facial asymmetry, edema in the lower limbs, skin involvement, muscle atrophy, among others. Therefore, in addition to paying attention to signs and symptoms inherent to the aging process, nurses must identify the need to adapt data collection methods, such as measuring blood pressure, which with advancing age may show variability, it is recommended to measure both limbs and in different positions – sitting, supine and orthostatic, when possible.<sup>23</sup>

With regard to adults, there were no particularities related to data collection.

It is important to point out, however, that regardless of the age group and characteristics of the individual to which it is directed, before starting the collection it is necessary to confirm data related to identification, date of admission, origin and reason for hospitalization of the being assisted.<sup>17,16,21,6</sup> Furthermore, the validation of the data obtained must occur throughout the process that involves collection. Thus, the nursing professional must be aware of the results of diagnostic tests, informative resources in the medical record and information updated by other professionals.<sup>16</sup>

## CONCLUSION

Six studies composed this review and revealed the need for data collection to be based on a theoretical framework, with systematization of anamnesis and physical examination; in addition to citing, among other aspects, the main recommendations for carrying out the collection. However, such approaches were considered comprehensive and do not characterize the specificities that involve data collection directed at an adult and/or elderly patient in the hospital context.

Were considered limitations of this review: the time cut-off of ten years in the search, which may have restricted the



selection of articles; and, the absence of searches in repositories of theses, dissertations and educational objects, which may have limited the findings and their respective interpretations.

Therefore, it is suggested the development of research related to the identification of the specificities that involve the collection of data in nursing directed to the adult and/or elderly patient in the hospital context. In this way, it will be possible to establish strategies that guide the care practice for this population and, at the same time, favor the teaching-learning process of those professionals in training, having as a guiding element the quality of care provided to adults and/or hospitalized elderly.

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