MANAGERIAL NURSING ACTIONS IN CARDIOLOGY REFERENCE SERVICES

AÇÕES GERENCIAIS DE ENFERMAGEM NOS SERVIÇOS DE REFERÊNCIA EM CARDIOLOGIA

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ABSTRACT

Cardiology services are critical sectors due to the unpredictability of occurrences and highly accelerated rhythms. Therefore, nursing management is essential and directly influences the quality of care. This is an integrative literature review, which aimed to know nursing publications and the impacts of their managerial actions for the qualification of cardiology services. Ten articles from the LILACS, PubMed, and SciELO databases were used. The descriptors "Health Management," "Nursing," "Hospital Services," and "Cardiology" were used in a cross-referenced manner. The selection of articles was carried out in the months of October and November 2018. The inclusion criteria were: articles produced by nurses; published in the period 2009-2018; in Portuguese, Spanish, and English; and available electronically in full. The data was organized and tabulated for analysis. The results found that most of the articles that made up this review were qualitative in nature and published in national nursing journals. It was highlighted as managerial actions the practices of decision making, leadership, communication, training, qualification, allocation of human and material resources. The nurse's work in public cardiology units represents a challenge, which reinforces the need for studies that prove its relevance to promote continuous improvement of care.

Keywords: Management in health. Nursing. Hospital services. Cardiology.

RESUMO

Os serviços de cardiologia são setores críticos devido à imprevisibilidade de ocorrências e ritmos altamente acelerados. Logo, o gerenciamento de enfermagem é algo imprescindível e que influencia diretamente na qualidade da assistência. Trata-se de uma revisão integrativa da literatura, que teve por objetivo conhecer publicações de enfermagem e os impactos das ações gerenciais desses para a qualificação dos serviços de cardiologia. Foram utilizados 10 artigos das bases de dados LILACS, PubMed e SciELO. Utilizaram-se os descritores “Gestão em Saúde”, “Enfermagem”, “Serviços Hospitalares” e “Cardiologia” de forma cruzada. A seleção dos artigos foi realizada nos meses de outubro e novembro de 2018. Os critérios de inclusão foram: artigos produzidos por enfermeiros; publicados no período de 2009-2018; nos idiomas português, espanhol e inglês; e disponíveis eletronicamente na íntegra. Os dados foram organizados e tabulados para análise. Os resultados constataram que a maioria dos artigos que compuseram essa revisão foi de natureza qualitativa e publicados em revistas nacionais de enfermagem. Destacaram-se como ações gerenciais as práticas de tomada de decisão, liderança, comunicação, treinamentos, capacitações, alocação de recursos humanos e materiais. O trabalho do enfermeiro, em unidades cardiológicas públicas, representa um défi, o que reforça a necessidade de estudos que comprovem sua relevância para promoção de melhorias contínuas da assistência.

Palavras-chave: Gestão em Saúde. Enfermagem. Serviços Hospitalares. Cardiologia.

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INTRODUCTION

Cardiovascular Diseases (CVD) are among the major public health problems worldwide, due to their high incidence that causes 17.9 million deaths every year, of which 7.4 million (13%) are caused by coronary heart disease and 6.7 million (12%) by stroke\(^1\)\(^-\)\(^2\). According to the American Heart Association, in 2017 CVD was the underlying cause of nearly 801,000 deaths in the United States\(^3\). Similarly in Brazil, 383,961 deaths were estimated, 28% of the total, being the second cause of death in young adults and the first in people over 60 years old, which generated costs of more than 37 billion to the health system in 2015\(^4\)\(^-\)\(^5\)\(^-\)\(^6\).

This epidemiological configuration, associated with the evolution of technology, public policies and health services, has been instigating nursing researchers, especially regarding the dynamics of work, resource mobilization, process management to achieve the goals and consequently proposals for service qualification\(^7\)\(^-\)\(^8\).

In this context, among the health sectors, the cardiovascular units represent one of the most critical services in relation to quality of care, and must be provided with the human and material resources necessary for the implementation of effective assistance, considering the specificity of the patients treated, requiring from the multidisciplinary team scientific improvement, development of skills and dynamization of care\(^9\).

The nurse, as a manager or team leader, needs theoretical and practical knowledge that can support and enable the development of activities of greater complexity, which involve training, updating, revitalizing or recognizing the skills and developing the potential of nursing workers as a practice that emerges from work to promote better care actions in the institutional context\(^10\)\(^-\)\(^11\).

However, management is often seen by nurses as a bureaucratic activity disconnected from the production of care, which is characterized by work fragmentation with separation between conception and execution, managerial control of the production process associated with rigid hierarchy, rationalization of the administrative structure, impersonality in interpersonal relationships, and emphasis on systems of procedures and routines\(^12\)\(^-\)\(^13\).

Therefore, the relevance of this research is verified, focused on highlighting the nurse's competencies to develop managerial actions, in the context of cardiovascular reference services, with emphasis on the qualification of care and is justified by the interest in understanding the applicability of these actions in the context of public health services, which serve a large portion of the population in Brazil.

Thus, this research aimed to know the nurse's managerial actions in cardiology referral services and to highlight the nurse's work as a cardiovascular unit manager.

METHOD

An integrative review was used as a methodological resource, which is an important tool for analyzing the evidence in the literature in a broad and systematic way to disseminate the results of the studies, contributing to point out problems that can be solved with evidence discovered in other research\(^14\).

The construction of this review was structured based on the following steps: identification of the theme, formulation of the
guiding question; establishment of eligibility criteria; survey of studies in the databases; assessment and critical analysis of the selected studies; categorization, evaluation and interpretation of results and presentation of the synthesis in the integrative review\(^{15}\).

In this perspective, the question that guided this work was elaborated: What are the nurse's managerial actions for the qualification of cardiology services, described in the literature?

As inclusion criteria, original articles in Portuguese, English, and Spanish, available in full in the Latin American and Caribbean Literature on Health Sciences (LILACS), National Library of Medicine (PubMed), and Scientific Electronic Library Online (SciELO) databases from 2009 to 2018 that addressed the main managerial actions performed by nurses in the context of cardiovascular units were adopted as inclusion criteria. Literature review articles, duplicates in the databases, or those not comprised in the established period were excluded. The search took place in October and November 2018, and the Mendeley software was used to manage the references.

To operationalize this research we used the PRISMA recommendation - Main Items for Reporting Systematic Reviews and Meta-Analyses\(^{16}\), according to the flowchart in figure 1.

**Figure 1 - Flowchart of the database search strategy LILACS, PubMed eSciELO, Aracaju/SE, 2018**

The search began with the selection of the descriptors used in the databases, using the DeCS/MeSH terminology: management in health, nursing, hospital services and cardiology.

The search strategy was ("health management" AND "nursing") and ("health management" AND "nursing" AND "cardiology" OR "health management" AND "hospital services" AND "nursing")

The selection of articles was performed in a paired manner between the authors by reading the titles and abstracts of the studies that met the
inclusion criteria. Then, the studies were jointly evaluated, in an exploratory way, based on a form structured and validated by Ursi (2005), which discriminated title, authors, year, country, objectives, method and main results. At the end, four articles were selected from LILACS, three from PubMed, and three from SciELO. Thus, the sample was composed of ten articles.

The diversity of study approaches, settings, actions taken and results precluded a formal systematic review or meta-analysis, so this review presented the results descriptively and narratively.

It is important to emphasize that this research, by having a bibliographical character, was not submitted to the Research Ethics Committee of Tiradentes University (REC/Unit), however, it guaranteed the authorship of the ideas used in its construction according to NBR 10520 (requirements about citations) and NBR 6023 (estabishes the parameters of references), in addition to the Law 12.853/2013 (collective management of copyrights).

RESULTS

Table 1 shows the distribution of studies according to author, year of publication, country of origin, journal, method, participants and main actions of the nurse manager.

Table 1 - Synthesis of the articles that made up the integrative review. Aracaju/SE, 2018

| Author/year/country | Journal | Method | Participants | Nursing Management Actions |
|---------------------|---------|--------|--------------|----------------------------|
| Vieira LC, Contrin LM, Rol JD, Conte HD, Lima AR, Castro ED, Santos ML, 2009 | Health Sciences Archives | Exploratory Descriptive | 56 Nurses | Forecasting and provisioning of materials, preparation of schedules, meetings with managers, continuing education, team supervision. |
| Kobayashi RM, Vendramini AB, Ayoub AC, 2010 | Northeast Nursing Network Journal | Descriptive Exploratory Documentary | 7 Nurses | Plans the physical space, sizes human and material resources. |
| Linch GF, Guido LD, Fantin SD, 2010 | Contextual Nursing Text | Cross-sectional | 63 Nurses | Training and supervision of nursing staff. |
| Oliveira EB, Souza NV, 2012 | UERJ Nursing Journal | Descriptive Qualitative | 7 Nurses | In-service training, elaboration of routines and protocols, performance of more complex procedures and team supervision. |
| Hickey PA, 2012 | American Journal of Critical Care | Cross-sectional | 150 Nurses | Standardizing communication, leadership, creating checklists, enabling the care process. |
| Driscoll A, Currey J, Allen JA, George M, Davidson PM, 2014 | Australian Critical Care | Cross-sectional | 24 Nurses | Performing more complex procedures. |
| Aruto GC, Lanzoni | Cogitare | Descriptive | 14 | Team supervision, continuing |
| Author(s)                                      | Journal/Source                                      | Type                                      | Year | Articles | Description                                                                 |
|-----------------------------------------------|-----------------------------------------------------|-------------------------------------------|------|----------|------------------------------------------------------------------------------|
| GMM, Meirelles BH, 2016                       | Nursing Qualitative Nurses                           | Education, communication, leadership, unit management, and training. |
| Koerich C, Erdmann AL, 2016                   | Brazilian Journal of Nursing Qualitative 22 Professionals | Discussing care actions with the team, managing continuing education practices and supervision of nursing care, identifying needs for professional improvement and guidance in the team. |
| Silva VL, Camelo SH, Soares MI, Resck ZM, Chaves LD, Santos FC, Leal LA, 2017 | USP's School of Nursing Journal Cross-sectional Descriptive Correlational 84 Nurses | Promotes leadership practices to empower, encourage, set the path, challenge the process, and inspire a shared vision, provides teamwork, helps create a climate of trust, shares power, and values his or her people. |
| La-Sala R, Dicembrino RB, Dall’Argine S, Baiguera M, Gazzotti L, Gubin E, Rondini A, Mamei I, 2017 | Acta Biomed for Health Professions Multicenter Observational Quantitative 154 Nurses | Continuing education, supervision, decision making, and training. |

Source: Research data.

Regarding the origin of the studies, seven articles were published in Brazil, in nursing or interdisciplinary journals (7,17-19,22-24), United States, Australia and Italy contributed one study each (20-21,25).

In the same sense, regarding the year of publication, it was found that the years 2010, 2012, 2016 and 2017 stood out with the highest number of articles, 2 per year. 2009 and 2014 contributed with one publication. Studies referring to the years 2011, 2013 and 2015 (Graph1).

Graph 1 - Distribution of articles, according to year of publication, Aracaju/SE, 2018

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Source: Research data.

The selected articles were socialized in ten different journals, especially the following ones: Health Sciences Archives, Northeast Nursing Network Journal, Text Nursing Context, UERJ Nursing Journal, American Journal of Critical Care, Australian Critical Care, Cogitare Enfermagem, Revista Brasileira de Enfermagem, Revista da Escola de Enfermagem da USP e Acta Biomed for Health Professions.

Studies were identified in which seven nurses participated\(^7,19\), however La-Sala et al. (2017)\(^{25}\) had in their research the participation of 154 nurses. The analysis of the research methodology of the articles allowed us to identify that nine articles used a qualitative methodological approach and only one used a quantitative one. In the qualitative approach studies, the methods were: descriptive, documental, cross-sectional.

This research evidenced that the nurse managers were aged between 23 and 62, predominantly female, with more than five years of education, postgraduate degrees, not necessarily in cardiology, but in urgency and emergency, ICU and management\(^{17-18,20,24}\).

It was also observed the lack of nurse managers specialized in cardiology, which demonstrates the need for qualification of these professionals for high complexity cardiovascular care, due to the demands that the sector requires in the actions of training and qualification of the nursing staff, organization and development of work processes in the sector, care support activities, such as risk management, patient safety and total quality management\(^{20-21}\).

DISCUSSION
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The management of cardiology services has as its main focus the organization of integral care, that is, the planning of shared actions so that the nursing team, under the leadership of the nurse, develops the work process with efficiency and quality, in order to satisfy the needs of safety and welfare of the assisted patient\(^{22}\).

Thus, for the authors, the essential managerial actions for the work of the nurse manager of a cardiovascular unit are related to decision making, communication, leadership, provision of material resources, dimensioning of human resources, supervision, elaboration of protocols, continuing education, among others\(^7,17-18,20\).

Regarding service management, a study conducted with seven nurses who work in a reference state government institution in the cardiovascular area refers that planning and decision making, as functions attributed to nurses, help in the development of service management\(^7\), because of this, it promotes the appropriate use of equipment, ensuring the effectiveness and cost in the process of selection and training of the workforce and in the performance of highly complex procedures and practices\(^{18-19}\).

Communication directly influences the effectiveness of institutional protocols, supervision and the leadership process, since it allows nurses to transfer and receive information and knowledge, organize their service and outline objectives with their team. Thus, the success of the leader is related to the ability to communicate, which is essential to reduce adverse events and ensure safe care, and facilitate the achievement of previously established goals\(^{20,22}\).
Thus, it can be seen that leadership is an important action in the work of the nurse manager of cardiology services, because it is a tool for promoting improvements in care, which assists in the evaluation, planning and communication of the work processes of the sector.

Regarding the dimensioning of human resources, Kobayashi, Silva and Ayoub (2010)⁷ point out that this action makes it possible to provide the necessary personnel to meet the demands of customer care. It also makes it possible to evaluate the workload in the unit and thus plan the ideal number of nursing workers to provide care, making this activity an essential requirement to measure the quality of care provided.

Likewise, the management of material resources in the cardiology unit is an effective practice in quality control and waste, due to the high cost of these materials and the difficulty of replacement⁸⁻¹⁰, especially in public institutions where resources are scarce. Therefore, the use of technology and innovation of equipment are essential for assistance, because obsolete inputs and equipment increase the possibility of errors, health risks to the worker and misfortunes to patient safety⁸⁻¹⁰.

As a consequence of these facts, there is a need for the nurse manager to participate in the purchase and distribution of materials, intermediating the contacts between the institutional levels and the responsible sectors, this aspect being one of the fundamental aspects of the nurse's work that guarantees the continuous improvements of the assistance and the management for total quality.

In the context of cardiology services, it was unanimous in the studies the conception that the lack of training impairs assistance. Due to this circumstance, it is essential that the nurse manager assumes the challenge of planning continuing education training, through the implementation of specific programs that address practical knowledge about the handling of equipment used in procedures, the conduct required in everyday situations, as well as the achievement of established goals¹⁸⁻²³.

In this sense, the implementation of continuing education in cardiology services, under the perspective of nursing management, provides opportunities for professionals to experience learning, according to the reality of the sector and the daily activities, contributing to the qualification of these services.

CONCLUSION

From an integrative review, we sought to know the managerial actions of nursing in cardiology services. Therefore, the study proved to be effective to provide support in building the profile of the nurse manager, i.e., they are professionals capable of driving and mobilizing care practices in the context of these services.

Thus, facing the complexity of managerial actions, the nurse must be prepared to lead the team and the care of patients, being essential skills and abilities in decision-making practices, leadership, communication, training and qualification, through continuing education and allocation of human and material resources.

Thus, the development of nurses’ work, especially in public cardiology units, represents a great challenge, after all, they do not have enough human and material resources to implement strategies to mitigate or eliminate the problems.
identified in the units. This reinforces the need for further studies to prove its relevance in promoting continuous improvement of care.

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