Knowledge management in the health area: sharing and learning

INTRODUCTION

When implemented in companies, Knowledge Management (KM) is perceived as a difficult and complex task, despite its numerous and perceived advantages. As a result, many organizations are unable to process it successfully, as knowledge has a value for business success and, when well managed, tends to bring an advantage and be increasingly necessary for organizational survival.1

Its relevance lies in the observation that, in any context, it is essential to consider the complexity of the human being, a theory founded by the anthropologist, sociologist and philosopher Edgar Morin, because “all and any unit of human behavior (praxis) is,
at the same time, genetic/ cerebral/ social/ cultural/ ecosystemic”. From this it follows that “the whole has a certain number of qualities and properties that do not appear in the parts when they are separated”. Consequently, “knowledge of the constituent parts is not enough for knowledge of the whole, and knowledge of the whole, of course, cannot be isolated from knowledge of the parts”, especially in the area of health. 2-3

In this context, Knowledge Management can favor institutions so that they transform the data collected in their daily practice, share the knowledge acquired during the professional journey and optimize health care. 1

For this clarification, this article aims to identify the Health Knowledge Management. The following question was established as a research problem: how has Knowledge Management been researched and what are its contributions to the health area?

METHOD

To meet the objective of this study of identifying the bases and theoretical contributions, an integrative literature review was carried out, based on the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 4 to map research processes, approaches, techniques, procedures and instruments on KM in the health area.

The inclusion criteria were works published in national and international researches / journals in Portuguese and English from 2016 to 2020 and those that presented contributions regarding the theme health, CG, knowledge sharing, learning in CG and CG in health teams. Furthermore, the exclusion criteria disregarded publications prior to 2016, duplicates, those that did not meet the inclusion criteria, those that had titles and abstracts that did not contain the selected criteria, and those that did not present an adequate level of evidence.

The publications that made up the sample were found in the databases listed in the Virtual Health Library (Bireme) and in the Web of Science. For access, the following keywords were used: ‘gestão do conhecimento’, ‘knowledge management’, ‘compartilhamento do conhecimento’, ‘knowledge sharing’, ‘aprendizagem em gestão do conhecimento’, ‘knowledge management learning’ and ‘gestão do conhecimento na área da saúde’, ‘healthcare knowledge management’.

RESULTS

A total of 103 works were identified during the initial search of the databases. After removing duplicates (n=18), 85 titles and abstracts were read. After selecting 53 articles, 41 were excluded and 9 final articles were included. The process of mapping, selecting, including and excluding studies is described in the flowchart shown in Figure 1.

On the eight selected works, table 1 presents a summary of their respective characteristics.

From the sample of articles, there is a master’s dissertation (11%) and the remaining articles published in national (55%) and international (34%) journals. As for the type of study, there are qualitative (34%), observational retrospective (22%), quantitative (22%), editorial (11%) and systematic review (11%).

DISCUSSION

Figure 1 – Mapping and selection of included and excluded surveys

Source: Adapted by the authors, 2021.
In this context, it is noticeable the interaction of sharing information that generate knowledge and later its management, through some studies, such as: education to support air rescue, 5 perception of employees of Portuguese health institutions, 6 developments of a successful KM systems model for New Zealand healthcare organizations, 7 KM implementations and tools used for decision making in healthcare, 8 identification of the competitive advantage located in KM directed to health management strategies, 9 identification of different KM models in hospitals, 10 implementation of KM and tools used for decision making in healthcare.

In the health area, Knowledge Management (KM) is a complex process that presents difficulties in sharing knowledge. Morin 3 states that knowledge of the constituent parts is not enough for knowledge of the whole, an essentially administrative focus, a management that deals with the recovery of people’s health problems requires more sensitive skills and abilities. In this context, KM is a discipline interested in favoring organizations in order to transform multiple medical data into relevant clinical information and promote the sharing of knowledge acquired over years of experience among health care professionals. 3

The research by Ali et al. 7 involved 263 doctors, 100 working in Hamilton and 163 in Wellington, New Zealand. They presented the model of knowledge management systems for health care considering the expansion of an existing generic knowledge management systems model, incorporating organizational and system factors, with the use of knowledge management systems for sharing and retrieval of success variables used.

Shahmoradi, Safadari and Jimma were identified as the main research focuses 8 the implementation of KM in the health area, KM tools in health, the available opportunities and the existing barriers. They sought to provide the right knowledge at the right time, that is, at the point of decision-making for the implementation of KM in the health area, understood as essential. For this, the use of an adequate tool to manage knowledge and an easy-to-use system are important requirements, as they can significantly improve the quality and safety of care provided to patients.

To Cruz and Ferreira, 10 the implementation and the very success of KM programs in health organizations do not occur peacefully, being conditioned by a wide range of factors, particularly in the management model and in the number of employees. The authors analyzed the positions of 671 employees from ten Portuguese health institutions, with different management models. One of the challenges perceived was the retention of employees and, as a consequence, the offering of growth and development opportunities in exchange for their commitment to the organization’s objectives, as it is in people that the main competitive advantage of organizations resides. They also found that current knowledge management practices are still not very

<table>
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<tr>
<th>No. of the Article</th>
<th>Title</th>
<th>Year</th>
<th>Journal</th>
<th>Type of study</th>
</tr>
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<tbody>
<tr>
<td>A1 (5)</td>
<td>Education strategy for aeromedical support: a descriptive study.</td>
<td>2016</td>
<td>UFF</td>
<td>Qualitative</td>
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<td>A2 (6)</td>
<td>Gestão do conhecimento em instituições de saúde portuguesas</td>
<td>2016</td>
<td>Revista Brasileira de Enfermagem</td>
<td>Quantitative</td>
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<td>A3 (7)</td>
<td>Knowledge management in Portuguese health institutions</td>
<td>2017</td>
<td>International Journal of Medical Informatics</td>
<td>Qualitative</td>
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<td>A5 (9)</td>
<td>Effective Knowledge Management Model (KM) for Healthcare Integrating Success Factors and Knowledge Management Strategy</td>
<td>2016</td>
<td>Asian Hospital &amp; Healthcare Management</td>
<td>Observational retrospective</td>
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<td>A6 (10)</td>
<td>Knowledge Management in public hospitals with different management models: some explanatory factors</td>
<td>2017</td>
<td>Revista Brasileira de Gestão e Inovação</td>
<td>Quantitative</td>
</tr>
<tr>
<td>A7 (11)</td>
<td>Nurse preparation for the care of multiple victims in air rescue</td>
<td>2021</td>
<td>Nursing (São Paulo)</td>
<td>Qualitative</td>
</tr>
<tr>
<td>A9 (13)</td>
<td>Knowledge management in the software industry: how Scrum activities support a knowledge management cycle</td>
<td>2020</td>
<td>NAVUS</td>
<td>Observational retrospective</td>
</tr>
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Source: Adapted by the authors, 2021.
consistent and, for the most part, not formalized.

The idea for developing Bonin’s research 5 was built from the work meetings that take place daily in the Air Operations Group of the Rio de Janeiro State Fire Department. It was possible to identify, among the statements of the unit’s professionals, the existing weakness in the criteria for activating air medical transport and the lack of knowledge of professionals from other units in relation to the process. The researcher created two flowcharts, one aimed at a controlled scenario or with a single victim and the other involving the incident with multiple victims.

The study on the care of multiple victims in the air environment corroborates the aforementioned researcher, as it is concluded that the challenges associated with the work environment, in line with the training of the entire team, will optimize safety and care for critically ill patients. 11

The model proposed by Ali 9 indicates that it is essential for healthcare organizations to incorporate KM processes, strategies and success factors into their system for the successful implementation of KM in the healthcare area. For the researcher, what is important is that KM processes and strategies are approached in a systematic and structured way.

In the health area, KM is interested in transforming multiple medical data into relevant clinical information and promoting the sharing of knowledge acquired over years of experiences among health care professionals, but the literature confirms the existence of obstacles, which are determined by the nature of the institution, the type of business process, products and customers.

In this context, studies prove that organizational culture and the environment influence, involve people, systems, processes and, consequently, knowledge management. 12,13 It is noteworthy that, for knowledge sharing to be productive, it must be based on mutual trust and respect.

CONCLUSION

It is concluded that the important thing in the health area is that the processes, the Knowledge Management strategies, are based on proven and effective models. Furthermore, that they are addressed in a systematic and structured way to the sensitive context, specifically. Because professionals in this area have specific characteristics that enable them to act in a coordinated and collaborative way. However, they can become more effective if they have transformative leaders. Above all, result in efficiency and success of service for your organizations.

In general, for decades, research has shown that in the health area, knowledge management is a fluid topic. It is necessary to carry out new studies that cover Knowledge Management.

As limitations of the study, it is possible to verify that health has several specificities due to the large number of professions and specialties. Therefore, further studies are suggested to fill in the gaps and specificities of the various areas that the field of health has.

References


