

view

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Abstract

Leadership is a topic of great conceptual approach and is considered fundamental in the work process of healthcare organizations as well as knowledge management. This study carried out a literature review to identify the leadership in the health domain with regard to knowledge management in health organizations in articles published in the last 05 years. The data search was performed in PubMed/Medline, Scielo, and Scopus, using the descriptors: leader*; health; knowledge management, which resulted in 136 articles. Of these, 22 were selected in the first analysis, of which 8 were chosen to support this study, which applied the method of integrative literature review. The research findings indicate that leadership and the role of leaders have strong contributions to the knowledge management process in healthcare organizations.

Keywords: Leadership. Health. Knowledge management.

1. Introduction

Knowledge management is a current topic and, therefore, relevant in organizations in general, and in turn, and not differently, important for healthcare organizations. These in particular are organizations that are constituted by the complexity of their processes, due to the operational nature of their activities, it is worth thinking that the health segments should direct attention to the contributions that knowledge management can bring in the alignment of the work production that materializes in different ways, especially for the effective performance of health professionals and leaders who integrate these work spaces. In this sense, this study was dedicated to a literature review to bring understanding about leadership and its implications for knowledge management in healthcare organizations.

The essence of leadership is the influence the leader achieves over followers in a non-unidirectional relationship, which can be over people, things or events. Leaders influence subordinates while also receiving in some way influences from them, influence is merely the effect of one party on another. In the case of people, the influence may be on attitudes, perceptions, behavior or some combination of these outcomes (YUKL, 1998). More overarching understandings of knowledge management in healthcare organizations must advance so that they can leverage improvements in the whole of activities combined with the important relationship with leadership, and consequently obtain better advantages in the environment of health services provision. The text is organized with the purpose of presenting a concise reference, the methodological aspects that guide the study, the presentation of the data found in the literature review, following the discussions on the findings arising from the scientific publications to which it was dedicated to investigate and, finally, the final considerations.

2. Theoretical Reference

Knowledge Management in Healthcare Organizations

Knowledge has become a new economy. Database, information bases, and knowledge storage artifacts are increasingly fundamental in organizations.

"Data are facts, and information is interpreted data. Knowledge is created and organized by flows of information, shaped by their holder. It is tacit or explicit. Tacit knowledge is nonverbalized, intuitive, and unarticulated knowledge that people carry in their heads. It is hard to formalize and communicate because it is rooted in skills, experiences, insight, intuition, and judgment, but it can be shared in discussion, storytelling, and personal interactions. It has a technical dimension, which encompasses skills and capabilities referred to as know-how. It has a cognitive dimension, which consists of beliefs, ideals, values, schemata, or mental models. Explicit knowledge is codified knowledge that can be expressed in writing, drawings, or computer programs, for example, and transmitted in various forms. Tacit knowledge and explicit knowledge are mutually complementary forms of meaning" (SERRAT, 2017, p. 291).

Management embraced knowledge, and by the 1990s a contemporary business philosophy had attracted the interest of executives, researchers, and academics. Therefore, the interest in knowledge management KM grew and remained (KARAMITRI; KITSIOS; TALIAS, 2020). According to Karamitri, Talias and Bellali (2017) Knowledge is an intangible asset in organizations and provides a competitive advantage to those who possess it.

As conceptualized by Santos and Varvakis (2020), human knowledge can be acquired through education or experience and contributes to the evolution of society. This evolution began with Society 1.0, that of hunter-gatherers who lived freely in the wild. With the agricultural revolution came Society 2.0, which started nations by increasing the need for collective organization. The industrial revolution gave rise to Society 3.0, concerned with mass production. With the emergence of computers and the internet, it was possible to connect intangible assets in a network and we became Society 4.0. We find ourselves in a transformation towards Society 5.0, which is the knowledge society, a super-intelligent society with the purpose of prosperity for the human race. Due to the expansion of the global knowledge-based economy, organizations face a need to identify and operationalize the most appropriate solutions that allow them to achieve a sustainable competitive advantage (POPA; STEFAN, 2019). According to Karamitri, Kitsios and Talias (2020) sustainable societies should consider the need to make the connection between knowledge management KM and health as a critical issue for social development.

As Drucker (2007) stated when referring to hospitals, as being the most complex human organizations of all time. Hospitals employ hundreds of workers from many different scientific fields, educational backgrounds, socioeconomic status and, occasionally, different cultures. Hospitals, as part of their operations, need to use knowledge management systems to facilitate their operations. Karamitri, Kitsios and Talias (2020) highlight that it is necessary to investigate how to create knowledge and identify possible predictors of knowledge-sharing behavior that can support a hospital's sustainable knowledge management strategy, since KM strategies can help managers to increase the performance of hospitals and other healthcare organizations.

Hospitals are complex organizations with unique characteristics due to the heterogeneity of the orientation of health professionals (KARAMITRI; TALIAS; BELLALI, 2017). Heterogeneity is constituted by the different work processes that coexist and that have an independent function with the other work processes. With a better understanding of knowledge management, health organizations can achieve improvements in their processes, such as speeding up productivity and coordinating the use of resources more efficiently, collaborating in the decision-making process in healthcare organizations.

According to Lee (2017) hospital organizations reveal one of the most complex structures of our society that differs from other organizations. It is difficult to share experiences and make comparisons between healthcare environments and other types of organization, and these must be studied independently through their social context and norms (KARAMITRI; KITSIOS; TALIAS, 2020). Hospitals require a highly divergent set of activities in healthcare that is established by vast networks and complicated decision-making processes (LEE, 2017).

Lee (2017) also argues that due to the organizational culture and systems within hospital organizations, successful knowledge management is not easy to achieve, rather it requires that hospital organizations need to understand organizational structure, culture and systems. to perform the KM successfully. On the other hand, according to Cruz and Ferreira (2016), the operational context of healthcare organizations in their operating environments is also marked by the complexity of the health system itself, by the substantial growth of scientific knowledge, by the impact of clinical error, due to the high investments in technology and the emerging competitiveness and associated with the implementation of new management models in favor of efficiency gains, the implementation of knowledge management seems particularly favorable.

However, Popa and Stefan (2019) highlight that even in the context of increasing advances in KM knowledge management by the business sector and somehow the consensus that creating, acquiring, sharing and using knowledge allows individuals, teams and communities achieve superior performance, in the context of healthcare, there is room for improvement in this regard, both from a theoretical and empirical point of view. The ISO 30401:2018 STANDARD emphasizes a series of fundamental requirements for the success of a knowledge management system. Among them is the leadership item, which comprises the stages of sensitization of the top management and its role, training and awareness-raising of knowledge management, definition of useful indicators to be strategically treated and monitored (ALVEZ et al., 2021).

3. Methodology

In accordance with Whittemore and Knafl (2005), the integrative review works with the concept of integration, from problem identification, to literature search, evaluation and data analysis. Therefore, the integrative review supports, from the search base of the state of the art of the studies for the collection and organization of the data to the analysis and explanation of the findings/results.

An integrative review (IR) is a specific method, which summarizes past empirical or theoretical literature, to provide a comprehensive understanding of a particular phenomenon. This research technique aims to idealize an analysis of the knowledge already built in other researches on a particular subject. And it enables the synthesis of several published studies, allowing the generation of new knowledge, grounded on scientifically based results (BOTELHO et al., 2011).

As for the schedule of activities, the research started on September 7, 2021. The selection of articles was carried out on September 9, 2021, and the analysis of the articles and their discussion was concluded on September 16, 2021. The research central aspect is leadership, health and knowledge management.

For the development of the study, the Scopus databases were consulted: <https://www.scopus.com>, Scielo: <https://www.scielo.br/> and PubMed/Medline: <https://pubmed.ncbi.nlm.nih.gov/> The inclusion criteria determined for the research were: studies in the format of full articles, published from 2016 and in Portuguese and English. The exclusion criteria were: theses, dissertations, articles duplicated in the databases.

4. Results

In a broad search in the Scopus research base, in order to have an overview of scientific publications, considering all publications up to the initial date mentioned, generalist expressions were used and consistent with the research theme and the following results were found:

Id Search	Expression	Results
P1-B1	TITLE-ABS-KEY (leader*)	134,774
P1-B2	TITLE-ABS-KEY (health)	1,630,801
P1-B3	TITLE-ABS-KEY ("knowledge management")	24,555
P2-B1	TITLE-ABS-KEY ((leader*) AND (health))	27,662
P2-B2	TITLE-ABS-KEY ((leader*) AND ("knowledge management"))	1,003
P2-B3	TITLE-ABS-KEY ((health) AND ("knowledge management"))	1,490
P3-B1	TITLE-ABS-KEY ((leader*) AND (health) AND ("knowledge management"))	100

Table 1 - Search Terms Definition

Source: Drafted by the authors

In the search for publications in the Scopus research base, using the most assertive expressions with the theme addressed, and applying the inclusion and exclusion criteria, 100 articles were found. In the search for publications in the Scielo research base, using the most assertive expressions with the theme, 2 articles were found. In the Pubmed database, 34 articles were found.

Base	Expression	Amount
Scopus	TITLE-ABS-KEY ((leader*) AND (health) AND ("knowledge management"))	100
Scielo	(ab:(leader*)) AND (ab:(health) AND (ab:("knowledge management"))	2
Pubmed	((leader)* AND (health) AND ("knowledge management")	34

Table 2 - Search strategy applied in the databases considering the inclusion and exclusion criteria

Source: Drafted by the authors

In the second stage, the titles of the 136 studies were read to detect those that corresponded to the scope of the research and the quality criteria for selection. A total of 22 articles were defined and read in their entirety and then 8 were selected to integrate the research, as shown in the list below.

Title of the article	Author(s)	Year
Development and Validation of a Knowledge Management Questionnaire for Hospitals and Other Healthcare Organiza- tions.	Ioanna Karamitri, Fotis Kitsios e Michael A. Talias	2020
Modeling the Pathways of Knowledge Man- agement Towards Social and Economic Outcomes of Health Organizations.	Ion Popa e Simona Cătălina Ștefan	2019
A systematic review of factors influencing knowledge management and the nurse lead- ers' role.	Anne Lunden, Marianne Teräs, Tarja Kvist e Arja Häggman-Laitila	2017
Effects of Leadership Behavior on Knowledge Management and Organization	Hongmei Tang	2017

Table 3 – Selected articles for the research.

Innovation in Medicine and Health Sciences.		
Knowledge management systems success in healthcare: Leadership matters.	Nor'ashikin Ali, Alexei Tretiakov, Dick Whiddett e Inga Hunter	2017
Knowledge Management Enablers and Pro- cess in Hospital Organizations.	Hyun-Sook Lee	2017
Knowledge management practices in healthcare settings: a systematic review.	Ioanna Karamitri, Michael A. Talias e Thalia Bellali	2017
Knowledge management in Portuguese healthcare institutions.	Sofia Gaspar Cruz e Maria Manuela Frederico Fer- reira	2016

Source: Drafted by the authors

5. Discussions

For the integrative review, after reading and segregating the articles, three themes of interest were chosen for this study: health workers; leadership and the role of leaders in knowledge management in health organizations and the contributions of knowledge management to health organizations. There were no restrictions on the typology of health business segments, we considered all of those which were found in the literature that agreed to meet the keywords we were looking for, such as: leadership and leaders, health and knowledge management.

5.1 Health Organizations Workers

Health organizations bring in their operational concepts a range of services of complex nature. As organizations developed to meet the supply of services that deliver solutions for health, the group of professionals required to perform activities in these organizations follows the same logic of complexity.

Organizations need to use People Management practices to balance data evidence, their goals, individual factors and human resources information systems. Organizations are becoming increasingly aware of the importance of employees in gaining and maintaining a competitive advantage. (KARAMITRI; KITSIOS; TALIAS, 2020).

In this sense, the people management sector has an important role, especially in relation to Knowledge Management (KM) in health organizations. According to Karamitri, Kitsios and Talias (2020) the categories of health workers are different and have their distinct role within the organization's operations. Therefore, they conclude that human resources managers should be encouraged to recruit people with the right qualifications to apply knowledge management, given that the acquisition of external knowledge usually occurs through processes that involve people. Karamitri, Talias and Bellali (2017) add that people who work in health organizations come from different scientific fields and with diverse educational backgrounds and need to collaborate to provide health services.

Different groups of employees tend to have their own regulations, perspectives, requirements and accreditation, so it is necessary for them to interact, cooperate, share information, transform it into knowledge and act efficiently to provide quality services to patients (KARAMITRI; TALIAS; BELLALI, 2017).

Popa and Stefan (2019) approach healthcare workers as actors and highlight that in the context of health, different "actors"/stakeholders need to be considered for the analysis of Knowledge Management, that is, different types of knowledge assets, processes and outcomes may be relevant to medical staff, non-medical employees of healthcare organizations, patients or the healthcare organization itself. The study by Karamitri, Kitsios and Talias (2020) highlights that doctors can process information related to the health sector and, based on their experience and knowledge, can improve the quality of the system and the management of their patients.

Tang (2017) research results showed that occupation, efficiency, integrity, stability, innovation and service quality are emphasized in the medical industry and the interaction with companies and the public is jointly close.

According to the study by Karamitri, Kitsios and Talias (2020), the implementation of knowledge management can be thought of in two different ways: one is that there is a possibility that knowledge management increases the autonomy of the clinical staff, enhancing the access to knowledge, however, heightened sense of autonomy may encourage individuals to destabilize the organization, and there is a chance that they will act against the organization's interests. Another way of thinking is that knowledge sharing can lead to knowledge creation. However, controlling team activities can diminish collective intelligence.

Lunden, Teräs, Kvist et al (2017) carried out a review study in order to describe the factors that facilitate or inhibit the development of nurses' competence and the role of the leading nurse in knowledge management. The authors highlight that the challenges of leading nurses in knowledge management include acquiring, evaluating and using current knowledge and evaluating and improving professional competence. Nursing knowledge management has been examined particularly from the point of view of implementing evidencebased practice.

The study by Ali, Tretiakov, Whiddett et al (2017) was carried out exclusively with doctors (MD) as health professionals and the result showed that the quality of knowledge content was considered particularly important for the success of knowledge management systems.

Lee (2017) conducted a study in hospitals with what he called knowledge workers, which included nursing specialists, clinical technicians, and administrative staff. The study found that most workers at the four hospitals believed that the core knowledge resides in individual brains, groupware, and personal computers.

Regarding the barriers to the implementation of KM, the study indicated the lack of enthusiasm to learn, the absence of a collaborative culture and the lack of time of these professionals due to the high involvement in operational activities. According to this study, all survey participants revealed that the most important way to

inspire KM involved clarity and consistency of well-defined purpose. Then it was concluded that it is necessary to well define the direction to be achieved, that is, the systematic management, with a well-designed vision, budget allocation, fair rewards, team of task forces and the link between the work processes, hospital and KM activities.

Karamitri, Talias and Bellali (2017) point out that even though Knowledge Management may have similarities between organizations and distinguish in terms of guidelines, there are certain characteristics and objectives that are unique in each health unit.

The study proposed by Karamitri, Kitsios and Talias (2020), which sought to develop a valid questionnaire for Knowledge Management, predicts that the introduction of methodologies such as Applied Knowledge Management Instrument or AKMI, so called by the authors, can bring new contributions to the study of knowledge. KM in the area of health organizations, adopting a social orientation in which employees and managers are the protagonists of KM's success. Even if the provision of health services relies on modern technologies, health professionals make the final decision for the diagnosis and treatment of the patient (KAR-AMITRI; KITSIOS; TALIAS, 2020).

Lee (2017) recommends in the conclusion of his research that the knowledge managers of each hospital should build an organizational culture and systems with the purpose of continually educating employees about KM based on trust and collaboration.

5.2 Leadership in Knowledge Management in Healthcare Organizations

Knowledge management presupposes the foundation of human capital, which implies leadership factors. In healthcare organizations, due to their particularities, the demands of leadership are even more discerning, which requires from the leader's skills and competences to integrate and transfer knowledge from different areas of knowledge.

In this integrative review study, the leadership theme was observed by studies with a strong point for KM in health organizations. For Karamitri, Kitsios and Talias (2020) with knowledge management, health leaders can understand how collective learning improves the quality and safety of hospitals. Since knowledge management can help to reduce errors in the provision of health services, and the nature of these errors that can affect the impact of the quality of healthcare on the whole. For example, effective control is achieved using a clinical decision support system. As a result, the potential reduction of medical errors can affect the improvement of healthcare provision (KARAMITRI; KITSIOS; TALIAS, 2020).

Tang's (2017) study, which addresses the medical industry, highlights leadership as a resource that brings a clear vision that serves to internalize values and create the environment for carrying out tasks that provide the best result for the organization. According to Karamitri, Kitsios and Talias (2020) leaders have a significant impact on companies and organizations and work to support learning processes to achieve service improvement goals.

In Ali, Tretiakov, Whiddett et al (2017) study, leadership was considered the most important organizational factor, even more important than incentives. While Tang (2017) reinforces that leadership is fundamental, as

a leader can reach the heart of his followers and encourage them to climb high peaks and create self-development and problem solving, the quality of leadership is closely related to the survival of the organization.

The study by Lunden, Teräs, Kvist et al (2017) on the role of nurses in KM reveals that leaders play a multifaceted role in knowledge management, acting as facilitators at the individual and organizational levels, creating favorable conditions for the development of skills. However, they warn that there are still few studies of evidence on the factors that influence knowledge management and the role of nurse leaders. Furthermore, they warn that innovative interventions must be developed and evaluated for the implementation of knowledge management, in nursing in particular in a context of challenging work environments with increasing workload and lack of time for learning and continuous professional development.

Ali, Tretiakov, Whiddett et al (2017), who exclusively studied medical professionals, reveal that leadership has been empirically demonstrated to promote quality in clinical settings and also leadership has promoted the success of knowledge management systems mainly by positively affecting the quality of the content of the knowledge. Leadership has also promoted the use of knowledge management for recovery, which should lead to the use of this better-quality knowledge by doctors, resulting in better patient outcomes.

Tang (2017) suggests that leaders in the medical industry are meant to maintain influence in the organization so that employees can be affected by leadership behavior and to promote the operation of knowledge management through the organization's strong culture and active innovation strategies, in order to achieve a better standard of management innovation and create a better level of technological innovation.

In the study by Ali, Tretiakov, Whiddett et al (2017), leadership also promoted the use of knowledge management systems for retrieval and therefore the use of this better-quality knowledge. The general findings suggest that leadership is a key element in promoting the success of knowledge management systems in healthcare organizations.

While Karamitri, Talias and Bellali (2017) study reveals that leadership promotes an organization's vision of growth and success, thereby organizations promote knowledge management with the support of their leaders, as they are the agents that motivate employees to embrace KM.

In Tang's view (2017), a leader in the medical industry is focused on a macro and permanent vision of ideas of continuous development and sustainable management, attentive to globalization trends, as well as transmitting and cultivating the value and beliefs in each employee, in order to consolidate efforts and create a culture for corporate goals.

5.3 Contributions of Knowledge Management in Health Organizations

The competitiveness of a health organization depends on the effectiveness of its knowledge management. A collaborative organization can apply knowledge management to share information to improve the services of health organizations (KARAMITRI; KITSIOS; TALIAS, 2020).

According to Lee (2017) hospital organizations are knowledge-intensive environments, involving rapidly changing medical technologies and requiring tools, skills and methods with more knowledge resources. In addition to hospital organizations Ali, Tretiakov, Whiddett et al (2017) claim that the health industry is also one of the most knowledge-intensive organizations. Specialized knowledge, that is, clinical knowledge, is

essential for clinical decision-making and, consequently, to offer better results to patients.

Regarding the contributions of knowledge management to health organizations, this integrative review brings some studies that reveal strong aspects of positive relationships for that matter.

The study by Ali, Tretiakov, Whiddett et al (2017) aimed to develop a model that incorporates systemic and organizational factors. System factors characterize information technology and its perceptions by users, and organizational factors describe the organizational context of its use. Ali, Tretiakov, Whiddett et al (2017) considered any use of information technology to manage knowledge within an organization, including commonly available tools such as email, videoconferencing or intranets, as the use of a knowledge management system and focused on the use of information technology for knowledge management, such as expert systems or clinical decision support systems. There, Tretiakov, Whiddett et al (2017) dedicated themselves to considering the effects of organizational factors on the success of knowledge management systems in healthcare organizations and concluded that the quality of knowledge content was considered particularly important for the success of knowledge management systems.

Karamitri, Kitsios and Talias (2020) carried out a study with the aim of presenting a valid and reliable questionnaire on KM in healthcare organizations. We developed a new knowledge management questionnaire based on the use of an extensive literature review and the consensus of health professionals, the Applied Knowledge Management Instrument (AKMI) questionnaire, for which we proposed the use of nine dimensions suggested for KM: perceptions of KM, intrinsic and extrinsic motivations, knowledge synthesis, knowledge sharing, cooperation, leadership, organizational culture and barriers.

The authors warn health organizations about patients' knowledge about the services offered. Patients are knowledge holders and can increase their knowledge from various sources of information such as the internet, social media and other medical teams. This way, patients can determine or change their behavior and thoughts and demand the best possible service from healthcare organizations. Therefore, in the authors' view, the ideal management of the knowledge process affects the quality of a system and they conclude that the introduction of a model such as AKMI can bring contributions to the study of KM in the area of health organizations. When considering social orientation among health workers and managers as a potential source of success for KM (KARAMITRI; KITSIOS; TALIAS, 2020).

Lee (2017) conducted a study in hospitals in South Korea. The study was based on the KM process that is subject to various organizational forces on the part of hospital organizations and their management. For the study it was proposed to analyze the influence between the organizational structure, leadership, IT systems, learning, trust and collaboration in the KM process. The final contacts show distinct particularities between the hospitals involved in the study and each hospital presented very different KM patterns and organizational characteristics.

Popa and Stefan (2019) in their study, aim to outline the contribution of the KM process to social and economic results in the context of health organizations. With this, they proposed an integrated model in order to provide a new perspective on the contribution of the KM process. For this, they consider knowledge acquisition, knowledge sharing and knowledge use, for the improvement of health quality, as well as related social and economic results in the context of healthcare organizations.

Popa and Stefan (2019) considered the quality of care as a goal whose level is influenced by the KM process, as a mediating factor between the KM process and the social and economic results. As a distinct result, the quality of care is positively influenced by the KM process. Regarding the quality of health, a first mentioned benefit of the KM process is the reduction of medical errors by providing decision support tools based on rules and established reasoning. Another refers to employee and patient satisfaction and general health benefits as factors arising from KM processes that encourage and support inter and intra-organizational cooperation and collaboration in the acquisition and sharing of knowledge, through involvement in practices of social learning, such as communities of practice and professional networks and the assimilation and application of knowledge, and facilitated by the adoption of clinical decision support systems.

Regarding social results, Popa and Stefan (2019) pointed out that the KM has a direct impact on it, which means, employee satisfaction, patient satisfaction and patient health status, and a positive indirect impact, mediated by the quality of healthcare. In other words, the KM process positively impacts health quality, which in turn has a positive effect on social outcomes.

On the other hand, with regard to the economic results, Popa and Stefan (2019) reveal that the positive impact, which is not very strong, but a much stronger total indirect effect was observed due to a complex concurrent mediation process, exercised for the quality of health services, social outcomes and, sequentially, for both together without highlighting the directly effective economic aspects. Therefore, Popa and Stefan (2019) assert that the KM is capable of improving the overall quality of health care. And they conclude if the KM process has specific characteristics and challenges for health organizations, the same can be said about the results at the organizational level considered as performance indicators.

As well defined by Karamitri, Talias and Bellali (2017) health organizations have, in their working environments, the ability to concentrate a vast network of people from various scientific areas, who use different sources of knowledge according to their professional status, which must cooperate effectively. Thus, the adoption of KM strategies in the health sector can be beneficial for patients, employees, organizations and public health. Interorganizational learning activities are fundamental components of the collaborative model, as an advantage of collaboration and interdisciplinary learning, there is a better understanding of the respective roles and practices.

Karamitri, Talias and Bellali (2017) developed a study that aimed to summarize the results of a systematic review on KM in the healthcare environment and to identify best practices and barriers to KM. From the interpretation of the review analysis, they highlight a special triangle between the doctor, the nurse and the patient, the triangle of knowledge management in health environments. And they summarize that data annotated by experienced or attentive health professionals, through patient communication and observation, can be discussed or recorded and, together with explicit knowledge, can create something new that contributes to improvements in health organizations. They reinforce that future studies should focus on identifying best practices and actions that promote employee behavior change towards knowledge sharing.

Cruz and Ferreira (2016) carried out a study to assess the perception of employees of health institutions regarding knowledge management in the institution where they work and analyze the existence of differences in this perception depending on the management model of the health institution. They concluded that private health institutions are closer to the KM process since these organizations are more guided by market management, and perhaps are guided by principles that bring together a greater number of conditions or activities that catalyze the creation, sharing, storage, retrieval and use of knowledge. However, they note the need to direct the implementation of KM in public management, since they can constitute particularly favorable ways to implement knowledge management.

6. Final Considerations

The segment of health services is made up of a certain complexity by several factors and so are the healthcare organizations where a large network of people from various scientific work areas, who use different sources of knowledge according to their professional status. Hospitals employ a vast number of staffs from various scientific areas, educational backgrounds, socioeconomic levels and also different cultures. With this, it is understood that knowledge management has strong contributions to healthcare organizations, with leadership being a fundamental part because it brings possibilities to promote and favor cooperation between people. The result of the study leads to understanding that the area of people management has an important role. With emphasis on leadership so that knowledge management is successful in healthcare organizations. Leadership is the most important organizational factor, it is through it that leaders and their subordinates work on developing and solving problems and in creating cultures of cooperation.

7. References

ALI, N; TRETIAKOV, A; WHIDDETT, D; et al. **Knowledge management systems** success in healthcare: Leadership matters. Int J Med Inform. 2017 Jan;97:331-340. doi: 10.1016/j.ijme-dinf.2016.11.004. Epub 2016 Nov 17. PMID: 27919392.

ALVEZ, J. K.; LAPOLLI, E. M.; SANTOS, N.; PACHECO, R. C. S. A norma ISO 30401:2018 para gestão do conhecimento 1^a ed. Florianópolis: Editora Pandion, 2021. 112p.

BOTELHO, L.L.R.; CUNHA C.C.A.; MACEDO, M. The integrative review method in organizational studies. Gestão e Sociedade, p. 121-136, 2011.

CRUZ, SG; FERREIRA, MMF. Knowledge management in Portuguese healthcare institutions. Rev Bras Enferm [Internet]. 2016;69(3):461-8. DOI: <u>http://dx.doi.org/10.1590/0034-7167.2016690311i</u> DRUCKER, P. Gerenciando na Próxima Sociedade; Taylor & Francis Ltd .: Oxford, Reino Unido, 2007. LEE, HS. Knowledge Management Enablers and Process in Hospital Organizations. Osong Public Health Res Perspect. 2017 Feb;8(1):26-33. doi: 10.24171/j.phrp.2017.8.1.04. Epub 2017 Feb 28. PMID: 28443221; PMCID: PMC5402843.

LUNDEN, A; TERÄS, M; KVIST, T; HÄGGMAN-LAITILA, A. A systematic review of factors influencing knowledge management and the nurse leaders' role. J Nurs Manag. 2017 Sep;25(6):407-420. doi: 10.1111/jonm.12478. Epub 2017 Jun 4. PMID: 28580645.

KARAMITRI, I.; KITSIOS, F.; TALIAS, M.A. **Development and Validation of a Knowledge Management Questionnaire for Hospitals and Other Healthcare Organizations**. Sustainability , *12*, 2730, 2020. <u>https://doi.org/10.3390/su12072730</u> KARAMITRI, I.; TALIAS, M. A.; BELLALI, T. **Knowledge management practices in healthcare settings: a systematic review**. Int J Health Plann Manage. 2017 Jan;32(1):4-18. doi: 10.1002/hpm.2303. Epub 2015 Jul 8. PMID: 26153388

POPA, I; ŞTEFAN, SC. Modeling the Pathways of Knowledge Management Towards Social and Economic Outcomes of Health Organizations. Int J Environ Res Public Health. 2019 Mar 28;16(7):1114. doi: 10.3390/ijerph16071114. PMID: 30925750; PMCID: PMC6480330. SANTOS, N; VARVAKIS, G. J.

R. Fundamentos teóricos da gestão do conhecimento. 1^a ed. Florianópolis: Editora Pandion, 2020. 114p. SERRAT, O. Notions of Knowledge Management. In: Knowledge Solutions. Springer, Singapore, 2017. https://doi.org/10.1007/978-981-10-0983-9_30

TANG, H. Effects of Leadership Behavior on Knowledge Management and Organization Innovation in Medicine and Health Sciences. Eurasia Journal of Mathematics, Science and Technology Education, 13(8), pp. 5425-5433, 2017. https://doi.org/10.12973/eurasia.2017.00840a

YUKL, G. Leadership in organizations. New Jersey (USA): Prentice Hall, 1998.

WHITMORE, R.; KNAFL,K. **The intregative review: updated methodology**. Journal of advanced nursing, 52(5), 546-553, 2005.