

DISCIPLINES OF ORGANIZATIONAL LEARNING FOR THE DEVELOPMENT OF NURSE LEADERS IN A HOSPITAL ENVIRONMENT: AN INTEGRATIVE REVIEW

DISCIPLINAS DA APRENDIZAGEM ORGANIZACIONAL PARA O DESENVOLVIMENTO DE ENFERMEIROS LÍDERES EM AMBIENTE HOSPITALAR: REVISÃO INTEGRATIVA

DISCIPLINAS DE APRENDIZAJE ORGANIZACIONAL PARA EL DESARROLLO DE ENFERMEROS LÍDERES EN UN AMBIENTE HOSPITALARIO: UNA REVISIÓN INTEGRADORA

 Ises Adriana Reis dos Santos¹
 Simone Coelho Amestoy¹
 Gilberto Tadeu Reis da Silva¹
 Ingredy Nayara Chiacchio Silva¹
 Alexandre Silva Santos¹
 Erica Luzia Sales Murici de Jesus¹
 Rebecca Maria Oliveira de Góis¹
 Marimeire Moraes da Conceição¹

¹Universidade Federal da Bahia - UFBA, Escola de Enfermagem, Programa de Pós-Graduação - PPGENF. Salvador, BA - Brazil.

Corresponding Author: Ises Adriana Reis dos Santos
E-mail: ises.adriana.reis@gmail.com

Authors' Contributions:

Conceptualization: Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva; **Data Collection:** Ises A. R. Santos, Ingredy N. C. Silva, Alexandre S. Santos, Érica L. S. M. Jesus, Rebecca M. O. Góis, Marimeire M. Conceição; **Investigation:** Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva, Ingredy N. C. Silva, Alexandre S. Santos, Érica L. S. M. Jesus, Rebecca M. O. Góis, Marimeire M. Conceição; **Methodology:** Ises A. R. Santos, Ingredy N. C. Silva, Alexandre S. Santos, Érica L. S. M. Jesus; **Project Management:** Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva; **Software:** Ises A. R. Santos, Marimeire M. Conceição; **Supervision:** Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva; **Validation:** Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva, Rebecca M. O. Góis, Marimeire M. Conceição; **Visualization:** Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva, Ingredy N. C. Silva, Alexandre S. Santos, Érica L. S. M. Jesus, Rebecca M. O. Góis, Marimeire M. Conceição; **Writing - Original Draft Preparation:** Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva; **Writing - Review and Editing:** Ises A. R. Santos, Simone C. Amestoy, Gilberto T. R. Silva, Ingredy N. C. Silva, Rebecca M. O. Góis, Marimeire M. Conceição.

Funding: No funding.

Submitted on: 2022/01/24

Approved on: 2022/06/02

Responsible Editors:

 Kênia Lara Silva
 Tânia Couto Machado Chianca

ABSTRACT

Objective: to analyze the scientific evidence on the application of the concepts of Peter Senge's organizational learning disciplines to the development of nurse leaders in a hospital environment. **Method:** integrative review, carried out by searching the Cumulative Index to Nursing and Allied Health Literature, Scientific Electronic Library Online Citation Index and Scopus databases. **Results:** 616 productions were identified and eight were included in the study. There was a gap in the production of knowledge about the application of these concepts for the development of nurse leaders. Characterized by research produced in a wide variety of countries, in English and Brazilian Portuguese. The use of this theoretical contribution was identified as an organizational learning resource for the area of health and Nursing, aimed at improving the work environment in services and in the hospital, as well as integrating teams. **Conclusions:** the investigation made it possible to expand scientific knowledge in the area of health and Nursing regarding the use of Peter Senge's organizational learning concepts in the area of health and Nursing. Presented as advances for the development of leadership, contributions to the awakening of a new look at the preparation, training and professional qualification, in order to encourage behavior, change and action scenarios through actions aimed at providing safe and Of Quality. An in-depth investigation on this topic is recommended, given the relevance of leadership, considered one of the essential managerial competences for the performance of nurses during their work in health services and, more specifically, in the hospital.

Keywords: Leadership; Nursing; Learning; Hospitals; Health Services Administration; Nurse's Role.

RESUMO

Objetivo: analisar as evidências científicas sobre a aplicação dos conceitos das disciplinas da aprendizagem organizacional de Peter Senge para o desenvolvimento de enfermeiros líderes em ambiente hospitalar. **Método:** revisão integrativa, realizada mediante busca nas bases de dados Cumulative Index to Nursing and Allied Health Literature, Scientific Electronic Library Online Citation Index e Scopus. **Resultados:** foram identificadas 616 produções e incluídas no estudo oito. Evidenciou-se um hiato na produção de conhecimentos sobre a aplicação desses conceitos para o desenvolvimento de enfermeiros líderes. Caracterizado por pesquisas produzidas em uma ampla variedade de países, em inglês e português do Brasil. Identificado o uso dessa contribuição teórica como recurso de aprendizagem organizacional para a área da saúde e Enfermagem, orientado para a melhoria do ambiente laboral nos serviços e no hospital, bem como integrador das equipes. **Conclusões:** a investigação possibilitou a ampliação do conhecimento científico na área da saúde e Enfermagem a respeito do emprego dos conceitos da aprendizagem organizacional de Peter Senge na área da saúde e Enfermagem. Apresentados como avanços para o desenvolvimento da liderança, contributos para o despertar de um novo olhar para o preparo, capacitação e qualificação profissional, de modo a incentivar a mudança de comportamento e dos cenários de atuação mediante ações voltadas para a prestação de uma assistência segura e de qualidade. Recomenda-se uma investigação aprofundada acerca dessa temática, dada a relevância da liderança, considerada uma das competências gerenciais essenciais para o desempenho do enfermeiro durante o exercício do trabalho nos serviços de saúde e, mais especificamente, no hospital.

Palavras-chave: Liderança; Enfermagem; Aprendizagem; Hospitais; Administração de Serviços de Saúde; Papel do Profissional de Enfermagem.

RESUMEN

Objetivo: analizar la evidencia científica sobre la aplicación de los conceptos de las disciplinas de aprendizaje organizacional de Peter Senge para el desarrollo de los líderes de enfermería en un entorno hospitalario. **Método:** revisión integradora, realizada mediante búsqueda en las bases de datos: Cumulative Index to Nursing and Allied Health Literature, Scientific Electronic Library Online Citation Index e Scopus. **Resultados:** se identificaron 616 producciones y se incluyeron ocho en el estudio. Se evidenció un vacío en la producción de conocimientos sobre la aplicación de estos conceptos para el desarrollo de los enfermeros líderes. Se caracteriza por la investigación producida

How to cite this article:

Santos IAR, Amestoy SC, Silva GTR, Silva INC, Santos AS, Jesus ELSM, Góis RMO, Conceição MM. Disciplines of organizational learning for the development of nurse leaders in a hospital environment: an integrative review. REME - Rev Min Enferm. 2022[cited _____];26:e-1455. Available from: _____ DOI: 10.35699/2316-9389.2022.38000

en una gran variedad de países, en inglés y portugués brasileño. Identificó el uso de esta aportación teórica como recurso de aprendizaje organizativo para el área de la salud y la Enfermería, orientado a la mejora del ambiente laboral en los servicios y en el hospital, así como a la integración de los equipos. Conclusiones: la investigación permitió ampliar el conocimiento científico en el área de la salud y la Enfermería en cuanto al uso de los conceptos de aprendizaje organizacional de Peter Senge en el área de la salud y la enfermería. Se presentan como avances para el desarrollo del liderazgo, aportes para el despertar de una nueva mirada en la preparación, formación y capacitación profesional, con el fin de incentivar el cambio de comportamiento y los escenarios de actuación a través de acciones orientadas a brindar una atención segura y de calidad. Se recomienda una investigación para profundizar en este tema, dada la relevancia del liderazgo, que se considera una de las competencias directivas esenciales para el desempeño de las enfermeras durante su trabajo en los servicios de salud y, más concretamente, en los hospitales.

Palabras clave: Liderazgo; Enfermería; Aprendizaje; Hospitales; Administración de los Servicios de Salud; Rol de la Enfermera.

INTRODUCTION

Currently, much has been discussed about the role of Nursing in health, especially in the development of leadership in the different scenarios of action. Actions such as the Nursing Now campaign were promoted by the World Health Organization (WHO) and the International Council of Nurses (ICN), with the aim of encouraging the advancement of this capacity among nurses, having as one of the goals the increase in the number of these professionals in leadership position.¹

In addition, more recently, some factors contributed to give greater visibility to Nursing. One of them was the announcement by the WHO and the Pan American Health Organization (PAHO) that 2021 would be declared the “International Year of Nursing and Midwifery Professionals”, commemorating the legacy of 200 years of foundation of modern Nursing.^{2,3} Another recent fact was the serious crisis created in public health as a result of the COVID-19 pandemic, which highlighted the role of health teams (especially Nursing teams) in the front line of combating the disease.⁴

Taking into account the relevance of the work of this professional category and the high complexity of the services, leadership emerges as one of the essential competences for nurses.⁵⁻¹⁰ Thus, the development of leading nurses in the hospital environment is encouraged, in view of the potential benefits in teamwork and, consequently, in the quality of care.

Therefore, the application of new approaches becomes urgent, with the purpose of promoting changes not only in the recognition of the class and its importance in the services, but also in the offer and in the fulfillment

of their needs, which is related to the achievement of fairer working hours, a healthy working environment and adequate remuneration.^{4,11} Furthermore, the engagement of these professionals in the knowledge, identification and adoption of a leadership posture in the services must be strengthened.

Given the above, the present research sought to analyze scientific evidence of the application of theoretical concepts of organizational learning disciplines for the development of leading nurses in a hospital environment. For that, the work of Peter Senge, *The fifth discipline: the art and practice of the learning organization* was adopted as a reference.¹² The text refers to five elements that are connected to each other, being thought and oriented to the promotion of the change of mentality, denominated by Senge as “*Metanoia*”. At the center is the fifth discipline, *Systemic Thinking*, followed by *Personal Mastery*, *Mental Models*, *Shared Vision*, and *Team Learning*.¹²

This work has challenging properties for the organization, as it fosters changes associated with the “*immediate spaces*” of wisdom, defined as the formation of environments for the development of leadership. The author mentions that “*to become a leader, first, you need to become human*”,¹² as well as the presence of limitations in these spaces, due to the lack of understanding of the meaning of this competence, alluded to by the ingrained idea that only people management positions are responsible for the changes.¹² Thus, this study seeks to adapt Peter Senge’s teachings as a management tool for Nursing, in order to re-signify nurses’ actions.

A proposal for a change of thought/behavior is envisaged that allows the transformation of the scenario of action, encouraging reflexivity, dialogicity, criticality, autonomy and, mainly, the development of leading nurses in a hospital environment.^{7,11,13-15} Furthermore, it is believed that the implementation of this strategy will be able to promote the adequacy and improvement of services as a whole, based on the assumption that leadership is a competence to be developed and strengthened to achieve these purposes.

A study carried out with undergraduate Nursing students on the constant learning of leadership shows as a knowledge gap the use of Senge’s theoretical precepts for the training of nurse leaders.⁷ In view of this, developing investigations on this topic may contribute to a better understanding of the concept under analysis

and the benefits related to the leadership process, specifically in a hospital environment.

Therefore, we sought to carry out an integrative literature review with the objective of expanding knowledge about the application of these concepts for the development of nurse leaders and managers who work or exercise their practices in the hospital environment and use them as a management tool for Nursing.

METHOD

This is an Integrative Literature Review (INR) and, in order to follow the recommended steps for the elaboration of an INR,^{16,17} initially we tried to identify the guiding question or questions, defined from the application of the PICo elements, with the description of the Population, the Phenomenon of Interest and the Context,¹⁸ according to the specifications in Figure 1.

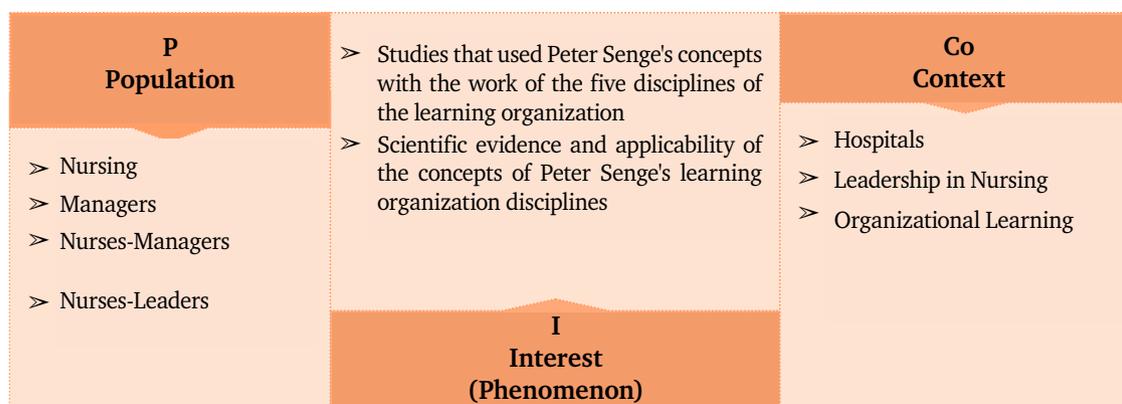


Figure 1 - Elements of the PICo, construction of the guiding question
Source: Investigation Scopus, 2022.

The following question arose: what is the scientific evidence on the applicability of the theoretical concepts of the disciplines of Peter Senge's learning organization in the hospital and/or in health for the development of nurse leaders? The following online data platforms were chosen as research sources: CINAHL via EBSCO - Cumulative Index to Nursing and Allied Health Literature, SciELO® - Scientific Electronic Library Online via Citation index Web of Science and SCOPUS - Elsevier.

Data collection took place fortnightly in June, July and August 2021 and, for the search strategy on online platforms, the association of booleans AND and OR with

the health sciences descriptors (DeCS) was applied: Nursing; leadership; hospital; administration of health services; role of the Nursing professional and Medical Subject Headings (MeSH): Nursing; leadership; health services administration; Nurse's role. In addition to these, the terms Peter Senge, learning organization and fifth discipline and the keywords or synonyms identified in the studies found were used: Nurse; learning; learning organization; management; organization culture, Nursing education, Nursing professional role and hospitals, as seen in Table 1.

Table 1 - Search strategy in the main databases of online platforms, Salvador, Bahia, Brazil, 2022

Database	Strategy
CINAHL	((“Peter Senge”) AND (nursing OR nurse OR nurse’s role) AND (leadership OR leader) AND (management OR health services administration) AND (learning OR learning organization)) AND (hospitals OR hospitaes)
SCIELO Citation index via Web of Science	“Peter Senge” AND nursing OR nurse OR nurse’s role” OR “Nursing Professional Role” OR Nursing education” AND leadership OR leader AND management OR “health services administration” AND learning OR “learning organization” AND hospitals OR hospitaes
SCOPUS	ALL (“Peter Senge” AND nursing OR “nurse OR nurse’s role” AND leadership OR leader AND management OR “health services administration” AND learning OR “learning organization” AND hospitals OR hospitaes)

Source: Investigation Scopus, 2022.

As for the selection criteria, the following were included: studies with a temporal cut from the year 1990, as it is the initial period of publication of the original revised work by Peter Senge; texts available in full; primary sources of knowledge with quantitative and qualitative approaches that addressed the research question/questions; texts in the area of health and/or Nursing; and texts in Portuguese, English and Spanish. Other reviews, studies from gray literature (theses, dissertations), book/book chapter, research carried out with professionals from other areas of knowledge and those who did not apply and/or make use of Peter Senge's theoretical contribution to the work were excluded. of the five disciplines and/or Learning Organization, fifth discipline.

The selection of publications was carried out by two reviewers independently, according to the steps of: 1) Identification of the *corpus* of material in the databases and/or by other methods, from the previous reading of the title and abstract; 2) Screening of identified records with the exclusion of duplicates and articles not available in full and/or that did not make use of Senge's theoretical framework; 3) Definition of eligibility criteria, based on the inclusion and exclusion parameters previously established; 4) Eligibility and inclusion of studies that met the guiding questions and the research objective.

Also at this stage, the selected articles were evaluated according to the JBI critical checklist for qualitative research and/or analytical cross-sectional studies, based on the evidence levels of the metrics proposed by Melnyk; Fineout-Overholt, in 2005.^{18,19} It is necessary to emphasize that, for these steps, the Rayyan Qatar Computing Research Institute (Rayyan QCRI) online review tool was used.²⁰

Thus, the included studies were organized in a Word table built by the researchers, containing the following information: author, year and type of study, objective, and main results. And in accordance with the qualitative studies, in relation to the interpretative analysis of the results, the materials were typified by similarities and correspondences to the objective of the work. At this stage, the data were processed with the help of the NVivo11 software.

It is worth mentioning that, as it is a review study carried out using data in the public domain and without the involvement and participation of human beings, there was no need for submission to the Research Ethics Committee (CEP).

RESULTS

Six-hundreds and sixteen productions were identified and 8 were included in the study. The results show

a publication gap on the application of Peter Senge's concepts from the work the five disciplines of learning organization for the development of leading nurses who work in health services, more specifically in the hospital.

Regarding characterization, the 8 analyzed productions are distributed as follows: 2 were published in Portuguese and are from Brazil; 1 is from the United States of America; and the other 5, despite being in the English language, were prepared in countries such as India, Australia, Holland, Israel, Iran, and the United Kingdom. Four of the studies were carried out with nurses in the hospital environment, 2 were carried out with undergraduate students, 1 with healthcare professionals from a child mental health clinic and 1 with professionals from an outpatient clinic.

As for the level of evidence of the selected studies, they are consistent with the metrics proposed by Melnyk; Fineout-Overholt in 2005: level I - systematic review studies (SR) and meta-analysis; level II - experimental studies; level III - quasi-experimental research; level IV - well-designed cohort and case-control studies; level V - descriptive and qualitative studies; level VI - evidence resulting from a single descriptive or qualitative study; level VII - official opinions or reports (Table 2).

Figure 2 shows the flowchart adapted from Reporting Items for Systematic Review and Meta-Analyses (PRISMA).²¹

It was observed that the most recent publications, from the year 2021, presented the theoretical precepts of Peter Senge as an approach that facilitates and/or promotes the development of leading nurses in health services and, more specifically, in the hospital environment, suggesting the discussion with students since the beginning of graduation.

Likewise, previous research has indicated that these concepts can be used as a resource for learning organization in the area of health and Nursing, with guidance for improving the work environment and team integration, whether in other services or in the hospital.

Authors were in agreement when mentioning the ideas and meanings related to the use of the five disciplines of the learning organization, namely: personal mastery, mental models, shared vision, team learning and systemic thinking.

There was also a consensus regarding the use of this knowledge for the improvement of organizational practices, considered sedimented.

Furthermore, the 8 selected productions discussed the components of the management models of hospitals, outpatient clinics and clinics, such as culture,

Table 2 - Distribution of scientific evidence included in the survey, Salvador, Bahia, Brazil, 2022

Author	Year	Method	Research Type/Level of Evidence	Instruments	Main Results
Santos <i>et al.</i> ⁷	2021a	Qualitative study	Case study (Level VI)	Questionnaire and interview	They recognized elements that contribute to the constant learning of leadership, such as behavioral characteristics and the use of methodological approaches in health services and in the hospital
Santos <i>et al.</i> ²²	2021b	Qualitative study	Case study (Level VI)	Questionnaire and interview	Adoption of methodological approaches that facilitate the constant learning of leadership in health services and in the hospital
Kumar <i>et al.</i> ²³	2016	Descriptive study	Cross-sectional study (Level V)	Dimensions of Learning Organization Questionnaire (DLOQ) at all hospital levels in the National Capital Region of India	The Kruskal-Wallis test indicated a significant difference between the means of the different professions, while the Mann-Whitney tests compared the relationship between each of the professions and a significant difference was observed ($p < 0.05$), except for the dimension "connection of systems"
Oudejans <i>et al.</i> ²⁴	2011	Descriptive study	Cross-sectional study (Level V)	Psychometric properties of the Questionnaire for Learning Organizations (QLO), including factor structure, internal consistency and correlations between the scales in the clinic and hospital	The scales for personal domain, shared vision and team learning had good internal consistency, but the scales for systems thinking and mental models had low internal consistency
Yaghoubi <i>et al.</i> ²⁵	2010	Descriptive study	Correlational study (Level V)	Learning Organization (LO) and Organizational Engagement Questionnaire (OE)	Overall, there was a significant relationship between organizational engagement and learning and there was a significant relationship between LO and work experience based on the ANOVA test
Jeong <i>et al.</i> ²⁶	2007	Descriptive study	Cross-sectional research (Level V)	For learning, the Organizational Scale was used to measure understanding of learning organization principles, and the Organizational Engagement Questionnaire (EQ) and General Satisfaction Scale (SGS) were used to measure organizational engagement	There was a statistically significant positive relationship between the use of learning organization principles and organizational effectiveness
Birleson e Brann. ²⁶	2006	Descriptive study	Retrospective comparative study - Anos 1995-1996 and 2001 (Level V)	Structured questionnaire and interview	The learning organization model seems particularly suitable for health services that seek to continually improve the quality of services, but there are few reported evaluations of the application of this model in the Australian literature, particularly in the field of mental health
Amitay, Popper e Lipshitz. ²⁷	2005	Descriptive study	Correlational study (Level V)	The hypothesis of a positive correlation between transformative leadership and learning organization manifested by Organizational Learning Mechanisms - OLMs (structural component) and by learning organization values (cultural component)	The findings confirm the central role of organizational leaders in determining the effectiveness of learning

Source: Investigation Scopus, 2022.

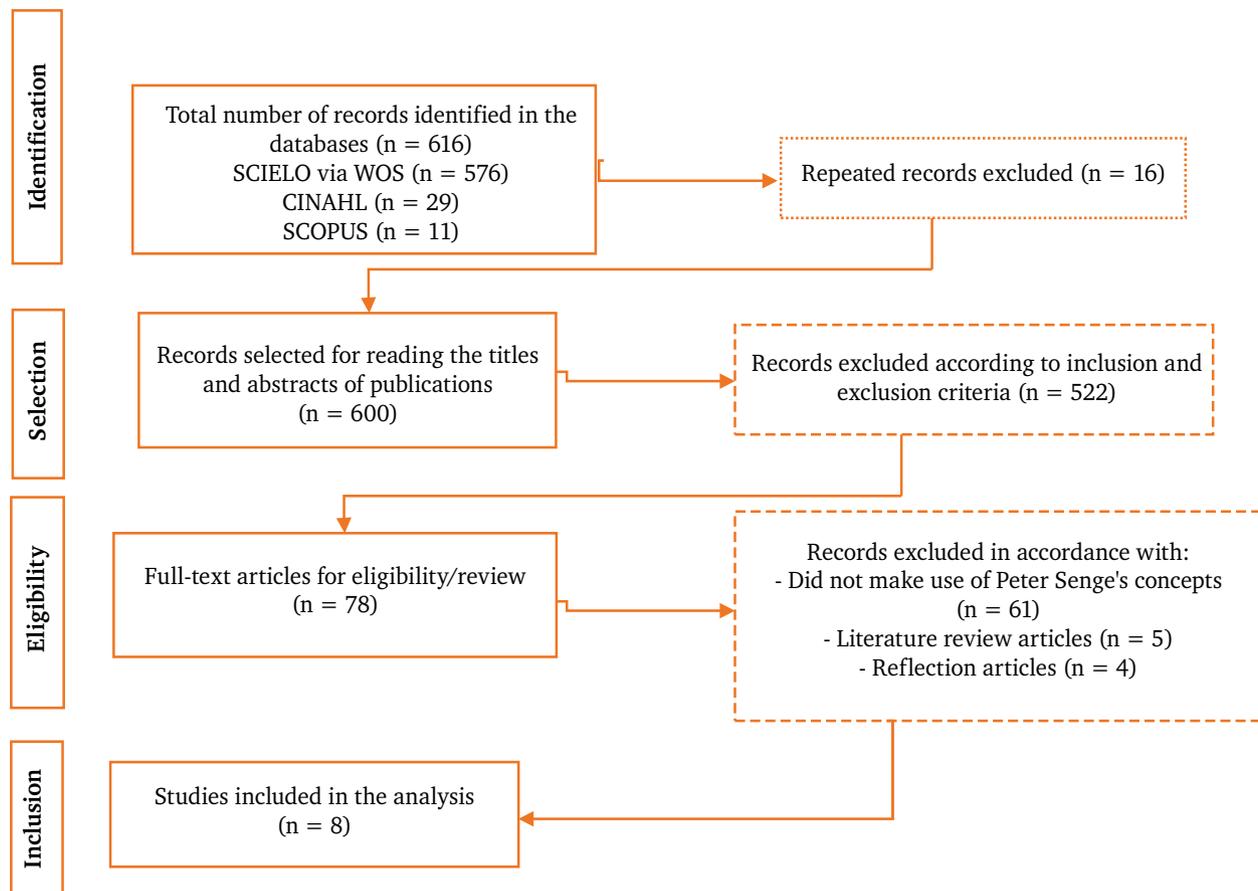


Figure 2 - Study selection flowchart
Source: Investigation Scopus, 2022.

organizational effectiveness and leadership in Nursing. Such components, according to the studies, are reinforced by organizational learning through the five disciplines, as a mechanism for changing behavior in these spaces.

These studies described the use of these concepts as a tool for people development, by encouraging the preparation and improvement of their skills or qualities. In addition, they highlighted the ability to awaken the creativity of professionals as a means of ensuring action in any situation that requires a more effective posture.

Regarding the resources/instruments available for the application of the five disciplines in the services, 5 studies were located: 4 implemented the concepts of Peter Senge's work, through the "Organizational Learning Scale" questionnaire; one developed an investigation of positive correlation by hypothesis between transformational leadership and learning organization; and another developed a retrospective comparative research, comparing the

performance of the service in the period of 1995 and 1996 with 2001, that is, five years after using the learning organization model. In addition to implementing this theory, the researchers used other references to support or complement their studies, such as the organizational commitment questionnaire and the general satisfaction scale.

In addition, research has indicated that an adequate organizational culture, which offers and supports learning among its members, training and qualifying them, contributes to the improvement and professional progress in favor of the development of skills. This, in turn, drives changes in these scenarios, enhancing action and reflection on their practices.

DISCUSSION

The theoretical contributions described in the literature indicate Senge's disciplines (systems thinking,

personal mastery, mental models, shared vision, and team learning) as an organizational learning approach that integrates knowledge, oriented towards change in the organization and in behaviors. Such an approach favors the acquisition, improvement, and shared optimization of skills (individual or collective) and can be used from teaching to training, and a *posteriori*, in the field of practice during the performance of work activities in health services.^{7-12,22,33}

In the field of health, researchers agree with the idea that Senge's concepts of learning organization provide tools for the diagnosis and evaluation of services, whether in the hospital, outpatient clinics and clinics, as drivers of transformation and the development of managerial skills.^{7,22-27} Such competences are considered essential for constant learning, with selection and learning practices, linked to the training and preparation of professionals.^{32,33}

It is also expressed that the creation of a meaningful learning environment demands that the management act as a facilitator of the service in hospital spaces, stimulated by the dialogue between people and the organization. In this way, mutual knowledge can be strengthened in a process of collective development, capable of driving the desired changes.^{7-11,22,26} In this sense, the study converges to the appreciation and recognition of constant learning, through personal commitment and collective.

It is understood that the culture and organizational climate in hospitals have a significant impact on the performance of health professionals involved in this context, reverberating in service users for the assistance provided.³³⁻³⁵ In this way, joint strategies are needed that provide the achievement of competences in the quality of values, knowledge, skills and attitudes that cause differentiated behaviors.³⁶ However, the participation of the hospital organization and the group in this process is essential so that these actions are not merely punctual and start to constitute long-term strategies, with a view to fostering the development of leaders instilled in the organizational culture.^{13,27}

Furthermore, a correlation study, when examining the effect of individual use of learning organization concepts on organizational effectiveness by nurses in a hospital in South Korea, indicated the possibility of improvements with the implementation of interventions based on the five disciplines.²⁶ It confirms, therefore, along with other studies, that the conduct of these professionals should contemplate these principles in an understanding of contributions to their improvement, intervening to change behaviors and the context experienced, given the opening of thoughts.^{7,22,23,26}

In the same way, these concepts foster reflexivity and criticality about actions in health and Nursing services, as well as the acquisition of a learning culture with a vision of the future.³⁰ It is, therefore, a path of constant evolution towards the quality improvement and personal, professional and organizational improvement.²⁶ Researchers who evaluated learning in health through the application of a questionnaire based on the five disciplines identified greater emphasis and flexibility in the development of people within the hospital organization, a result that strengthens the contribution of the theoretical precepts investigated.¹²⁻²⁰ It is noteworthy that these concepts can be used beyond Administration, their area of origin, with effective collaboration in other fields of knowledge, such as Nursing.

Despite this, other authors reflect that the types of mechanisms and cultural influences are not enough for the effectiveness of learning organization in the hospital environment, as it is necessary to pay attention to the impact of the behavior of certain leaders, considering the scenario of action.²³ Furthermore, they recognize that the elucidation of these behaviors favors the training and preparation of leaders in a shared way with the organization, a result that is in line with the perspective defended by Peter Senge's theoretical precepts about Learning Organization.

Regarding the use of the theoretical concepts of the five disciplines, researchers describe the absence of difficulties for their implementation, but call attention to the need to form a learning culture in these services, in order to train leaders and managers in the skills mentioned by the author.¹² Such a culture must contemplate the commitment of a shared vision, established in the dialogue and in the mental models resulting from this action, that is: the sharing of ideas and experiences must favor the joint identification of problems and solutions. This contributes to the realignment of services and their priorities, as well as to the strengthening and improvement of skills.^{7,22-28}

Similarly, the connection between team learning and shared vision stands out as a factor capable of enhancing job satisfaction, as well as effectiveness and organizational commitment, as a result of affective, normative and continuity leadership.^{7,20,25} A study on the use of organizational practices to advance academic Nursing knowledge along nurse career progression highlights the importance of the organization as a supporting source for these professionals to become leaders and promoters of changes in the provision of healthcare.³³

In this sense, based on Senge's theoretical constructs, it is possible to see the opening of new opportunities for

the development of nurse leaders, sowers of change. Faced with the diversity of views and understanding of systemic thinking, for the recognition of the complexities present in services in a hospital environment. It is envisaged, like other benefits resulting from the leverage of these actions, better, lasting, and significant gains, consonant with the efficiency and effectiveness of the organization. Thus, the use of such constructs allows leaders to build and strengthen individual and collective relationships in the presence of new challenges.^{7,22-28}

The limitations of this study are related to the inclusion of only evidence published in English, Portuguese, and Spanish. Furthermore, the analysis of the results may have been influenced by cultural differences and/or concepts used throughout the development process of leading nurses in the countries of origin of the studies examined.

However, it is considered that the present study allowed advances in scientific knowledge in the area of health and Nursing, which reverberates in the preparation, training, and qualification of critical and reflective professionals, in line with the profession and consistent with the provision of care adequate and of quality for the population, as recommended by the current health system in the various spaces, whether in the hospital, clinic or outpatient clinic.

CONCLUSION

The knowledge gap regarding the application of Peter Senge's theoretical concepts in a hospital environment was evidenced, pointing out the use of disciplines as an approach that facilitates and/or promotes the development of leading nurses in these spaces.

In addition, in the analysis of these studies, it was found that the implementation of disciplines as an organizational resource in the hospital, clinic and outpatient clinic provides the stimulus for improvements in the work environment through the development of people. As benefits, there is the improvement of scientific, technical, and relational skills and abilities, resulting in professional improvement and encouraging commitment, self-responsibility, autonomy, and creativity.

Components of management models in health and Nursing were also identified, such as culture and leadership, which are reinforced by organizational learning with disciplines that favor mechanisms for changing behavior/mentality, especially in the organization and work relationships in the hospital. Likewise, it was found that the researchers made use of other research instruments

as support, in order to obtain a better reach and greater reliability of the results.

It is also noticed that the application of the concepts of the five disciplines of the organization that is learned for the development of nurse-leaders and/or managers provides an opportunity for a dialogic, shared practice. This stems from favoring the construction of competencies that optimize the organizational climate, as contributions to the performance of healthcare professionals and, therefore, to the quality of care provided to users of Health services, more specifically in a hospital environment. Thus, it is suggested to deepen knowledge about these concepts for the development of leading nurses, as it is a fundamental competence for nurses in the most varied health scenarios, whether in hospitals, clinics, or outpatient clinics.

REFERENCES

1. Cassiani SHB, Lira Neto JCG. Nursing Perspectives and the "Nursing Now" Campaign. *Rev Bras Enferm.* 2018[cited 2021 Jan 15];71(5):2351-2. Available from: <http://doi.org/10.1590/0034-7167.2018710501>
2. World Health Organization. State of the world's Nursing 2020: investing in education, jobs and leadership. Geneva: WHO; 2020[cited 2020 June 2]. Available from: <http://www.who.int/publications/i/item/9789240003279>
3. Pan American Health Organization. Year of the Nursing and the midwife. Washington, DC: PAHO; 2020[cited 2020 July 7]. Available from: www.who.int/es/campaigns/year-of-the-nurse-and-the-midwife-2020
4. Geremia DS, Vendruscolo C, Cellupi IC, Adamy EK, Toso BRGO, Souza JB. 200 Years of Florence and the challenges of Nursing practices management in the COVID-19 pandemic. *Rev Latinoam Enferm.* 2020[cited 2021 Jan 28];28:e3358. Available from: <http://doi.org/10.1590/1518-8345.4576.3358>
5. Carlos AMM, Kuiava IB, Nogueira MM, Menegon FHA, Andrade SR, Santos JLG. Liderança no ambiente hospitalar: diferenças entre enfermeiros assistenciais e enfermeiros gestores. *Enferm Foco.* 2019[cited 2021 Feb 5];10(6):143-8. Available from: <http://doi.org/10.21675/2357-707X.2019.v10.n6.2900>
6. Ferracioli G, Oliveira R, Souza V, Teston E, Rodrigues Varela P, Costa MR. Competências gerenciais na perspectiva de enfermeiros do contexto hospitalar. *Enferm Foco.* 2020[cited 2021 Feb 20];11(1):15-20. Available from: <https://doi.org/10.21675/2357-707X.2020.v11.n1.2254>
7. Santos IAR, Amestoy SC, Silva GTR, Backes VMS, Silva CCR, Conceição MM, et al. Theoretical-practical articulation of the continuous learning of leadership in Nursing in light of Peter Senge. *Rev Bras Enferm.* 2021[cited 2021 Mar 10];74(4):e20201200. Available from: <http://doi.org/10.1590/0034-7167-2020-1200>
8. Amestoy SC, Trindade LL, Silva GT, Martins MM, Varanda PA, Santos IA. Fragilities and potentialities in the training of nurse leaders. *Rev Gaúch Enferm.* 2021[cited 2021

- May 20];42(spe.):e20200196. Available from: <http://doi.org/10.1590/1983-1447.2021.20200196>
9. Miles JM, Scott ES. A New Leadership Development Model for Nursing Education. *J Prof Nurs*. 2019[cited 2021 June 1];35(1):5-11. Available from: <http://doi.org/10.1016/j.profnurs.2018.09.009>
 10. Amestoy SC, Trindade LL, Silva GT, Santos BP, Reis VR, Ferreira VB. Liderança na Enfermagem: do ensino ao exercício no ambiente hospitalar. *Esc Anna Nery Rev Enferm* 2017[cited 2021 June 1];21(4):e20160276. Available from: <http://doi.org/10.1590/2177-9465-EAN-2016-0276>
 11. Souza NV, Pires AS, Gonçalves FG, Tavares KF, Baptista AT, Bastos TM. Nursing Education and the Workplace: perceptions of Nursing graduates. *Aquichan*. 2017[cited 2021 June 1];17(2):204-16. Available from: <http://doi.org/10.5294/aqui.2017.17.2.9>
 12. Senge MP. A quinta disciplina: arte e prática da organização que aprende. 35ª ed. Rio de Janeiro: BestSeller; 2018.
 13. Lyman B, Hammond EL, Cox JR. Organisational learning in hospitals. *J Nurs Manag*. 2018[cited 2021 June 1];27:633-46. Available from: <http://doi.org/10.1111/jonm.12722>
 14. Wardani E, Ryan T. Barriers to Nurse Leadership in an Indonesian Hospital Setting. *J Nurs Manag*. 2019[cited 2021 June 1];27(3):671-8. Available from: <http://doi.org/10.1111/jonm.12728>
 15. Aspinall C, Jacobs S, Frey R. The impact of intersectionality on Nursing leadership, empowerment and culture. *J Clin Nurs*. 2021[cited 2021 June 1];30:1927-41. Available from: <https://doi.org/10.1111/jocn.15745>
 16. Souza MT, Silva MD, Carvalho R. Integrative review: what is it? How to do it? Einstein (São Paulo). 2010[cited 2021 May 10];8(1):102-6. Available from: <http://doi.org/10.1590/s1679-45082010rw1134>
 17. Mendes KDS, Silveira RCCP, Galvão CM. Integrative literature review. *Texto Contexto Enferm*. 2008[cited 2021 May 11];17(4):758-64. Available from: <http://doi.org/10.1590/S0104-07072008000400018>
 18. Lockwood C, Porritt K, Munn Z, Rittenmeyer L, Salmond S, Bjerrum M, *et al*. Chapter 2: Systematic reviews of qualitative evidence. In: Aromataris E, Munn Z, editors. *JBIM Manual for Evidence Synthesis*. JBI; 2020. Available from: <https://doi.org/10.46658/JBIMES-20-03>
 19. Melnyk BM, Fineout-Overholt E. Making the case for evidence-based practice. In: *Evidence-based practice in Nursing & healthcare: a guide to best practice*. Philadelphia: Lippincott Williams & Wilkins; 2005[cited 2021 Sept 20]. Available from: <https://doi.org/10.1037/t68160-000>
 20. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan-a web and mobile app for systematic reviews. *Syst Rev*. 2016[cited 2021 Sept 6];5(1):210. Available from: <https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-016-0384-4>
 21. Moher D, Liberati A, Tetzlaff J, Altman DG. The PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses. *PLoS Med*. 2009[cited 2021 May 11];6(7):1-6. Available from: <http://doi.org/10.1371/journal.pmed.1000097>
 22. Santos IAR, Amestoy SC, Silva GTR, Backes VMS, Varanda PAG, Virgens CDR. Abordagens metodológicas facilitadoras da aprendizagem constante da liderança na Enfermagem. *Rev Gaúch Enferm*. 2021[cited 2021 June 2];42:e20200175. Available from: <http://doi.org/10.1590/1983-1447.2021.20200175>
 23. Kumar JK, Gupta R, Basavaraj P, Singla A, Prasad M, Pandita V, *et al*. An Insight into Health Care Setup in National Capital Region of India using Dimensions of Learning Organizations Questionnaire (DLOQ)- A Cross-Sectional Study. *J Clin Diagn Res*. 2016[cited 2021 May 20];10(6):ZC01-5. Available from: doi: 10.7860/JCDR/2016/16186.7898
 24. Oudejans SC, Schippers GM, Schramme MH, Koeter MW, Van der Brink E. Measuring the learning capacity of organisations: development and factor analysis of the Questionnaire for Learning Organizations. *BMJ*. 2011[cited 2021 Apr 21];20:307-13. Available from: <https://qualitysafety.bmj.com/content/20/4/307>
 25. Yaghoubi M, Raeisi AR, Afshar M, Yarmohammadian MH, Hasan-zadeh A, Javadi M *et al*. The relationship between learning organization and organizational commitment among Nursing managers in educational hospitals of Isfahan University of Medical Sciences in 2008-9. *Iran J Nurs Midwifery Res*. 2010[cited 2021 Apr 1];15(2):83-9. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093178>
 26. Jeong SH, Lee T, Kim IS, Lee MH, Kim MJ. The effect of nurses' use of the principles of learning organization on organizational effectiveness. *J Adv Nurs*. 2007[cited 2021 July 25];58(1):53-62. Available from: <https://doi.org/10.1111/j.1365-2648.2006.04206.x>
 27. Birleson P, Brann P. Reviewing the learning organization model in a child and adolescent mental health service. *AHR*. 2006[cited 2021 July 28];30(2):181-94. Available from: <https://doi.org/10.1071/AH060181>
 28. Amitay MM, Popper M, Lipshtz R. "Leadership styles and organizational learning in community clinics". *Learn Organization*. 2005[cited 2021 Aug 3];12(1):57-70. Available from: <https://doi.org/10.1108/09696470510574269>
 29. Phillips JM, Stalter AM, Dolansky MA, Lopez GM. Fostering Future Leadership in Quality and Safety in Health Care through Systems Thinking. *J Prof Nurs*. 2016[cited 2021 Aug 16];32(1):15-24. Available from: <https://doi.org/10.1016/j.profnurs.2015.06.003>
 30. Ferreira VB, Amestoy SC, Silva GT, Felzemburgh RD, Santana N, Trindade LL *et al*. Transformational leadership in nurses' practice in a university hospital. *Acta Paul Enferm*. 2018[cited 2021 Aug 16];31(6):644-50. Available from: <https://doi.org/10.1590/1982-0194201800088>
 31. Boamah AS, Laschinger HK, Wong C, Clake S. Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nursing Outlook*. 2018[cited 2021 Aug 16];66(2):180-9. Available from: <http://doi.org/10.1016/j.outlook.2017.10.004>
 32. Kraaij J, Oostveen C, Vermeulen H, Heinen M, Huis A, Adriaansen M. Nurse practitioners' perceptions of their ability to enact leadership in hospital care. *J Clin Nurs*. 2019[cited 2021 Aug 16];29:447-58. Available from: <http://doi.org/10.1111/jocn.15105>
 33. Dyess SM, Sherman RO, Pratt BA, Chiang-Hanisko L. Growing Nurse Leaders. *Online J Issues Nurs*. 2016[cited 2021 Aug 16];21(1):7. Available from: <http://doi.org/10.3912/OJIN.Vol21No01PPT04>
 34. Beal JA, Riley JM. Best organizational practices that foster scholarly Nursing practice in Magnet® hospitals. *J Prof Nurs*.

- 2019[cited 2021 Aug 16];35(3):187-94. Available from: <http://doi.org/10.1016/j.profnurs.2019.01.001>
35. Higashi GDC, Erdmann AL. Weaving meanings from the deliberative process of collegiate management in Nursing. *Rev. Latino-Am. Enfermagem*. 2014[cited 2021 Aug 25];22(2):269-76. Available from: <http://dx.doi.org/10.1590/0104-1169.3346.2412>
36. Wuisan DSS, Meilani YFCP, Sutawidjaya AH. The influence of organizational commitment, work satisfaction, and organizational culture to behavior organizational citizenship. *IJRCMS*. 2020[cited 2021 Apr 16];2(2):136-56. Available from: <http://ubipayroll.com/ijrcms/index.php/ijrcms/article/view/58>
-

