

Use of instruments to evaluate leadership in nursing and health services



A utilização de instrumentos para avaliação da liderança nos serviços de saúde e enfermagem

Uso de instrumentos para la evaluación del liderazgo en los servicios de salud y de enfermería

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ABSTRACT

Objective: To identify the available scientific evidence about the use of instruments for the evaluation of leadership in health and nursing services and verify the use of leadership styles/models/theories in the construction of these tools.

Method: Integrative literature review of indexed studies in the LILACS, PUBMED, CINAHL and EMBASE databases from 2006 to 2016.

Results: Thirty-eight articles were analyzed, exhibiting 19 leadership evaluation tools; the most used were the Multifactor Leadership Questionnaire, the Global Transformational Leadership Scale, the Leadership Practices Inventory, the Servant Leadership Questionnaire, the Servant Leadership Survey and the Authentic Leadership Questionnaire.

Conclusions: The literature search allowed to identify the main theories/styles/models of contemporary leadership and analyze their use in the design of leadership evaluation tools, with the transformational, situational, servant and authentic leadership categories standing out as the most prominent. To a lesser extent, the quantum, charismatic and clinical leadership types were evidenced.

Keywords: Leadership. Health services. Nursing.

RESUMO

Objetivo: Identificar as evidências científicas disponíveis acerca da utilização de instrumentos para a avaliação da liderança nos serviços de saúde e enfermagem, bem como verificar a utilização de estilos/modelos/teorias de lideranças na construção dos mesmos.

Método: Revisão integrativa da literatura de estudos indexados nas bases de dados LILACS, PUBMED, CINAHL e EMBASE, no período de 2006 a 2016.

Resultados: 38 artigos foram analisados, exibindo 19 instrumentos de avaliação da liderança, sendo os mais utilizados o Multifactor Leadership Questionnaire, a Global Transformational Leadership Scale, o Leadership Practices Inventory, o Servant Leadership Questionnaire, o Servant Leadership Survey e o Authentic Leadership Questionnaire.

Conclusões: A busca na literatura possibilitou a identificação das principais teorias/estilos/modelos de liderança contemporâneos, assim como a análise de sua utilização na construção de instrumentos de avaliação da liderança, se destacando a liderança transformacional, situacional, servidora e autêntica. Em menor proporção, foram evidenciadas as lideranças quantum, carismática e clínica.

Palavras-chave: Liderança. Serviços de saúde. Enfermagem.

RESUMEN

Objetivo: Identificar las evidencias científicas disponibles acerca de la utilización de instrumentos para la evaluación del liderazgo en los servicios de salud y enfermería, así como verificar la utilización de los estilos/modelos/teorías de liderazgo en la construcción de los mismos.

Método: Revisión integrativa de la literatura de estudios indexados en las bases de datos LILACS, PUBMED, CINAHL y EMBASE, entre los años 2006 a 2016.

Resultados: 38 artículos fueron analizados y mostraron 19 herramientas de evaluación del liderazgo, destacando el Multifactor Leadership Questionnaire, la Global Transformational Leadership Scale, el Leadership Practices Inventory, el Servant Leadership Questionnaire, el Servant Leadership Survey y el Authentic Leadership Questionnaire.

Conclusiones: La búsqueda en la literatura permitió la identificación de las principales teorías/ estilos / modelos de liderazgo contemporáneos, así como el análisis de su utilización en la construcción de instrumentos de evaluación del liderazgo, destacándose el liderazgo transformacional, situacional, de servicio y auténtico. En menor proporción, se evidenciaron los liderazgos quantum, carismática y clínica.

Palabras clave: Liderazgo. Servicios de salud. Enfermería.

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■ INTRODUCTION

The world has experienced an accelerated process of social, political, cultural and economic development due to technological revolution, demographic transformations and globalization. Health services keep pace with these changes through a dynamic work process, in which nurses participate and assume management positions⁽¹⁾. In this context, health organizations need coordination, services require leading and staffs call for supervision, which demands the development of leaders in these organizations and the adoption of leadership behaviors, such as initiative, standpoint defense, commitment to work and team motivation⁽²⁾.

It is valid to emphasize that the environment where a leader acts may change their actions; one example is the organizational policies that determine the rules to be followed, because they limit the way leadership is executed. In this regard, the increasing requirements of productivity and quality widen the requisites of qualification of the workers in an unstable and flexible labor market and make the implementation of formation and management models based on professional skills more generalized⁽³⁻⁴⁾.

To meet these needs, a good leader must present a set of characteristics, among which the most prominent are vision, competence, communication and problem-solving skills, decision-making ability, planning, emotional stability and a good relationship with the team⁽⁵⁾. However, the leadership developed by a nurse requires an individual development plan that includes knowledge, skills, attitudes and values for the practice of their competences⁽¹⁾.

Therefore, the performance and efficiency of chief nurses depend on their communication abilities, knowledge about the different management and leadership styles and the organizational environment⁽⁶⁾. In this aspect, communication is one of the management skills responsible for the success or failure of interpersonal relationships in the workplace, in addition to helping detect issues and plan changes⁽⁷⁾. It is important that nurses understand the leadership process and develop the necessary competences, among which communication, interpersonal relationship, and decision-making and clinical skills, to succeed in their assistance⁽⁸⁾.

Other factors that may influence leadership quality are cooperation among team members, the role model offered by the leader, and the leadership style. Thus, the establishment of trust by the leader motivates the staff to work and promotes good relationships in the organization. However, when these conditions are not induced by the leader, there are losses to the institution⁽⁹⁾.

Considering that the subject "professional competence" is a current focus of attention among nurses and that nursing staffs represent the majority of human resources in health institutions, especially in hospitals, the mobilization of competences among these professionals may influence results significantly, mainly in terms of care efficacy, quality and costs⁽¹⁰⁾.

In this scenario, it is pertinent to identify the ideal profile and competences of the chief nurse, taking into account the health organization perspective, that will choose a professional according to requirements of the labor market and the population. Leaders will meet the needs of their teams when the values that they advocate are noticed by the members and the competences recognized. This situation stresses the need to know the satisfaction level of the healthcare team and to evaluate its perception about the chief nurse to suggest improvements⁽¹¹⁾.

Application of simplified and objective leadership evaluation instruments allows to assess the most common leadership styles, models and theories in Brazilian health-care institutions. This originated the question: "What instruments are used to evaluate leadership in nursing and healthcare services?" The goal of the present study was to identify the scientific evidence reported on literature about the use of instruments to validate leadership in nursing and health services and verify patterns in leadership styles/models/theories in the elaboration of these tools.

■ METHODS

The present study is part of a dissertation entitled "*A utilização de instrumentos para avaliação da liderança nos serviços de saúde e enfermagem*"⁽¹²⁾. The chosen methodology was the integrative literature review because it facilitates access to scientific knowledge worldwide and contributes to research and clinical practice⁽¹³⁾.

The integrative review was executed in six steps: design of the research subject, sampling or literature survey of primary studies, collection of primary studies, critical assessment of primary studies, analysis and synthesis of review results and presentation of the integrative review⁽¹⁴⁾.

The design of the research question was carried out through the use of the PICO strategy, an acronym that stands for Population (P), Intervention (I), Comparison (C) and Outcomes (O), whose objective is to guide the design of the research question and the systematic bibliographic survey to allow the desired information to be found quickly and accurately⁽¹⁵⁻¹⁶⁾. Taking this into consideration, the result for the question design was: (P1) = nursing; (P2) = health services; (I) = leadership evaluation; (C) = no comparison; (O) = instruments.

A bibliographic survey was performed in the databases Latin America and Caribbean Center on Health Sciences Information (LILACS), PubMed/Medline (PUBMED), Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Excerpta Medica Database (EMBASE), using the controlled descriptors “leadership”, “nursing”, “nurses”, “evaluation studies”, “surveys and questionnaires”, “professional competence” and “health services” and the noncontrolled descriptor “health professional”. Controlled descriptors were stipulated by the Medical Subject Headings (MeSH) and the Descriptors in Health Sciences (DeCS). The Boolean operators “AND” and “OR” were applied to cross the descriptors.

The review included full primary papers in Portuguese, English and Spanish that addressed the subject “use of instruments to evaluate leadership” published between 2006 and 2016. The search was carried out between May and June 2016. Exclusion criteria encompassed theses, dissertations, monographies, books and reviews of any kind.

To decrease the risk of bias, two reviewers were recruited and identified as main reviewer and reviewer with mastery on the subject. First the paper titles and abstracts were read and an initial selection took place. Subsequently, a previously developed instrument was applied to assure that all the relevant data would be collected, minimizing the risk of mistakes during the transcription, certifying a precise information check and serving as a registry⁽¹⁷⁾. The characteristics covered by the instrument were: paper identification (paper and journal titles, authors and year of publication); methodological features of the study (objective, sample details, methodology details, data treatment

or analysis, results and conclusions) and evaluation of the methodological rigor (clarity in the description of the methodology and identification of limitations or biases)⁽¹⁸⁾.

To classify the levels of evidence in the manuscripts, evaluation criteria that took into account the types of questions addressed in the primary studies were used⁽¹⁹⁾. Figure 1 presents a flowchart depicting the database survey, selection and inclusion of the manuscripts for the review. A total of 2,075 references were chosen, distributed as follows: CINAHL: 412 papers; EMBASE: 900 papers; LILACS: 246 papers and PUBMED: 517 papers.

RESULTS

The set of selected primary studies was the starting point to determine the characteristics of the instruments and leadership styles/models/theories. These features can be seen in Chart 1.

The number of papers included in this review from each database was: CINAHL: 17 papers; EMBASE: 8 papers; LILACS: 7 papers; PUBMED: 6 papers, totaling 38 studies. As for the year of publication, seven (18.4%) papers were published between 2014 and 2015 and four (10.5%) in 2013. Thirty manuscripts (78.9%) were published in English, six (15.7%) in Portuguese and two (5.4%) in Spanish. The number of papers originated in Brazil and Canada was significant – both presenting seven publications (18.4%), followed by the United States, with six papers (15.9%).

Regarding the composition of the samples, there were 17 studies with nurses, four with healthcare professionals

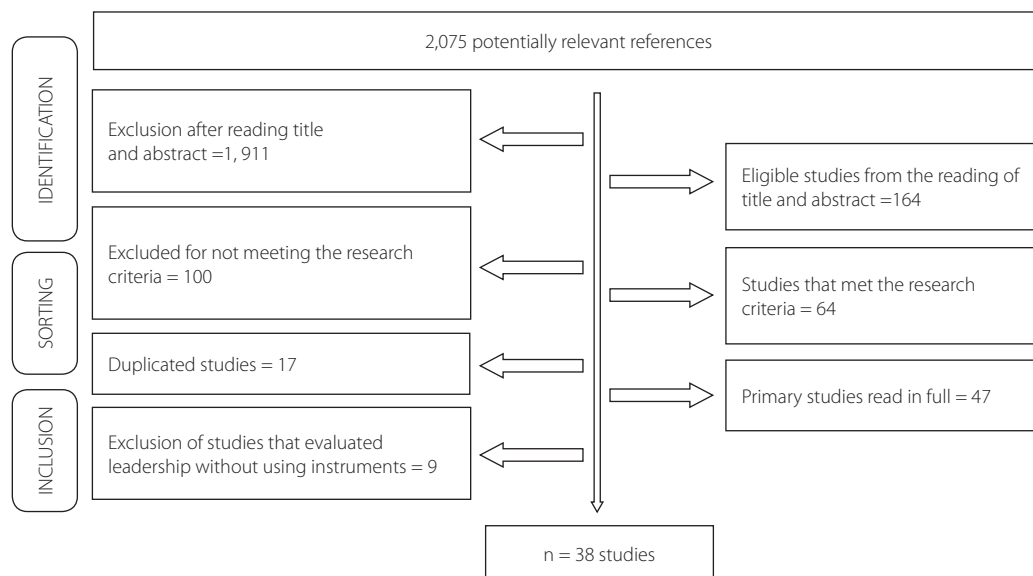


Figure 1 – Flowchart showing the primary studies survey, adapted from Moher et al., 2015⁽²⁰⁾.

Source: Research data, 2016.

Instruments Leadership style/model/theory	Authors, Year/Country
Leadership Practices Inventory (LPI)/Transformational leadership	Martin et al., 2012/Switzerland ⁽²¹⁾
	Foli et al., 2014/USA ⁽²²⁾
	Leggat, SG, Balding C, Schiffan D, 2015/Australia ⁽²³⁾
	Fealy et al., 2015/Ireland ⁽²⁴⁾
	Patrick et al., 2011/Canada ⁽²⁵⁾
	Apekey et al., 2011/England ⁽²⁶⁾
Clinical Leadership Survey/Clinical and transformational leadership	Patrick et al., 2011/Canada ⁽²⁵⁾
MLQ-5X/Transformational and transactional leadership	Horwitz et al., 2008/USA ⁽²⁷⁾
	Aarons GA, 2008/USA ⁽²⁸⁾
	Kanste, O, Miettunen J, Kynga SH, 2007/Finland ⁽²⁹⁾
	Deschamps et al., 2016/Canada ⁽³⁰⁾
	Edwards et al., 2014/USA ⁽³¹⁾
	Mogolon SMR, Gonzalez MA, 2010/Colombia ⁽³²⁾
	Fonseca AMO, Porto JB, 2013/Brazil ⁽³³⁾
	Chen HC, Baron M, 2006/China ⁽³⁴⁾
	Ghorbanian A, Bahadori M, Nejati M, 2015/Iran ⁽³⁵⁾
	Ebrahimzade et al., 2015/Iran ⁽³⁶⁾
Quantum/Quantum leadership	Pucheu A, 2010/Chile ⁽³⁷⁾
	Dargahi H, 2013/Iran ⁽³⁸⁾
Survey of Transformational Leadership (STL)/Transformational and transactional leadership	Edwards et al., 2014/USA ⁽³¹⁾
Charismatic Leadership Socialized Scale/Charismatic leadership	Chavaglia et al., 2013/Brazil ⁽³⁹⁾
Transformational Leadership Inventory (TLI)/Transformational and transactional leadership	Fonseca AMO, Porto JB, 2013/Brazil ⁽³³⁾
LRPQ/Scale of attitudes toward leadership styles/Transformational and transactional leadership	Fonseca AMO, Porto JB, 2013/Brazil ⁽³³⁾
360° Tool/Not defined	Llapa-Rodriguez et al., 2015/Brazil ⁽⁴⁰⁾
Coaching/Situational leadership	Cardoso MLAP, Ramos LH, D'Innocenzo M, 2011/Brazil ⁽⁴¹⁾
	Cardoso MLAP, Ramos LH, D'innocenzo M, 2014/Brazil ⁽⁴²⁾
Grid Gerencial /Not defined	Castro CB, Santos I, 2008/Brazil ⁽⁴³⁾
MSF-Multisource feedback tool/Clinical leadership	Lakshminarayana et al., 2015/England ⁽⁴⁴⁾

Chart 1 – Instruments to evaluate leadership found in primary studies, with their respective authors, year of publication and origin country. (to be continued)

Source: Research data, 2016.

Instruments Leadership style/model/theory	Authors, Year/Country
Servant Leadership Survey (SLS)/ Servant leadership	Gunnarsdóttir S, 2014/Iceland ⁽⁴⁵⁾
	Hanse et al., 2016/Sweden ⁽⁴⁶⁾
Leader–member Exchange (LMX)/ Not defined	Hanse et al., 2016/Sweden ⁽⁴⁶⁾
	Han HG, Bai Y, 2014/USA ⁽⁴⁷⁾
Servant Leadership Questionnaire (SLQ)/Servant leadership	Garber et al., 2009/USA ⁽⁴⁸⁾
Leadership Effectiveness and Adaptability Description-LEAD/Situational leadership	Silva MA, Galvão CM, 2007/Brazil ⁽⁴⁹⁾
	Intaraprasong et al., 2012/Thailand ⁽⁵⁰⁾
Authentic Leadership Questionnaire (ALQ)/ Authentic leadership	Wong CA, Giallonardo LM, 2013/Canada ⁽⁵¹⁾
	Wong CA, Laschinger H, Cummings GG, 2010/Canada ⁽⁵²⁾
	Nelson et al., 2014/Canada ⁽⁵³⁾
	Read EA, Laschinger HKS, 2015/Canada ⁽⁵⁴⁾
	Laschinger et al., 2015/Canada ⁽⁵⁵⁾
Global Transformational Leadership Scale/ Transformational leadership	Munir F, Nielsen K, 2009/Denmark ⁽⁵⁶⁾
	Nielsen et al., 2009/Denmark ⁽⁵⁷⁾
	Nielsen et al., 2008/Denmark ⁽⁵⁸⁾

Chart 1 – Instruments to evaluate leadership found in primary studies, with their respective authors, year of publication and origin country. (continuation)

Source: Research data, 2016.

in general, four with nurses and nursing technicians and a few described investigations with a mix of nurses and other professionals. Nineteen instruments were identified to evaluate leadership: Authentic Leadership Questionnaire (ALQ) (five papers)⁽⁵¹⁻⁵⁵⁾; Charismatic Leadership Socialized Scale (one paper)⁽³⁹⁾; Clinical Leadership Survey (CLS) (one paper)⁽²⁵⁾; the Coaching tool (two papers)⁽⁴¹⁻⁴²⁾; Scale of attitudes toward leadership styles (one paper)⁽³³⁾; the 360° tool (one paper)⁽⁴⁰⁾; Global Transformational Leadership Scale (three papers)⁽⁵⁶⁻⁵⁸⁾; *Grid Gerencial* (one paper)⁽⁴³⁾; Leadership Effectiveness and Adaptability Description (LEAD) (two papers)⁽⁴⁹⁻⁵⁰⁾; LMX-Leader–member Exchange (two papers)⁽⁴⁶⁻⁴⁷⁾; Leadership Practices Inventory (LPI) (six papers)⁽²¹⁻²⁶⁾; Leadership Reward and Punishment Behavior Questionnaire (LRPQ) (one paper)⁽³³⁾; Multifactor Leadership Questionnaire (MLQ) (eleven papers)⁽²⁷⁻³⁷⁾; Multisource Feedback Tool (MSF) (one paper)⁽⁴⁴⁾; the Quantum tool (one paper)⁽³⁸⁾; Servant Leadership Questionnaire (SLQ) (one paper)⁽⁴⁸⁾; Servant Leadership Survey (SLS) (two papers)⁽⁴⁵⁻⁴⁶⁾; Survey of Transformational Leadership (STL) (one paper)⁽³¹⁾; and Transformational Leadership Inventory (TLI) (one paper)⁽³³⁾.

The styles/models/theories of leadership found in the selected materials were: transformational leadership^(21-37,56-58), cited in 20 papers; transactional leadership⁽²⁷⁻³⁷⁾, in 11 papers; situational leadership^(41-42,49-50), in four papers; servant leadership^(45-46,48), in three papers; authentic leadership⁽⁵¹⁻⁵⁵⁾, in five papers; quantum leadership⁽³⁸⁾, in one paper; charismatic leadership⁽³⁹⁾, in one paper; and clinical leadership^(25,44), in two papers. Three studies did not mention a specific style/model/theory^(40,43,47).

■ DISCUSSION

By analyzing the development of leadership based on the creation or adaptation of evaluation tools, the selected studies demonstrate the relevance of leadership evaluation based on validated instruments. Investing on and assessing leadership is essential to reach a leader's main function: the development of people. However, to function in this area, it is necessary to have knowledge of current models and/or theories about the subject. Hence, instruments or tools, whose development is based on different leadership theories/models/styles, can be applied to evaluate leadership.

The most abundant theoretical framework in the investigated manuscripts was transformational leadership: more than half the papers addressed this model^(21-37,56-58), which corroborates other studies⁽⁵⁹⁻⁶²⁾. Transformational leadership is wide, visionary and charismatic, characteristics that made it one of the most popular in the present days. The relationship between leader and team is inspiring, and leaders are known to identify potential in their followers⁽⁶³⁻⁶⁶⁾.

This model was important in the instruments that evaluate leadership in health professionals; MLQ⁽²⁷⁻³⁷⁾, which assesses transformational and transactional leadership, stood out as one of the most cited. Transactional leadership is characterized by exchange between leader and subordinate, who is rewarded for obeying⁽⁶³⁾. These leaders are defined as people that emphasize standardized work and directed tasks⁽⁶⁶⁾.

Other instruments that stood out in the transformational category were the Global Transformational Leadership Scale⁽⁵⁶⁻⁵⁸⁾, TLJ⁽³³⁾, STL⁽³¹⁾, LPI⁽²¹⁻²⁶⁾ and Scale of attitudes toward leadership styles⁽³³⁾.

The following instruments were identified for situational leadership: LEAD⁽⁴⁹⁻⁵⁰⁾, *Grid Gerencial*⁽⁴³⁾ and the Coaching tool⁽⁴¹⁻⁴²⁾. This type of leadership is centered in the leader, the subordinates and the situation; the main approaches are Fiedler's model, the Hersey-Blanchard situational theory and Robert House's path-goal leadership theory. Fiedler's model associates the different leadership styles with varied situations to know the contingencies that make a style more effective, taking into account that some leaders are motivated by tasks and some by relationships. The Hersey-Blanchard situational theory considers that the leader's behavior and way of acting depend on the level of maturity of the subordinates and that the more mature they are, the more the leadership style changes. Robert House's path-goal leadership theory says that an efficient leader charts a path that guides the team to achieve goals, reduces obstacles and difficulties, helps, supports and rewards subordinates, so that they meet targets^(65,67-69).

The behaviors in servant leadership in the set of selected studies were evaluated through the SLQ⁽⁴⁸⁾ and SLS⁽⁴⁵⁻⁴⁶⁾ tools. This leadership model was originally described as a philosophy that values altruism. Thus, an altruist leader shows a strong desire to make a positive difference in people's lives⁽⁷⁰⁾. The altruist gift is related to the will to serve, disposition to sacrifice to benefit collaborators, emotional cure, wisdom, persuasive mapping and organizational management⁽⁷¹⁾.

The ALQ instrument⁽⁵¹⁻⁵⁵⁾ assessed the behaviors of authentic leadership, a class characterized by leaders aware of

their strong and weak points and transparent in their attitudes; moral and ethical conducts; humility in the relationship with subordinates and equilibrated decision making. Therefore, there is a consensus about the four components of authentic leadership: balanced processing; moral perspective and internalized ethics; transparent relationships; and self-knowledge and self-awareness⁽⁷²⁾.

Behaviors in charismatic leadership were examined through the Charismatic Leadership Socialized Scale⁽³⁹⁾. This theory advocates that subordinates consider their leader's capacities and talents exceptional, sometimes idolizing the person as a superhuman hero or a spiritual icon⁽⁷³⁾. However, charism is not necessarily a set of mystic and innate characteristics and behaviors, but a skill to be learned and depends partially on the perception of the individual and involves a relationship between leader and followers⁽⁷⁴⁾.

Clinical leadership was evaluated through the instruments CLS⁽²⁵⁾ and MSF⁽⁴⁴⁾. The development of this type of leadership is important because it is directly related to the goal of improving the services, considering that it deals with the management of the clinical field and care to patients⁽²⁴⁾.

Finally, in an innovative proposition, the evaluation instrument for quantum leadership was designed. According to quantum theory, there are seven quantum skills that make leaders capable of examining their mental models, thus promoting their capacity to learn. These skills are: quantum vision; quantum thinking; quantum sensitivity; quantum knowledge; quantum action; quantum trust and quantum being. Using quantum leadership demands that health leaders change their individual paradigm to develop skills in the management of conflicts, assumption of risks, innovation and qualification, creating new organizational cultures and building a context of hope⁽³⁸⁾.

Several leadership behaviors were present in the investigated instruments; most of them mentioned a form of support to several involved levels (leaders and/or subordinates); other behaviors were focused on relationships, in which the leader asks for opinions, improves collaboration⁽⁴⁸⁾, promotes team formation⁽⁴⁸⁾, trains educators and facilitates the development of people; last, some behaviors were directed to tasks, given that the leader provides suitable material and human resources, plans actions and decision making⁽²⁶⁾ and clarifies the results to the team, improving supervision and group instruction⁽⁴⁶⁾. There were also studies that reported an evaluation aiming to change behaviors^(40,44), stressing topics in which the leader defines priorities to reach success and innovation⁽⁵²⁾.

Most studies pointed transformational leadership as the great mediator of the aspects related to the health of

subordinates, especially quality of sleep, well-being and satisfaction at work. Concurrently, servant leadership stood out as a significant influence on satisfaction at work, and authentic leadership was found positive in terms of its contribution to prevent damages to mental health, mainly the ones caused by the burnout syndrome.

■ CONCLUSION

The leadership styles, models or theories found more often in the selected papers of the present review were transformational, situational, servant and authentic. Less common types were quantum, charismatic and clinical leaderships.

The transformational leadership model contributed to an increase in motivation and satisfaction at work for providing collective discussion, increase in dialogic communication and active listening to the employees, causing a higher organizational commitment. This type of leadership also stood up in the set of 19 instruments; MLQ, the Global Transformational Leadership Scale, TLI, STL, LPI and Scale of attitudes toward leadership styles were the most cited tools in this category. In the situational leadership evaluation, the instruments LEAD, *Grid Gerencial* and the Coaching tool were the most commonly used. The behaviors in servant leadership were analysed through SLQ and SLS, and the conducts in authentic and charismatic leadership were assessed by ALQ and the Charismatic Leadership Socialized Scale, respectively. Clinical leadership was investigated through CLS and MSF tools.

The survey in the mentioned databases allowed to identify the main contemporary leadership styles, models and theories and analyze their use to design instruments to evaluate leadership, which raises awareness among managers, leaders and workers in the healthcare area of the need to adopt a transforming and inclusive theoretical framework and a practical evaluation of leadership in different scenarios by the application of specific instruments.

The limitation of the present study was the number of researched databases. Although the consulted platforms are relevant in the health field, they were few (four) compared to the total of available databases.

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