Mapping review: Presenting a need for future investigation into how the Magnet model affects nurses

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Background: Due to challenges in recruiting and retaining skilled nurses in health care organizations, an understand of how to create sustainable work environments is needed. The Magnet model is an excellence model developed in the 1980s as a framework for health care organizations to promote innovation and quality in nursing.

Aim: The purpose of this mapping review is to explore the literature regarding how the utilization of the Magnet model in health care organizations affects nurses.

Method: A descriptive map with systematic searches in the databases CINAHL and PubMed, including studies published between 2010 and 2023.

Results: 16 articles were included. Only a few qualitative studies were identified. Consensus on measuring nurses' work satisfaction in research is needed to conclude how the Magnet model affects nurses.

Main findings: There is a growing interest in the Magnet model and how it affects nurses in western countries, although most of the studies are from the U.S. all the studies were performed in the field of nursing research.

Implication: This mapping review identified a gap in existing literature of how the implementation of the Magnet model affects nurses in their daily work. Quality management may in the future assist in finding solutions through insights from other research fields.

Type of paper: Review

Keywords: "Excellence model", "Working conditions", "Quality Management", "Nursing retention", "Organizational innovation".

1. Introduction

Improving quality, efficiency, and the work environment is essential for a sustainable organization. A growing problem in health care organizations worldwide is workplace dissatisfaction resulting in health care workers quitting their jobs (Raso et al., 2021; Statistics Sweden, 2017; Stone et al., 2007). Hospital management needs to attend to these critical issues

to retain the nurse workforce and create sustainable work environments (Neff et al., 2011; Schwartz & Burnes Bolton, 2012). Positive work environments are an important part of work satisfaction in the nursing profession and are important for the successful recruitment and retention of nurses and for ensuring patient quality of care (Kupperschmidt et al., 2010). A positive workplace is supportive and assures a patient-centred approach (Shirey, 2009). A positive work environment results in high quality of care, improved motivation, innovation and work satisfaction (Brewster et al., 2015; Rondeau & Francescutti, 2005).

Quality management (QM) in social and organizational science is a research field that embodies fundamental principles aligned with the core competencies in nursing. Customer focus, synonymous with person-centred care, is one aspect. Second, continuous improvement and the establishment of a quality culture, correspond to evidence-based practice and create a patient-safety culture in nursing (Bergman et al., 2022; Cronenwett et al., 2007). Due to these similarities in the core values of the two research fields, it is of interest to investigate how QM can assist health care overcoming challenges. The strengths of combining QM and nursing have been demonstrated in previous studies (Sten et al., 2020), but represent a relatively new and unexplored frontier between the two research fields. In both QM and nursing science, the exploration of sustainable health care organizations is a significant area of investigation. QM researchers have conducted tests using excellence models within the health care domain, with the goal of enhancing organizational quality and performance. Nevertheless, research findings suggest that unless there is consistent continuity in the assessment process, the desired improvements may not be realized (Kamal, 2023).

The excellence model called the "Magnet model" was first mentioned in 1983 in a study that investigated nursing shortages in the U.S. (American Nurses Credentialing Center, 2019). Findings from the study conducted by the American Academy of Nursing shed light on specific hospitals where nurses exhibited increased levels of job satisfaction. These hospitals were called "Magnet hospitals". Based on this knowledge, the Magnet model was elaborated. Five essential components were described: 1) Transformational leadership, 2) Structural empowerment, 3) Exemplary professional practice, 4) New knowledge, innovation, and improvements, and 5) Empirical quality results (Ibid.).

The model has been shown in quantitative studies to provide a positive work environment for nurses, resulting in better outcomes for both patients and the health care workers (Kramer et al., 2011; Rodríguez-García et al., 2020). The model seems to contribute to high quality of care, higher nurse retention, a better work environment, less burnout, lower hospital mortality, and greater patient satisfaction (Aiken et al., 1994, Aiken et al., 1999, Kelly et al., 2011, Kramer et al., 2011, Lake et al., 2010, Stone et al., 2007). The model also seems to fosters a culture of innovation and ongoing organizational learning (Porter-O'Grady, 2009). A descriptive map with exhaustive searches for both qualitative and quantitative studies is needed to attain a comprehensive understanding of the research field and to potentially indicate the need for continuous research if gaps in the literature are identified.

2. Aim

The purpose of this descriptive mapping review was to explore the literature regarding how the utilization of the Magnet model in health care organizations affects nurses.

3. Method

The chosen design of the study was a systematic map, which is usable when there is a need to conduct reviews in areas where there is frequently a lack of empirical data to answer a specific outcome-focused question (Bates et al., 2007). This descriptive systematic map pictures research activity on the topic of how the Magnet model affects nurses. It presents the geographical distribution, the research methods used, the main purposes and research questions that have been investigated and the theoretical frameworks used in accordance with the methodological description of a systematic map (Gough et al., 2012; Tranfield et al., 2003). Mapping studies can be of great importance inasmuch as they provide an overview and general idea of the literature in a research field (Kitchenham et al., 2011). This overview helps to create a picture of the research questions that have been addressed in earlier studies and supports decisions for continuous research by visualizing existing gaps. In this study, the five stages described by Kitchenham et al. (2011) were followed: 1) identify the research aim and research question, 2) conduct an exhaustive search to gather primary studies, 3) screen the identified studies and include or exclude them in accordance with the established criteria, 4) classify the selected studies, and 5) perform data extraction and mapping of the studies.

The databases used in the searches were CINAHL and Medline. Primary research studies in English conducted between 2010 and 2023 were included. The quality criteria for inclusion in this map were proper presentation of the methodology used, ethical approval, and proper presentation of the results. Although the included studies varied in the degree to which their signal value outweighed their noise (methodological deficiencies) (Edwards et al., 2000), no study was excluded due to poor quality.

Table 1: Presentation of the searches.

Search in PubMed/Medline Date: 2023-03-06	Search terms	Filters used	Number of results
# 1	"magnet model" or "magnet hospital" or "magnet standard" or "magnet accreditation" or "magnet nursing" or "forces of magnetism" or "aspire for magnet" or "magnet recognition"	Abstract available Year 2010-2023	58462
#2	Nurses or nursing or nurse	Abstract available Year 2010-2023	396657
#1 AND #2		Abstract available Year 2010-2023	**796**
Included after reading title:			72
Included after reading the abstract:			24
Included after reading the article:			10
Included by reference list checking:			3
Toral included in this search:			13

Table 1 continuing: presentation of the searches

Search in Cinahl via Ebsco Host Date: 2023-03-08	Search terms	Filters used	Number of results
#1	"magnet model" or "magnet hospital" or "magnet standard" or "magnet accreditation" or "magnet nursing" or "forces of magnetism" or "aspire for magnet" or "magnet recognition"	Abstract available Peer-reviewed English language Year 2010-2023	417
#2	Nurses or nursing or nurse or nurses' or nurse´s	Abstract available Peer-reviewed English language Year 2010-2023	201204
#1 AND #2		Abstract available Peer-reviewed English language Year 2010-2023	**315**
Included after reading the title:			15
Included after reading the abstract:			8
Included after reading the article:			2
Included by reference list checking:			1
Total included in this search:			3

4. Results

There were a total of 1111 hits in the searches (see Table 1 and Figure 1). After scanning the titles, 87 articles were chosen for continuous evaluation, and 12 were selected that appeared to meet the aim of this review. Reference list checking was conducted to ensure that no key study was missed in the searches, which according to Gough (2012) can be an important tool to sustain validity. Four additional studies that met the criteria for inclusion were found. A total of 16 articles were finally included.

The included studies were primarily conducted in the U.S. Other countries that have investigated how nurses are affected by the Magnet model include Finland, Turkey, Jordan, Saudi-Arabia, United Arab Emirates,

Figure 1: Overview of the searches

Brazil, and Belgium. Most of the studies were observational and were conducted with a quantitative methodology with a cross-sectional study design. The most common sampling method was convenience sampling. There were 24 different types of questionnaires and surveys used to gather data from nurses in the studies. All were self-conducted. Only three of the studies were qualitative, and one were conducted with a mixed methods design.

The studies have all been performed in the field of nursing research. Most of the studies do not use a conceptual or theoretical framework. The frameworks used are as follows: "Diffusion of innovation theory", "Kanter's theory of structural empowerment", "Consolidated framework
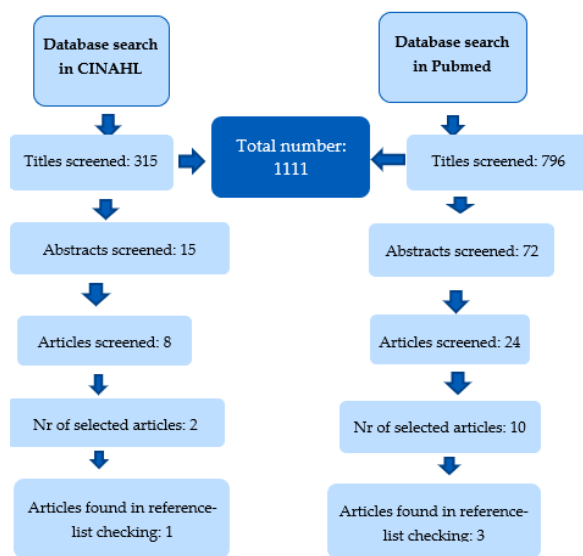
for implementation research", "Kouze's and Poster's leadership practices", "Social cognitive theory" and "The promoting action on research implementation in health services".

The purpose of the studies varied (see Figure 2). Most of the studies either investigated how the Magnet model affects nurses with respect to the use of evidence-based practice (Melnyk et al., 2020; Saunders & Vehviläinen-Julkunen, 2016; Tyndall et al., 2017; Wilson et al., 2015) or investigated the work environment and how the perceptions of nurses differed between Magnet and non-Magnet hospitals (Dutra & Guirardello, 2021; Kelly et al., 2011; Kol et al., 2017; Trinkoff et al., 2010). In relation to the model, two of the included studies investigated how "transformational leadership" and "shared governance" affect nurses (Clavelle et al., 2013;
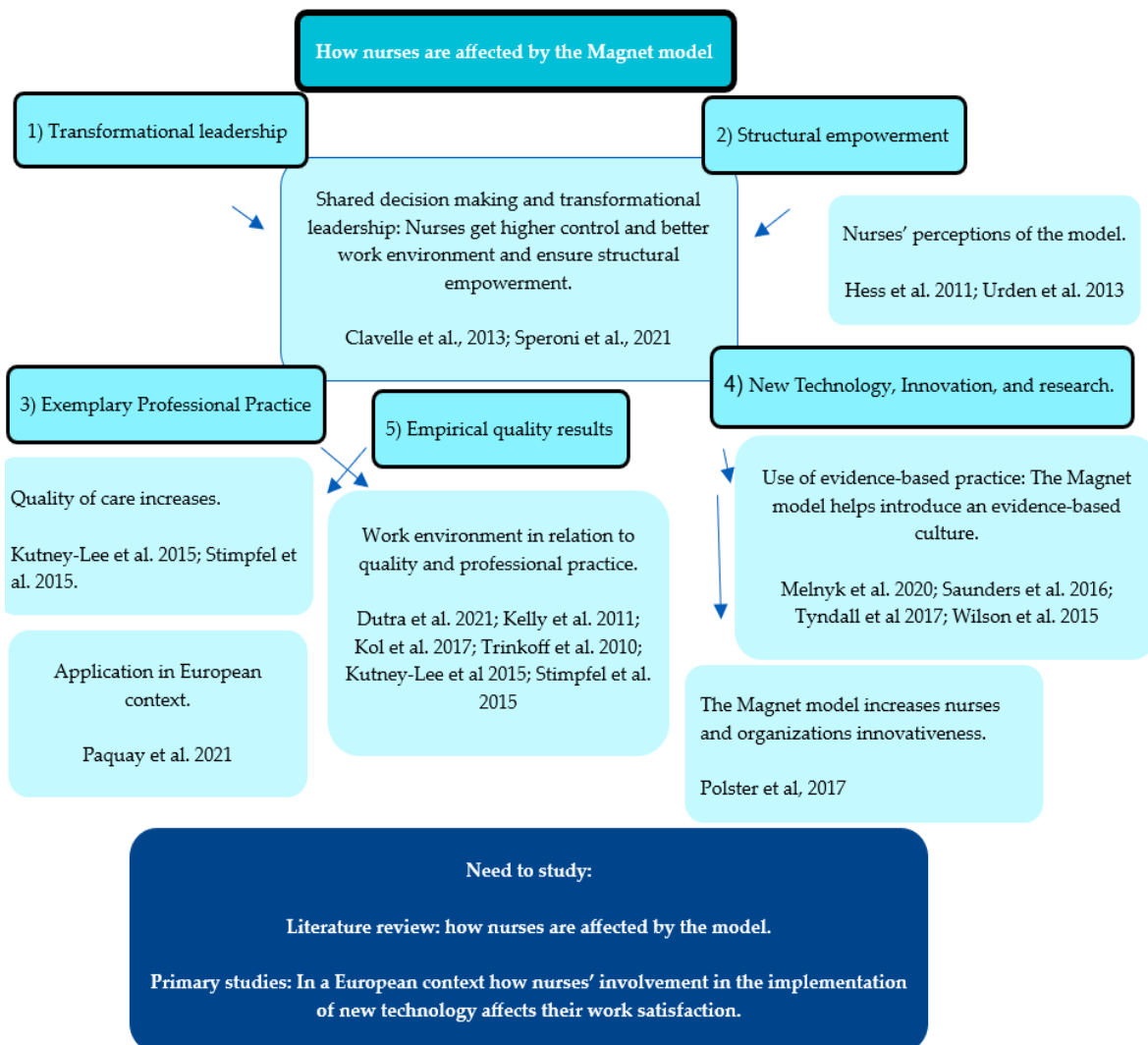

Figure 2: A Map presenting the forces in the Magnet model that have been investigated by the included studies.

Speroni et al., 2021). Two studies investigated how nurses' perceived quality of care varies between Magnet and non-Magnet hospitals (Kutney-Lee et al., 2015; Stimpfel et al., 2015), and two others investigates nurses' perception of the Magnet model (Hess et al., 2011; Urden et al., 2013), one of which included a deeper analysis of the phenomena with a grounded theory design (Urden et al., 2013). One study investigated whether the model has positive effects for nurses in a European context (Paquay et al., 2021). One study investigated how the Magnet model affects nurses' perceived individual and organizational innovativeness (Polster & Villines, 2017). And one study examined how only parts or principles of the Magnet model affected nurses, which

indicates that the model can be disseminated into smaller parts and still have positive effects (Kol et al., 2017).

5. Discussion

Systematic reviews in the field of social science are likely to include heterogeneous studies regarding study design and methodology. This is a strength and an opportunity for analysis (Gough et al., 2012), and the heterogeneity of the included studies makes it possible to shed light on different aspects of the phenomenon (Greenhalgh et al., 2004).

Rigor in the review process was enhanced by monthly meetings with the review team and by the adoption of a review framework (Whittemore & Knafl, 2005). A close contact with the nursing organizations where the writer worked as a practitioner in elderly care helped identify the need for this research. This is important according to Grant and Booth (2009) to conduct more contextually sensitive research.

The aim of this review was to explore the literature regarding how the utilization of the Magnet model in health care organizations affects nurses. The results indicate that the Magnet model may be beneficial for organizations that have adopted it, resulting in improved quality outcomes (Dutra & Guirardello, 2021; Kelly et al., 2011; Kol et al., 2017; Kutney-Lee et al., 2015; Speroni et al., 2021; Stimpfel et al., 2015). However, some studies have reported no significant results (Goode et al., 2011; Mills & Gillespie, 2013; Trinkoff et al., 2010), which signals a need to be critical and continue with research in the field. This is also important in relation to the relatively diminutive research conducted on the topic.

A systematic review of 10 studies conducted in 2015 surmised that it was not possible to conclude that the Magnet model had an effect on nurse outcomes due to the lack of robust study designs in the literature (dit Dariel & Regnaux, 2015). This mapping review might serve to validate the conclusions in that review to some extent.

Worldwide, researchers would gain advantages from collaborating and reaching a consensus on the selection of measurement tools and research strategies for investigating the outcomes of the Magnet model. This collaborative effort could enhance the comparability of results across various clinical studies. The results can be synthesized in systematic reviews to provide greater evidence and support decision-makers. It is important to acknowledge that research conducted on individuals within intricate organizational settings cannot be universally generalized to all other contexts. Organizations, as well as human behaviours within them, are multifaceted and influenced by numerous factors. Consequently, isolating and examining a single factor to draw conclusions about its impact on organizational outcomes becomes challenging. This presents a significant challenge for researchers in the field of social science, who must actively address and critically analyse this issue to generate knowledge about best practices.

The studies found in the searches were all conducted in the field of nursing research. The focus of QM could potentially bring insights from other work sectors that can be valuable for creating better quality and more sustainable work environments for nurses. The higher demands on companies and businesses worldwide have created a need to implement excellence models in organizations today (Kennedy, 2019). It would be of interest to compare existing excellence models in the field of QM with the Magnet model to understand the differences and learn more about common challenges between different work sectors.

5.1 Threats to validity

The objective of this study was to create a descriptive map with systematic searches, mapping the status of primary studies investigating how the Magnet model affects nurses. This paper includes a general analysis of the main aspects of the included studies, such as describing where the studies were conducted and with what methods and designs. The studies have therefore not been explored in depth, and their quality has not been assessed.

Selection study bias was avoided by a rigorous search strategy with relatively few search filters applied and the examination of a multitude of titles and abstracts to make sure not to miss any relevant research. The reference lists of included studies were scanned. The fact that no study was excluded due to poor quality may be a strength for this study, researchers have argued against exclusions of studies for reasons of quality because it may lead to the marginalization of important aspects (Conn & Rantz, 2003). The writer of this study conducted the process of selecting primary studies alone, through use of the inclusion and exclusion criteria, which is considered a weakness.

5.2 Conclusion

This mapping review reveals that there is limited research exploring the effects of the Magnet model on nurses' opportunities and prerequisites for engaging in nursing innovation and continuous improvements within health care organizations. This is described in one of the five parts of the model as "New knowledge, innovation, and improvements". Most of the studies conducted in relation to this part of the model investigate nurses' potential to conduct research and use evidence-based practice in their daily work, and one focused on nurses' innovativeness in a Magnet organization. This focus indicates the necessity for a deeper and comprehensive understanding of this aspect of the model to acquire knowledge of its impact on nurses and to contribute to creating sustainable work environments. More primary research on this topic is therefore needed.

The cross-sectional study design with convenience sampling leads to the conclusion that the methodology of most of the included studies is weak and exhibit low reliability. The sample sizes are also generally small with low response rates, which adds to the questionable generalizability of some of the study's results. The use of many different questionnaires and surveys may lead to confusion of concepts and difficulties comparing and bringing study results together in systematic reviews to understand the greater evidence. This may present challenges when advocating for the positive outcomes that arise from implementing the Magnet model in health care organizations, making it hard for policy-makers to make evidence-informed decisions regarding implementing the Magnet model in health care organizations. Together, this adds to the requirement of more studies on the topic of how the Magnet model affects nurses. With the use of more rigorous study methods, more longitudinal studies with random samples and control groups and an effort to achieve a higher response rate are needed. Furthermore, qualitative studies of high-quality design are needed to understand the phenomena in depth.

5.3 Implications

The existing gap in the literature that this mapping review revealed implies the need for future research on this topic. Most of the studies on this topic have been conducted in the U.S. This means that there is a need to continue with the investigation of how well the Magnet model can be applied in other countries.

5.4 Limitations

This systematic map may have several limitations. The inclusion of articles in English may result in language bias. Some articles may also have been missed during the searches even though the searches were based on a rigorous search strategy, since as only one of the researchers on the team conducted the searches. There are methodological issues with almost all the included studies with respect to credibility, transferability, and confirmability.

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ANNEXES:

Table 3: Map of included articles

Number, article, country, database, and year	Study design and data collection method	Study aims and questions	Sample size, response rate, sample method, and year of data collection	Summary of main findings (categories, themes)
1, *Staff Nurse Perceptions of the Magnet Journey,* USA, Pubmed, 2013	Qualitative, focus groups. Grounded Theory approach.	The objective of this study was to compile a rich description of the phenomenon of Magnet journey by registered nurses in clinical settings who provide direct patient care in community health care systems recently receiving Magnet designation.	58 nurses participated, 1200 contacted, convenience sample.	Communication and collaboration improved, and there were more opportunities for higher education, nurses felt empowered, better practice standards and common goals. When the magnet standard was achieved the education, staff involvement, connection with leaders and teamwork seamed to decrease.
2, *Evidence-Based Practice and Job-Related Nurse Outcomes at Magnet-Aspiring, Magnet-Conforming, and Non-Magnet University Hospitals in Finland,* Finland, Pubmed, 2016	Quantitative, descriptive, cross-sectional, national survey. Convenience sample, 943 nurses.	The aim of this study was to compare nurses' evidence-based practice (EBP) beliefs, EBP knowledge, and nurse workforce outcomes between Magnet-Aspiring, Magnet-Confirming, and Non-Magnet university hospitals in Finland.	943 nurses participated. 50% response, random sample, 2014	Most of the nurses were familiar with the term EBP, and most had a welcoming attitude. Nurses working in hospitals aspiring for magnet were more likely to report that they worked in accordance with EBP. Most of the nurses reported their EBP knowledge as at a beginner's level. Nurses working in Magnet hospitals rated their EBP knowledge highest. Only a slightly higher job satisfaction was reported by nurses in Magnet-hospitals.
3, *The effectiveness of strategies similar to the Magnet model to create positive work environment on nurse satisfaction*, Turkey, Pubmed, 2017	Quantitative, questionnaire with follow up after the implementation, 235 and 259 nurses.	The objective of this study was to identify the satisfaction levels of nurses with the positive environment initiatives and positive management strategies.	259 participants, 49% response rate, convenience sample, 2011 and 2013.	The satisfaction rates of the nurses were significantly higher after the implementation of parts of the Magnet model.
4, *An exploratory Descriptive Study of Registered Nurse Innovation,* USA, Pubmed, 2017	Quantitative, descriptive, surveys, 217 nurses.	The aims of this study were to describe registered nurses' levels of personal innovativeness and registered nurses perceived organizational innovativeness and determine the relationship between these 2 variables.	217 participants, 35% response rate, convenience sample, data collection year not described.	Higher reported innovativeness in the patient care group than in the administrative group. Approximately 90% reported that the Magnet organization was innovative. Nurses working in Magnet hospitals may perceive the hospital as more innovative and may be more likely to be innovators and early-adopters.

5, *Structural Empowerment and the Nursing Practice Environment in Magnet Organizations*, USA, Pubmed, 2013	Quantitative, e mail surveys, descriptive, 95 CNO's, 107 NPCs.	The aim of this study was to describe the characteristics of shared governance and its relationship with nursing practice environment in Magnet organizations.	95 CNOs and 107 NPCs, 28% response rate, convenience sample, 2012	Shared governance in Magnet hospitals were described by CNO´s as administrational with little staff input. There was a relationship between high levels of shared governance and nurse practice environments.
6, *Changes in Patient and Nurse Outcomes Associated with Magnet Hospital Recognition*, USA, Pubmed, 2015	Quantitative, retrospective, nurse surveys, Patient journals, National survey.	To compare changes over time in surgical patient outcomes, nurse-reported quality, and nurse outcomes in a sample of hospitals that attained Magnet recognition between 1999 and 2007 with hospitals that remained non-Magnet.	Not reported, 39% Random sample 1999-2006	Nurses in hospitals emerging for Magnet reported higher levels of excellence of care and lower rates of burnout, job dissatisfaction and intentions to leave. The magnet aspiring hospitals had no higher results before the intervention which may point at the fact that the Magnet model change the nurses work environment in a positive way.
7, *Effects of Shared Governance on Nurse-Sensitive indicator and Satisfaction Outcomes by Magnet Recognition Status*, USA and Jordan, Saudi-Arabia, United Arab Emirates, Pubmed, 2021	Quantitative, 2170 RNs	Researchers examined associations between Index for Professional Nursing Governance (IPNG) types and outcomes.	2170 participants, response rate, sample method and year not reported.	Nurses in Magnet hospitals reported higher levels of shared governance, control over personnel, access to information, control over practice and goal setting. Magnet hospitals had higher scores for nurse satisfaction and better interprofessional relationships. In this study, non-Magnet hospitals scored higher on patient satisfaction.
8, *Differences Between Magnet and Non-Magnet Designated Hospitals in Nurses' Evidence-Based practice Knowledge, Competencies, Mentoring and Culture*, USA, Pubmed, 2020	Quantitative, national survey,2344 nurses	To determine the differences between Magnet-designated versus non-Magnet designated hospitals on nurses' EBP knowledge, competency, mentoring and culture.	2344 participants, response rate, sample method and year not reported.	Nurses working in Magnet hospitals had higher scores in EBP knowledge, mentoring and culture. No differences in EBP competency were found. Knowledge is insufficient for behavior change and competency.
9, *Nursing work environment and accreditation: Is there a relationship?* Brazil, Pubmed, 2021	Quantitative, cross-sectional survey, descriptive 452 nurses and nurse technicians (majority).	To describe the Brazilian nurses' perceptions of the work environment and their relationship with hospital accreditation.	452 participants, 58% response rate, convenience sampling, 2015.	Nurses in the accredited hospital rated their work environment better. No precise description if the accreditation was for Magnet standard or another kind of accreditation.
10, *Nurse Outcomes in Magnet and Non-Magnet Hospitals*, USA, Pubmed, 2011	Quantitative, e-mail surveys, random sample of 4562 RNs in Magnet hospitals and 21714 RNs in non-Magnet hospitals.	The aim of this study was to determine whether work environments, staffing, and nurse outcomes differ between Magnet and non-Magnet hospitals.	26 276 participants, response rate not reported, random sample, 2006-2007	Magnet hospitals had significantly better work environments. No differences in staffing, but number of patients per nurse was significantly lower (when California was excluded) at Magnet hospitals. Less dissatisfaction and burnout in nurses in Magnet hospitals.

11, *Exploring the feasibility of the Magnet Hospital concept within a European university nursing department: a mixed-method study*, Belgium, Cinahl, 2021	Mixed-method approach, quantitative, questionnaires to nurses, qualitative: interviews (private, semi structured) with head nurses.	The aim was to explore whether Magnet Hospital principles and values were applicable to a nursing department within a Belgian University Hospital Centre.	1744 participants, 12% response rate, convenience sample, 2017 and 2018.	Quantitative phase: the organization was found to be partly Magnetic. High attraction to work at the hospital for new nurses but also high retention rates and low reported well-being. Qualitative phase: Facilitators for the Magnet model: patient needs and resources, quality of care and communication. Innovate towards Magnetism. Barriers: Loss of identity of the institution, lack of communication and harmony between units and lack of support from leaders.
12, *Factors Facilitating Publication by Clinical Nurses in a Magnet hospital*, USA, Cinahl, 2017	Qualitative, focused ethnographic. 5 nurses.	This study examined cognitive, behavioral, and environmental factors that facilitate publication by clinical nurses in Magnet hospitals.	5 participants, 46% response rate, convenience sample.	Cognitive factors facilitating publication: professional perspective, writing knowledge, intrinsic motivation. Behavioral factors: effective strategies to facilitate writing, taking initiative to engage in opportunities that promote publication. Environmental factors: influence of organizational culture, available resources. No activities to support nurses' peer-reviewed publications were undertaken by the organizations, but nurses still published.
13, *Empowering Nurses with Evidence-Based Practice Environments: Surveying Magnet, Pathway to Excellence, and Non-Magnet Facilities in One Health care System*, USA, Reference List Checking, Pubmed, 2015	Quantitative, descriptive, cross-sectional survey (self-reported), 2441 nurses.	To determine whether individual organizational qualities could be identified that were related to registered nurses' (RN's) readiness for EBP as measured by their reported EBP barriers, ability, desire, and frequency of behaviors.	2441 participants, 35% response rate, convenience sample, 2013.	The barriers for applying evidence-based practice were higher in non-Magnet hospitals. RNs in Magnet hospitals had a higher desire for evidence-based practice. They used more research findings in their daily work and participated more often in research studies. Nurses engaged in career development programs were more willing to engage in evidence-based practice.
14, *A Comparison of Working Conditions Among Nurses in Magnet and Non-Magnet Hospitals*, USA, Reference List Checking, Pubmed, 2010	Quantitative, survey (self-reported), 837 nurses.	To compare working conditions (ie, schedule job demands, and practice environment) of nurses working in American Nurses Credentialing Center designated Magnet and non-Magnet hospitals.	2156 participants, 43,% response rate, probability sample, 2004	Nurses working in Magnet hospital were less likely to report mandatory overtime. However, there were no differences in hours worked. No differences were observed in psychological demands between nurses in Magnet and non-Magnet hospitals. Physical demands were lower in Magnet hospitals. No differences were found in nursing practice environment, patient safety culture or job satisfaction.
15, *Perceptions of Nurses in Magnet Hospitals, Non-Magnet hospitals, and Hospitals Pursuing Magnet Status,* USA, Reference List Checking, Pubmed, 2011	Quantitative, mail survey (self-reported), 1500 registered nurses.	The objective of the study was to compare perceptions of RNs employed in Magnet, in process (ie, hospitals seeking Magnet recognition), and non-Magnet hospitals using data from the 2010 National survey of Registered Nurses (NSRN).	518 participants, 35% response rate, random sample, 2010	Nurses in hospitals aspiring for Magnet status reported sufficient staff on their ward. All nurses were satisfied with being a nurse. More nurses in hospitals aspiring for Magnet status were likely to recommend a student to become a nurse. No differences between Magnet hospitals and non-Magnet hospitals with respect to workplace-related factors: violence, abuse, injuries or discrimination. Nurses in Magnet and Magnet aspiring hospitals are more likely to rate their opportunities to influence decisions about the workplace as excellent (36%).
16, *Understanding the Role of the Professional Practice Environment on Quality of Care in Magnet and non-Magnet Hospitals*, USA,	Quantitative, survey, retrospective, cross-sectional	The aim of this study was to explore the relationship between Magnet Recognition and nurse-reported quality of care.	Number of participants and response rate not reported, 2006 and 2007	Even when compared with a matching hospital, nurses in Magnet hospitals reports significantly higher quality of care. The working environment for nurses has a correlation to the quality of care, better work environments correlated with better quality of care, to which the Magnet model contributes.

Reference List Checking, Pubmed, 2015				