Perception of Nursing Middle Managers about the Evidence-Based Management

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Wilza Carla Spiri[1],
Paulina Kurcgant[2],
Maria Valéria Pereira[3]

1 Associate Professor at the Nursing Department of Botucatu Medical School, University of State of São Paulo, UNESP. Distrito de Rubião Jr. s/n, CEP 18618-970, Botucatu (SP), Brazil.
2 Full Professor at the School of Nursing. University of São Paulo. Av. Dr Eneas de Carvalho, 410, São Paulo (SP), Brazil.
3 M.Sc. in Nursing. Nurse at Hospital Estadual Bauru (SP), Brazil.

Contact information:

Wilza Carla Spiri.

Address: Distrito de Rubião Jr, s/n. Campus da Faculdade de Medicina de Botucatu, Botucatu-SP, Brazil. CEP 18618-970.
Tel: +55-14-38801320.

✉ wilza@fmb.unesp.br

Abstract

Objective: to comprehend the experience of nursing middle managers of an accredited public hospital, from São Paulo state, about the evidence-based management.

Method: case study and analysis of thematic content in the stages of unity of meaning, condensed meaning unity, interpretation of the underlying meaning, sub-theme and theme. Nine nurse managers participated. The data collection was done through a script with questions that, according to the convenience of the participants, were answered by electronic mail. The data were analyzed in the light of the theoretical reference of the managerial process in nursing and the evidence-based management.

Results: six themes were revealed: Evidence-based management and management process; Evidence-based management strengths; Evidence-based management challenges; the leader and the Evidence-based management; Hospital accreditation and evidence-based management and Experiences with the evidence-based management.

Conclusion: the scientific knowledge and the experiences in the work are sources of evidences that interfere, positively, in the quality and safety of the patient. Leadership training, planning, team empowerment and involvement are essential for the development of this practice. Strategies need to be discussed and implemented so that the management process is based on evidences.

Introduction

The managerial rationality in health, according to the principles of division and verticalization of work, favors the fragmentation of care making it difficult to incorporate scientific evidence into the routine of this nursing practice.

In this context, the management of work process in nursing requires from the nurse manager specific competences in the technical-scientific, ethical-political and socio-educational dimensions [1].

The development of these competences contributes so that the dichotomy between the care and the management can be reverted to an integrative practice, where the assistance and management actions, founded on scientific principles and knowledge, direct to the need are directed towards meeting individual and collective health needs.

The nurse managers, in all management levels, are fundamental for the nursing work process to focus on the scientific basis, because they are in the institutional and practice politics interface and they can organize, stimulate and make it possible for the nursing team to develop themselves in this context. The middle manager handles an immense amount of responsibility, such as the hiring and firing of staff, judging competency of staff, assuming budgetary responsibility, and taking overall responsibility for the delivery of safe, high-quality patient care [2].

The Evidence-Based Management [EBM], defined as the identification, implementation and assessment of evidences that direct the managerial decision making [3] is a recent practice in nursing and it is incorporated in health, based on the principles and elements of the science of administration. [4]

The current management context comprises ineffective and effective management strategies, where there is concern about the quality of care provided to patients without, however, having the same concern about the quality of management and decision making. What distinguishes the evidence-based management from other approaches is the adoption of well-conducted management research results; search for other information sources, as personal experience and/or experience of other organizations in similar situation; specialists opinion; assessment of trends and data patterns; use of medicine and nursing knowledge based on evidences; articulation of models for the improvement of the quality and incentive of the use of electronic resources that help, through updated information, the problem solving [5].

In nursing the EBM may be described as the systematic application of the best available evidence to evaluate management strategies in the development and improvement of health services performance. Similarly to the Evidence-Based Practice (EBP), besides the adoptions of results of researches, it also considers the personal experience, the specialist's opinion and the user's expectations [6].

The performance of the nurse in management and leadership position is particularly critical for the adoption of both EBP and EBM, which, being in a formal position of authority can establish and articulate the organization's vision, mission, values and beliefs that influence the behavior of workers in those organizations [7-8].

One of the fundamental aspects for the EBM is the organizational commitment with the quality. Quality, considered in a generic way, is an appropriate response to the need and expectations of the health system user [9]. It is a dynamic and uninterrupted process, demanding constant review of patterns [10]. The accreditation is a tool of the quality process, because the requirements and standards allow the development of a patient safety policy, improvement of organizational performance and internal cooperation between processes and staff [11].

Thus, seeking answers to the questions: how do managers of nursing units of accredited organizations understand EBM? And, what strengths and challenges do they attribute to this practice? This

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study aims to "understand the experience lived by middle managers of an accredited public hospital in the State of São Paulo on evidence-based management".

Method

We adopted the Case Study method, which consists of collecting and recording data, from a particular case, to organize a critique about an experience, to make a decision and to propose a transforming action [12]. As a data analysis technique, content analysis was adopted as a set of techniques aimed at obtaining, through systematic and objective procedures, the description of the content of the messages that can infer knowledge regarding the conditions of production and reception of those messages [13]. In this study the analysis technique used is the Graneheim and Lundman proposition [14].

The study was carried out in a general hospital, public-service, tertiary level and teaching hospital, with quality certification from the National Accreditation Organization (NAO) at the full accredited level (level 2).

The number of middle managers of the study hospital was 15 professionals. Of these, nine nurses accepted to participate in this research and gave their free and informed consent.

Data collection occurred between March and August 2013. The nurse managers were invited to participate of the research by personal contact and electronic mail. In this contact was given the option of conducting an individual structured interview, according to their convenience, or sending the script of questions to be answered and sent to the researcher by electronic mail (*e-mail*).

Participants' option was to email responses to the questions: For you, what is evidence-based nursing management? Do you think that working in an accredited hospital may contribute to the evidence-based management? Tell me about the facilities and difficulties for evidence-based management. What is the leader role for the evidence-based management? Would you like to share any lived experience with evidence-based decisions?

For the analysis of the content of the answers we adopted the proposal of Graneheim, Lundman [14] who suggests models that allow reducing the speeches, preserving the essence, abstractions to emphasize the descriptions and interpretations at a high logical level. Abstractions include the creation of codes, categories and themes [14].

Thus, the units of meaning, condensed units of meaning [description close to the text], interpretation of the underlying meaning, sub-theme, and theme were elaborated [14].

After the analysis of each testimony, by similarity of meanings found, the themes that encompassed all the statements were elaborated.

The speeches were validated with the participants and NVivo 9 *software*© *QRS International* was used to encode the statements and assist in the analysis process.

The research was approved by the Research Ethics Committee of the Faculty of Medicine of Botucatu, protocol number 3884/2011.

Results

The age of the nine participant nurses ranged from 29 to 35 years and the average time spent in the position of middle managers was six years.

The revealed themes were: (1) EBM and the Management Process in Nursing, (2) Strengths of EBM, (3) Challenges of EBM, (4) The Leader and the EBM, (5) The Hospital Accreditation and the EBM, (6) Experience with the EBM.

The theme EBM and the Management Process in Nursing explain that scientific knowledge, experiences and organizational reality are constitutive elements of this managerial "model" that aims at the analysis of results with pre-established parameters. It emphasizes that these elements are

fundamental for the decision-making process, since they reduce the risk of errors and improve the quality and safety of patients in the care setting. The speeches show:

> *The evidence-based management is an administration act, taking decisions, applying experiences with scientific knowledge.*
>
> E3.

> *...performance of group management tasks... based on evidence, that is, through literary, scientific data... a "standard model" in management...*
>
> E7.

> *It is that done through information from literature based on statistical and scientific data.*
>
> E8.

EBM is related to decision making and this is based on the reliability and validity of evidence that is facts or data that enable the leader to act logically, fully and impartially in the management of conflicts that arise in the context of work. The speeches explain

> *Evidence-based management means to be reliable, clear, right, proved... it may be used, because it has already been studied, assessed and proved... it gives more credibility, credibility, reliability, to the actions taken.*
>
> E1.

> *The scientific evidences may assist in the conduction of an impartial way, allowing a better positioning in situations of conflict assisting the nursing management.*
>
> E9.

In the theme Strengths of EBM, it was revealed that, in this acting model, there is planning, systematization of work, strengthening of teamwork and the involvement of people, because there is clarity of roles and organizational objectives. Furthermore,

the effective communication and the active participation of the leaders are highlighted as essential in the managerial work process.

> *What makes it easier the action planning... team work.*
>
> E3.

> *When the involved people understand exactly their role inside the goals to be reached inside the institution.*
>
> E1.

> *Is to have a methodology applied and a single communication.*
>
> E7.

> *I believe that the active presence of leaders can improve the involvement of all and facilitate the managerial process.*
>
> E9.

EBM allows work to be grounded in facts and contributes to results being measured, assessed, scientifically based, promoting nurses' autonomy for the decision-making process.

> *The visible results, that is, palpable even.*
>
> E4.

> *In my view, what makes it easier is to have a theoretical basis, the monitoring of the actions assessment through the indicators that we have and the best is the autonomy in decision making.*
>
> E5.

The theme, Challenges of EBM highlights two essential aspects. The first refers to the preparation of the leader for management and the second to the scarcity of resources for the development of this management practice, generating interpersonal conflicts. In this sense, the understanding of the leaders and those who are led about the management work process is fundamental.

When the manager/leader does not take as base the organizational reality and does not have scientific knowledge about their area of activity, they act in an authoritarian and uncritical manner as a way of hiding their ignorance.

> *What makes it difficult is the interpersonal conflicts and the institution's lack of clarity about their goals to be reached.*
>
> E1.

> *…what makes it difficult, in fact, is the understanding and the execution of this leader on the one ones who are led.*
>
> E2.

> *…what makes it difficult is the absence of critical thinking.*
>
> E7.

The scarce resources regarding to people, material and time; to the lack o educational processes that enable people to this practice; to the unavailability of tools and methodologies that allow the assessment of the work results, besides of the awareness and all team involvement, constitute barriers that hinder the management process in the evidence-based practice's perspective. Thus

> *The difficulties are the lack o resources, lack of training of some professionals.*
>
> E3.

> *…not having human resources, not having time when there is human resource their quality leaves a lot to be desired…*
>
> E4.

> *I see as a difficulty to the management process the lack of training t this practice, the lack of communication and also the lack of criteria…*
>
> E5.

In the theme Leader and the EBM it gets clear that the unit manager needs to exercise their leadership, because it has a fundamental role as an influencer of the team in achieving the proposed organizational objectives. The leader needs to develop the leadership considering the shared decision-making process, conducting the team in an ethic way, delegating activities in order to achieve results through participation, involvement and trust. For this they must be able to perform the management process, including the planning, organization and assessment of the actions carried out. The speeches:

> *The leader influences the team so that they can reach the goals and learn from their experiences and abilities.*
>
> E1.

> *The leader has the role of facilitator in the management and decision-making process…*
>
> E9.

> *The leader is responsible for evaluating the problem and choosing the best decision, seeking tools to contribute and achieve the expected goal.*
>
> E8.

It was also emphasized that the leader must be fair in the decision making process, supporting and empowering the team without disregarding, however, the organizational aspects. Hence:

> *The leader should analyze situations, judge them but not take sides, being fair and coherent. The leader has to support the team, but do not forget the institutional rules.*
>
> E6.

The theme, The Hospital Accreditation and the EBM highlights two important aspects: in the first does not associate the accreditation process to the evidence-based management and, in the second, it

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relates and attributes the certification of the organization to the basis of evidence in the management process.

Hospital accreditation as a non-facilitator of evidence-based practice is reported by participants when they believe that, although in the organization where they work, this practice is implemented there is a need for support from executive managers, leadership training, team involvement and the availability of research and scientific articles for the development of the work, from this perspective. The speeches:

> I do not believe that the fact of being an accredited institution facilitates the evidence-based practice, since it is not implemented in the institution.
>
> E1.

> The accredited institution do not facilitates the evidence-based practice, because even it is an accredited institution, it misses research material and publications on the situations experienced by providing the evidence.
>
> E9.

The accreditation process is facilitator to the evidence-based practice when it expected quality and good care practices; educational process that favors the safety of users and workers and use of work tools that organize the information and establish flows to reach the proposed goals. However, it is necessary that the decisions are participative so that there is the involvement of the people and consequent achievement of the objectives outlined.

> I believe that being an accredited institution facilitates evidence-based practice, but decisions still needed to be more participatory.
>
> E2.

> …within this model of institution is always aimed at quality of service, good practices in customer service, educational measures and customer and employee safety.
>
> E3.

The theme Experience with the EBM makes it possible to recognize, from the perspective of the nurses unit managers, situations experienced by them that reflect the decision process based on this proposal. The experiences shared show that the indicators adoption; the search for literature on this management theme; the discussion among team members about the relevant scientific articles and the relation, of these, with the practice and, the inclusion of care protocols, are actions that demonstrate scientific management strategies and personal experiences essential for decision making.

> …evidencing the high cost of the unit, I made use of data to reduce the costs with the involvement of the whole team.
>
> E2.

> …indicators use, of my area, to improve the performance of the employees and also to improve the production of exams. I showed it to the manager and we took the board and we were able to increase our production goal, using the idle periods of exams.
>
> E5.

Discussion

The managers emphasized that the evidence-based management is related to the reliable and valid scientific knowledge and to the experiences lived as fundamental elements for the decision-making process with repercussion on safety and improvement of the quality of care.

The literature corroborates the perception of unit managers when defining EBM as the identification, implementation and evaluation of evidence whose purpose is to guide the process of management decision making [3]. It highlights that the best evidences of research are relevant to solve problems under its consideration [5].

The decision process based on scientific knowledge enables the leader to act objectively. The data which supports the decision making must be available and besides the data, the nurse leaders need to have clearly stated the objectives, as well as having accurate tools to the decision-making process related to the work with the care quality [15].

The source referred by managers to the search for evidence presupposes that the research available in the literature, as well as the experience in the management process, trigger a critical evaluation process, being this fundamental to the success of the translation of knowledge to health organizations. The translation process is related to autonomous decisions about how knowledge can be used to improve results; how to negotiate relations in health system [individuals, team, internal and external relations] and how to conquer resources to sustain changes/improvements in practice [16]. It emphasizes that research is an essential activity for the advancement of health sciences and research results should contribute to improving the quality and efficiency of health organizations [17].

However, similarly to a study carried out, the middle managers recognize the source of the evidences [scientific studies and experience], but they do not refer in a systematic way, they seek, locate and obtain evidence relevant to the decision-making process by maintaining the gap between information and its application in practice [18].

A disseminated strategy is the journal club, which aims to raise awareness of the use of research in the management area, promoting the development of leaders and improving the competence to evaluate research. This strategy provides for the creation of spaces for reflection and updating of managers in the use of results for the decision-making process. This implies that leaders routinely seek and critically consider management literature as the basis for practice [6].

For the actions implementation, both in care and management, based on evidences, it is essential to create a research discussion agenda. The manager can create the agenda and establish this practice [19].

Therefore, one of the paths mentioned is the elaboration of a strategic plan that generates new knowledge based on what has been produced and the experience lived. The strategic planning is the process in which, the members of an organization design the future and develop the procedures and operations to achieve that future. It also allows to identify existing strengths, opportunities and fragilities [19].

The effective communication is also strength for the EBM, because its communication failure interferes in the work results. The managers perform an important role in the communication process with the nursing and health team, because they are considered as models to be followed and also as mediators and interlocutors. A study carried out with the objective of identifying essential communication skills of nurse managers revealed that respect, dignity and mutual trust are essential values in the management process. Leaders are responsible for maintaining a work environment that considers these values by adopting some strategies such as giving *feedback* in a constructive private place, actively listening to each other, developing the team cooperative work and acting with justice [20].

The managers expressed that the lack of capacity of the leader and the scarcity of resources are aspects that make EBM difficult. The best option for leaders training is still discussed in literature. Leadership development programs are positives to improve the leaders' performance, but they need a theoretical referential which support them [21].

Often nurse managers are selected for their position, based on their clinical expertise, without the proper preparation to manage people, coordinate units, considering the budget and using the technology in their daily lives [22].

The obvious barriers to the practice, which involve the evidence basing as a strategic dimension include: lack of time, lack of resources, leaders and managers that establish as priorities other goals, difficulty in recruiting and retaining nursing workers and work overload [23]. The lack of organizational support, of culture focused on the management process based on evidence and the discrepancy between the organizational policy and the nurse work are great challenges [10].

Besides the scarcity o resources, other challenging aspects are: team resistance to changes; presence of inexperienced leaders; established power dynamics; historical and social traits that prevent the use and search of innovations in daily work [18] and interest and diffusion, of the importance of access to evidence, in a timely manner and with information that can be used in practice [15].

The health organizations need to implement and promote policies that enable the development of a positive work environment for the nurses, where they can feel empowered and where the leading nurses establish relationships that empower and promote the transfer of knowledge consistent with the standards of professional practice [24].

It was also referred that the manager needs to exercise their job with ethics and justice. When leading nurses are ethical, they create a culture of care based on trust. This ethical responsibility is reflected through encounters in different contexts and becomes especially visible in the face of difficult situations [25].

Managers were not unanimous about the fact that accreditation process was a facilitating component of evidence-based management. Those who affirmed it emphasized that accreditation enables the development of good assistance practices, staff training and the use of tools that establish flows and organize the work process. A study carried out in the same place of this research made it possible to understand, from the nurses' perspective, the meaning of the accreditation process. Participants referred that the professional who works in an accredited hospital develops managerial skills, since it needs to elaborate indicators being encouraged to update their knowledge by articulating scientific processes to the practice developed [26].

The experiences with EBM highlight the adoption of indicators, protocols and problem solving strategies, using scientific evidence and experiences. The nurse managers seek to value the theoretical evidences and apply them in practice, adapting them to reality. However, there is no consolidation of this action, possibly because of the distance between theory and practice, and also because of the difficulty in critically reading and interpreting the scientific findings [18].

Conclusion

The findings of this study fulfill the objectives proposed when explain, according to the managers, that the scientific knowledge and the experiences are sources of evidences that interfere, positively, in the quality and safety of patients. However, they refer that they do not search, systematically, to locate and obtain relevant evidences to the decision-making process. They emphasize, as strengths of the management process based on evidences, the planning, the systematization, the involvement of people and the work in team that contribute to the results and autonomy of the professionals. The challenges relate to the lack of preparation of the manager and the scarcity of resources which creates conflicts in the context of work and authoritarianism of the manager as a way of hiding their ignorance.

The manager needs to exercise the leadership, since it influence and empowers the team with an ethical and fair performance, sharing the decision-

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making process to reach the institutional objectives and ensuring, employee satisfaction, in a healthy work environment.

The perception about the accreditation process as an EBM facilitator is not unanimous when they consider that research is not available for consultation and managers are not trained. They refer as facilitator factor, the fact that the accredited organization contributes to the EBM through the encouragement of good care practices, the use of appropriate tools and the ongoing educational process.

The contribution of this research to the management in nursing is important when, according to the experience of nurse managers, the EBM articulates knowledge produced with practice and encourages team managers and leaders to create strategies, so that this practice is implemented to work in health.

The limitation refers to the reduced number of managers participants that, by own choice of qualitative approach, do not allow the data to be generalized to other realities.

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