Nursing management in the vaccine room: challenges and potentialities

Gerenciamento de enfermagem em sala de vacina: desafios e potencialidades

Gerencia de enfermería en sala de vacuna: retos y potencialidades

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Abstract: Objective: to analyze nursing management in the vaccine room, with emphasis on supervision, in a medium-sized city of Minas Gerais, Brazil. Method: a descriptive, qualitative, unique case study. The data were organized and analyzed through theme/category-based content analysis. Results: the findings were organized into two analytical categories: "Intervening factors in the management of the vaccine room", addressing the challenges for supervision, the need for an instrument to standardize this activity, lack of work process organization and overloading of functions. The second category: "Potentialities for the management in the vaccine room" points out as potentiating factors the organization of the nurse’s time and agenda and the need for an instrument that systematizes the supervision activities. Final Remarks: Most nurses understand the importance of supervision as a management tool, but do not perform it systematically.

Descriptors: Nursing; Health Management; Nursing, Supervisory; Organization and administration; Vaccines

Resumo: Objetivo: analisar o gerenciamento de enfermagem em sala de vacina, com ênfase na supervisão, em um município de médio porte de Minas Gerais, Brasil. Método: estudo descritivo, de abordagem qualitativa, tipo estudo de caso único. Os dados foram organizados e analisados por meio da Análise de Conteúdo modalidade temático-categorial. Resultados: os achados foram organizados em duas categorias analíticas: “Fatores intervenientes no gerenciamento em sala de vacina”, abordando desafios para supervisão, necessidade de um instrumento que padronize essa atividade, falta de organização do processo de trabalho e sobrecarga de funções. A

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segunda categoria: “Potencialidades para o gerenciamento na sala de vacina” aponta como fatores potencializadores a organização do tempo e agenda do enfermeiro e a necessidade de um instrumento que sistematize as atividades de supervisão. **Considerações finais:** a maioria dos enfermeiros compreendem a importância da supervisão, como ferramenta do gerenciamento, mas não a realizam de forma sistemática. **Descritores:** Enfermagem; Gestão em Saúde; Supervisão de enfermagem; Organização e administração; Vacinas

**Resumen:** Objetivo: analizar la gerencia de enfermería en sala de vacuna, con énfasis en supervisión, en un municipio de tamaño mediano en Minas Gerais, Brasil. **Método:** estudio descriptivo, cualitativo, tipo estudio de caso único. Los datos fueron organizados y analizados a través de modalidad temática y categoría de Análisis de Contenido. **Resultados:** los hallazgos se organizaron en dos categorías analíticas: “Factores que intervienen en la gerencia en sala de vacuna”, que abordan desafíos de la supervisión, necesidad de instrumento para estandarizar esta actividad, falta de organización del trabajo y sobrecarga de funciones. La segunda categoría: "Potencialidades para gerencia en sala de vacuna" señala factores potenciadores en organización del tiempo y agenda de la enfermera y la necesidad de un instrumento que sistematice las actividades de supervisión. **Consideraciones finales:** la mayoría de las enfermeras entienden la importancia de la supervisión como una herramienta de gestión, pero no realizan de manera sistemática. **Descritores:** Enfermería; Gestión en salud; Supervisión de Enfermería; Organización y Administración; Vacunas

**Introduction**

Immunization is one of the most effective measures in disease prevention and requires sufficient knowledge to ensure its quality.¹ The World Health Organization (WHO) points out that an efficient vaccination program has health benefits, and concludes that immunization offers the ability to achieve broad social and/or community gains, more easily than any other health intervention.²

The success of vaccination should not only take into account compliance with vaccination coverage, but rather the ideal conditions of storage, preparation and administration of these vaccines.¹ In this context, the nurse assumes an important role, performing nursing management in the vaccine program, directing the service to achieve the hoped for results, with beneficial and satisfactory impact on the quality of care services.³

In Brazil, the Ministry of Health, in order to ensure the correct handling, conservation and administration of immunobiologicals, instituted the National Immunization Program (NIP), recommending that activities in the vaccine room be performed by a qualified nursing team, with the nurse being responsible for the supervision.⁴ This needs to be used by the professional
as a management tool of care, in the preparation of personnel and constant improvement to achieve success in the quality of care.\textsuperscript{5}

The NIP is a priority strategy in the control and eradication of immunopreventable diseases today. It is noteworthy that the Basic Health Units (BHU) are fundamental structures for the development of this Program, by performing most of the vaccination in the national territory. Thus demonstrating that they play an important role in disease prevention by assuming the main gateway to the Brazilian National Health System (SUS), as recommended by the National Policy for Primary Care (PNAB)].\textsuperscript{6,7}

In a study conducted in the state of Minas Gerais, to determine nurses' perceptions about the supervision of activities performed in the vaccine room, several difficulties were identified for its development.\textsuperscript{8} Therefore, it is necessary to demonstrate its importance in the vaccine room, not only limited to supervising the work of the health unit, but also to the necessity of meeting the guidelines established by the NIP.\textsuperscript{6}

The nurse, as a care manager, needs to understand that supervision in the vaccine room has a relevant social impact, making it necessary to overcome the difficulties that may interfere with this activity and impair its true meaning for those involved in the process.

Assuming that nurses are responsible for the management of care in the vaccine room, and that nursing supervision is an important tool for the quality of care, the question is: how is the practice of nursing supervision conducted in vaccine room management?

Thus, this paper aims to analyze nursing management in the vaccine room, with emphasis on supervision, in a medium-sized municipality of Minas Gerais State, Brazil.

Method

This is a descriptive study with a qualitative approach, as in a single case study.\textsuperscript{9} The case under study is the southeastern region of health in a medium-sized municipality in the central
Nursing management in the vaccine room: challenges and potentialities

west of Minas Gerais state, which has an estimated population of 232,945 inhabitants. This region has nine BHUs, two of which are classified as a Health Center (HC) and seven as a Family Health Strategy (FHS).

Each HC has two nurses in its team, one of them being the Technical Manager (TM) for the nursing team. Each FHS has a nurse, who is therefore the TM of its BHU. The Technical Reference in Immunization is located in the Municipal Health Department of the municipality and manages the service.

The case study encompasses the qualitative approach, pointing out a contemporary phenomenon in its real context. Its characterization is based on the use of multiple data collection methods, in order to determine the phenomenon in its various aspects. In this sense, the use of the single case study represents a simple narrative to describe and analyze the context. This takes into account its capacity to handle a quantity of evidence — documents, artifacts, interviews, and observations — beyond that which would be available in a conventional historical study.

The case analyzed was the southeast region of the municipality and the units of analysis were the nine BHU in this region. The choice was made by indication of the coordination of the Technical Reference Service in Immunization of the Municipal Health Secretary, due to weaknesses in maintaining the vaccine cold chain. The participants were the TM nurses of each Health Unit. The inclusion criteria were: to be a nurse active in the basic health network of the municipality allocated to the BHU and responsible for supervision of the vaccine room. Nurses who were on vacation, sick leave or otherwise off work were excluded. Out of 11 nurses meeting these criteria, nine were eligible for the study.

To meet the assumptions presented, the research sought, during data collection, convergent or divergent evidence regarding the facts and conclusions and for the source of evidence used a semi-structured interview with the nurses of the BHU responsible for
supervision of the vaccine rooms and non-participant direct observation in the vaccine rooms using in a field-diary.

Telephone contact was made with the nurses of the health units for prior scheduling of interviews and observations. All nine nurses agreed to participate in the study, in accordance with the Term of Free and Informed Consent.

Data collection took place from August to November 2017, by three previously trained researchers. The interviews and observations were conducted at the BHU where the nurse was working, in accordance with a guiding script. The interviews lasted on average 30 minutes and were recorded on digital media. Subsequently, they were literally transcribed, thereby preserving the reliability of the information.

The semi-structured script addressed aspects of vaccine room management activity by nurses, focusing on supervision, i.e.: nurses’ perceptions of vaccine room supervision; factors that interfere with supervision; instruments used for supervision; perception of vaccine room supervision on the quality of care services; and possible strategies for improving vaccine room supervision. The discourses referring to the interviews are identified alphanumerically with the letter N, corresponding to the nurse, followed by the numbers from one to nine, sequentially.

Direct observation was performed for five days in the vaccine room of each unit by a single observer. The script for conducting direct observation addressed: the presence of nurses in the vaccine room; identification of supervisory activities; identification of supervision instruments used by nurses and identification of factors that facilitate or impede supervision by the nurse in the vaccine room. This information was recorded in a field diary, prepared each period, with an average duration of four hours and identified as “Observation Notes” (ON).

For data analysis, thematic-categorical content analysis was used,\textsuperscript{11} with the help of Atlas.ti software 8.0,\textsuperscript{12} considering the objective of the study; through the exploration of the
empirical material, with exhaustive reading of the records, and separation of the extracts according to the convergences, divergences, classification and aggregation of data into themes.

The research met all the ethical precepts described in Resolution No. 466/2012 of the National Health Council, which includes aspects that must be met in the face of research conducted with human beings, and was approved by the Research Ethics Committee of the Federal University of São João del Rei - Midwest Campus, through Resolution no. 2.168.374, dated July 11, 2017.

Results and discussion

All study participants were female with a mean age of 37 years, ranging from 29 to 45 years. All nurses had been performing TM activities at the BHU for over a year. From analysis of the obtained data two analytical categories emerged: a) Factors intervening in the management of the vaccine room and; b) Potentialities for vaccine room management.

Factors intervening in the management of the vaccine room

The training of nurses focused on supervision in the vaccine room appeared in this category as an important discourse of professionals, who reported the existence of a deficit in this aspect that negatively influenced supervision.

*I never heard that the nurse had to do vaccine room supervision at the time I graduated.* (N1)

*Often the training of nurses in relation to the vaccine room is very outdated, which makes it very difficult when we start working.* (N2)

Vaccine room supervision is not a frequent activity in public health services in Brazil, sometimes demonstrating a lack of knowledge on the subject among health professionals. Therefore, the deficiency of nursing supervision may compromise the quality of immunobiologicals offered to the population and, consequently, compromise the quality of care.
Among those interviewed, two cited the nurses’ lack of knowledge about vaccine room supervision, reporting a concept of reductionist supervision. In general, in the daily routine of Health Units, it was observed that the nurse went to the vaccine room sporadically, only when the demand for their activities in the service was low, to collect immunobiologicals administration charts and use the computer for other functions. (ON)

This is probably due to gaps in the nurses’ training, such as communication in a participatory, dialogical perspective, interpersonal relationships, conflict management and exercise of the supervision itself or even insufficient valorization of this activity, which undermines their true role as a vaccine room supervisor.

Training, therefore, is not yet aligned to the various demands of SUS, including supervision. In this sense, a study has reported that via the qualification of professionals, the health sector will become a critical, reflexive and technically competent place.

The lack of systematization in the nurses’ work appears in general, to be negatively influencing the supervision process. This can be observed in the following statements.

*Ah, so even when there’s no vaccine to do, I stay there watching, I keep asking, I’m like someone who wants nothing there.* (N2)

*S occasionally go there to have a look, do some vaccine and look at the temperature charts.* (N8)

The lack of planning and the difficulty on the part of nurses to explain how the supervision process in the vaccine room takes place, means the professional does not prioritize this activity in their daily work. This corroborates that supervision is unsystematic and unplanned, indicating an absence of compliance with the objectives proposed by supervision, which include planning, organization and evaluation of the service together with the continuing education of staff.

Away from the activities of the vaccine room, nurses cannot identify the demands and needs of their team, which results in compromising care planning, supervision and guidance
from the perspective of monitoring the team work. In this sense, the nurse needs to acquire scientific, theoretical and practical knowledge in nursing supervision, so that the performance of this attribute can be achieved with excellence.

In agreement with this finding, the discourses are related to the multiple activities and functions that nurses perform within the BHU. The excess of activities reported, refers to activities specific to the nurse as well as those actions that are the responsibility of other professionals.

But it is really a matter of demand from the population, a lot of bureaucratic service, a lot of paperwork, a lot of things we have to do; there are times when we are leaving some things aside. So I think it would be more, because of the overload that the nurse has. (N1)

Insufficient Human Resources, in which we have to perform functions that are not even ours, the nurse’s. (N7)

These reports corroborate the findings of a study conducted in Brazil with 11 nurses from the BHU, which aimed to determine the managerial practices of nurses in these units. This research reported that work overload is related to the accumulation of administrative functions and care, in addition to performing non-specific functions.

Supervision requires time, planning and prioritization to be put into practice in the work process of nurses. However, we must consider that there is still a prevalence of the model in which activities, denominated curative actions, are prioritized despite activities related to preventive actions, thus corroborating the findings of this study.

The nurse’s work needs to be systematized in all its phases, i.e., from the choice of interventions to an evaluation of the results, including the planning, organization and daily performance of the work process.

From the observations, it became evident that most nurses, in fact, spend most of their time performing bureaucratic services, such as recording production, deliveries, among others, which hinders supervision in the vaccine room. In
addition to human resources, other factors already mentioned are the insufficient quantity of supplies. (ON)

Supervision in the vaccine room is also made very difficult by the lack of supplies, all supplies, not only vaccine. Thus the lack of a technician, computer, vaccine, print also makes it difficult, and so on. (N2)

The lack of these supplies was also observed in some units where there was also a lack of vaccines (rotavirus), lack of an exclusive vaccine room computer and lack of specific needles, for example. (ON)

The BHUs need to have appropriate physical facilities for vaccination activities in accordance with Collegiate Board Resolution - RDC No. 50 dated February 21, 2002, or subsequent regulations. This provides an environment which is more appropriate for the performance of work tasks, reducing the exposure of professionals to potential sources of occupational hazards and improving the quality of care services.18,20

When there is a divergence between material, physical and/or human resources, such a complicated situation for workers is capable of increasing tension in the work environment - which reduces motivation and interferes with the quality of care. It is necessary that the structure offered by BHU can meet all its organizational, care and community needs.18, 21

In addition to the quantity of resources and supplies, there is the resistance of nursing technicians to adapt to supervision by nurses in the vaccine room, as reported in the discourses.

Another factor that hinders the supervision by nurses in the vaccine room, are the professionals who work in the room, often they create obstacles, are resistant. (N2)

When the nursing technician who is responsible for the vaccines does not follow the procedures, the protocols that have to be followed in the room it’s very complicated. (N9)

They want to do it the way they think is right, or that they have learned that way and they don’t accept changes. (N3)

It can be seen from the interviews that the professional working in the vaccine room often does not adapt to the demands of their duties. The supervisor, on the other hand,
recognizes this resistance in the professionals' behavior and considers it be harmful to the team's internal relationship, which has consequences for the interpersonal relationships of the workers.22

This instability can create a negative work environment, interfering with the care for patients, lacking interaction, leading to formal, routine and mechanized care. Thus, care for patients becomes impaired, since the care becomes permeated by negative factors, such as dissatisfaction and emotional distress among the professionals.22

In this context, the strengthening of interpersonal relationships in the nursing team needs to achieve a democratic consolidation of the profession. It is necessary to pay attention to communicative action during the nursing work process, enabling qualification of the interpersonal relationships, with autonomy of its agents and mutual construction of common goals within the team. Finally, the components of this interactive process need to be recognized as actors in a social world full of cultural divergences, knowledge and subjectivities, to enable effective relationship22 and to consider the aspect of reciprocity present in supervision.3,23

Potentialities for vaccine room management

Regarding the factors that potentialize management, with emphasis on supervision in the vaccine room, the nurses interviewed highlighted the organization of the work process as fundamental to improve the quality of service.

So I think it's really a matter of organization. The nurse has to empower herself and see this as her function of organizing, not just leaving it and doing the vaccinating; she has to do the supervision function. (N6)

The majority of those interviewed also reported their own assignment to perform supervision as a means to improve the care provided.

I think if you have good vaccine room supervision that means everything will work well in there. This will influence the quality of care and the trust of the population
with us as well. Less trouble and more confidence, more benefits, no doubt about it. (N3)

This highlights the importance of nursing supervision as a management tool, which can facilitate planning, implementation, care assessment and teamwork orientation and, consequently, enhance the quality of service provided, search for problem solving strategies and additionally promoting educational and relational objectives with other team members. 

In a study it was observed that in addition to the organization of the work process, as a factor that enhances an organized and appropriate environment, offering good human resources dimensioning and professional satisfaction, there is a feeling of high demands to reach the institutional goals. This shows more and more autonomy over that established, recognizing positive factors of service organization, while pointing out issues that generate fatigue and discomfort.

In this sense, supervision considered as a tool can guide the nurse's service in achieving desirable results, satisfactorily benefiting the organization of the work process. The adoption of the Nursing Process represents a means of realizing this logic, enabling the organization and conduct of work, based on an instrument specific to the profession.

The need for a management tool can be considered another important factor to guide the planning of the nurse's activity and improve the quality of care, in order to systematize and coordinate supervision in the vaccine room, as shown below.

I think it would be interesting to have a supervisory tool. I think, which is a kind of empirical supervision, there isn't one, it's not systematic. (N8)

A specific tool would be important. (N7)

It was observed that most of the time, on entering the vaccine room the nurses did not follow a standard for performing the supervision. They just checked some materials, and the cold room temperature. (ON)
It can be highlighted that the supervision techniques and tools that nurses use in the
development of their work present little or no systematization, despite recognizing their
relevance in the work process and specifically in supervision.26

Since 2004, the NIP has made available the Evaluation Program of the Vaccine Room
Supervision Tool (PAISSV), which is used by state immunization coordinators to standardize
the evaluation profile and increase agility in tabulating the results found.27 However, it is
noteworthy that within the knowledge of these authors, there are no systematized and validated
instruments in the literature for nursing supervision practice in vaccine rooms specifically for
use by nurses. That is, the conceptions of supervision are marked by contradictions, being
translated, in concrete practice, by an inarticulate and fragmented supervision.28

It is inferred that this research presents limitations regarding its development, covering
only the BHUs of the southeast region of the municipality, besides presenting a reduced
number of Units, restricting consideration of the results found only to the studied region.
Nevertheless, the reflections and observations that emanate can deepen an understanding of
how the supervision of the vaccine room has been taking place and opens a perspective for
future work on themes such as the creation of a supervisory tool, and analysis of the teaching-
learning process for nurses, among other aspects.

**Final considerations**

The construction of knowledge regarding the management practice of nurses in the BHU
is essential in order to make decisions and innovate in activities developed with the team and
the community. Supervision is also highlighted as a form of assistance in this practice, in order
to provide qualified and resolute care services for the population.

The study indicated that most nurses understand the importance of vaccine room
supervision as a management tool, but do not perform this effectively. This factor is influenced
by a lack of organization in the work process, overload of functions and lack of a tool to standardize the activity.

In addition, the lack of guidance on how to perform supervision also hinders the performance of nurses in the vaccine room. This highlights the relevance of investments in the professional education of nurses and the improvement of nursing skills, through measures such as continuing education regarding vaccine room supervision, to be included as a tool in their work process.

The organization of nurses' time and schedule as a facilitating factor for the supervision process was highlighted by the participants. From the records in the field diary, it was evident that those nurses who organize and plan their activities, can perform supervision in the vaccine room effectively. Consequently, the creation of a tool that systematizes this process and standardizes the direction of supervision by nurses will enable professional support through the records and the continuity/complementarity of quality care services.

Therefore, the challenge for nurses is to rethink their work process and develop strategies to effectively perform vaccine room supervision in order to ensure the quality of care.

References


Nursing management in the vaccine room: challenges and potentialities | 14


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