
THE NURSE'S SUPERVISION IN THE VACCINATION ROOM: THE NURSE'S PERCEPTION

Valéria Conceição de Oliveira¹, Pilar Serrano Gallardo², Tânia Silva Gomes³, Luzia Márcia Romanholi Passos⁴, Ione Carvalho Pinto⁵

¹ Ph.D. in Science. Professor of the Federal University of São João Del Rei, Dona Lindu Center-West Campus. Researcher funded by the Coordination for the Improvement of Higher Education Personnel (CAPES). Minas Gerais, Brazil. E-mail: valeriaoliveira@ufsj.edu.br

² Ph.D. in Public Health. Professor of the Faculty of Medicine of the Autonomous University of Madrid. Madrid, Spain. E-mail: pilar.serrano@uam.es

³ Doctorate student in Public Health at the Ribeirão Preto School of Nursing (EERP), of the University of São Paulo (USP). São Paulo, Brazil. E-mail: jasmimgomes@yahoo.com.br

⁴ Ph.D. in Public Health. Nurse of USP. São Paulo, Brazil. E-mail: vesu@saude.pmrp.com.br

⁵ Ph.D. in Nursing. Full teacher of the EERP/USP. São Paulo, Brazil. E-mail: ionecarv@erp.usp.br

ABSTRACT: The objective of this qualitative study was to understand the nurse's perception of the supervision of vaccination activities carried out in Primary Care Centers. The vaccination rooms selected for this study were from a preliminary quantitative study which analyzed the best vaccination rooms in the macroregion of western Minas Gerais, Brazil, in which 12 rooms met 100% of the structural criteria. The nurses responsible for these rooms were interviewed and the data obtained was analyzed through thematic content analysis. The results show the lack of a supervision process by nurses, which might have occurred due to the quantity of actions under their responsibility. The nurses need a proactive attitude with educational actions and more effective monitoring of vaccination room activities, avoiding the occurrence of flaws in the procedures which might influence the quality of the immunobiological preparation made available for the population.

DESCRIPTORS: Nursing, Supervisory. Immunization. Organization and administration. Primary health care.

SUPERVISÃO DE ENFERMAGEM EM SALA DE VACINA: A PERCEÇÃO DO ENFERMEIRO

RESUMO: O objetivo deste estudo qualitativo foi compreender a percepção do enfermeiro sobre a supervisão das atividades realizadas em sala de vacina de unidades de atenção primária à saúde. As salas selecionadas fizeram parte de estudo preliminar, com abordagem quantitativa, que analisou as melhores salas de vacina da Macrorregião Oeste de Minas Gerais, das quais 12 salas atenderam a 100% dos critérios estruturais. Foram entrevistados os enfermeiros responsáveis por essas salas e os dados obtidos submetidos à análise de conteúdo na modalidade temática. Os resultados demonstraram ausência de um processo de supervisão pelos enfermeiros, o que pode ter ocorrido pela quantidade de ações assumidas por eles. O enfermeiro necessita de atitude proativa com ações educativas e acompanhamento mais efetivo das atividades em sala de vacina, evitando a ocorrência de falhas nos procedimentos que podem acarretar reflexo na qualidade dos imunobiológicos, disponibilizados para a população.

DESCRIPTORIOS: Supervisão de enfermagem. Imunização. Organização e administração. Atenção primária à saúde.

SUPERVISIÓN DE ENFERMERÍA EN LA SALA DE VACUNA: LA PERCEPCIÓN DEL ENFERMERO

RESUMEN: El objetivo de este estudio cualitativo fue comprender la percepción de las enfermeras sobre la supervisión de actividades realizadas en las consultas de vacunación de las unidades de atención primaria de salud. Las consultas seleccionadas formaron parte de un estudio preliminar con abordaje cuantitativo, que analizó las mejores consultas de vacunación de la Macrorregión Oeste de Minas Gerais, y de las cuales 12 consultas obtuvieron 100% de los criterios estructurales. Fueron entrevistados los enfermeros responsables de estas consultas, y los datos obtenidos fueron sometidos a un análisis temático de contenido. Los resultados demostraron que hay ausencia de un proceso de supervisión enfermera y que tal vez, eso ocurra por la cantidad de acciones asumidas por estos profesionales. El enfermero debe tener una actitud pro-activa con acciones educativas y un acompañamiento más efectivo de las actividades en consulta de vacunación, con el fin de evitar la ocurrencia de fallos en los procedimientos, los cuales pueden tener un impacto en la calidad de los preparados inmunobiológicos disponibles para la población.

DESCRIPTORIOS: Supervisión de enfermería. Imunización. Organización y administración. Atención primaria de salud.

INTRODUCTION

The profile of morbimortality in Brazil has changed markedly in recent decades, principally in relation to infectious and parasite-borne diseases. This is the result of control measures, including vaccination, which take a central position among the instruments of public health policy in Brazil.¹ The success of the National Immunization Program (NIP) is related to the safety and efficacy of the immunobiological preparations, as well as to complying with the specific recommendations for preserving, handling and administering them and post-vaccinal follow-up, among others, by the nursing team.²

The NIP recommends that the activities in the vaccination room should be undertaken by a nursing team which has been trained for handling, preserving and administering the immunobiological preparations. Ideally, the team is made up of two nursing technicians or auxiliary nurses for each work shift, and one nurse who is responsible for supervising the vaccination room activities and for the team's continuous education.²

In spite of the NIP's good results, however, Brazilian studies have indicated shortcomings in the vaccination room, mainly in relation to the preservation of the immunobiological preparations, which may compromise the NIP's effectiveness.³⁻⁵ In addition to this, research has identified that vaccination *per se* – including the indication, contraindication, administration and monitoring of adverse events – is undertaken by nursing technicians or auxiliary nurses, and almost always without the nurse's supervision.⁶

In a developed country too, the United States, a recent investigation has raised the hypothesis that shortcomings in the storage of vaccines in local health centers may be contributing to a recent increase in the rates of morbidity of whooping cough in that country.⁷

Bearing in mind that the nurse is technically and administratively responsible for the activities in the vaccination room, and that nursing supervision is an important tool in improving the quality of the service and developing the health team's skills and competences,⁸ it is relevant to understand how the nurse in the Primary Healthcare Centers (PHC) undertakes the supervision of the activities of the nursing team in the vaccination room, as regards the quality of the care given.

Supervision is one of the tools for adjustment between the dynamic of the health actions and the

goals proposed. Given their multiple tasks, and changes in the political and social context, the definition, methods and objects of the supervision are diverse and variable.⁹

Systematized Supervision can be understood as a process of planning, carrying-out and evaluating the activities undertaken, through the use of supervisory techniques and instruments, aiming for efficiency and effectiveness, as well as for the development of the nursing team and the quality of the care given to the client.¹⁰

In the light of this, this study's objective was to investigate the nurse's perception regarding the supervision of the activities undertaken in the PCCs' vaccination rooms.

Studies relevant to the issue of vaccination, principally in regard to the work process in vaccination rooms, remain at an incipient stage in nursing.

Furthermore, studies on supervision in nursing are more directed at the hospital context. In addition to this, investigating how the supervisory activity is undertaken in vaccination rooms may prevent the NIP from being compromised, particularly in relation to the quality of the immunobiological preparations offered to the population. In this way, it is hoped that this study may contribute to the socialization of the knowledge of supervision in the vaccination room, bearing in mind the recognition of this tool's importance for the quality of care, besides supporting the formulation of diagnoses, monitoring and evaluation, and the directing and guiding of the nurse's work in the vaccination room.

METHODOLOGICAL ROUTE

This research has a qualitative approach, and was undertaken in the west macroregion of Minas Gerais, Brazil, in 2011. This macroregion is one of the Ten in the State of Minas Gerais. Currently, it is made up of the union of 55 municipalities, grouped in six micro-regions, covering 1,198,304 inhabitants.¹¹

This macro-region has 261 vaccination rooms, of which 221 (84.7%) are distributed in Family Health Strategy (FHS) Centers, and 40 (15.3%) in Primary Care Centers (PCC), these being the traditional centers, known as centers or health clinics, whose functioning predates the implantation of the FHS. In the present study, the participating centers were termed PHCs, that is, the conjunction of the FHS centers and the traditional PCCs.

The selection of the vaccination rooms which made up this research, took place based on a

preliminary study with a quantitative approach, undertaken in the 261 vaccination rooms, which aimed to evaluate the quality of preservation of vaccines in the PHCs. Structural criteria of quality were defined, in order to select the best vaccination rooms of the region. The structural criteria were: the exclusive use of the refrigerator, the presence of a thermometer with maximum and minimum temperatures marked on it, the presence of recyclable ice packs in the freezer, the water collection tray, bottles of water in the lower part of the refrigerator, the absence of objects in the refrigerator door shelves, the existence of a program for corrective/preventive maintenance of the refrigerator, and the training of the health professionals in the vaccination room.¹²

In this regard, following the analysis of the quantitative data, the authors selected twelve vaccination rooms which had met 100% of the structural criteria selected for the research. The study subjects were the nurses responsible for the vaccination rooms selected.

For the data collection, letters were sent, via the Regional Health Office, requesting authorization from the health secretaries of each municipality in which the selected vaccination rooms were located, to undertake the study. Following the official authorization, contact was made via telephone with the sector responsible for immunization in each municipal health department, so as to pre-schedule the interviews. In the municipalities where there was no person in the municipal health department specifically responsible for immunization, contact was made directly with the PHC nurse. All 12 nurses accepted to participate in the research.

The interviews were held in the period August - October 2011, by one researcher, and were recorded on a digital file, after the participants had consented by signing the Terms of Free and Informed Consent. The interviews were guided by a guiding script and were later transcribed word-for-word, thus preserving the reliability of the information. The semi-structured script addressed aspects of the nurse's supervisory activity in the vaccination room, namely: description of the supervisory activity in the vaccination room, supervision of the activities undertaken by the nurse technicians/auxiliary nurses, and training of the team for the care provided in the vaccination room.

For the data analysis, the thematic mode of content analysis was used,¹³ following the phases of organization of the data, taking into account the study's objective; exploration of the empirical

material, with thorough reading of the records, separation of the excerpts in line with the convergences and divergences, and classification and aggregation of the data into themes.

This study was approved by the Research Ethics Committee of the *São João de Deus* Hospital, under Decision n. 38/2011.

RESULTS AND DISCUSSION

The thematic categories developed based on the empirical material were titled: the nurse's supervision in the vaccination room: the concept in the view of the nurse; and barriers to, and perspectives on, the exercising of the supervision in the vaccination room.

These shall be presented below, illustrated with examples taken from the discourses, which shall be identified with the letter N for Nurse, followed by the numbers 1 to 12, sequentially.

The nurse's supervision in the vaccination room: the concept in the view of the nurse

One can perceive, in the interviewees' discourses, a reductionist concept of supervision, based on a fragmented view, which does not encompass the stages of planning, implementation and evaluation, principally when the nurses delegate the running of the vaccination room to the middle-level team. *It's not supervised, both M [nurse technician], who works in the afternoon, who's the technician, and D [nurse technician], in the morning, they've got, I think, more or less 10 years' experience in the vaccination room, both of them. So they know what's going on (N1).* It is clear that the nurses interviewed consider that their participation in the routine work in the vaccination rooms is not necessary, due to the nurse technicians' / auxiliary nurses' enormous length of service, believing that exercising these activities for various years enables them for such practice, not considering that these professionals' need supervision.

Another interviewee corroborates the same perception: *when I came, they already had a routine, and so adapted to the routines. But, most of the time, they are very capable, they can carry out good work (N3).*

The account below denotes that the nurse disengages from supervisory activity, understanding the need to be in the room only in the activities which are required to be done by professionals. *The vaccination room is run by one, administrated by a nurse technician, and she takes care of this room, she*

organizes it. Me and F [nurse], we are in charge of monitoring and vaccinating, and doing the heel prick test, also in the afternoon, when she's not here. Or when she's on holiday and there's nobody around, to be organizing it.[...] (N2).

It should be noted that the nurse technician/auxiliary nurse has knowledge from her experience, which must not be ignored – on the contrary, it is necessary for the team's work, with a view to the quality of the care – but the supervision of a mid-level professional is the job of the nurse, whose role is to organize, control and – principally – encourage the development of the nursing team. Thus, the supervision must be understood as part of the process of “caring” in the vaccination room. It goes beyond the supervision of the records, temperature maps, the cleanliness of the refrigerator, and includes the monitoring of the “doing” of the workers in the room, an opportunity where the supervision occurs, and, consequently, the educative process as well.

According to Decree n. 94.406/87, which regulates Law n. 7.498, of the 25th of June 1986, which regulates the exercising of nursing, it is the job of the auxiliary nurse, in article 11, subparagraph e, to carry out tasks referent to the preservation and administration of vaccines,¹⁴ but these activities can only be undertaken under the supervision, guidance and direction of the nurse, as the above-mentioned law makes clear in article 13.¹⁴ This leads to the need for the nurse to monitor the nursing team's work process in the vaccination rooms, planning and evaluating the activities carried out with the aim of offering the population vaccines which are in a state of maximum potency and reducing flaws in the procedures, so as to ensure the client's safety.

A study which aimed to investigate the meaning of the supervision undertaken by the nurse in the Primary Care Center, as expressed by the auxiliary nurses, identified – based in their evaluations – that the nurse's absence in the sector was considered a negative aspect, which influences the quality of the activities which they undertake.¹⁵

For supervision to take place, it is necessary for there to be planning of this activity, which may be instrumentalized with the adoption of a plan to coordinate the nursing team's activities, aiming for quality care and obtaining better working conditions.⁸⁻⁹ In this regard, the Vaccination Procedures Manual presents a suggestion for a supervision timetable in the vaccination room, and stresses that it can be used as a basic guide, so as not to hinder such a rich work.²

However, with the aim of improving the nursing team's ability, an articulated and dynamic work process is necessary. It is possible to observe that the interviewees consider that the access to the vaccination room facilitates supervision, due to its physical closeness. *My supervision room is next to it, so I have lots of contact with the vaccination room. Because my access to it, as it's very easy, so, because of this I don't have to make an appointment to be always looking in, because my access there is very easy, that's why I don't need to reserve a particular time, and as I'm close to the girls the whole time, sometimes they ask me things: 'the thermometer's not working, is it the battery'? (N9).*

This account also shows a conception of supervision which is understood as being carried out through the doing of the vaccination room's routine activities, which can happen, occurring in the moments when the workers raise doubts, or by visiting the vaccination room, which is favored by the physical layout. This demonstrates an “improvised” supervisory practice, which is not systematized or planned, but which happens, partly, in the routine of the vaccination rooms; thus it is not considered a process, as it is punctual, sometimes being summed up as questions and answers. It does not in fact achieve the supervision's objectives and purposes.

There is also one account that, due to not having much time, the nurse takes advantage of the records of administration of the immunobiological preparations to undertake the supervision. *[...] I see a record and it's time to do the accounts for the vaccine, because, as I haven't been here for very long, I like to do the accounts myself, rather than leave it to the technician. Because I'll be able to see what went wrong and what didn't, because a vaccine didn't match the accounts, you know (N6).*

Another study undertaken with the aim of investigating the nursing team's functioning in the vaccination room observed that in some of the units evaluated, the nurse would go only to collect the records of the administration of the immunobiological preparations, a situation which de-characterizes the role expected of this professional, who is the manager responsible for the vaccination room.⁶

It is not possible, however, to evaluate the functioning (and/or dynamics) of the vaccination room only by the immunobiological preparations' records, which are analyzed monthly. This practice allows one to analyze the vaccinal coverage, date mistakes, and the stock levels and usage of immunobiological preparations.

The statements reported here show that the nurses have difficulty in describing the supervisory activity carried out in the vaccination room, which may be through absence of knowledge about, or valorization of, this activity. In the interviewees' discourses, it is evident that the supervision is seen as the compliance with technical norms, and, thus, it is not clear whether the interviewees perceive the supervision as a process, and whether they actually do supervise the vaccination room. *Generally, the person who checks the refrigerator every day is me. Both when I arrive, and when I go home. It's always me who closes the vaccination room, you know. That's more or less how it is. At the start, and after I finish the activities. Routinely, during the work, it's pretty hectic* (N10).

In expressing herself regarding the supervision, the nurse asserts that she also opens the vaccination room. *So when I arrive first, I open the room and check the temperature* (N8).

In another account, it is possible to perceive that the nurse only checks whether the vaccination room activities were carried out, emphasizing the aspect of control. *I arrive, the first thing I look at is go to the vaccination room, to see how the temperature is, to see how the boxes are, if there's some message, anything different* (N12).

The supervision of the work process originated in the technical and social division which determined the need for an activity which would ensure compliance with rules and norms. Thus, the dimension of control appears recurrently in the nurses' work.¹⁶

One investigation, which sought to identify the nurse supervisor's knowledge regarding her activity, showed that 70% of the interviewees mentioned not being prepared specifically for the function of supervision, it being supposed, therefore, that the nurse supervisor exercises a role much more directed at the control of the activities carried out by the other members of the nursing team than at supervision itself.¹⁷ Thus, there is a failure to cover the objectives of the supervision, which presupposes planning, organization of the work, continuous education for the workers, and evaluation with the aim of putting into practice the assistance provided by the nursing team and, consequently, ensuring quality care for the population.⁹

Barriers to, and perspectives on, the exercising of the supervision in the vaccination room

In the set of accounts above, attention is called to the absence of a more systematic supervi-

sory process carried out by the nurses, and it may be that this happens due to the amount of actions for which they are responsible. *It's not like a health clinic, like the Central health clinic where G [a nurse] only deals with vaccines, do you get the difference. Here, I have 10 Community Health Workers, this area has more inhabitants than the Family Health Strategy. So there are days I arrive and there are 30 people to be triaged. So, as a result, I rely heavily on R [auxiliary nurse], because she has extremely good experience, she's very competent in the vaccination room* (N11).

The multiplicity of activities and tasks is raised by the nurses as an obstacle to the supervisory process, and genuinely does act as a hindrance. Supervising involves time, and time involves the prioritization of activities in the nurse's work routine. For this reason, it is also necessary to consider that in the nurse's assistential routine, the activities linked to care for the processes of diseases which are already in place (termed curative actions) are overlapped by the activities linked to preventive actions, represented in this case by the activities in the vaccination room.

For this reason, the municipal health managers must offer conditions so that the nurse can really take on the technical responsibility for this area of care, the alternative being the compromising of the quality of the vaccination services.⁶

A study undertaken in Australia, which aimed to assess the integrity of the cold chain and to identify local factors which affect the breaking of this chain, showed that the nurses perform an essential role in the vaccination room. The authors emphasized the value of contracting nurses and investing in education specifically on immunization.¹⁸

It is evident that excessive demands on the nurse and the lack of planning for supervision – associated, moreover, with the organization of the health services – cause the nurse to get lost in so many activities, which are not always specifically nursing-related, thus compromising the undertaking of, and quality of, the supervision in the vaccination room.

As has been seen, the nurse's routine is surrounded by a series of difficulties in carrying out her work. Nevertheless, it is believed that here, Nursing should accompany the transformations in contemporary society and increasingly seek innovations allowing the alleviation of the consequences of this model of supervision. In this way, a new conception is under way for carrying out a more participative and humanized supervision, directed at the improvement of the team, with a view to the quality of care.¹⁹

In relation to this aspect, it is possible to identify in the accounts below the importance of direct communication between supervisor and nursing team in the joint, cooperative resolution of problems. *I monitor it every day. I look it over, I arrive in the room, I look at the thermometer, I look at the cool box. I look in the morning, and I look in the afternoon when the vaccination is stopping. And I advise the girls... this is every day. They ring me with any doubts if I'm not here. I monitor it every day. We do all the activities together. Like, just now, I was going through the records with them, getting the records up to date. She administers the vaccines, and asks me about any doubts. But we do it all together (N7).*

In this cooperative process, all have the opportunity to develop, and the nursing team's knowledge is recognized. *Here, we carry out daily supervision, in the administration of the vaccines, in their preservation, the stock levels. Every day (N4).*

In this perspective, these new approaches entail concepts of flexibility, reduction of hierarchy, teamwork, and decentralization of decision-making, with a view to the satisfaction of the client and the team, as well as productivity and co-responsibility.²⁰ In this perspective the activity of supervision has as its mission to achieve the results and objectives proposed, to promote the nursing team's development, and to create the necessary motivation and attitudes for greater efficiency in the performance of the work functions.²¹

The account below describes the nurse's importance in detecting and responding to the workers' doubts in the vaccination room: *during the whole day, like, hourly, I go into the vaccination room to supervise. The auxiliary nurse who is in the vaccination room comes here with all her doubts. If she has doubts, she doesn't do anything. So, in addition to me going there and supervising the room, the cleanliness, how the vaccination room is, they come here to me to clear up their doubts. So I've told them, don't do anything if you're not sure (N5).*

One can grasp, from this account, the central preoccupation, which is to identify, clarify, and clear up misunderstandings which can compromise the assistance in the vaccination room. One of nursing supervision's objectives is to maintain the workers' continuous education through constant evaluations of the activities which they undertake, identifying needs for guidance and improvement with the aim of preventing harm in the assistance provided to the health service user.⁸ Furthermore, due to the

great development of the NIP and the accelerated process of introduction of new vaccines on the calendar, there should be systematic updates, so that the nursing team which works in the vaccination room may become essential for offering a quality service to the population.

"In this process of training, which occurs 'in' and 'for' the services' routine work process, the principal focus is to produce health care which is based on the professional practice, building meanings for the nurse's action, where this may identify the aim of the work and mobilize the tasks in a combined way, for the production of action in health and in nursing, in accordance with the ongoing political project".^{16:319}

FINAL CONSIDERATIONS

The study revealed inadequate nursing supervision of the vaccination rooms in the west macroregion of Minas Gerais, and this may compromise the quality of the immunobiological preparations made available to the population, in view of the fact that the nursing supervision is a viable instrument for evaluating the quality of the care given to the population, and that the nurse has a fundamental role in this process.

The nurse, as the person directly responsible for the nursing team, needs to integrate planned supervision of the vaccination room into her routine, based on the routine of the vaccination rooms, possibly using the instruments already made available in the NIP. She must also be able to broaden the understanding that supervision is an important action in the educational process, which allows the identification of the workers' needs for training, so as to develop the nursing team's potential and qualification.

In spite of the difficulties mentioned by the interviewees from the region's PHCs, it is important to re-think the nurse's work process, as well as to find alternatives in the PHCs' daily routines, integrating the administrative and assistential activities, which allow the construction of the management of the care in the vaccination room.

It is also necessary to undertake nursing research so as to investigate the meaning of the supervision of the vaccination activities, as well as the perception of the strong and weak points so as to supervise the work process in vaccination rooms, bearing in mind that immunization in primary health care in Brazil is exclusively a nursing activity.

REFERENCES

1. Bisetto LHL, Cubas MR, Malucelli A. A prática da enfermagem frente aos eventos adversos pós-vacinação. *Rev Esc Enferm USP* [online]. 2011 [acesso 2012 Mai 2]; 45(5):1128-34. Disponível em: <http://www.scielo.br/pdf/reeusp/v45n5/v45n5a14.pdf>
2. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Manual de procedimento para vacinação. 4ª ed. Brasília (DF): MS; 2001.
3. Oliveira VC, Guimarães EAA, Guimarães IAG, Januário LH, Pinto IC. Prática da enfermagem na conservação de vacinas. *Acta Paul Enferm*. 2009 Nov-Dez; 22(6):814-8.
4. Melo GKM, Oliveira JV, Andrade MS. Aspectos relacionados à conservação de vacinas nas unidades básicas de saúde da cidade do Recife-Pernambuco. *Epidemiol Serv Saúde* [online]. 2010 Mar [acesso 2011 Nov 3]; 19(1):25-32. Disponível em: <http://scielo.iec.pa.gov.br/pdf/ess/v19n1/v19n1a04.pdf>
5. Luna GLM, Vieira LJES, Souza PF, Lira SVG, Moreira DP, Pereira AS. Aspectos relacionados à administração e conservação de vacinas em centros de saúde no Nordeste do Brasil. *Ciênc Saúde Coletiva* [online]. 2011 Fev [acesso 2012 Jan 15]; 16(2):513-21. Disponível em: <http://www.scielo.br/pdf/csc/v16n2/v16n2a14.pdf>
6. Queiroz SA, Moura ERF, Nogueira PSF, Oliveira NC, Pereira MMQ. Atuação da equipe de enfermagem na sala de vacinação e suas condições de funcionamento. *Rev Rene* [online]. 2009 Out-Dez [acesso 11 Nov 17]; 10(4):126-35. Disponível em: <http://132.248.9.1:8991/hevila/RevistaRENE/2009/vol10/no4/14.pdf>
7. McCollister P, Vallbona C. Graphic-output temperature data loggers for monitoring vaccine refrigeration: implications for pertussis. *Am J Public Health*. 2011 Jan; 101(1):46-8.
8. Correia VS, Servo MLS. Supervisão da enfermeira em Unidades Básicas de Saúde. *Rev Bras Enferm*. 2006 Jul-Ago; 59(4):527-31.
9. Servo MLS. Pensamento estratégico: uma possibilidade para a sistematização da supervisão em enfermagem. *Rev. Gaúcha Enferm*. 2001 Jul; 22(2):39-59.
10. Leite MLS. Padrão de supervisão da enfermeira em hospitais de Feira de Santana-BA [dissertação]. Salvador (BA): Universidade Federal da Bahia, Escola de Enfermagem; 1995.
11. Malachias I, Leles FAG, Pinto MAS. Plano Diretor de Regionalização da Saúde de Minas Gerais. Belo Horizonte (MG): Secretaria de Estado de Saúde de Minas Gerais, 2010.
12. Oliveira VC, Guimarães EAA, Silva SS, Pinto IC. Conservação de vacinas em Unidades Básicas de Saúde: análise diagnóstica em municípios mineiros. *Rev Rene*. 2012 13(3):531-41.
13. Bardin L. Análise de conteúdo. Lisboa (PT): Edições 70; 2000.
14. Brasil. Lei N. 7.498, de 25 de junho de 1986: Dispõe sobre a regulamentação do exercício da Enfermagem e dá outras providências. *Diário Oficial da República Federativa do Brasil*, 26 Jun 1986. Seção 1.
15. Servo MLS, Correia VS. A Supervisão sob a ótica dos auxiliares de enfermagem. *Rev Diálogos Ciênc* [internet]. 2005 [acesso 2012 Mar 6]; 3(6). Disponível em: http://dialogos.ftc.br/index.php?Itemid=4&id=84&option=com_content&task=view
16. Kawata LS, Mishima SM, Chirelli MQ, Pereira MJB. O trabalho cotidiano da enfermeira na saúde da família: utilização de ferramentas da gestão. *Texto Contexto Enferm* [online]. 2009 Abr-Jun [acesso 2012 Mai 5]; 18(2):313-20. Disponível em: <http://www.scielo.br/pdf/tce/v18n2/15.pdf>
17. Ayres JA, Berti HW, Spiri WC. Opinião e conhecimento do enfermeiro supervisor sobre sua atividade. *Rev Min Enferm*. 2007 Out-Dez; 11(4):407-13.
18. Carr C, Byles J, Durrheim D. Practice nurses best protect the vaccine cold chain in general practice. *Aust J Adv Nurs* [online]. 2010 Dec-Feb [acesso 2012 Jul 12]; 27(2): 35-9. Available at: <http://www.ajan.com.au/Vol27/Carr.pdf>
19. Carvalho JFS, Chaves LDP. Supervisão de enfermagem no contexto hospitalar: uma revisão integrativa. *Rev Eletr Enferm* [online]. 2011 [acesso 2012 Abr 26]; 13(3):546-53. Disponível em: <http://www.fen.ufg.br/revista/v13/n3/v13n3a21.htm>
20. Fernandes MS, Spagnol CA, Trevizan MA, Hayashida M. Nurses managerial conduct: a study based on administration general theories. *Rev Latino-Am Enfermagem*. 2003 Mar-Apr; 11(2):161-7.
21. Espuela F, Prieto RMB. Perfil competencial del supervisor de unidad. *Metas de Enferm*. 2008 Nov; 11(9):8-13.

Correspondence: Valéria Conceição de Oliveira
Universidade Federal de São João del Rei
Campus Centro Oeste Dona Lindu
Rua Sebastião Gonçalves Coelho, 400, bl A
35501-296 - Chanadour, Divinópolis, Minas Gerais, Brazil
E-mail: valeriaoliveira@ufsj.edu.br

Received: August 13, 2011
Approved: September 6, 2012