The technical skills of the nurses on the assistance of the newborn

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RESEARCH

THE TECHNICAL SKILLS OF THE NURSES ON THE ASSISTANCE OF THE NEWBORN

AS COMPETÊNCIAS TÉCNICAS DOS ENFERMEIROS NA ASSISTÊNCIA AO RECÉM-NASCIDO

COMPETENCIAS TÉCNICAS DE ENFERMERÍA EN EL CUIDADO DEL RECIÉN NACIDO

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ABSTRACT
Objectives: To characterize the profile of the professional nurse and to analyze the knowledge and essential skills of nurses working in the care of newborns. **Method:** Quantitative, cross-sectional, descriptive, applied a form of 12 nurses selected with cluster sampling technique. The data were processed with Microsoft Office Excel 2007 and analyzed through manuals of the International Confederation of Midwives and the Ministry of Health. It was approved by the ethics committee of the Municipal Health and Civil Defense, CAAE: 0265.0.314.000-10. **Results:** Identified that 66.66% of nurses have all 8 knowledge points assessed. About the basic skills, especially in emergency procedures, we have approximately 46% of untrained nurses and 79% who do not perform the procedures. **Conclusion:** The lack of knowledge and skills established by the International Confederation of Midwives confers a risk for newborns in primary care, especially in cases of emergency, and nurses should have a professional training to ensure their competence. **Descriptors:** Professional competence, Newborn, Nursing care, Primary health care.

RESUMO
Objetivos: Caracterizar o perfil profissional do enfermeiro e analisar os conhecimentos e habilidades essenciais dos enfermeiros que atuam no atendimento ao recém-nascido. **Método:** Quantitativo, transversal, descritivo, aplicado um formulário a 12 enfermeiros selecionados com técnica de amostragem por conglomerados. Os dados foram processados no Microsoft Office Excel 2007 e analisados através de manuais da Confederação Internacional das Parteiras e do Ministério da Saúde. Aprovado pelo comitê de ética da Secretaria Municipal de Saúde e Defesa Civil, CAAE:0265.0.314.000-10. **Resultados:** Identificou-se que 66,66% dos enfermeiros têm todos os 8 conhecimentos avaliados. E quanto às habilidades básicas, especialmente nos procedimentos de emergência, temos aproximadamente 46% de enfermeiros não treinados e 79% que não realizam os procedimentos. **Conclusão:** A ausência de conhecimento e habilidades estabelecidos pela Confederação Internacional das Parteiras confere um risco ao recém-nascido na assistência básica, principalmente nos casos de emergência, devendo o profissional ter um treinamento que assegure sua competência. **Descritores:** Competência profissional, Recém-nascido, Assistência de enfermagem, Atenção básica.

RESUMEN
Objetivos: Caracterizar el perfil del enfermero y analizar el conocimiento y las habilidades esenciales del enfermero que trabaja en el cuidado de los recién nacidos. **Método:** Cuantitativo, transversal, descriptiva, aplicó un formulario de 12 enfermeras seleccionadas con la técnica de muestreo por conglomerados. Los datos fueron procesados con el Microsoft Office Excel 2007 y fueron analizados a través de manuales de la Confederación Internacional de Matronas y el Ministerio de Salud. Aprobado pelo Comité de Ética da Secretaria Municipal de la Salud e Defesa Civil, CAAE: 0265.0.314.000-10. **Resultados:** Identificó-sé que 66,66% de las enfermeras tienen todos los 8 conocimientos evaluados. Las habilidades básicas, especialmente en los procedimientos de emergencia, tenemos aproximadamente el 46% de las enfermeras sin formación y el 79% no realizan los procedimientos. **Conclusión:** La falta de conocimientos y competencias establecidas por la Confederación Internacional de Matronas confiere un riesgo para los recién nacidos en la atención primaria, especialmente en casos de emergencia, y debe tener una formación profesional para asegurar su competencia. **Descritores:** Competencia profesional, Recién nacidos, Cuidados de enfermería, Atención básica.

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INTRODUCTION

In 2002, the International Confederation of Midwives (ICM), in partnership with the World Health Organization (WHO) and the International Federation of Gynecology and Obstetrics (FIGO), conducted a study involving 17 countries on 05 continents on the knowledge, skills and attitudes that health professionals need to do to care for women in pregnancy and childbirth. This study resulted in the document on Essential Skills for Exercise Basics Obstetrics.[1] This document gaps in the data recorded in Brazil. And international meeting on this issue, the representatives of Brazil Teachers Marli Mamede (Proprietor of the School of Nursing of Ribeirão Preto) and Maria Antonieta Rubio Tyrrell (Holder of the Anna Nery School of Nursing), assumed responsibility for investigating these knowledge gaps .

This research was developed in 2011, the working mode of completion, the Center for Research on Women's Health (NUPEM) School of Nursing Anna Nery (EEAN) Federal University of Rio de Janeiro (UFRJ). This study included the sixth powers of the aforementioned document that addresses the care of the newborn (NB) up to two months old.

Discuss only the basic knowledge and skills, because the study has as object of study the basic skills of nurses in the care of the newborn in the light of the determinations of the ICM and the Ministry of Health (MOH).

This competency covers the following elements: eight basic knowledge: 1. Adaptation of the newborn to extra-uterine life; 2. Basic needs of the newborn: breathing, warmth, nutrition, attachment 3. Assessment elements of the immediate newborn, eg APGAR assessment system for breathing, heart rate, reflexes, muscle tone and color 4. General appearance and behavior of the newborn; 5. Normal growth and development

of the newborn infant and 6. Particularities of some normal newborns, eg "caput" head molding, Mongolian spots, hemangioma, hypoglycemia, hypothermia, dehydration, infection 7. Elements of health promotion and prevention of diseases in the newborn and infant; 8. Need for immunization risks and benefits for the infant up to 2 months old.

In addition, the nine basic skills were assessed: 1. Clear airway to keep breathing 2. Maintain body heat, preventing overheating 3. Assess the immediate condition of the newborn, eg APGAR or other assessment methods 4. Perform a focused physical examination in newborns to detect conditions incompatible with life; 5. Positioning the child to breastfeed; 6. Educate parents about danger signs and when to take the child to receive care; 7. Initiate emergency measures for respiratory distress (newborn resuscitation), hypothermia, hypoglycemia, cardiac arrest; 8. Transfer newborn to receive emergency care, when available; 9. Record results, including activities and those that require follow up.

In this study, we consider competence as an intersection of knowledge, skills and attitudes used by the professional to perform a certain task.[2]

Based on this definition, we understand how competent professional who is able to perform a given activity, differing from a qualified professional, who is the one who has the qualifications required to take certain position, because the classification is related to vocational training.[2]

The basic skills are those essential to the accomplishment of care to newborns, include knowledge and skills to perform this tour, so all professionals should possess them, considering the duties assigned to each profession, in the case of

nurses, established by Law the Professional Practice of Nursing 7498 to June 25, 1986.

According to the Pan American Health Organization and WHO, skilled care, which includes professional competence, have demonstrated impact on indicators of countries that prioritize this strategy in reducing neonatal deaths, showing by this that the less attention is qualified higher mortality neonatal.[3]

Therefore, the need to study the basic skills of nurses attending the newborns, since the reduction of the infant mortality rate in Brazil is still a major challenge for health services and society as a whole. Despite the decline that has been observed in the rates, the drop rate is lower than expected, resulting in rates still high, according to information from the Department of the Unified Health System (DATASUL).

In the state of Rio de Janeiro, were recorded every thousand live births: in 2005, 8.2 early neonatal deaths and 3.0 neonatal deaths later, in 2006, 8.0 early neonatal deaths and 2.5 neonatal deaths later, in 2007 7.6 early neonatal deaths and 2.4 neonatal deaths later, in 2008, 7.0 early neonatal deaths and 2.6 neonatal deaths later, and in 2009, 7.2 early neonatal deaths and 2.4 neonatal deaths late .[4]

The infant death, by his transcendence in family, health services and society, as well as its magnitude in national and world stage, is a serious health problem pública5. Especially in our country, where there is a shortage regarding coverage of health services in the primary care level to meet the needs of newborns and their family.[6]

Studies indicate that the neonatal period is responsible for two-thirds of infant deaths, of which half occur in the early neonatal period (first week of life, from the moment of birth until the 6th day). These deaths, with 50% occur in the first 24 hours after birth.[5]

In Brazil, the millennium development goal number 04 is to reduce, by 2015, by two thirds the mortality in infants and children up to five years, neonatal mortality one of the determining factors for the reduction of infant mortality rate. And to facilitate the achievement of this goal, the training of health professionals in the care of the newborn is an important strategy for promoting child health, preventing premature deaths and health problems of children. Moreover, the national agenda of priorities in health research (2008) establishes as a priority the development of studies like this that help you understand the landscape of care and therefore may contribute to the reduction of fetal mortality, perinatal and neonatal.[3]

The objectives of the study are to characterize the profile of nurses in the comprehensive health care of the newborn and analyze the basic knowledge and skills of nurses working in the care of newborns in the city of Rio de Janeiro in the light of the International Confederation Midwives and the Ministry of Health.

METHODOLOGY

The study is a quantitative, cross-sectional, and non-experimental, in order to highlight and quantify the skills of nurses who assist the newborn in Municipal Health Centers (CMS) in the municipality of Rio de Janeiro. This is a descriptive study, since the purpose is to observe and document describing a situation.

The study population was composed of twelve (12) nurses working in the care of newborns in Municipal Health Centers of the Municipality of Rio de Janeiro.

The technique of cluster sampling was used to select the CMS. Thus, each program area of the municipality was considered a conglomerate and for the choice of CMS, we conducted a simple

random sample in each cluster.

The study setting was composed of ten (10) CMS Municipality of Rio de Janeiro whose nurses performed the care of newborns. However, during the study, one (01) CMS had to be excluded because the only professional who performed the care of newborns was on maternity leave.

Data collection was performed after approval by the Ethics Committee in Research of the Municipal Health and Civil Defense of the Municipality of Rio de Janeiro (CEP / SMSDC / RJ), with protocol number 07/11 (CAAEn: 0265.0. 314000-10). Data collection was structured in three stages: telephone contact; authorization of the directors and managers of nursing marking days and times with the professionals. Before each interview, the research subject received the consent to that with the knowledge of the objectives of the study, its risks and benefits, and guarantee of confidentiality, could, without embarrassment, refuse to participate. After consent, the data collection was performed.

The data collection instrument was a questionnaire structured in seven blocks, containing open questions to characterize subjects with socioeconomic data and professional and closed questions covering knowledge and skills of basic newborn care. In each jurisdiction, the professional answer had knowledge, was trained and it was in their practical experience skills determined by ICM.

The limitations of the study, we observed that there may be an overestimation or underestimation in the responses of some respondents, since this was a field study with self-reported data, moreover, it may have been inaccurate responses by memory bias.

Data were processed with the aid of the Microsoft Office Excel 2007. This is a spreadsheet program for calculation written and produced by Smoken Lols Microsoft for computers using the Microsoft Windows operating system as well as

Apple Macintosh computers. Its features include an intuitive interface and tools capable of calculating and graphing.[7]

Regarding the method of organization and presentation of quantitative data, calculations were used as frequencies, percentages and averages.

RESULTS AND DISCUSSION

The socioeconomic profile of nursing professionals, covering nurses interviewed, had the following characteristics: age ranged from 32 to 53 years, with a weighted average of approximately 44 years. In the clustering of ages, nurses, mostly were 46-53 years old (41.7%), followed by the age group 39-46 years old (33.3%) and, lastly, 32-39 years old (25%). Regarding marital status, 58.3% were married, 25% were single, and 16.7% were divorced. Seven of the nurses (58.3%) had a son, two (16.7%) had no children, and three nurses had 2, 3 and 4 children respectively. As for salary, 41.7% were in the salary range 5-10 minimum wages, 41.7% in the salary range of 10 or more minimum wages, and only two nurses (16.6%) reported having family income of 3 5 minimum wages.

Regarding the data of the nurses working in the grouping set times can be seen that 66.7% met a workload of 40 hours per week, 8.3% worked 60 hours or more, and 16.7% were between 41-60 hour working week. 8.3% did not answer the question. Time working in nursing ranged from 02 to 31 years. Half of the nurses (50%) have more than 21 years in the profession, three nurses (25%) have less than 10 years of experience and 25% have 11-20 years of experience. The operating time in neonatal nursing ranged from less than 1 to 25 years, with an average of approximately 12 years. 33.33% of nurses are working in the group

for over 15 years and 33.33% in the group of up to five years in professional practice. And 16.7% arein the group 06-10 years of experience and 16.66% 11-15 years.

Regarding the basic knowledge to adapt the RN to extra-uterine life, appearance and behavior of the newborn, normal growth and development of newborns and infants, the elements of health promotion and prevention of diseases in the newborn and infant, and the need for immunization (risks and benefits for the infant until two months of age), all nurses reported having such knowledge. Have knowledge about the elements of evaluation of the newborn, as the evaluation system APGAR (for breathing, heart rate, reflex, muscle tone and color), a nurse (8.33%) reported not having that knowledge.

Regarding knowledge about the basic needs of the newborn, all nurses interviewed said that they had knowledge of the needs of warmth and nutrition. A nurse (8.33%) reported having no knowledge about the needs of breath and attachment.

The study found that all nurses have the basic knowledge of Mongolian spots, hypoglycemia and dehydration.

About hemangiomes, a nurse (8.33%) said they had no knowledge. On knowledge of infection, a nurse (8.33%) reported not having knowledge.

The question of the knowledge molding of the head, "caput", and hypothermia, two nurses (16.66%) reported not having knowledge.

As for basic skills, five of these were excluded because they practice for the scenario of motherhood. The basic skills that were not analyzed were clear airway to keep breathing, maintaining body heat, preventing overheating; assess the immediate condition Rn: Apgar; assess the immediate condition Rn: other assessment methods perform an examination specific physical

conditions in newborns to detect incompatible with life.

Skills analyzed, four of the nurses interviewed (33.33%) have not been trained to initiate emergency measures for respiratory distress in situations of hypothermia. However, 75% of nurses do not perform this practice in your workplace.

Seven nurses (58.33%) say they have not been trained to initiate emergency measures for respiratory distress in hypoglycemia; however, eleven nurses (91.67%) do not perform this practice.

Compared to initiate emergency measures for respiratory distress in situations of cardiac arrest, six nurses (50%) say they have not been trained, however, 100% claim not to perform this maneuver in your workplace. Twelve nurses (100%) were trained in the placement of the child to breastfeed and the same twelve said they perform this orientation in their workplace.

All the nurses say they have been trained how to record the results, including activities and those that require follow-up, however, a nurse (8.33%) does not perform this practice.

As for the ability to transfer the newborn to receive emergency care, when available, five nurses (41.67%) say they have not been trained six nurses (50%) do not perform this skill in your workplace.

The socioeconomic profile of respondents is consistent with the context of the female population of the century, where there is a trend of complete emancipation, particularly economic, social and legal, in the face of man; predominance of professional work on the burden of the home; vocational higher competitive with man; final insertion in the labor market first line.[8] According to data from the Brazilian Institute of Geography and Statistics (IBGE), in 2009, the average fertility rate in Brazil was 1.94 children per woman.[9] In the

present study, 58.33% of the nurses have a son and 16.66% do not have children.

Regarding the economic context for category nurse in the state of Rio de Janeiro, the minimum wage was 1630.99 real, according to Law 5.950/2011. We realize that all nurses receive above 03 minimum wages (1635 dollars), so the value was within what was envisaged at the time of data collection. Currently, the minimum wage of the state was changed to the law 6.163/2012 for 1861.44 dollars.

Regarding labor data, both time working in nursing as of the time working in neonatal nursing, we can verify that they reveal a luggage experience. These professionals are considered proficient due to the acquired knowledge in practice. Thus, these professionals who already know and typical events expected when plans must be changed, because they recognize the situation as a whole and to know when to expect a normal event is not realized.[2]

As the workload of nurses, it can be inferred that these high workloads weekly professional wear, reduce the quality of care, compromise patient safety and decrease the chances of qualification.[2]

The study found that only 66.66% of nurses hold all 8 basic knowledge about care to the newborn.

Among the basic knowledge that have not been learned by all nurses, are the elements of evaluation of the newborn, as the evaluation system APGAR (for breathing, heart rate, reflex, muscle tone and color); need to breath and attachment; molding of the head, caput and hemogiomes.

Even if the Apgar score is used only in hospitals during the consultation host mother-infant APGAR notes should be seen and evaluated by nurses in CMS, since the first minute Apgar score demonstrates that the newborn had any sign of choking and there was need for mechanical

ventilation at birth. In addition, the fifth minute Apgar and tenth minute are considered more accurate, leading to the prognosis of neurological health of the child (neurological sequelae or death). Armed with this knowledge, the nurse can direct your query.

Regarding the need for attachment, the infant needs to develop a relationship with at least one primary caregiver for social and emotional development to occur normally. Nurses can be a facilitator of family participation, favoring the bond, the attachment between parents and children, and the practical skills humanized.[11]

On knowledge of respiration of the newborn, it is concluded that it is fast and that its frequency, amplitude and rate vary considerably. The respiratory rate of a newborn should be on average 40-60 breaths per minute and should be part of the evaluation of the nurse in the physical examination of the newborn.[12]

In assessing the "caput" and the molding of the head, it is necessary to check the head circumference and palpate the fontanelle. Normal delivery, especially in infants of black, can cause an increase in the anteropostern diameter (dolichocephalic) .[12]Identification of changes in anatomical structures of the skull of the newborn can prevent neurological sequelae by early interventions.

And capillaries hemangiomas are vascular forms more extensive and higher that may have pathological significance. For example, when located in the cephalic segment and face, with a red wine stain, may be associated with angiomas of leptomeninges (Sturge-Weber), being related to seizures and hemiplegia. Approximately 50% of hemangiomas disappear by 5 years of age and 70% by age 7.[12]

On basic skills, some nurses claimed not to perform certain procedures for acting on CMS.

However, even if some situations are rare in CMS, as the cases of newborns in cases of cardiac arrest, hypoglycemia and hypothermia, it was found that there is little training for nurses.

In situation of cardiac arrest, the nurse CMS should start the first steps of neonatal resuscitation and transfer the newborn for emergency pediatric care.

The hypoglycaemia in newborn is considered when plasma glucose is less than 40 mg / dl and hypothermia (low body temperature) can lead to hypoglycaemia. The nurse should advise the mother to the baby warm with appropriate clothing.

The basic skills related to the placement of the child to breastfeed, record the results (including the activities done and what needs follow-up) and transfer the newborn to receive emergency care (when available), we can conclude that there is training for these skills carried out.

However, a nurse does not perform the registration procedure. The registry is often hampered by excessive duties that nurses have the space to take the time to write. In reality of health services, a nurse should perform, in each hour of service, three queries, ie, it has about twenty minutes for each client. Therefore, the nurse prioritizes care instead Registration (Evolution), which leads us to reflect on the importance of this procedure for continuity of care to the newborn in subsequent consultations and also in relation to the legal aspect, since the patient entitled to have your medical records with all procedures recorded for future reference and also for use in legal proceedings.

About transferring RN, which has been reported is that nurses are trained to have the ability, but there is a delay in the arrival of adequate transportation. And we know that to reduce neonatal mortality from preventable causes and sequelae that may compromise the newborn, it is important that it receives proper attention and problem-solving. In this sense, the guarantee of access to appropriate and timely neonatal transport, when necessary, can be critical to the survival of the newborn with the best possible conditions.[14]

CONCLUSION

The professional competence of the neonatal nurse translates, then, the ability to use knowledge and skills acquired in practice for the care of the newborn.

Regarding the basic knowledge of the parameters evaluated in the ICM (2002), the study found that 66.66% of all nurses have knowledge assessed. Therefore, we find that, based on the basic knowledge and skills established by ICM, not all nurses had all the skills essential to the practice of care to the newborn.

The analysis in comparative perspective between the quantity of trained professionals who, in theory, should have ability to perform the procedures, ie, to demonstrate attitude, revealed that nurses are more trained and performed fewer activities for which they were trained.

A major difficulty common to all nurses in the care of the newborn, was insufficient knowledge about contents and practices of emergency. And we must consider that the lack of responsiveness is one of the consequences of neonatal death, thus demonstrating that this knowledge / skills need to be covered in training courses and training urgently.

The study has recommended that training of health professionals in the care of the newborn, as this is an important strategy for the promotion of child health, preventing premature deaths and health problems of children. Therefore, to establish and describe the skills of professional nursing Neonatal practices is a first step to bring

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together a unique language of the practical nurse (o), but the second step is the reflection and discussion of how this profile will be operationalized in practice and validated the realities of different states.

Pointed out the need for further studies regarding the issue of skills in neonatal in order to fill in some gaps that are still present, such as the lifting of these knowledge and skills in maternity hospitals in Rio de Janeiro and other states of Brazil.

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