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ORIGINAL ARTICLE

FIRST STEPS OF NURSING CONTINUING EDUCATION IN NEONATAL INTENSIVE CARE UNIT

PRIMEIROS PASSOS DA EDUCAÇÃO PERMANENTE EM ENFERMAGEM DE UMA UNIDADE DE TERAPIA INTENSIVA NEONATAL

PRIMEROS PASOS DE LA EDUCACION PERMANIENTE EN ENFERMERÍA DE UNA UNIDAD DE TERAPIA INTENSIVA NEONATAL

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ABSTRACT

Objective*:** to identify the requirements of nursing professionals in a Neonatal Intermediate Intensive Care Unit. ***Method: descriptive study, with quantitative approach, carried out in a Neonatal Intermediate Intensive Care Unit in a Public Hospital in the Federal District. The data was collected using questionnaires and statistically analysed through frequency distribution and presented in tables. This study was approved by the Research Ethics Committee, Protocol no. 171/2011. ***Results:*** 30 professionals, 6 nurses and 24 nursing technicians, all female, participated in this study; the professionals require educational activities directed at the subject *administration of medications*. ***Conclusion:*** the *first step* towards an adequate educational practice was accomplished. The data collected will contribute to the planning of the educational activities for the continuing qualification of the professionals in this healthcare service. ***Descriptors:*** Nursing; Education; Neonatology.

RESUMO

Objetivo: Identificar as demandas dos profissionais de Enfermagem de uma Unidade de Cuidados Intermediários/Intensivos Neonatal. ***Método:*** estudo descritivo, de abordagem quantitativa, realizado na Unidade de Cuidados Intermediários/Intensivos Neonatal de um Hospital Público do Distrito Federal. A coleta de dados ocorreu por meio de um questionário e os dados foram analisados estatisticamente pela distribuição de frequências e apresentados em tabelas. Este estudo teve o projeto aprovado pelo Comitê de Ética em Pesquisa, Protocolo 171/2011. ***Resultados:*** participaram 30 profissionais, seis enfermeiros e 24 técnicos de enfermagem, todos do sexo feminino; as profissionais requerem ações educativas direcionadas para a temática de *administração de medicamentos*. ***Conclusão:*** o primeiro passo para uma prática educativa adequada foi realizado. Os dados coletados contribuirão para o planejamento das ações educativas para a qualificação permanente dos profissionais deste serviço de saúde. ***Descritores:*** Enfermagem; Educação; Neonatologia.

RESUMEN

Objetivo*:** Identificar las demandas de los profesionales de enfermería de una Unidad Neonatal de Cuidados Intermedios/Intensivos. ***Método: estudio descriptivo, con abordaje cuantitativa, realizado en la Unidad Neonatal de Cuidados Intermedios/Intensivos de un Hospital Público del Distrito Federal. La colección de datos se realizó a través de un cuestionario y los datos fueron analizados estadísticamente mediante distribución de frecuencias y se presenta en tablas. Este estudio fue aprobado por el Comité de Ética con Protocolo 171/2011. ***Resultados*:** 30 profesionales participaron, seis enfermeras y 24 técnicos de enfermería, todas mujeres, las profesionales requieren iniciativas de formación orientados al tema de la administración de fármacos. ***Conclusión*:** se llevó a cabo el primer paso para una práctica educativa adecuada. Los datos recogidos contribuirán con la planificación de actividades educativas para la calificación continuada de los profesionales deste servicio de salud. ***Descriptores*:** Enfermería; Educación; Neonatología.

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INTRODUCTION

When analysing the national healthcare scenario, the fourth Millenium Development Goal (MDGs) stands out – reduce child mortality. However greater effort and attention is needed.[1] Although the United Nations has published that Brazil has reached in 2012 the target set out by the MDGs[2], it is necessary that the government actions that contributed to reaching this goal continue and that new actions are proposed so that this indicator continues to decrease.

Prenatal, labour and delivery care and newborn care are actions that effectively contribute to a reduced child mortality rate.[3] Thus, Brazil needs to continue dedicating efforts to revert this scenario. All efforts should be made so that pregnant women as well as children have access to a healthcare that fundamentally promotes healthy pregnancy and child development.[1]

We estimate that 60 per cent of neonatal deaths occurs due to preventable causes and that the main faults are related to the quality of prenatal care, the diagnosis of changes in pregnancy, the obstetric management and the newborn care in the delivery room and neonatal unit. The pregnancy's negative outcome is primarily related to problems in the ability to prevent and respond, in the right moment, to complications during pregnancy, labour and puerperium, with emphasis on the neonatal stage.[4]

The practice of Continuing Education in Health Care is considered a relevant strategy to contribute to the continuing qualification of the healthcare professionals who deal with children and newborns. This way they will be able to act early, anticipating and preventing possible complications.

Continuing Education is defined as a systematic and global strategy that covers, in its process, several specific capacitation actions; it can have a beginning and end and be directed at specific work groups, as long as it is linked to the general strategy of institutional change; it requires preparation, planning and execution based on a strategic analysis and the institutional culture of its healthcare services.[5] Continuing Education consists of capacitation practices of the professionals in healthcare services, while considering scenarios where learning occurs involving the subjects.[6]

This project originates from the need to carry out Continuing Education Practices in partnership with the nursing team of a public hospital of the Federal District, with the intention of contributing to the qualification of these professionals in a Neonatal Intensive Care Unit (Neonatal ICU).

In order to subsidize a quality educational practice we believe it is of fundamental importance to know the individuals that will be involved in this process of Healthcare Continuing Education. This will be achieved through profile characterization, as well as identification of their own requirements of the work process, the final aim being their professional improvement.

The main objective of the present study is:

- To identify the requirements of the nursing professionals of a Neonatal Intermediate Intensive Care Unit.

METHOD

This descriptive study, with quantitative approach, was carried out between August 2011 and August 2012 in the Neonatal Intermediate Intensive Care Unit of a Public Hospital in Federal District, in connection with the scientific contents of Continuing Education Practices.

During the research, this service was composed of 9 nurses and 58 nursing technicians. However, at the time of data collection 17 nursing technicians were absent on leave, such as holiday leave, sick leave, maternity leave or paid leave. For this study a group of 50 subjects was considered (9 nurses and 41 nursing technicians). The inclusion criteria took into account the nursing team of the neonatal unit who agreed to participate in the research.

Before collecting the data a first visit was carried out to introduce the objectives of the study and invite the subjects to participate. After confirmation of the participants the data collection was scheduled.

The questionnaire is composed of 18 questions, 14 close-ended and 4 open-ended, which aims to describe the profile of the nursing team professionals and their relationship with Continuing Education, as well as highlight the topic requirements for Continuing Education.

All participants involved in this study signed a Free and Informed Consent Term, taking into account the guidelines of Resolution 196 in regards to research with human subjects.[7] This research was approved by the Research Ethics Committee of the Health State Secretariat, under protocol no. 171/2011.

The data was entered into an Excel spreadsheet, with double data entry in order to check for possible errors. Then a statistical

analysis through frequency distribution was carried out.

RESULTS

Thirty female nursing professionals participated in this study. Of these, 6 were nurses and 24 were nursing technicians. Thirty per cent of the professionals with age ranging from 30 to 34 years old (Table 1).

Table 1. Frequency distribution of nursing professionals per age. Ceilândia-DF, 2012.

Age	n	%
25-29 years	5	16,7
30-34 years	9	30,0
35-39 years	3	10,0
40-44 years	4	13,3
45-49 years	5	16,7
More than 50 years	4	13,3
Total	30	100,0

In regard to the time since the nursing professionals attained their qualification, 36.7% have between 10 to 15 years, as shown in Table 2.

Table 2. Frequency distribution of nursing professionals per time since qualification attained. Ceilândia-DF, 2012.

Time	n	%
Less than 1 year	1	3,3
1-5 years	2	6,7
6-10 years	5	16,7
11-15 years	11	36,7
16-20 years	4	13,3
More than 20 years	7	23,3
Total	30	100

Of the participating nurses, half (3) had already attained some type of complementary qualification. Similar circumstances were found between the nursing technicians (12 subjects), where three subjects qualified in Nursing, two specialized in neonatal ICU and one specialized in adult ICU.

We observed that seventy per cent of the nursing professionals work 40 weekly hours (Table 3).

Table 3. Frequency distribution of nursing professionals per weekly hours worked. Ceilândia – DF, 2012.

Hours	n	%
20	2	6,7
24	1	3,3
40	21	70
More than 40	6	20
Total	30	100

We observed that 76.7% (23) of the nursing professionals work in only one healthcare service, 20% (6) work in two institutions and only 3.3% (1) in more than three institutions.

In this study, we consider Continuing Education Practices to be those activities performed exclusively by the Continuing Education Centre of the Hospital, and Scientific Meetings as any scientific activity carried out at the hospital, for example Nursing Week, Conferences, Symposiums, Seminars or Meetings, where health topics are discussed which contribute to the scientific development of the professionals. Thus, in regard to participating in Continuing Education Practices offered by the employing service/hospital, 66.7% (20) reported having taken part in some educational activity and of those, 40% (12) attended the Scientific Meeting at the hospital.

When questioned about the use of a computer as a tool to update their scientific knowledge, 76.7% reported they make use of the computer. Of these, 53.4% have access to one at home, 23.3% at home and at work and 33.3% of the professionals use a computer for

about 1 to 2 hours per week for the same purpose, as shown on table 4.

Table 4. Frequency distribution of nursing professionals per computer use, where it is accessed and time spent. Ceilândia – DF, 2012.

	Computer Use		Computer Place of Access			Weekly Time Spent at Computer		
	Nº	%		N°	%		Nº	%
Yes	23	76,7	**Home**	16	53,4	**< 1h**	9	30
No	7	23,3	**Home and Work**	7	23,3	**1 - 2 h**	10	33,3
			No Access	7	23,3	**2 - 3 h**	4	13,3
						No Access	7	23,3
Total	30	100	**Total**	30	100	**Total**	30	100

All the nursing professionals in the study either have a subscription or read scientific journals. Furthermore, 63.3% (19) dedicate approximately 1 hour a week for this purpose.

When questioned about the topics most relevant to the decrease of the high neonatal mortality rates, 10 participants answered *hospital infection*; 8 answered *humanization and hand hygiene*; and 7 answered *administration of medication*.

In the specific field of Neonatal Care, the topics reported by the participants as most relevant to the professional development were *administration of medication*, according to 14 answers, and *humanization*, according to 6 questionnaires.

It is noteworthy to point out that these two questions were open-ended, and the subjects were able to choose the topics they considered more important for decreasing neonatal mortality as well as for professional development.

Considering the information obtained in the two questions aforementioned, all the topics were considered important for professional development as well as for decreasing neonatal mortality rates. However, *humanization* and *administration of medication* were highlighted because they were mentioned in both questions, and the latter topic was mentioned in more answers in total.

DISCUSSION

It is obvious that Nursing, from its origin, has been a profession of the female gender. Likewise, the data from this study corroborates this premise seeing as the female gender predominates amongst the participants in this research. Furthermore, data collected by the Nursing Federal Council shows that the majority of the nursing professionals are female, corresponding to 87.24% of this sector in Brazil.[8]

As with gender, the age group of qualified professionals (30 to 34 years) also reflects the country's reality, where the age between 26 and 35 years predominates, corresponding to 35.98% of the nursing professionals.[8]

As for the time since qualification was attained, there was predominance in the period of 11 to 15 years. There are no significant changes comparing this study and the one carried out in neonatal ICUs of hospital institutions in Cuiabá-MT, where it was demonstrated that in public services the time since qualification was attained was between 6 and 8 years for nurses (37.5%) and more than 10 years for nursing technicians (50%).[9] However, statistics from the Ministry of Health indicates different values since it was observed that the time since qualification was attained for 35.2% of the nurses was between 16 and 25 years.[10]

Half the participants in the study (15) had previously attained complementary qualification. *Complementary qualification* was considered to be specialization, other undergraduate courses in health related areas, short duration courses and courses of continuing and permanent education. Complementary qualification involves any activity carried out after graduation, such as nursing residency, specialization, master's degree, doctorate or postdoctoral. Based on this, in the study carried out in neonatal ICUs in Cuiabá-MT it was observed that 22.2% of the senior nurses of the public healthcare service have a *lato sensu* postgraduate degree, and 55.5% are currently enrolled in one.[9] Statistics from the Ministry of Health reveal that 78.8% of nurses completed specialisation courses, 23.7% completed a second specialisation, 36.9% have a master's degree and 13.6% have a doctorate degree.[10]

Regarding the weekly hours worked of qualified professionals, we observed a predominance of 40 weekly hours (70%), similar to other brazilian states.[9] In Brazil, the weekly hours in nursing varies between 30 and 40 hours. Currently there is a campaign to reduce the work load to 30 hours. Some states have approved this reduction, however this issue is still under discussion in the Federal District.[11]

As shown by the Ministry of Health, in Brazil the higher percentage of nurses is in employment (47.5%).[10] Similar statistics were found in our study, where the majority of the professionals (76.7%) confirm they have only one job.

We observed that, although few professionals in the neonatal ICU of the hospital in this study have a specialization in neonatal ICU, their participation in Continuing Education Practices and a scientific meeting demonstrates an interest in developing their knowledge in the field. Nevertheless, though the participants stated they were involved in educational activities, results indicate it was not the case for all the professionals. A similar situation was noted in a study carried out in a public university hospital in the north of Parana, where out of a total of 720 nursing team workers, there was a predominant average of 35 people attending capacitation events promoted by the institution.[12]

As for the use of computers, 76.7% of the professionals stated they use this tool to update their scientific knowledge. In a study carried out in a Hospital Centre in Baixo Alentejo (Beja-Portugal), it was seen that nurses use the Internet more often to acquire and update knowledge, and for clarification of queries about less frequent pathologies.[13]

In the health field, especially in Nursing, the use of the computer promotes access to information, facilitates communication, improves the quality of healthcare, and contributes to the development of professionals and to progress in research. Computers are present in the majority of health organizations; however in Brazil most nurses do not have adequate knowledge about computers, even though this is available resource to help them perform their work.[14]

Subscribing or reading scientific journals was predominant amongst the qualified professionals. We believe this practice is an adequate resource to support or contribute to the resolution of continuing education requirements which is essential in the health field, thus contributing to a quality healthcare.

We found that the participating professionals in this study require educational activities focused on the topic *administration of medication*, which is included in a technical dimension.[15] Similar findings were noted in a study carried out in a university hospital in the state of São Paulo, where it was found that the majority of requests for the nursing team capacitation was for the aforementioned dimension.[16]

In the practice and development of the nursing professional, the education of professionals can be accomplished using Continuing Education.[17] In the framework of ICU service/care, Continuing Education is a participatory management strategy which creates opportunities for educational activities triggered by dialogue, critical reflection and problematization, construction and integration of new knowledge. Furthermore, it provides elements, resources and learning strategies which promotes change in our thoughts and actions.[18]

In view of the continuing education of nursing professionals and the maintenance of the fourth Millennium Development Goal (reduce child mortality), we believe the continuing education of these professionals is a contributing factor to a better neonatal care, thus contributing to positive outcomes of pregnancy and puerperium. Continuing Education is considered by the authors of this article to be an important tool to maximize these goals.

CONCLUSION

It is fundamental to learn the professionals' profile before outlining any educational practice. This way, with information such as gender, age group, time since qualification, employing services and weekly hours worked, it will be possible to adequately plan the right steps to take in Continuing Education activities.

A significant number of the participating professionals in this study took part in Continuing Education Practices offered by their employing services/hospitals, thus demonstrating that although few neonatal ICU professionals are specialized in neonatal ICU, the data collected shows that these subjects are looking to develop further in this field. It was also noted that these professionals require educational activities directed at the '*administration of medication in neonatology*', and that is the chosen topic for the next step in Continuing Education.

Continuing Education of nursing team professionals in the neonatal unit is an effective tool to meet current needs and that way ensure a quality, safe and humanized public healthcare service.

This study has contributed to taking the *first step* towards Continuing Education Practice of the nursing professionals involved, seeing as the next step will be to develop an educational tool with topic highlighted here.

REFERENCES

1. Barros FC, Matijasevich A, Requejo JH, Giugliani E, Maranhão AG, Monteiro CA, et al. Recent Trends in Maternal, Newborn, and Child Health in Brazil: Progress Toward Millennium Development Goal 4 and 5. American Journal of Public Health. 2010 [cited 2012 Set 16];100(10):1877-92.

2. Brasil supera meta de redução de mortes em crianças quatro anos antes do previsto. Jornal agora MS [Internet]. 2012 [cited 2012 Sept 16]. Available from: http://www.agorams.com.br/jornal/2012/09/brasil-supera-meta-de-reducao-de-mortes-em-criancas-quatro-anos-antes-do-previsto/

3. Basso CG, Neves ET, Silveira A. Associação entre realização de pré-natal e morbidade neonatal. Texto contexto - enferm. 2012 [cited 2011 Oct 28];21(2):269-76. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072012000200003&lang=pt

4. Barreto JOM, Abdala CVM, Schechtman A. Síntese de evidências para subsidiar ações contra a mortalidade perinatal (fetal e neonatal precoce) no Brasil. EVIPNet Brasil [Internet]. 2010 [cited 2011 Out 28]. Available from: http://sintese.evipnet.net/mortalidade-perinatal/mensagem-chave/

5. Brasil. Ministério da Saúde. Secretaria de Gestão do Trabalho e da Educação na Saúde. Política Nacional de Educação Permanente em Saúde. Ministério da Saúde: Brasília; 2009.

6. Tanji SL, Viana LO. Educação permanente subsidiando a competência dos docentes do curso de graduação em enfermagem. J Nurs UFPE on line [Intenet]. 2012 [cited 2012 Nov 24];6(9):2065-70. Available from: http://www.sumarios.org/sites/default/files/pdfs/2704-28883-1-pb.pdf

7. Brasil. Ministério da Saúde. Conselho Nacional de Saúde. Resolução Nº 196, de 10 de outubro de 1996: diretrizes e normas reguladoras de pesquisas envolvendo seres humanos. Brasília: Ministério da Saúde; 1996.

8. Conselho Federal de Enfermagem. Comissão de Business Intelligence. Análise de dados dos profissionais de enfermagem existentes nos Conselhos Regionais. [Internet] 2011 [cited 2011 Oct 26]. Available from: http://site.portalcofen.gov.br/sites/default/files/pesquisaprofissionais.pdf

9. Bittencourt RM, Gaiva MA, Rosa MKO. Perfil dos recursos humanos das unidades de terapia intensiva neonatal de Cuiabá, MT. Rev. Eletr. Enf. [Internet]. 2010 [cited 2012 Ago 18];12(2):258-65. Available from: http://www.revistas.ufg.br/index.php/fen/article/view/6517

10. Ministério da Saúde. Fundação Oswaldo Cruz. Instituto de medicina social. Organização Pan-Americana de Saúde. Trabalho e educação em saúde no Mercosul. Brasília, DF: Ministério da Saúde; Rio de Janeiro: Europa, c2008.

11. Conselho Federal de Enfermagem. Mobilização pelas 30 horas para enfermagem continua. [Internet] 2010 [cited 2011 Nov 5]. Available from: http://portalcofen.gov.br/sitenovo/node/4982

12. Costa DB, Vannuchi MTO, Haddad MCFL, Cardoso MGP, Silva LG, Garcia SD. Custo de educação continuada para equipe de enfermagem de um hospital universitário público. Rev Eletr Enf [Internet]. 2012 [cited 2012 Aug 18];14(2):257-66. Available from: http://www.fen.ufg.br/revista/v14/n2/v14n2a05.htm

13. Rosário JMOA, Santos EMCP. A importância da utilização dos recursos da internet para a autoformação dos enfermeiros no contexto da educação continuada. J Nurs UFPE on line [Internet]. 2012 [cited 2012 Nov 24];6(4):728-34. Available from:http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/2450/pdf_1143

14. Rodriguez EOL, Guanilo MEE, Fernandes LM, Candundo G. Informática em enfermagem: facilitador na comunicação e apoio para a prática. Invest Educ Enferm [Internet]. 2008 [cited 2012 Out 6];26(2):144-149. Available from: http://www.scielo.org.co/pdf/iee/v26n2s1/v26n2s1a14.pdf

15. Carmagnani MIS. Procedimentos de enfermagem: guia prático. Rio de Janeiro: Guanabara Koogan; 2009.

16. Braga AT, Melleiro MM. Perception of the nursing staff about service of continuing education of a University Hospital. Rev Esc Enferm USP [Internet]. 2009 [cited 2011 Oct 28];43(Esp2):1214-8. Available from: http://www.scielo.br/pdf/reeusp/v43nspe2/en_a12v43s2.pdf

17. Camelo SHH. Professional competences of nurse to work in Intensive Care Units: an integrative review. Rev. Latino-Am. Enfermagem. 2012 [cited 2012 Nov 24];20(1):192-200. Available from: http://www.scielo.br/pdf/rlae/v20n1/25.pdf

18. Medeiros AC, Pereira QLC, Siqueira HCH, Cecagno D, Moraes CL. Gestão participativa na educação permanente em saúde: olhar das enfermeiras. Rev Bras Enferm. 2010 [cited 2011 Oct 28];63(1):38-42. Available from: http://www.scielo.br/pdf/reben/v63n1/v63n1a07.pdf

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