



Knowledge of graduated nursing students on breast feeding newborns with cleft lip and palate

Conhecimento de enfermeiros sobre amamentação de recém-nascidos com fissura labiopalatina

Conocimiento de enfermeros acerca de la lactancia materna de recién nacidos con fisura del labio y paladar

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Objective: to identify the knowledge of nursing professionals about breastfeeding infants with a cleft lip and palate. **Methods:** a cross-sectional survey with nurses from two Brazilian Universities. A questionnaire with personal characteristics and knowledge related to nursing education was used. **Results:** all 13 nurses reported the lack of training on breastfeeding for infants with a cleft lip and palate. Most of the nurses were unaware of offering ways of feeding, suggesting that despite being one of the professionals who give more guidance on breastfeeding, knowledge on the subject is just beginning about the need for attention and care in attending children with a cleft lip and palate. **Conclusion:** further research in the area is recommended in order to improve understanding of caring for newborns with a cleft lip and palate, and to help professionals upgrade the care process.

Descriptors: Breast Feeding; Cleft Lip; Cleft Palate; Nursing Care.

Objetivo: identificar o conhecimento de enfermeiros acerca da amamentação de recém-nascidos com fissura labiopalatina. **Método:** pesquisa transversal, com enfermeiros egressos de duas universidades brasileiras. Para coleta de dados utilizou-se um questionário enviado por via digital para avaliar as características pessoais, de formação e relacionadas ao conhecimento em amamentação. **Resultados:** de 13 enfermeiros, todos relataram ausência de aprendizado sobre aleitamento materno para lactentes com fissura labiopalatina. A maioria dos enfermeiros desconheciam formas de oferecimento de alimentação da criança sugerindo que, apesar de o profissional ser aquele realiza orientações sobre o aleitamento materno, o conhecimento quanto ao assunto é incipiente sobre as necessidades de atenção e cuidados direcionados aos recém-nascidos com fissura labiopalatina. **Conclusão:** urge ampliar o conteúdo ofertado durante a graduação acerca das necessidades dos recém-nascidos com fissuras labiopalatina, a fim de melhorar o entendimento do processo de cuidar.

Descritores: Aleitamento Materno; Fenda Labial; Fissura Palatina; Cuidados de Enfermagem.

Objetivo: identificar el conocimiento de enfermeros acerca de la lactancia materna de recién nacidos con fisura del labio y paladar. **Método:** investigación transversal, con enfermeros de dos universidades brasileñas. Recolección de datos a través de cuestionario encaminado por vía digital para evaluar características personales, de formación y conocimiento en lactancia. **Resultados:** los 13 enfermeros relataron falta de capacitación en lactancia materna direccionadas a estos recién nacidos. La mayoría desconocían formas de ofrecer alimentación a estos niños, indicándose que, a pesar del enfermero ser aquello que realiza orientaciones acerca de la lactancia materna, el conocimiento sobre el tema no era suficiente cuanto a las necesidades y atención al recién nacido con fisura del labio y paladar. **Conclusión:** es preciso ampliar el contenido ofertado en la graduación acerca de las necesidades de estos recién nacidos para mejorar la comprensión del proceso de cuidar.

Descriptor: Lactancia Materna; Labio Leporino; Fisura del Paladar; Atención de Enfermería.

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Introduction

Pregnancy brings with it many expectations about the fetus in formation. The birth of a malformed child, like those with an oral fissure, surprises both the parents and the health team⁽¹⁾.

A cleft lip and palate is considered a congenital disease, characterized by tissue failure at the higher cleft lip level, compromising the alveolar arch, hard palate and soft palate⁽²⁾, causing deformities in the face of the future baby⁽³⁾.

The palate formation begins at the end of the fifth intrauterine week of life. At about the sixth week, failures can occur in the fusion between the fronto-nasal and maxillary processes, resulting in clefts of the lips. Palate malformation usually happens in the ninth week of gestation, by deficiencies in the union of the palatine plates that form the maxillary process⁽⁴⁾. The accurate diagnosis of lip and palate malformation can be performed at 26 weeks of intrauterine life, by regular ultrasound⁽⁵⁻⁶⁾.

A cleft lip and palate are the most relevant among the craniofacial anomalies, especially by the number of changes and the high complexity of their aesthetic and functional effects⁽³⁾. Its prevalence in the Brazilian population is in 1 for each 673 live births⁽⁷⁾.

Malformation can compromise the baby's feeding, making it challenging for the mother and her baby⁽⁸⁾. Among the most common problems related to breastfeeding are inadequate oral suction from lack of pressure⁽⁹⁾, fatigue during breast-feeding, prolonged feeding, growth and nutrition problems⁽¹⁰⁾.

Health professionals agree that breastfeeding is important for babies, but there is no information in the literature on nurses' knowledge about the learning offered during university education. However, among other responsibilities, nursing is engaged in conducting health education, providing quality guidance, ensuring the health and well-being of babies and family. Also, it is a nurse's responsibility

to recognize the malformation and offer guidance to parents on the diagnosis; to discuss the best possible ways of treatment and services available to care for children with a cleft lip and palate^(1,11).

Based on these, the present study has the guiding question: How do the undergraduate nursing courses prepare future health professionals to treat newborn infants/children with cleft lip and palate problems?

This study aimed to identify the knowledge and the perception of nurses about breastfeeding among infants with a cleft lip and palate.

Method

This cross-sectional study was conducted with nurses who graduated from two universities, one public university in the State of Paraná, and other private from the State of São Paulo.

The study population consisted of 60 nurses. As inclusion criteria, all nurses were invited to participate, regardless of whether or not they had contact with infants with a cleft lip and palate. There were 47 losses relating to subjects who did not respond to the questionnaire within the given period. There were no excluded respondents.

Thus, the sample was characterized by 11 graduates of the state university who had graduated in 2012, and two graduates from a private university in 2013, totaling 13 respondents.

The first stage of the research was to identify the graduates with help from the Academic Departments of Universities by requesting names and e-mails. The second phase was guided by routing sending emails to develop research knowledge of nursing graduates about breastfeeding newborns with a cleft lip and palate.

To meet the requirements of this research, a data collection instrument was developed using the program provided by Google Docs®; its variables were gender, marital status, education, age, race, knowledge

and experience about breastfeeding infants with a cleft lip and palate; and the acquisition of knowledge in university about the orientation of the mothers in relation to breastfeeding newborns with clefts.

Requests to participate in the research were sent by e-mail from January to March 2014, with information on the deadline process for returning their response.

After completion of the period for receiving data, the information was consolidated. The data were collected and stored in the Google Docs® program and then transferred to Microsoft Office Excel 2010 program, allowing for analysis using absolute and relative frequency.

In obedience to the rules of human research, the project was analyzed and approved by the Ethics in Research Committee of the Nursing course at Northern State University of Paraná, and whose report was published in the document number 046/2013.

Results

Of the 13 nurses, ten (76.9%) were between 21 to 24 years, eight (61.5%) were female, ten (76.9%) were single and all self-reported as being white.

During graduation, 11 (84.6%) professionals reported not having received any information about the process of breastfeeding babies or children with cleft lip and palate. Although when they were asked about the indication of breast milk for this population, nine (69.2%) stated natural breastfeeding as a possibility.

As for how breastfeeding should be done, four (30.8%) said it should be on the breast (actual breastfeeding), two (15.4%) professionals indicated a bottle, one (7.7%) a spoon, one (7.7%) a dropper and five (38.5%) did not know how to best suggest breastfeeding.

Regarding the best position to nurse the baby, six (46.2%) professionals were emphatic in saying

they did not know the appropriate position. On the other hand, five (38.5%) nurses mentioned the sitting position, one (7.7%) mentioned the uplifted position and another (7.7%) mention the dorsal position.

Discussion

Mother-child health is the subject of a large number of health policies and programs in Brazil that assist in promoting binomial health to mother/child in any situation⁽²⁾. Health professionals should know the assistance guidelines for this population and act effectively in comprehensive care.

In this context there has been the nurse, the one responsible for health care and education in pregnancy and early childhood period. The present study was motivated by the knowledge of nurses about breastfeeding for babies with a cleft lip and palate.

However, a deep and optimal exploration of the issue is necessary in order to identify factors related to the question of teaching/learning in the area of professional practice. The institutional curriculum, the teaching methods in maternal and child health, and the learning characteristics are important questions about the topic and were not investigated in this study. But, several studies have shown the importance of researching nursing knowledge through interviews⁽¹²⁾.

A theme required for professional nursing practice in the context of maternal and child health is breastfeeding. Breastfeeding for child health promotion is encouraged, but it is not consolidated in Brazilian society⁽¹²⁾.

In order to achieve a satisfactory level of care, it is necessary that all pregnant women have knowledge regarding nursing all infants, including those with a cleft lip and palate. It is in this aspect that nurses are involved; promoting education, encouragement and monitoring of breastfeeding for all children.

With regards to the results of this study, a

profile of young nurses with a deficit in the issue of newborn breastfeeding with a cleft lip and palate was predominantly found. A study conducted in São Paulo showed that the professionals involved in this process need proper training and commitment to promote breastfeeding and support to Mothers into their new maternity routine⁽¹²⁾.

Nutritional care is one of the most important concerns the mother and family members have toward newborns. In the case of babies with clefts, concerns are heightened because of abnormalities in the formation of their face in the first months of life, food intake may be compromised.

A cleft lip can be diagnosed by ultrasound examination in the prenatal period, and the palate by clinical examination of the newborn. However many of the diagnoses are made after birth in the maternity ward, with the most common fissure type being the cleft lip⁽¹³⁾. The newborns with clefts present problems beyond the aesthetic; there are functional disorders related to eating and speaking, but all problems are treatable⁽¹⁴⁾.

Thus, cleft lip and palate challenges start from the moment of birth, in the maternity ward. Hence the need for a well-trained team of health professionals, especially nurses, as they are responsible to give emotional support and guide the mothers on questions about the well-being of both⁽¹⁵⁾.

It is up to hospital health care team to coordinate the initial care⁽¹³⁾ and for nurses to attend to the basic needs of the patient, especially for those that the baby cannot fill. It relieves the pain and the feeling of helplessness⁽¹⁶⁾.

Newborns with a cleft lip and palate are equal to any other patient, but they require special care in feeding and hygiene. Breastfeeding can be done, but its success will depend on the type of malformations, socioeconomic and emotional factors, and previous experience with lactations⁽¹⁵⁾.

Encouraging breastfeeding is a decisive factor

for the correct maturing and craniofacial growth in bone, muscle and functional level, but also in the prevention of oral problems such as dental caries, periodontal disease and malocclusion problems⁽¹¹⁾. Nurses are the professionals who should be able to guide the mother in choosing the method of feeding, to encourage and promote the benefits of exclusive breastfeeding⁽¹⁶⁾.

The difficulty in breastfeeding is due to the lower suction efficiency and varies according to the severity of injury. Thus, the inability to satisfactorily feed results in maternal stress and anxiety, and may lead to a lack of maternal-infant bonding. It is therefore crucial that nurses provide guidance to families, but this action has not been achieved by professionals, either for lack of knowledge or not recognizing the importance of the activity⁽¹⁷⁾.

Research developed with students of a course on nursing in pediatrics reported that few students knew about the observation of cleft breastfeeding protocol⁽¹⁸⁾. Similarly, professionals in this study were not familiar with suggesting different breastfeeding methods to newborns.

Another study reinforces that for the mother of a newborn with a cleft lip and palate, the immediate concern for their care in the first weeks of life is related to feeding in order to provide adequate nutrition⁽¹⁹⁾.

As weight or height gain is directly related to nutritional status, usually the baby's failure to thrive is due to the additional energy expenditure during breastfeeding, because breastfeeding can be time consuming and the amount of milk consumed may be insufficient⁽¹⁴⁾. It is essential that nurses know the anatomical, structural and emotional aspects involved in feeding difficulties so they can provide efficient and humanized assistance⁽²⁰⁾.

On the other hand, the study discloses a myth existing between mothers who believe that cleft babies cannot be breastfed. However, breastfeeding cleft babies is the best way to stimulate the muscles

of the face, strengthens the mother-child bond, and helps to prevent infections⁽²⁾. But one should be careful to provide realistic guidelines considering the peculiarity of each newborn to not generate feelings of failure given the impossibility of breastfeeding⁽²⁰⁾.

Exclusive breastfeeding is extremely important because it directly influences infant growth and development. Breastfeeding should also be offered for those with a cleft lip and palate, however depending on the type of cleft, feeding should happen in different ways. Furthermore, breastfeeding should be discussed in training nurses so they learn the correct guidelines in order to promote the offer and the benefits of breastfeeding. These guidelines should be initiated in the prenatal period, ensuring a positive impact on breastfeeding rates and maternal and child health⁽²¹⁾ for children with a cleft lip and palate.

A study of mothers of children with clefts seen at a specialized rehabilitation center in cleft lips and palates reveals that the average exclusively maternal breastfeeding duration was 29 days⁽²⁰⁾. The success of breastfeeding depends not only on the type of injury, but also the stimulation and adaptation of the mother and baby in the feeding process⁽¹⁶⁾. If the mother does not feel that the newborn is able to breastfeed or overcome obstacles, she tends to abandon it.

As previously mentioned, maternal guidelines facilitate the mother-infant relationship, the neuropsychological development and the organization of oral functions, thereby reflecting the health of newborns with a cleft lip and palate⁽¹⁷⁾.

Newborns with a cleft lip and palate can and should be put to the breast soon after birth, as contact between mother and child is essential. The correct introduction of the nipple needs to be taught at birth. In children without a cleft palate, the tongue pulls the nipple into the mouth; the lips and palate form a vacuum, keeping the nipple in place while compressing the dental arches to the milk channels located at the base of the nipple, so that the milk is

depleted within the oral cavity. In order to have the same results, it is necessary for the child with a cleft to have compensatory mechanisms available, and many infants achieve this with skill⁽¹⁴⁾.

As for breastfeeding practices, there is no conclusive information on the best method to breastfeed, however, as feeding is an immediate need of newborns with a cleft lip and palate, many feeding methods have been recommended⁽²²⁾.

When breastfeeding is possible, babies should be in a semi-erect position facing the mother's body, or alternatively lying on a flat surface with the head tilted to the maternal lap, while the mother leans her body on it. In this position, the action of gravity allows the nipple and the areola of the breast to more easily penetrate into the baby's mouth, providing an increased sealing of the cleft, thereby promoting better food outflow to the oropharynx and esophagus as well as reducing fatigue and the energy spent by the baby during feeding⁽¹⁷⁾.

A cleft lip and palate is considered a risk factor for the occurrence of a swallowing disorder called mechanical dysphagia due to change in the structural organ of the anatomical structures responsible for swallowing. Among the main problems for feeding is weak suction power and the milk escaping through the nasal cavity⁽¹⁷⁾. Thus, nurses having prior knowledge of this can help women in solving the problem and ease maternal anxiety in facing the problem.

It is common for children with jaw nose and mouth malformations to experience difficulties in being breastfed. In the most extensive palate, the tongue does not find support for the nipple and areola compression, limiting compression of lactated breasts to extract the milk, thereby also hindering breastfeeding⁽²³⁾. Research shows that parents have opted for nursing by spoon to be the most common method of feeding practiced with children with a cleft lip and palate⁽²²⁾.

The main difficulties reported by mothers

of babies with orofacial defects are: weak suction, handling difficulty, milk reflux through the nostrils, choking, poor weight gain, a little milk, breast ingurgitation and nipple trauma. Such difficulties can be minimized with the manual expression of milk to soften the nipple and the areola; occlusion of the slit with the mother's finger during breastfeeding; applying warm compresses the breast to facilitate the exit of the milk; the nipple position toward the side opposite the slit; and having the baby in a semi-seated position to prevent backflow of milk through the nostrils⁽²³⁾.

Thus, expert support is important for mothers for breastfeeding so they can be helped to better position and manage the breast milk supply⁽¹⁰⁾.

Early diagnosis is important because it promotes the family to contact experts, and this favors acquiring knowledge of different feeding techniques, prevents weaning when possible and allows for the planning of neonatal and therapeutic care. Newborns with clefts need care in specialized rehabilitation centers for treatment, however childcare can and should be made by primary care, so therefore public health should be organized to better serve children with this congenital anomaly⁽¹³⁾.

Conclusion

It can be concluded that nurses were not prepared from graduation to experience care of breastfeeding infants with a cleft lip and palate.

Most professionals said they had not received any information on the subject at the undergraduate level. A considerable number did not know how best to recommend breastfeeding or the best position for breastfeeding within this child group.

The recommendation of breastfeeding is a topic discussed during academic education, but little attention is given to cases exceeding the standard

normal child, like facial malformation. It is therefore essential that nurses recognize breastfeeding as necessary for children with a cleft lip and palate, and that directors of nursing courses offer learning about breastfeeding possibilities for this population in order to emphasize that newborns can benefit from breastfeeding offered naturally, with a spoon or otherwise.

However, knowledge on the physiology and clinical and surgical treatment is not sufficient to support a more effective proposal to target assistance to these children due to the changes in sucking and swallowing processes, which require specialized care during breastfeeding and other alternative forms of feeding.

It is suggested that the issue be more explored in undergraduate courses to motivate nurses about possibilities for stimulating mothers of infants with a cleft lip and palate to breastfeed, regardless of the form that it will be offered.

Collaborations

Souza CM and Toledo Neto JL contributed to the work design, data collection, analysis, interpretation of data and writing of the article. Prezotto KH contributed to the analysis, interpretation of data and writing of the article. Katakura EALB, Costa TV and Freitas TB contributed to the writing of the article and final approval of the version to be published.

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