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Parental Knowledge on Breastfeeding: Contributions to a Clinical Supervision Model in Nursing

M. R. Santos, A. P. França, O. Fernandes, and L. Cruz

Abstract—**Parental skills development in breastfeeding, not only eases the bonding and the maintenance of the process, but also, mirrors the excellence of nursing care. The study aims to assess parental knowledge concerning breastfeeding, in order to bring forth contributions for a clinical supervision model, which promotes the development of nursing skills.**

A quantitative and cross sectional study was conducted on a non-probability sample consisting of 135 recent mothers. The enquiry form applied allowed the assessment of parental skills on breastfeeding and in determining the conditions for the development of these skills. Most women (63%) provided information on the benefits of breastfeeding, 75% of the mothers did not show familiarity with strategies on how to continue breastfeeding. The study pointed to the existence of practices that impair the progress of acknowledgement on breastfeeding and contribute to early withdrawal, such as: delay in breastfeeding initiation, early introduction to infant formula, lack of nurses' guidance and support on breastfeeding, during the post-partum period. Clinical supervision can be a means for the development of nursing skills allowing a widespread improvement of practices and rates (exclusivity and duration) of breastfeeding, boosting parent's capacity, security, trust and satisfaction, which regards breastfeeding.

Index Terms—**Breastfeeding, clinical supervision, nursing care quality, parental skills.**

I. Introduction

The practice of breastfeeding is an indicator of the quality of the child's and the mother's health and consequently of perinatal health care. Breastfeeding rates in Portugal are well below the recommended, in particular those concerning exclusive breastfeeding [1].

Clinical supervision (CS) in nursing is a dynamic effort that maintains and develops the professional practice contributing to the safety and to the quality of care. In the present study, it is expected that the diagnosis of the situation and the proposal of a supervision model will contribute to the development of parental skills in breastfeeding.

Clinical supervision is a dynamic, interactive, mediating, facilitating and experiential learning enhancer process, based on a relationship of trust and help among all stakeholders, where each one performs functions and establishes strategies [2], [3] in order to achieve a common purpose - the supervisor's personal and professional development. Reference [4] refers to it as an educational process, focusing on the development of skills, aiming organizational objectives. In this design, the clinical supervision is presented as a means to attain certain quality standards, optimize health indicators, increasingly demanded by institutions. Reference [5] states that the main purpose of clinical supervision is to increase the quality of care and through it supervisees achieve, continue and develop high quality practices. Reference [6] adds that supervision nowadays is one of the most important dimensions in promoting quality processes and accreditation, given the benefits it offers as far as assistance is concerned. Thus, there is a greater emphasis on integrating clinical supervision in the process of continuous care quality improvement [7].

Although scarce, there are studies that show the benefits of clinical supervision on improving customer satisfaction and overall care quality. They indicate that the implementation of a clinical supervision process promotes customer satisfaction, allows standardizing practices, identifies areas for improvement and motivates nurses in assessing their strengths and weaknesses [7]-[9].

Delivering secure health care quality is a priority action, increasingly recognized, by international bodies like the World Health Organization and the International Council of Nurses, and national organizations such as the National Health Quality Council, the Department of Health Quality and the National Nurses Association.

Parenting is not only one of the most important social issues with great relevance today, it is also the one with the greatest impact when promoting child's health and well-being [10], and it may be described as "a process of incorporation and transition of roles that starts during pregnancy and ends when the parents establish a feeling of comfort and confidence when performing their respective roles" [11].

The decision to breastfeed is complex and it depends on multiple factors, namely demographical, biological, psychological, social and educational [12], [13].

The physical challenges inherent to the process of breastfeeding, such as pain, discomfort and disturbance caused by fissures, breast engorgement and even mastitis, contribute significantly to the abandonment of breastfeeding [12], [14], [15].The psychological factors, namely maternal intent, interest and confidence are crucial in the decision to breastfeed [12].

Mothers' guidance on breastfeeding in the postpartum period increases their knowledge on the subject and, consequently, the prevalence of this practice for a longer period [16]. Mothers need guidance and congruent, sensitive, effective, beneficial support, in order to successfully undergo the experience [17], [18]. The uniformity of information is

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crucial to the success of the nursing intervention. According to reference [19] mothers who are provided with a supply of adequate information on breastfeeding have less difficulty in breastfeeding.

II. Methodology

A descriptive, quantitative study was carried out, with the intent of assessing parental knowledge concerning breastfeeding, so as to bring forth contributions to a clinical supervision model, which promotes the development of nurses' skills.

The sample consisted of 135 recent mothers, who were assisted in the obstetrics service, in the Middle Ave-EPE Hospital Centre in Portugal, between February 7th and April 7th, 2012.

Inclusion criteria were: having the intent to breastfeed or breastfeeding and to agree in participating in the study. Exclusion criteria were: recent mothers in the first six hours of *puerperium*; mothers who had never breastfed and recent mothers with cognitive changes that hampered their collaboration in the study. The data was collected from the "Assessment of Parental Skills (I_ACP)" enquiry form [20], adapted to the context and aims of the study which encompass two parts:

1) The first allows the mothers' characterization and identifies the factors that interfere with parental skills (socio-demographic factors, characteristics of pregnancy and childbirth, and partnership in postpartum care);
2) The second consists of 26 indicators and aims evaluating mothers' knowledge on breastfeeding.

As far as ethical issues are regarded, permission to gather data was attained at the Obstetrics Service of Middle Ave E.P.E Hospital Centre and from the author of the instrument. Informed consent was given by all the participants in the study, as well as their parents, in the case of underage mothers.

III. Results and Discussion

The participants' ages ranged between 14 and 40 years old (*M*=30 years, *SD*=6 years); 45% (*n*=61) attended primary school and only 18% (n=24) had higher education; 24% (n=33) were unemployed and 18% (*n*=24) were unqualified workers; most mothers (57%; *n*=77) were *primiparas*, lived with the child's father (96%; *n*=129) and had planned the pregnancy (70%; *n*=94). For 61% (*n*=82) of the mothers breastfeeding constituted a first experience; 77% (*n*=104) were monitored by a nurse during pregnancy surveillance at prenatal check-ups; 63% (*n*=85) of the mothers had not attended any breastfeeding preparation session. This result is worrisome because it is during these prenatal check-ups that correct, timely and recurring information is provided on the advantages of breastfeeding and how to solve the inherent problems of this process [21].

All the mothers confirmed the intent to breastfeed, but only 66% (*n*=89) were practicing exclusive breastfeeding.

As far as nursing care is concerned the following was noted: delayed initiation to breastfeeding, with 33% (n=44) that were not breastfeeding in the delivery room; early introduction to artificial milk since 34% (n=46) of the mothers were not practicing exclusive breastfeeding; 43% (*n*=58) of the mothers reported not having spoken to the nurses about breastfeeding; in what concerns partnership care, 45% (*n*=61) of the mothers expressed that they had not consulted the nurses, about the breastfeeding process. Studies led by references [18], [22], [23] point at the benefits prenatal preparation have in a successful breastfeeding process. They inform on the need to universalize this kind of guidance. The promotion of early breastfeeding, following *postpartum*, constitutes a sound health practice [24].

Mothers need guidance and congruent, sensitive, effective and beneficial support so that they can successfully experience breastfeeding [17]. The percentage of women who exclusively breastfeed falls short of the data presented in the report on breastfeeding in Portugal, for the years 2010 and 2011, which indicates 72.5% of exclusive breastfeeding, prior to hospital discharge. The early introduction of artificial milk continues to be a frequent practice, and therefore it is necessary to counsel nurses on its damages, when implementing and maintaining breastfeeding [23], [25]. One of the important steps for successful breastfeeding, defined by UNICEF/OMS, is to give the newborn no other food or liquid than breast milk, unless there are medical prescriptions [24]. Children who are administered infant formula at the hospital leave breastfeeding precociously [19].

As far as knowledge on breastfeeding is concerned, 63% (*n*=85) of the mothers acknowledged breastfeeding benefits; 67% (n=90) met the criteria to decide the length and duration of feedings; 90% (*n*=122) recognized the signs of hunger; 91% (*n*=123) recognized the signs of satiety and 57% (*n*=77) were able to recognize the signs of milk production and release. However, 56% (*n*=75) did not possess knowledge about the characteristics of *colostrum* and milk; 53% (*n*=71) on the criteria for deciding when to offer one or both breasts; 50% (*n*=67) on the signs of sufficient nutrient intake; 67% (*n*=91) on measures that stimulate or impair lactation and 72% (*n*=97) on the child's adequate weight gain.

Reference [16] states that most weaning occurs due to the fact that mothers consider having little or poor milk. In most cases, insufficient production of milk is due to technical difficulties and inadequate management of the breastfeeding process [12]. The lack of knowledge about the signs of sufficient nutrient intake, criteria for deciding when to offer one or both breasts, appropriate weight gain and measures that stimulate or impair lactation, contributed to the inadequate management of the breastfeeding process, which led to the erroneous perception of being unable to meet the nutritional needs of the child due to hypo or *agalactia* [13], [26], and contributes to precocious introduction of adapted milk [12], [23].

In relation to the knowledge required to prolong breastfeeding until the child is six months of age: 75% (*n*=101) of the mothers did not acknowledge the strategies needed to maintain lactation/breastfeeding; 61% (*n*=82) were not acquainted on how to extract and store breast milk; 73% (*n*=99) did not show they knew what the conditions and material for storing breast milk were and 74% (n=100) showed no knowledge on how to thaw breast milk.

This sort of knowledge is crucial if the child is to continue being fed with breast milk during the periods where the mother is absent. In a study carried out by reference [16], it was noted that 65.7 % of the mothers had not received any guidance on this issue. The study pointed out that the mothers who had effectively received guidance kept breastfeeding for longer.

As regards to partnership care, only 42% (*n*=57) of the mothers had had the opportunity of speaking with the nurse on this issue, after delivery. Nurses need to provide guidance in advance, assisting mothers in the prevention of breastfeeding complications [27].

IV. Conclusion–Contribution to a Supervision Model

Reference [28] report that nurses can help mothers consider breastfeeding as a positive experience, provide them effective support, respond to each one's specific needs and increase maternal skills and confidence. Inadequate intervention can contribute to a negative experience, to increase insecurity and consequently to early withdrawal of breastfeeding [29], [30].

In general it has been found that mothers have some knowledge deficits on breastfeeding, which can constitute a leading factor to an early withdrawal from this process. Therefore, it is suggested an interactive model in *puerpera*/nurse partnership that takes into account four operating dimensions:

1) Assessment of care needs (case characterization): identification of socio-demographic characteristics, obstetric history, social support, breastfeeding preparation, childbirth features and breastfeeding experience.
2) Feeding observation and evaluation: identification of difficulties and incorporating a correct approach to breastfeeding.
3) Re (structuring) clinical intervention practices: (a) planning interventions that take into account the level of schooling, pregnancy planning and breastfeeding preparation; (b) implementation of strategies that promote parental skills in managing the breastfeeding process, resolution of complications, adoption of measures to prolong lactation, teaching milk extraction.
4) Monitoring practices: care quality indicators (a minimum number of interactions between mother and nurse, a set of essential skills before hospital discharge, the establishment of the breastfeeding process, the level of parental satisfaction).

The results obtained in this study confirm the need to question practices, procedures and attitudes, with the aim of improving the quality and safety of care provided to mothers and newborns.

As the promoting process of quality development and safety in nursing care, Clinical Supervision can constitute a means for implementing evidence-based practices, which improve the quality of care, the satisfaction of mothers and consequently the success in breastfeeding. Thus, we may improve mothers' and newborns' safety and quality of care by implementing a clinical supervision model, like Proctor's Model [31].

Partnership care process must include nurses' observation and evaluation of the feeding act so as to identify difficulties whilst breastfeeding and to provide the correct manner to breastfeed. This practice must continue until the mother feels confident, safe and the breastfeeding process has been embedded.

The practices observation by the supervisor allows monitoring, evaluating, and identifying aspects that should be improved. It is fundamental that the supervisees receive feedback on their performance, in order to change their behaviours, achieve and keep the high standards of quality in the course of their practice.

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