Support offered to newborns’ parents by the nursing team

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Abstract

Objectives: to know the perception of parents of newborns regarding the support received from the nursing team during their child’s hospitalization.

Methods: prospective study. Sample of 127 mothers and fathers of newborns hospitalized for at least 72 hours in neonatal units of a hospital in the southern region of Brazil. Data collected from May to September 2018 through application of a proposed questionnaire and consultation of medical records. Descriptive and analytical statistics were used.

Results: participants were aged 28.2 (SD = 6.8) years, mostly composed of mothers (76.4%), primiparous (51.2%). Full support was declared by 66.0% of participants in the appreciative domain and 65.5% in the instrumental, 51.7% in the informational and 46.2% in the emotional domains. Mothers declared they felt supported mainly in the instrumental (p=0.009) and informational (p=0.039) domains. There was a positive correlation between the emotional, appreciative and informational domains (p<0.001).

Conclusion: for most participants, in the informational domain, there was a demand for knowledge provided by the team, inclusion in decisions and encouragement to ask questions; in the emotional, there was concern for wellbeing and attention to anguish. Greater support for parents in the informational and emotional domains must be reinforced with the use of training strategies for the nursing team.

Key words Health care quality assessment, Parents, Nursing staff, Neonatal nursing, Neonatology

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Introduction

From the perspective of nurses, hospitalization of newborns can be a common fact but for parents, it is an experience full of stress, anxiety and uncertainty. They mourn the imagined child and suffer from adaptation to the baby’s real condition and separation when hospital care is needed. The bond between parents and child arises from ambiguous experiences, such as the happiness of touching the baby and the anguish of being unable to take him/her home or knowing the outcome of their clinical evolution.1

The quality of health care is related to the quality of the relationship between users and multidisciplinary team professionals, while user satisfaction is intrinsically linked to health services conditions.2 Parental satisfaction is related to the effective dialogue between them and nursing professionals. Parents value being updated about the general health status and care provided to their child, as well as the use of accessible language by professionals.3

In this context, the bases of family-centered care include recognizing the importance of the family for patients’ life and guaranteeing their participation in decisions involving the way patients will be treated. This brings a new approach to care and offers the family an opportunity for establishing the problems and their respective solutions.4

Although there have been improvements in family participation in the hospital environment, nursing care remains centered on the individual, without seeing the family as a client.5 Thus, knowing parents’ perception of their adaptation to the newborn’s hospitalization can lead to strategies for their better participation in care to their child.6

Given the above, the following research question emerged: How do parents of newborns perceive the support offered to them by the nursing team in a context of hospitalization? The objective of this study was to know the perception of parents of newborns regarding the support they receive from the nursing team during their child’s hospitalization.

Methods

This is a cross-sectional, descriptive, prospective, quantitative study. It was conducted in a university hospital in the southern region of Brazil. Data collection took place from May to September 2018.

The sample consisted of 127 biological parents (mothers and fathers) of newborns hospitalized for at least 72 hours in the Neonatal Intensive Care Unit (NICU) and the Neonatal Inpatient Unit (NIU) of the Neonatology Service of the hospital. For inclusion in the study, participants needed to be literate and aged ≥ 18 years. If the newborn was transferred between units, parents who had answered the questionnaire did not do it again.

The “Nurse-Parent Support Tool”, translated and validated for the Portuguese Language, was applied for data collection.7 Fifteen out of the 21 questions of the original instrument were used, as recommended by the Research Ethics Committee of the responsible institution. These questions cover the evaluation of four support domains, namely: instrumental, appreciative, emotional and informational. All questions follow a Likert response pattern in which: 1- Never; 2- Rarely; 3- Sometimes; 4- Most of the time; and 5- Always. For each question, parents were asked to measure the support received from the nursing team during hospitalization.

The instrumental domain concerns parents’ assessment of the technical skills of the nursing team. The informational domain comprises nursing actions for the guidance of family members on procedures, medications and tests performed on the newborn and to resolve doubts regarding hospitalization. The emotional domain encompasses the support offered by the nursing team at times of greater psychological vulnerability of families. The appreciative domain refers to the valorization of the parental role.

Parents’ data such as age (stratified by age group: 18-31; 32-44 years), gender, years of study, marital status and number of living children were requested in order to fill out the proposed questionnaire. Knowing these data was relevant given the importance of considering participants’ sociodemographic context in the discussion of results.

Clinical data of newborns regarding gestational age (weeks), birth weight (grams), length of hospital stay in days (from birth to the day of data collection) and the hospitalization unit (NICU or NIU) were extracted from their electronic medical records. This information was essential to describe the clinical aspects of newborns in the population studied.

Data were analyzed using the SPSS Statistics, version 18.0. Results were expressed by descriptive statistics with mean and standard deviation of the mean (SD), median (Q_{25} - Q_{75}) and relative and absolute frequencies, analytical statistics by Kruskal-Wallis and Mann-Whitney tests for independent samples, and the Spearman’s correlation coefficient (r_{s}) for dependent samples. The level of significance adopted was 0.05.

The project was approved by the Research Ethics Committee of the responsible institution under...
number 18-0145. Ethical principles were respected according to Resolution 466 of 2012 of the National Health Council.

Results

Participants who declared themselves as biological parents of the hospitalized newborns (observing the inclusion criteria of the study) filled out 149 questionnaires. Of these, 127 participants answered all questions and 22 questionnaires were considered as sample loss because they were incomplete. The results obtained from the sample are described below.

Considering the total sample, the mean age of participants was 28.2 (SD=6.8) years and educational level of less than eleven years of study (n=70; 55.10%). The most frequent age range of participants was between 18 and 31 (n=90; 70.86%) years. There was a prevalence of women (n=97; 76.37%), primiparous (n=65; 51.20%), who claimed to have a partner (n=83; 66.0%) (Table 1).

The hospitalized newborns had a mean gestational age corresponding to 37.49 (SD=3.00) weeks and a birth weight of 3,129.11 (SD=1,050.26) grams. As for length of hospital stay, newborns had a median of 7 (4-11) days from birth to data collection. Of the total number of newborns, 51 (40.16%) were admitted to the NICU, while 76 (59.84%) were in the NIU (Table 2).

For the analysis of results, the following support domains were stratified: instrumental, appreciative, emotional and informational. Regarding the answers considered as favorable for the evaluation of satisfaction, that is, when answers to questions were “Most of the times” or “Always”, the following results by support domain were obtained: instrumental, appreciative, informational, 78.73%; and emotional, 71.43%. However, full support (answer “Always”) was declared by 65.5% of parents in the appreciative domain; 66.0% in the instrumental; 51.7% in the informational; and 46.2% in the emotional (Table 3).

Regarding the correlation between the gender of parents and the support domains, the results showed that women declared themselves to be more supported in the instrumental (p=0.009) and informational (p=0.039) domains compared to men. As shown in Table 4, there was no statistically significant association between age, marital status, years of schooling or number of living children in relation to the support domains (p>0.05).

Parents whose newborns were admitted to the NICU declared themselves to be more supported in their emotional domain compared to parents whose children were hospitalized in the NIU (p=0.001). There was a positive correlation between the emotional, appreciative and informational domains (p=0.001). There was no association between the instrumental domain and the other support domains (Table 5).

Discussion

The sample was composed mainly of primiparous women who reported having a partner. There was no association between the perception of support from the nursing team and years of study, marital status or number of children.

Previous studies bring sociodemographic data of puerperal women corresponding to those found in this study, with most primiparous women aged between 20 and 30 years. These data show a trend for women having their first child at an older age than what was observed in the past. Viana et al. and Aldrighi et al. who studied the aspects leading women to have children later, attribute this fact to women’s greater dedication to their professional careers, the economic situation, easy access to contraceptive methods, marital conditions, among others.

The educational level can influence the care of the newborn and interfere in the use of health education actions offered by the nursing team. In this aspect, the nurse must be able to adapt the language and information provided to the family according to their ability to understand.

In addition to low education, extremes of age and uncertain marital status are factors of gestational risk, and these characteristics should not go unnoticed by the nursing team. Knowing the profile of puerperal women helps nurses in their work, because the particularities of families’ life context can be taken into consideration. In a study conducted in Iran by Sanjari et al. to identify the parents’ experience in relation to the quality of nursing support in pediatric hospitalization, no association was found between parental satisfaction and age or number of children, a similar finding to that of the present study. In contrast, McCormick et al. associated mothers with older age and more years of study to greater satisfaction with support received from the nursing team.

When comparing the difference in satisfaction between fathers and mothers by support domain, mothers were more satisfied than fathers with the instrumental and informational domains. This fact may be related to the greater focus on mothers as...
Table 1

Sociodemographic characteristics of newborns’ parents.

| Variables                          | N     | %    |
|------------------------------------|-------|------|
| Age (years)                        |       |      |
| 18-31                              | 90    | 70.86|
| 32-44                              | 37    | 29.13|
| Sex                                |       |      |
| Female                             | 97    | 76.37|
| Male                               | 30    | 23.63|
| Marital status (women)             |       |      |
| With partner                       | 83    | 82.50|
| No partner                         | 14    | 17.50|
| Years of study                     |       |      |
| <8                                 | 26    | 20.50|
| 8 – 11                             | 81    | 63.71|
| >11                                | 20    | 15.75|
| Number of children                 |       |      |
| 1                                  | 65    | 51.20|
| 2-4                                | 55    | 43.30|
| >4                                 | 7     | 5.50 |

Table 2

Clinical characteristics of newborns regarding birth and days of hospitalization.

| Inpatient units | N   | GA (weeks+days) min-max | BW (grams) min-max | LS (days) min-max |
|-----------------|-----|-------------------------|--------------------|-------------------|
| NICU            | 51  | 28+0 - 38+4             | 750 - 3.818        | 3 – 40            |
| NIU             | 76  | 34+3 - 40+6             | 1.675 - 5.425      | 3 – 20            |

GA = gestational age at birth; BW = birth weight; LS = length of stay; NICU = Neonatal Intensive Care Unit; NIU = Neonatal Inpatient Unit.

Table 3

Absolute and relative frequencies obtained in each question according to support domains.

| Support domains                          | Answers to questions (Likert type) | Never | Rarely | Sometimes | Most of the time | Always |
|------------------------------------------|------------------------------------|-------|--------|-----------|------------------|--------|
|                                          | n       | %   | n      | %        | n      | %    | n      | %     | n      | %    |
| Instrumental                             |         |     |        |          |        |      |        |      |        |      |
| Was sensitive to my child’s special needs| 1       | 0.8 | 0      | -        | 7      | 5.5  | 36     | 28.3  | 83     | 65.4 |
| Provided good care to my child           | 0       | -   | 0      | -        | 4      | 3.1  | 17     | 31.4  | 106    | 65.5 |
| Appreciative                             |         |     |        |          |        |      |        |      |        |      |
| Guided me on how to comfort my child     | 7       | 5.5 | 8      | 6.3      | 12     | 9.4  | 33     | 26.0  | 67     | 52.8 |
| Procedures                               |         |     |        |          |        |      |        |      |        |      |
| Taught me how to take care of my child   | 3       | 2.4 | 1      | 0.8      | 8      | 6.3  | 33     | 26.0  | 82     | 64.6 |
### Table 3

Absolute and relative frequencies obtained in each question according to support domains.

| Support domains | Answers to questions (Likert type) |  |  |  |  |  |  |
|-----------------|-----------------------------------|---|---|---|---|---|
|                 | Never | Rarely | Sometimes | Most of the time | Always |        |
|                 | n     | %      | n     | %      | n     | %      | n     | %      |
| Made me feel important as a mother/father. | 1 | 0.8 | 1 | 0.8 | 10 | 7.9 | 26 | 20.5 | 89 | 70.1 |
| Allowed my involvement in the care of my child whenever possible. | 2 | 1.6 | 2 | 1.6 | 5 | 3.9 | 21 | 16.5 | 97 | 76.4 |

### Table 4

Sociodemographic data and support domains.

| Support domains   | Age* | Marital status | Years of study | Number of children |
|-------------------|------|----------------|----------------|--------------------|
| Instrumental      | 0.606 | 0.138 | 0.803 | 0.736 |
| Appreciative      | 0.536 | 0.104 | 0.837 | 0.277 |
| Emotional         | 0.745 | 0.623 | 0.488 | 0.547 |
| Informational     | 0.964 | 0.319 | 0.763 | 0.828 |

*categories with cutoff point=32 (< 32 ≥) years.
primary caregivers of children, as more often, they remain at the newborn’s side during hospitalization.5

Faced with the child’s illness, fathers and mothers feel more insecure to perform child care, because they are in a strange environment and exposed to the view of health professionals.1

In the present study, extremely premature and extremely low birth weight infants were more prevalent in the NICU, and moderately premature and low birth weight newborns were more prevalent in the NIU. However, the averages of both gestational age and birth weight between the two neonatal hospitalization units corresponded to late prematurity and adequate weight. Information about late preterm birth and low birth weight has been found in other studies.18,19 Borges et al.20 and Freitas et al.21 aiming at tracing the epidemiological profile of hospitalized newborns, considered that the most prevalent factors were prematurity, low birth weight, jaundice, neonatal infection and respiratory disorders.

When characterizing the birth profile in neonatal intensive care units, Cardoso and Schumacher19 reported the association of the main morbidity and mortality factors in neonatology with prematurity and low birth weight. Such results are worrisome and require the attention of teams working with this profile of patients. Prenatal characteristics such as number of follow-up consultations of pregnancy, control of maternal infections and healthy maternal lifestyle habits are associated with a better birth prognosis for the newborn.19

Regarding the comparison of parents’ perception of the nursing support, the NICU group of parents perceived greater emotional support by the nursing team than that perceived in the NIU group. Fernandes et al.5 and Ribeiro et al.22 found that the longer the hospital stay and the more severe the newborn’s condition, the greater the bond between professionals and family members, thereby contributing to make them feel more embracement and understanding by the nursing team.

In general, the results obtained indicate that most parents perceive nursing support positively in the neonatology units studied, similar to data found in other studies8,23,24 in which the Nurse-Parent Support Tool was used. However, Sousa24 shows that high levels of parental satisfaction can be influenced by the gratitude felt by family members towards the professionals who care for their children, which may hinder the assessment of care improvements needed.

The perception of parents regarding support in the instrumental domain shows their confidence in the work and care techniques performed by the nursing team at the hospital where data were collected. Parents consider that the quality of thenNursing team’s technical skills are compatible with excellent care.

On the other hand, in parents’ evaluation, nursing support obtained lower percentages of favorable responses in the informational and emotional domains compared to the instrumental and appreciative domains. In the emotional domain, a lower percentage of favorable responses was related to the concern for parents’ wellbeing and attention to their anguish and feelings. In the informational domain, a lower percentage of favorable responses was related to the identification of team members who provide care to newborns, the inclusion of parents in the decision to stay during technical procedures and the encouragement of parents to ask questions about the newborn.

The domains of appreciative, emotional and informational support require the use of soft technologies by the nursing team, such as embracement, bonding and communication, in contrast to the hard technology found in intensive care environments.3

Sousa24 evaluated parental satisfaction with nursing care and found that parents felt less supported in relation to the informational domain compared to other support domains. This is in line with results found in the present study regarding the same domain. Ribeiro et al.22 showed that parents, whose newborns were admitted to the NICU, experience a great emotional overload and need to receive information and support from nurses.

The percentages of favorable responses in the

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Table 5

|                      | Instrumental | Appreciative | Informational | Emotional |
|----------------------|--------------|--------------|---------------|-----------|
| Instrumental         | -            | 0.487 \(p<0.001\) | 0.536 \(p<0.001\) | 0.400 \(p<0.001\) |
| Appreciative         | -            | -            | 0.717 \(p<0.001\) | 0.563 \(p=0.01\) |
| Informational        | -            | -            | -             | 0.570 \(p<0.001\) |
| Emotional            | -            | -            | -             | -         |
appreciative domain demonstrate that parents have been encouraged to provide care, which is essential for the newborn’s wellbeing. This also shows the favorable attitude of the nursing team of including the family in the care of the newborn and the appreciation of parents’ presence during the child’s hospitalization and in their performance of active parenting.

The nursing team must be aware of their influence in the promotion of a bond between family and newborn and offer support by covering the four domains (instrumental, appreciative, informational and emotional). Hence the importance of developing interventions for promoting a welcoming environment so that parents feel safe in all aspects of care to their child.

Although most results obtained in this study were positive in relation to parents’ perception of the support offered, similar studies suggest that the nursing team must be aware of the importance of providing quality support in the emotional and informational domains that include embracement and understanding actions related to the moment experienced by families. Nursing professionals need to recognize families as essential actors in the care of the newborn and realize that they fall ill during the hospitalization process and need support, attention and empathy from the team. However, nursing professionals may not be prepared to offer support to parents in the care for their children. Aimed at identifying the attitude of nurses from different hospital contexts in relation to the importance of including the family in nursing care, Fernandes et al. showed that 54.9% of nurses interviewed had no formal preparation in Family Nursing. Most of these nurses reported they have learned to include families in patient care during professional practice.

The family-centered care paradigm assumes that professionals expand their care sphere by aiming to improve attitudes and beliefs that limit family participation in the hospital environment. Therefore, the nursing team is expected to reinforce the bond between the newborns and their family and encourage parents to participate in the care of their child. In this context, Trajkovski et al., concerned with bringing neonatal nurses and parents together for the improvement of family-centered care, showed beneficial strategies cited by parents, such as: clear definition of the roles of parents and nurses, welcoming environment and more space between beds, educational materials that share knowledge about care for the newborn, support groups for parents and permanence of the same professionals providing care for the newborn during hospitalization.

Therefore, the use of soft technologies in care is fundamental to support parents in the appreciative, emotional and informational domains. Nursing plays an important role within the hospital environment because they are fully present during neonatal hospitalization and are responsible for the care of families. A large part of problems faced by parents during neonatal hospitalization requires a trained nursing team for performing interventions that involve the mastery of soft technologies in care, such as relational and interpersonal skills, effective communication, bonding and production of subjects’ autonomy.

The nursing team must be dynamically and continuously prepared to offer parents the necessary support, whether instrumental, appreciative, emotional or informational, in their daily practice. Nurses must be attentive in promoting quality of care linked to the practice of supporting parents, and to this end, they must consider newborns’ birth profile, associated comorbidities and length of stay in neonatology units, which can influence the parents’ perception about nursing support.

The present study is in line with the new model of care, in which co-responsibility and partnership between the nursing team and parents are fundamental for the care promotion of newborns hospitalized in neonatal inpatient units.

Authors’ contribution

Tosca CF, Breigeiron MK participated in the study design, analysis and interpretation of data, as well as in drafting the manuscript. Tosca CF, Rimolo ML performed the data collection. Breigeiron MK revised the article critically. All authors approved the final version of the manuscript and are publicly responsible for the article content.

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