

Evaluation of the Quality of Enfermería's Attention in Neonatología's Service

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Received: January 23, 2021; **Published:** March 31, 2022

Abstract

Introduction: You define Pediatrics' American Academy as intensive care those that you receive the gravely sick newborn baby or the ones that call for a close watch of the professionals of the neo-natal unit. The quality of the sanitary attention is an attribute more and more appraised for all the implicated in the attention to health (professionals, users and managers) although each one of these groups emphasizes some aspects in particular with respect to the rest.

Objective: Evaluating the quality of Enfermería's attention in Neonatology's Service. Methods: Juan De accomplished a Descriptive, prospective and longitudinal study himself, in Neonatología's Service of the Infantil North Teaching Hospital James's Cross Martínez Maceira of Cuba in the period January December 2019. The universe was constituted by 630 patients left of the service, his accompanying mothers and 40 nurses that were meeting laboring in the service. They manufactured indicators of quality with standards established for structure, process and result, evaluative applied over itself an instrument to the nurses and polls of satisfaction the mothers of the neo-born.

Results: The indicator structure caught up with standards not acceptable as to unsuited equipment for his use and the structure of the service, in the process and once all his indicators were proven to be they were evaluated of acceptable, existing good grade of satisfaction of the totality of the mothers that attended with his little babies.

Conclusion: They did not detect difficulties in the indicators of process and results evidencing that quality of the attention of infirmary in neonatology's service exists.

Keywords: Quality; The Patient's Certainty; Neo-Born; Attention of Infirmar

Introduction

The academy of America defines neonatal care as the constant and continuous care that the seriously ill newborn receives or that requires strict surveillance by professionals in the neonatal unit [1].

In the achievements made by our country in reducing infant mortality, care for the newborn child has been of primary importance. With the development of the Maternal and Infant program and neonatology services, together with the training of personnel, a notable decrease in infant mortality rates has been achieved, located within the 30 countries in the world with the least probability of death for their children, from the moment of birth until the first year of life and in the first place in Latin America [1].

In Cuba, before the triumph of only 4 centers dedicated to the care of the sick newborn, with capacity ranging from 10 to 20 beds for the neonates. The care was very simple and with little material and human resources, from a medical and sick pointlet Revolution of view [2].

Citation: Graciela Rodríguez García and Rosa Castellanos Rodríguez. "Evaluation of the Quality of Enfermería's Attention in Neonatología's Service". *EC Nursing and Healthcare* 4.4 (2022): 32-39.

Neonatal surgery was very underdeveloped and was limited to some diseases of the digestive tract and some congenital malformations. Most of these patients died without the most elementary attention [2].

In the 1950s, the first incubators were introduced into the country and their number was very small. Mortality was very high, many children lacked vaccines and were constantly getting sick.

In 1960, neonatology services began to be developed, located in gynecologic-obstetric and pediatric hospitals, prophylaxis with vitamin K assessment of apgar, vaccination with BCG and ocular prophylaxis by the *credé* method began. At the beginning of the 70s, the first neonatal intensive care unit was created in the "William Soler" hospital in the city of Havana, which served to train numerous neonatologists and specialized nurses [3].

In an etymological sense, the concept of quality comes from the Latin qualities, which means the set of qualities that constitute the way of being of a person or thing, and is synonymous with quality, class, aptitude, excellence, category, caste, nobility, superiority, among many other meanings [4].

Quality is not a simple concept and its meaning varies depending on historical and cultural conditions. According to Donabedian, "Quality assessment must be supported by a conceptual and operational definition of what quality of health care means. In this fundamental aspect there are many problems, since the quality of care is an extremely difficult idea to define and adds "There are some who consider that the quality of health care is such a complex and mysterious property, so variable in meaning between one situation and another, which is not assignable to a previous specification. Others have another point of view believing that quality can reach such a specification that it can be bought and sold for 'kilos'" [4].

Quality is therefore the extent to which the care provided is expected to achieve the most favorable balance between risks and benefits. The model then proposed by Donabedian covers three aspects of quality control: structure, process and results [4].

The development and quality of newborn care in the special neonatal care units is closely linked to the training of the personnel who serve in these institutions, for which the national public health directorate has created training programs through courses, specialties, basic postgraduate and graduate degrees, which has allowed the professional development of doctors and nurses throughout the country that has improved the quality of care for the sick newborn [5].

The quality of health care is an attribute that is increasingly valued by all those involved in health care (professionals, users and managers) although each of these groups emphasizes some aspects in particular in relation to the rest [5].

The neonatology service of the Hospital Infantil Norte "Juan de la Cruz Martínez Maceira" is a surgical service, the only one in the province that receives newborns after they leave the maternity wards, with serious and critical conditions that frequently put the results of the mother-child program, but 99% of the children attended there graduated with quality of life, therefore that this work was carried out with the aim of evaluating the quality of Nursing care provided in the Neonatology service of this center.

Methods

A descriptive, prospective and longitudinal study was carried out in the Neonatology service of the Hospital Infantil Norte Tecente "Juan de la Cruz Martínez Maceira, in the period January-December 2019.

The universe consisted of 630 neonates who graduated from the unit and their accompanying mothers, as well as 40 nurses who were working in the service during the period. The consent of the research staff and the center directors was requested.

To evaluate the quality of the service provided, quality indicators were made for structure, process and results and standards were established for each indicator.

Structure: Material, human and organizational resources that support service assistance. Taking into account construction standards and equipment necessary for the job.

Process: Set of actions focused on the needs of care and that include the activities of professionals by and for clients. An instrument and qualification key were prepared to evaluate the competence of the personnel regarding the care of the newborn (annex), validated by a group of experts made up of: First Degree Specialist Maternal and Child Program, Epidemiological vigilant nurse, Professors with teaching category Assistants and assistants, Specialist in Neonatology, Master in Infectious Diseases and Comprehensive Child Care.

Responses to the proficiency test were evaluated.

Not suitable	Adequate
Less than 70 points	70 and 100 points

The performance of the personnel was evaluated according to a demonstrated suitability sheet, established by the Ministry of Health, selecting as acceptable the personnel that obtained a very good rating (95 to 100 points).

A concurrent audit of the medical records was performed.

Results: Consequence of the care process of the impacts that have occurred throughout the globally considered care process such as Phlebitis, infections related to health care as well as mortality from infections.

Indicators: Are the qualitative measures that serve to monitor and evaluate the quality of some particularly important aspects of care. The indicators were evaluated in:

Acceptable	Standards with a score lower than the established acceptable ones of 90%.
Not Acceptable	Standards with a score greater than or equal to 90% of the established acceptable ones

The following definitions were used for the work of the neonatology services according to the organization and procedure manual of the same:

- Definitions.
- Neonatology construction standards indicate that each cubicle must measure at least 6m², to avoid overcrowding in areas [1].
- They are considered as nurses with a higher qualification than the graduates and specialists in neonatology.
- Correct evolutions were considered those that were carried out in accordance with the provisions of resolution 396/07 that regulates Nursing practices for nursing reception, daily evolutions [6].
- Patients with a nursing care process, according to the new Cuban method for registering the nursing care process in 2009; evaluating the non-omission of elements required in these documents [7].

- Results indicators were measured at rates established for each service.
- An infection related to health care was considered to be that infection that the patient acquires once admitted to a health institution after 72 hours of admission, whose origin may be related to the manipulation of medical and paramedical personnel.
- The infant mortality rate is calculated taking into account the deaths under one year of the period in the institution.
- To evaluate the degree of satisfaction of family members with nursing care, criteria, indicators and standards are used taking into account immediacy, treatment and satisfaction with nursing care.

The data processing was carried out in databases prepared for this purpose and processed on Pentium IV computers with the office 2010 package. A documentary review of the subject in question was carried out.

The results were expressed according to the quality indicators in standards and percent, in addition to simple tables with percentage analysis.

Results

Table 1 shows the quality indicators corresponding to structure, resulting with acceptable standards corresponding to incubators (92.8), necessary staff (100) and physical (90.9), personnel qualification (97.7), and pumps of infusion (100) and epidemiological vigilant nurses in shifts of work (100), those corresponding to the structure of the cubicles with a standard of 0 and monitors (28.5) that did not reach the standard allowed by norms were not acceptable.

Indicator	Criterion	Outcome	Standard	Evaluation
1.1 Monitors	2	28.5	90	No Acceptable
	7			
1.2 Incubators	13	92.8	90	Acceptable
	14			
1.3 Infusion pumps	7	100	90	Acceptable
	7			
1.4 Template required	45	100	100	Acceptable
	45			
1.5 Physical staff	40	90.9	90	Acceptable
	45			
1.6 Structure	0	0	100	No acceptable
	4			
1.7 Staff rating	44	97,7	90	Acceptable
	45			
1.8 Epidemiological watchdog nurse	4	100	100	Acceptable
	4			

Table 1: Quality indicators according to structure.
Source: Data Collection Form.

According to neonatology standards it is considered appropriate [1]:

- 2 Incubators per cubicle.
- 1 monitor for each intensive care bed.
- 1 nurse for each intensive care bed and for every 4 baby care providers.
 - Each cubicle should measure 6m².
 - 1 epidemiological watchdog nurse for each work shift.

The quality indicators for the process are shown in table 2, competence and professional performance were evaluated, as well as auditor to medical records, all obtained acceptable standard between 90 and 100%.

Indicator	Criteria	Result	Standard	Evaluation
Nursing staff competency	37	92.5	90	Acceptable
	40			
Professional performance of nursing staff	40	100	95	Acceptable
	40			
Audits	48	96	90	Acceptable
Competing	50			
Retrospective audit	25	100	90	Acceptable
	25			

Table 2: Quality indicators by process.

Table 3 sets out the quality indicators for the results, with the 4 indicators assessed for intrahospital mortality, infant mortality rate, phlebitis and intrahospital infection below the permitted rate range of 1.5.

Indicator	Criteria	Result	Standard	Evaluation
Phlebitis	0	0	0	Acceptable
	630			
Health care-related infection	10	1.5	1,8 a 4,5	Acceptable
	630			
Intrahospital infection mortality	0	0	1,8 a 4,5	Acceptable
	630			
Infant mortality	2	0,8	0 a 2,7	Acceptable
	630			

Table 3: Quality indicators based on result.

Note: The results standards are measured in rates established by the national hospital infection program for these services and the infant mortality rate calculated according to the results of the previous year.

Table 4 reflects the evaluation of the degree of satisfaction of the relatives related to nursing care, in 100% of the evaluated indicators an acceptable standard is obtained.

Indicator	Criteria	Result	Standard	Evaluation
Immediacy with which nursing services are received	630	100	90	Acceptable
	630			
Treating nurses for family members	630	100	90	Acceptable
	630			
Satisfaction with nursing care	630	100	90	Acceptable
	630			
Indicator Summary	3	100	90	Acceptable
	3			

Table 4: Indicators evaluating the degree of satisfaction of relatives.

Discussion

Prevention of nosocomial infection is an important goal of hospital care. The identification of the procedures for cleaning, asepsis, disinfection and sterilization of medical devices, equipment and healthcare environment, as well as the guarantee of quality in the applied techniques, constitute the basis of the rules and regulations established in the national prevention and prevention program. control of hospital infection [8].

The neonatal care unit because it is a surgical service is more likely to have a health care-related infection [8]. The unfavourable structural conditions of the same have not affected the results since they have been favourable in behaving at the required lower rate, requiring a greater effort by the staff working in this service in strict compliance with epidemiological hygiene standards.

About 3 to 5% of patients who become infected in pediatric hospitals die from pediatric hospitals, generalized sepsis, bronchopneumonia, and others (central nervous system infections, bacterial endocarditis, are the main causes [9]. In 2019, a very reduced number of drinks had intrahospital infections, strict monitoring in compliance with epidemiological hygiene standards and systematic application of nurse skills in the management of serious and critical patients, as well as limiting access to non-service personnel to prevent the microbial environment of the service from getting worse with other bacteria that are not common in these departments.

The literature states that the surgical patient, unlike patients admitted to clinical services, is frequently subjected to multiple risky procedures during admission, as in addition to being surgically surgery, vascular devices, urinary catheters and endotracheal tubes are placed, some of which are performed only during the perioperative period. This conditions that this patient is exposed to different types of nosocomial infections, among which the fundamental is that related to the surgical site, in addition to having risks of acquiring pneumonia, urinary tract infection and bloodstream infection [9,10].

The good degree of satisfaction is an indicator that has been evaluated in all the relatives of the graduated neonates, it is essential that the nurse develops her communicative skills with them since even having at that time objective difficulties, when adequate communication channels are established, there is satisfaction towards the service provided [11,12].

Authors consulted point out that the quality of care is very subjective, but only if the opinion of patients and family members is quantified, can it be improved [10,13,14-16].

Conclusion

In conclusion, no difficulties were detected in the process and results indicators, which shows that there is quality of nursing care in the neonatology service of the North Children's Hospital "Juan de Maceirala Cruz Martínez".

Skills Test Qualification Key for Nurses

No	Response					Qualification key	Total points
1	Assess newborn conditions					20 points	20
2	5 minutes					10 points	10
3	a-2	b-4	c-1	d-5	e-3	3 points by correct subparagraphs	15
4	a-V	b-F	c-V	d-V	e-F	6 points by correct subparagraphs	30
5	Alternative B					10 points	10
6	Seizures. Coma, respiratory arrest, hydroelectrolytic imbalance, cerebral edema.					3 points for each correct answer (other logics accepted)	15
Total points							100

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Volume 4 Issue 4 April 2022

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