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# ARREST OF SUPPORT VENTILATION BY NURSING: EXPERIENCE REPORT APREENSÃO DO SUPORTE VENTILATÓRIO PELA ENFERMAGEM: RELATO DE EXPERIÊNCIA

ARRESTO DE APOYO DE LA VENTILACIÓN POR LA ENFERMERÍA: UN INFORME DE LA EXPERIENCIA

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#### ABSTRACT

Objective: illustrating the expropriation of respiratory support in the ICU by nursing. *Method*: a descriptive study, type reporting experience, resulting from the work of an intensivist nurse of an Intensive Care Unit (ICU) of a university hospital in the city of Rio de Janeiro between 2003 and 2013. *Result*: the expropriation of the mechanical ventilator management by nurses with devaluation of knowledge about technological apparatus that reflects the confounding of professional identity and with consequent disparity of status in relation to other health top level professionals. As well as the dependence of the nursing profession perpetuates another subordinate status of the profession in practice. *Conclusion*: nursing may only acquire full autonomy when care spending to be seen as a privileged sphere in healthcare, both scientifically and practically enjoying equality between the professions. *Descriptors*: Artificial Respiration; Nursing Practice; Nursing Care; Nursing; Intensive Care Unit.

#### RESUMO

Objetivo: ilustrar a desapropriação do suporte respiratório em UTI pela enfermagem. Método: estudo descritivo, tipo relato de experiência, resultante do trabalho de enfermeira intensivista de um Centro de Terapia Intensiva (CTI) de um hospital universitário do Município do Rio de Janeiro entre os anos de 2003 e 2013. Resultado: a desapropriação do manejo do ventilador mecânico pelo enfermeiro com desvalorização do conhecimento sobre esse aparato tecnológico reflete no confundimento da identidade profissional e com consequente disparidade do status em relação aos outros profissionais da saúde de nível superior. Como também, a dependência da enfermagem a mais uma profissão perpetua a condição subalterna da profissão na prática. Conclusão: a enfermagem só poderá adquirir plena autonomia quando o cuidado passar a ser visto como uma esfera privilegiada na área da saúde, tanto do ponto de vista científico como prático gozando de igualdade entre as profissões. Descritores: Respiração Artificial; Enfermagem Prática; Cuidados de Enfermagem; Enfermagem; Unidade de Terapia Intensiva.

### RESUMEN

Objetivo: ilustrar la expropiación de la asistencia respiratoria en la UCI por la enfermería. Método: estudio descriptivo, del tipo informes de experiencia, como resultado de la labor de la Unidad de Cuidados Intensivos intensivista de enfermería (UCI) de un hospital universitario de la ciudad de Río de Janeiro entre 2003 y 2013. Resultado: la expropiación del maneo del ventilador mecánico por las enfermeras con la devaluación de conocimiento sobre ese aparato tecnológico que refleja la confusión de la identidad profesional y la consiguiente disparidad de estatutos en relación con otros de nivel superior profesional de la salud. Además de la dependencia de la enfermería a más otra profesión de perpetúa la condición subordinada de la profesión en la práctica. Conclusión: la enfermería sólo podrá adquirir plena autonomía cuando el cuidado pasar a ser visto como una esfera privilegiada en la asistencia de la salud, tanto del punto de vista científico como práctico que goza de la igualdad entre las profesiones. Descriptores: La Respiración Artificial; Práctica de Enfermería; Cuidados de Enfermería; Enfermería; Unidad de Cuidados Intensivos.

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## **INTRODUCTION**

The ventilatory support posts, in most cases, to the invasive and noninvasive ventilation devices for maintaining normal gasometric and oximetric values of patients in respiratory failure. In a magnified view is all working process that involves the maintenance of physiological values and patency of the airways artificially.

In relation to nursing, the practical reality of care to patients under ventilatory support has broader particularities of the concepts routinely used, therefore covering: assessment of the correct management of the mechanical ventilator care as endotracheal aspiration and prevention of infection associated with ventilation mechanical and other activities in the context of intensive care. Thus stands out as an object of nursing work when the subject thus delimits, is not a natural object, while there is no object in itself, but is focused by a 'look' that contains a transformation project with a purpose.1

The story goes back to the use of endotracheal tubes was conceived in ancient Rome and was always associated with the use in anesthesia. By 1880 it was introduced after sedation with chloroform, preferably by the nasopharyngeal route. From the late 1928, Magil was the first to access the oral way for installation of the pipe, realizing it was the safest route and still is the most used. First they were made of latex and then were bγ silicon which replaced were biocompatible.<sup>2</sup> From the 1980s was replaced by PVC, given the ability of the plastic to model - if the lower airways, termosensibility capacity. The increased transparency brought the possibility of visualization of secretions in the distal part of the tube and radiopaque line was inserted to identify the correct placement of the tube through the Pulmonary Radioscopy RX.3 It is noteworthy that at this time nursing and medicine were the only existing professions.

Among many techniques used by nurses in intensive care, endotracheal aspiration is the most controversial. Currently, with the inclusion of professionals working exclusively with ventilatory support, one wonders to whom the obligation to perform it belongs. Moreover, the knowledge of nurses regarding ventilator management was lost after 2004.

Regarding endotracheal aspiration, there are two methods or endotracheal suction systems used in ICU: open and closed. The open system endotracheal suction is the most traditional, and the most routinely used in most services. This vacuum system is the

introduction of a catheter in the patient's airway, single use, for extracting secretion. For secretion is removed, must be connected to the rubber suction with a vacuum suction pressure or negative pressure.

The process of endotracheal suctioning of tracheal secretions moving through the pressure gradient passively by the patient is considered. Although frequently performed, there may be decrease in arterial oxygen saturation in patients requiring high positive end-expiratory pressure (PEEP) and inspired fraction of oxygen (FiO<sub>2</sub>).<sup>4</sup>

In the political context of health care institutions the nurse has a crucial role in the incorporation of innovations through new ways of being, thinking, doing and becoming, while knowledge preparing technically for learning and research on the conceptual upgrade technology producer, because in specialized areas, care, administrative, teaching and research functions must be intertwined and deserve attention from the professional. Thus, this experience report aims to illustrate the expropriation of respiratory support in the ICU by nursing.

## **METHOD**

This is a descriptive study, of type experience report resulted from work as a nurse in an Intensive Care Unit (ICU) of a university hospital in the city of Rio de Janeiro from 2003 to 2013. For 10 years the confrontation of various techniques advocated by books and guidelines in the profession, its actual application and clinical significance were envisioned. On the theme of aspiration is shedding one of these meetings, which will be presented in this paper.

The research setting was the University Hospital of general nature, public, high complexity, where patient care teaching and research activities are carried out, making for an active physical area of 110 thousand square meters, with a capacity of 527 beds, among which are distributed in the following industries: Medical, Surgical Clinic, Medical-Surgical ICU, coronary ICU and Cardiac, Emergency, Surgical Center, among others.

A multidisciplinary approach is characteristic of the university hospital in question, now has 3.513 servers and resident physicians and interns from various areas. There are 2435 servers are the attendance area, with 260 nurses and 901 nursing and other health care area of 1077 servers.

Nursing is managed by the Division of Nursing (DEN), which coordinates the work of six sectors, including the service of

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community health nursing;

community health nursing; service development, clinical nursing service hospital, nursing service surgical hospital; of operating room nursing and nursing service of sterilization material.

The CTI has three intensive care units divided: in clinical, surgical and unit of a patient cohort for patients with carbapenem resistant enterococci, has 19 beds, but are used only 12 beds due to the poor structural condition of the units, lack of materials and professionals. The surgical unit consists of nine beds being used only six beds for lack of materials and medical professionals hospitalized patients after liver transplantation, lung transplantation, general surgical, thoracic, gynecology, neurosurgery, orthopedics, oncology, isolation respiratory, among others.

The direct care of patients are performed by three nurses, four technicians on average in each nursing unit, an attendant nurse and a physiotherapist working in regimen on call of The relationship hours. between professional nursing assistants varies between one and two for each patient. Fulfilling the nursing staff there are 3 nurses diarists, being one head of the sector and two daily routines of each ICU two attendants 12X36h from Monday to Friday, one hygienist and two assistants of various Operational Services (AOSD) hour weeks are also under the responsibility the nursing.

The scheme of work is differentiated between gazetted employees under the Legal (RJU) Regime Single and cooperative members. The first meet workload of 32,30 h and other 44-hour weeks differentiated income, and the average salary of a nurse in 1300,00 reals and the actual average level of 700,00 reals, not entitled to funding for transportation and food.

## **RESULTS**

Distancing from the technique of endotracheal suctioning nurses by observed when professionals do not suprabefore endotracheal optimized of  $(O_2)$ suctioning intubated patients on mechanical ventilation and perceived lack of knowledge nurses about the management mechanical ventilation. Regarding reimplementation O<sub>2</sub> by nurses, when asked appointment about the of reimplementation gas before endotracheal knew no professional aspirations of the indications and contraindications for such care. Emerged from this, questions about the abandonment of the practice by consensus and proclaimed that such practices do not

agreed before other professionals involved in the ICU.

In 2004, a new professional permanent framework was introduced in the ICU with the award of the management of mechanical ventilators having direct link with medicine. We observed an enhancement of ventilator-associated devaluation of knowledge and practice of nurses about the management of this technological apparatus, but also the attempt to prescribe Infortune direct conduits to the average level, this attitude, rigorously opposed by nurses' scenario.

Note that the evolution of the weaning process of patients was performed by nurses with medical professionals and from the participation of other professionals in the ICU nurses were dispossessed of this practice. Therefore, nurses distanced themselves from the construction of knowledge on hemodynamic, respiratory and physiological effects of ventilatory support, as well as handling the mechanical ventilator and noninvasive ventilation process.

The nurses were sold compared to mechanical ventilation, are unmotivated to perform any aspect related to that conduct. Thus, a practice that was held by nursing for years, was transferred into the hands of other professionals, gave high status to "working professionals ventilatory part" nursing and eventually becoming once again subordinate giving your space without question and claims. It is worth noting that the workload of these professionals is equal to doctors while the workload of nurses is equal to the average level.

Nursing remains the core team responsible for monitoring the timing of the patient on mechanical ventilation. However it is unable to perform any conduct related to the device. It is worth noting that only the doctor and the nurse can make request for the gold standard blood gas analysis, testing for control of variables oximetric.

Therefore, we expanded to nursing communication of complications for over a professional in the process that would be ready once solving the profession.

## DISCUSSION

Autonomy is the ability of nurses to fulfill professional duties in a self - determined manner while complying with legal, ethical and practical aspects of the profession. In this respect, decision making is a key component for the professional autonomy of nurses and should be based on nursing skills and not on emotions or exercise of routine tasks. The

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autonomous nurses are responsible for their own decisions and may influence the professionalization of nursing.<sup>6</sup>

So for these decisions to be taken nurses should be inserted in direct care of patients. However, until the 1990s, the nurse was away from the tour. In fact, nursing attendants were representatives of nursing before patients and accounted for employment relationships in health, whereas in previous decades, the attendant had hegemonic presence. For the exercise of his authority was necessary only schooling until the 4th grade of elementary school. However, it is noteworthy that the National Health Council in Resolution n° 143 of 17 November 19948 pursuant to Law No. 7498/869, article 23, sole paragraph, put endangered the figure of the nursing attendant from of June 25, 1996.

Faced with the extinction of nursing qualification, an article published in the book of public health in 1990 underscored the resolution of the Federal Council of Nursing (COFEN). The authors emphasized that to improve the quality of health services, minimize iatrogenic, would only be possible by the technical background of this contingent unprofessional. Also highlighted perpetuate the appointment of attendants for the simple exchange of instruments of labor (the broom into the syringe and the color of the uniform ) did not contribute to the resolution of the low education level of nurses, but also would not address the poor quality of service health. 10

The nurse those decades was not a socially recognized professional in the care of patients, but by management. Still, for nursing attendants, the doctor was already ruler who held high economic power and accessibility of services. Nurses are being inserted into practice. In order to meet the particularities of critically ill patients with to monitoring, evaluation identification of deviations from baseline standards established for each critical patient will only be achieved when nurses assume their full role in patient care. The reflection of the retired nurse direct care to the detriment of his bureaucratic role has opened some gaps that are being filled which are covered by other health professionals with a positive social impact that nursing cannot reach.

In relation to critical patients, the  $N^{\circ}$  7.498/86 Law which provides for the regulation of nursing practice and other measures alleges that direct nursing care to patients with serious life-threatening is

private nurse. In this perspective endotracheal aspiration perfectly fits this description since it is a procedure that can cause damage to critical patients.

Critical care nurses are responsible for ventilatory support related to care, such as blood sampling for blood gas analysis, monitoring of ventilatory parameters, positioning of patients in bed, restriction of changing positions when it is needed, but cannot handle the fan itself.

Conflicts of participation of other professionals in the ICU conferred loss of quality assistance and restriction of autonomy of nurses m relation to the respiratory tract with increased requests for endotracheal secretion culture to the drawing board, more time for sample collection. dyssynchrony modes ventilation for much longer, stay under ventilation, periods of apnea and prolonged desmane process. Perverse alarms and uninterrupted water signal in the proximal and distal trachea fan, secretions accumulation of in patients saturated bacteriostatic filters, more complications evidenced mainly at night.

When you think of good health practices currently vaunted, realize the enhancement of adverse events in relation to drug therapy of blood products, a fall of pressure ulcer patients. 11 However, leave gaps in key areas such as the care of basic needs of critical patients on respiratory support. In this respect the complexity of the actions necessary to care for the critically ill patient favors the of adverse occurrence effects contribute to the maintenance of the high number of preventable deaths. However, these events are identifiable and generally prolong hospitalization and increase the social cost of health care. Data show that the majority of patients in critical conditions, during hospitalization, suffer some kind of mistake that will put your life at risk. 12

From the inclusion of other health professionals in the ICU nurses have accepted the condition of secondary and became sold on the management of mechanical ventilator, and today, are totally unmotivated to perform any aspect related to that conduct. Thus, the practice performed by nursing is diminished, benefit to the other professionals provided for another profession status among health professionals directly linked to medicine. The process of care and patient care is a specific area of nursing and is part of a set of stocks that are undervalued in a hospital, performed primarily by technical and/or auxiliary nursing.6 This is also the reality of an Intensive Care Unit (ICU) of four

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hospitals in Mossoró/Rio Grande do Norte units, where the difficulty of the nurses was observed in relation to the definition of programmable ventilation parameters. The fact that it is not specific and private nursing assignment, plus the deficiency of scientifictechnical view point, often ends up limiting the performance of the team to control these parameters as well as the setting of alarms from mechanical ventilation.<sup>13</sup>

It is up to the intensivist nurse, intellectual work and manual high complexity, and auxiliary technical and the medium complexity since ICU latter pursue the same activities of those with different yields. Thus, the identity of nurses is confused and status conferred upon it is lost through the division of labor. This division of labor, besides causing internal conflict, reflects negatively on patient care as well as the autonomy of the professional nurse as it often alienates his action direct caregiving, minimizing the potential for action in this process.<sup>7</sup>

Nursing may only acquire full autonomy when care spending to be seen as a privileged sphere in healthcare, both scientifically and practically. Clearly such appropriation extrapolates the individual will of the nurse or even the collective will of the profession as a class. Only a change of scientific paradigm, may give emphasis to the care.<sup>5</sup>

Although contributing to the science of health and self-perpetuating still in practice the social devaluation of nurses to other health professionals. Such conflicts refer to historical genesis of the profession and the mass of the working poor economic backgrounds. In this respect the structure of organizational power expressed by policies, laws and rules is strengthened by these characteristics associated with the charitable nature of the profession, perpetuating the social imaginary and guaranteed by the power of dominant groups and their members, through social and political inertia of nursing.

# CONCLUSION

During 10 years of direct care to critical patients was noticed a changing role of the nurse in the intensive care pouring patients under mechanical ventilation. This fits mainstay nursing retake its rightful place with a status essential for assist basic needs of critically ill patients and be recognized for its profession primordial role in the effectiveness of direct nursing care.

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