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Perception of Information Technology in the Care Process From The Point of View of Nurses.

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Abstract: *The continuous use of the computer and new information technologies is becoming indispensable in the hospital, which can be a great challenge for nursing, since it is necessary to learn new skills for the provision of care. The present study is a quantitative, descriptive and cross - sectional approach, based on data analysis of 30 questionnaires applied to employees of several sectors of a large health institution located in Vale do Paraíba, with the purpose of characterizing the socio - demographic profile of professionals Of nursing of a specific hospital institution, to identify the use of the computer in the routine of the hospital nursing practice and to evaluate the impact of the use of the computer on patient / client care by the nurse. In this work, the recommendations of Resolution No. 466/12 of the National Health Council and approval of the Research Ethics Committee of Teresa D'Ávila University Center, nº 2,024,357 were followed. It was observed that among the employees interviewed, the prevalence was given by female employees 25 (83.3) in the age group 20 to 30 years 17 (56.6%), who work in the Intensive Care Unit 18 (60 (53.4%) and the systematization of nursing care, 23 (76.7%) of the respondents reported having no difficulty in performing SAE, already in relation to the level Of satisfaction with the use of Electronic Records 24 (80%) reports that the PEP brought improvements to the nursing care provided. The results obtained in this study reinforced the need to provoke reflections on how technological implementations influence the care process, and how they can help in the complex contemporary nursing scenario.*

Keywords: *Technology; Nursing; Nursing Care.*

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I. Introduction

Technological development enables the expansion of the communication and information network with each other. We must create mechanisms to avoid sediment, by accommodation or ignorance, inert thoughts in ideas not adapted to the evolution of the various sectors of society, contextualizing, learning, facing the complexities.Nursing is a profession that has developed over the centuries, maintaining a close relationship with the history of civilization. In this context, it has a preponderant role because it is a profession that seeks to promote the well being of the human being, considering its freedom, unity and dignity, acting in the promotion of health, prevention of diseases, in the course of diseases and injuries, in disabilities and In the process of dying[1] .Today technologies are part of people's lives. The continuous use of the computer and new information technologies is becoming indispensable in the hospital, which can be a great challenge for nursing, since it is necessary to learn new skills for the provision of care. In the coming years, advances in computational technology will revolutionize processes at all levels of nursing services in health care institutions, providing operational and strategic benefits to the organization and development of professional practice [2].

Computer science has been used in nursing for over fifty years. The first contact of this technology with hospital life was often limited to the development of programs that met specific requirements. With the evolution of the hardware and software resources, this tool has become much more accessible, since today we have applications that come to supply the more specific situations of the work in which the nurses work. It is easier to provide agile computer programs and efficient application[3].The best way to make this tool part of the hospital life is to enable the professionals of the area to get in touch with it. The "fear" of the new one dissolves when one perceives the facilitation and applicability in the daily process, with the reduction of errors and optimization in the presented quality. This is in addition to better patient care, since this quality is transferred to people who use their work in various sectors of the hospital environment[3].We can not forget that this is only feasible and effective, with research and studies focused on this area of computer application, hence the need for investment in professionals who work in the nursing area in the process of developing new software, making the Application language is the same as those that will be used in your patient care routine. With this, there is a

question to ask: How can nursing innovate and improve care, taking into account the growing evolution of technologies. What is the contribution to changing nursing practice, uniting technology and safe human care? [1].

The computer is undoubtedly of vital importance in any sector of society for being a facilitator of various processes. We must use it in a way that allows the organization and efficiency, with the quality presented in the accomplishment of the several services. It is up to the nurse to not forget the irreplaceable importance of human relations, computerization should not oppress the relations of affection and human complicity, which are undoubtedly the essence of the work of the patient / client relationship [4]. With this, computer science is defined as the science of automatic information processing, not only focuses on programming computers to perform specific tasks, but also studies the structure and treatment of information in a wide variety of ways [5].

With the evolution of technology, it was noticed the need to optimize the medical record that was once on paper, developed by doctors and nurses to ensure that they remember facts and clinical events about each individual, so that all other professionals involved in the process Health care have the same information, are computerized[6].It should be emphasized that nursing professionals play a fundamental role in the chronological record during the twenty-four hours of the day in relation to the data on the evolution of the patient's health status and also in relation to the actions performed by them Nursing process [6]. According to the American Nursing Association (ANA), nursing informatics is "[...] a specialty that integrates Nursing Science, Computer Science, and Information Science to manage and communicate data, information, and knowledge In the practice of Nursing "[5].The Nursing Process consists of a set of systematized and interrelated stages aiming at the integral care of the human being[7].

The usual practice of development in the Nursing Process is called Nursing Care Systematization (SAE), which constitutes a strategy to identify the patient's special needs in a holistic view, while also supporting the basis for assessing care as it enables the monitoring and The documentation of actions, as well as the visualization of the results [6].The SAE is of great importance, serving as an instrument to guide the actions of the team, considering the different levels of complexity of the assistance to both, it should contribute to direct the nursing practice and enable the planned and individualized assistance to the patient, by emphasizing the aspects Biopsychosocial, based on documented records that give autonomy and recognition to nursing work[8].

Finally, technology and nursing must move in convergence to the development of new possibilities, quality of execution, accuracy of diagnostics, optimization, presentation, security, new research, but never overshadowing the importance of nursing in what has the most noble and essential happiness Of patients, who inevitably become fragile need the look of the human professional. Thus, this study seeks to relate the difficulties to be faced by this challenge, often innovative, with the facilitation that is sought, even because, I believe that this process of computerization of nursing is inevitable in a modern society[9].The objective of this study was to characterize the socio-demographic profile of nursing professionals in a given hospital institution, to identify the use of the computer in the daily practice of hospital nursing and to evaluate the impact of computer use on patient / client care by the nurse

II. Method

It is an exploratory, descriptive, transversal study of quantitative nature. The present study was performed in a large general hospital institution, located in the Vale do Paraíba - SP. The study included nurses who work in a given institution. The sample consisted of several age groups and both sexes. As criteria for inclusion, the interviewees were an employee of the institution, exercising the position of nurse, and agree to participate in the study signing the consent term, and the exclusion criteria were: not being an employee of the institution, obtaining another position in the same, disagreement in participating of the study. The recommendations of Resolution No. 466/12 of the National Health Council and approval of the Research Ethics Committee of Teresa D'Ávila University Center, opinion no. 2,024,357, were followed in accordance with the ethical and legal standards required. The confidentiality of information was guaranteed to all; the guarantee of not having penalties or damages for the non participation or the desistência at any moment; the right to answers to doubts and the absence of any financial charge and / or remuneration to the participant. Data collection was carried out through an elaborated questionnaire containing nine questions related to the socio-demographic profile, level of knowledge on informatics, questions on the use of information from Nursing Assistance Systematization (SAE) and on electronic medical records. The data collected was entered electronically into a database in Excel Software. These data were presented below in tabular form, and in descriptive form, and are then also discussed based on the selected literature.

III. Results And Discussion

In this topic will be presented the results of this research, concomitant to the discussion of this work. The socio-demographic profile of the employees participating in this study were 25 (83, 3%) female and five (16, 7%) male. Regarding the age group, the survey revealed that 17 (56.6%) of employees are between 20 and 30 years of age, 12 (40%) are between 31 and 40 years old.

Table 1- Distribution of the participating employees (N = 30) according to Demographic Partner data. Vale do Paraíba, São Paulo, 2017.

Variáveis	**Funcionários Participantes**	
Sexo	**N**	**%**
Feminino	25	83,3 %
Masculino	5	16,7%
Faixa etária		
20 – 30	17	56,6%
31 – 40	12	40%
41 – 50	1	3,4%

Source: the authors, 2017.

The number of men in nursing has been increasing significantly, but the predominance is greater by female professionals, representing about 70% of the contingent, this only tends to grow in the coming years, demonstrating that feminization is a strong characteristic of the sector [10]. The identification of the sociodemographic profile of nurses in their work was characterized by the majority of nurses / women that is due to the rise of women in society, in the labor market, often exercising the function of head of family, thus conquering space And recognition in both public and private waiting [11].

Regarding the variable age, the majority of the sample is in the age group of 20 to 30 years 17 (56.6%), with a low participation of the extreme ages. These results agree with those of many other studies [12], in which the middle-aged professionals with a low participation of both extreme ages, that is, young and old, also predominated. The intermediate age group was not the predominant one, but the one between 20 and 30 years with an average of 24,54 years, as in the study presented here, and also, in relation to the age of the participants, the age groups that present the highest levels of satisfaction Were those of the young. The results here coincide on the level of overall satisfaction, however, they disagree on the levels of satisfaction with the possibilities of promotion and with colleagues at work. In another study, the intermediate age group was the one with the highest levels of satisfaction, while other authors found no significant correlation between these two parameters [13]. According to the sector that works in the Institution, three (10%) work in the Surgical Clinic, three (10%) in the Medical Clinic, 18 (60%) in the Intensive Care Unit, four (13.3%) , 7%) in Oncology.

Table 2 - Distribution of the participating employees (N = 30) according to the sector that works in the Institution. Vale do Paraíba, São Paulo, 2017.

Variables	**Participating officials**	
Sector that works	**N**	**%**
Medical clinic	3	10%
Surgical clinic	3	10%
Intensive care unit	18	60%
Ready care	4	13,3%
Oncology	2	6,7%

Source: the authors, 2017.

Sectors that require a more individualized level of care, where the patient is hospitalized for long periods such as the medical clinic with elderly patients and patients with chronic diseases and intensive care units, with traumatized patients, completely dependent on the assistance of the nursing team, They end up causing the employee to develop pathologies, because they perform functions that require a great physical and mental effort, causing consequently the removal of their functions, a result that damages both the institution and the employee [14] . Activities that have characteristics and values that differentiate, making the hospital a structured service provider that aims at the profits and effectiveness of the assistance. Hospital institutions are complex environments, since they offer several services, which are distributed in various sectors present in the organization [15].

Nursing professionals who work in closed areas such as intensive care units and surgical centers are likely to develop a gradual process of both psychological and physical wasting. Needing periodic follow-up of the mental and physical health of this collaborator, since studies affirm the index of departures and absences due

to the Burnout syndrome is increasing gradually, causing a deficit in the assistance provided by the institution [16].According to the second level of computer knowledge, six (20%) of the participating employees reported having a basic level of knowledge in Informatics, 16 (53, 4%) had intermediate knowledge and eight (26.6%) had advanced knowledge.

Table 3- Distribution of the participating employees (N = 30) second, level of knowledge on Informatics (N = 30). Vale do Paraíba, São Paulo, 2017.
Source: the authors, 2017.

Variables	Participating officials	
Knowledge level	**N**	**%**
Basic	6	20%
Intermediary	16	53,4%
Advanced	8	26,6%

Source: the authors, 2017.

When discussing the level of formal information knowledge about the nurses interviewed, it was verified that the majority do not have advanced level of computer knowledge, neither does not have another higher level course related to the area of computer science or management Information systems. When questioned about the execution of fast courses on computer applications 80,77% reported having already attended at least one, and in smaller numbers they have already done at least one reading of magazines or books on computing (32,05%). Thus, all these data corroborate to the affirmation of the work presented here, where the interviewed nurses do not have advanced level related to computer science, but rather that the research sample was formed mainly by beginner nurses or intermediate level in computer science.

As can be observed the use of the computer confers agility to the care process, due to the time savings in the displacement of professionals between different sectors. This is important because, in some pathological conditions, such as severe sepsis and septic shock, rapidity of therapeutic adequacy is essential for patient survival, computer use makes it possible to treat the patient and his family more closely; With this, it is probably possible to improve reception and qualified listening, elements that make up humanized and patient-centered care. A similar result was found in a study carried out with 34 nurses from the Intensive Care Units of a general hospital in São Paulo, SP, where it was found that due to the reduction of time spent in bureaucratic activities and the speed in obtaining the information that facilitated the activities Administrative, the computer provided more time for the planning and active participation of the professional in the direct care to the patient [5].Regarding the Systematization of Nursing Care (SAE), 23 (76, 7%) of the employees interviewed reported not having difficulty performing the SAE and seven (23.3%) reported having little difficulty in performing SAE. As for the question: do you believe that SAE can improve the quality of nursing care 30 (100%) of the employees interviewed believe that SAE can improve quality of care.

Table 4- Distribution of Participating Employees (N = 30) Second, you have difficulty performing the SAE, you believe that SAE can improve the quality of nursing care. Vale do Paraíba, São Paulo, 2017.

Variables	Participating officials	
Difficulty in performing SAE	**N**	**%**
I have no difficulty	23	76,7%
I have little difficulty	7	23,3%
Not done at SAE	0	0%
I'm very difficult	0	0%
Quality of care		
Yes	30	100%
NO	0	0%

Source: the authors, 2017.

The fact that the SAE is applicable in health services still presents a great challenge, since, according to these authors for some time, nurses are aware of the subject and, what is lacking, according to these is the initiative to introduce the theory in the Practice, in this article, when a questionnaire about the importance and possible benefits for the implementation of the SAE was asked, only one nurse (2,2%) answered that it was important and pointed to the benefit of "improved nursing care planning". Which differs from the result of the article presented here, where 30 (100%) of the employees interviewed considered the use of SAE as important [17].The results of another study, contrary to what was presented previously, pointed out that professionals recognized the importance of SAE as an instrument for efficiency and effectiveness of actions, organization and standardization of care, individualization and continuity of care. They also add that it was expected that its

implementation would bring benefits to patients, professionals and institution. Regarding the difficulties pointed out for the implantation in the hospital, the results were, as mentioned in the literature, related to two levels: institutional, exemplified by non-implantation, lack of professionals and high patient demand, and those related To the professional, which are lack of time / overload of the nurse and lack of training and training [18].

Concerning questions related to the use of electronic records, 26 (86.6%) of the employees interviewed report having received training to use PE, one (3,3%) of interviewees reported having difficulty using PEP (22 , 4%) report having no difficulty in using the PEP, six (20%) reported having difficulty in some items and one (3, 3%) reported not performing PEP records. When asked about the level of satisfaction with the use of electronic records, 24 (80%) reported that the use of the PEP brought improvements to nursing care, four (13,3%) reported not having noticed a difference in care and two (6,7%) reported that the use of PEP did not meet all the needs related to nursing care provided.

Table 5- Distribution of Participating Employees (N = 30) Second, you received training to use Electronic Records, found difficulty in using it, and your level of satisfaction with the use of PEP. Vale do Paraíba, São Paulo, 2017.

Variables	**Participating officials**	
Have you received training	**N**	**%**
YES	26	86,6%
NO	4	13,4%
Difficulty level		
I have difficulty	1	3,3%
I have no difficulty	22	73,4%
itens I have difficulty with some items	6	20%
I do not register	1	3,3%
Satisfaction Level		
Brought improvements	24	80%
I did not notice any differences	4	13,3%
I did not meet all the needs	2	6,7%

Source: the authors, 2017.

There are countless advantages and possibilities arising from the use of the PEP, such as: faster access to health history and the interventions to which the patient was submitted; Remote availability; Simultaneous use by various health services and professionals; Data dolayout flexibility; Readability of information; Elimination of data redundancy and requests for supplementary examinations; Information; Integration with other information systems; Continuous processing of the data, leaving them immediately available to all actors involved in patient care; Information organized more systematically; Ease in collecting data for reporting, whether for research or billing; Access to updated knowledge with a consequent improvement in the decision-making process and the effectiveness of care [19].

Other advantages were identified, such as: no possibility of loss of the chips; Control of patient flow in health services; Possibility of prioritizing care for severe cases; Availability of prior care data and patient history; Requesting and verifying examinations and medications; More agility. In addition, it increases the quality in filling out medical records; Can prevent deterioration, loss and alteration of information; There is better control of medications that can minimize errors and standardization of care [20].

IV. Conclusion

Nursing is a profession that has developed through the centuries, maintaining a close relationship with the history of civilization, nowadays technologies are part of people's lives. The continuous use of the computer and new information technologies is becoming indispensable in the hospital, which can be a great challenge for nursing, since it is necessary to learn new skills for the provision of care. The Nursing Process (PE) stands out as a care technology that guides the sequence of logical reasoning and improves the quality of care provided through the systematization of clinical assessment, diagnoses, interventions and Nursing outcomes. With this in nursing, informatics is used in different approaches in the area of knowledge, among them: teaching, care and management, whose operationalization can be exercised through different resources such as: voice recognition, knowledge banks, internet , among others.

Through the analysis of the data obtained from the 30 questionnaires applied to the employees of the various sectors of a large health institution located in the Vale do Paraíba, aiming to identify the use of the computer in the routine of nursing practice, pointing out The difficulties related to the system implementation process (SAE - Nursing Assistance Systematization), also evaluating the impact on patient / client care by the

nurse, it was observed that among the interviewed employees, the prevalence was 25 (83,3) in the age group of 20 to 30 years 17 (56,6%), who work in the Intensive Care Unit 18 (60%), and who have an intermediate level of computer knowledge 16 (53, 4%), and the systematization of nursing care 23 (76,7%) of the interviewees reported not having difficulty performing the SAE, already in relation to the level L of satisfaction with the use of Electronic Records 24 (80%) reports that the PEP brought improvements to the nursing care provided. The results obtained in this study reinforced the need to provoke reflections on how technological implementations influence the caring process, and how they can help in the complex contemporary nursing scenario.

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Andréia Hias Faleiros. “Perception of Information Technology in the Care Process From The Point of View of Nurses.” IOSR Journal of Nursing and Health Science (IOSR-JNHS) , vol. 6, no. 4, 2017, pp. 08–13.