

40 - KNOWLEDGE AND PRACTICE OF THE NURSING TEAM IN A ICU OF A UNIVERSITY HOSPITAL ABOUT THE TECHNIQUE OF WASHING HANDS

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INTRODUCTION

The nosocomial infections (NI), according to Martins (2001), are infections acquired in hospital, expressed or outside the incubation period at time of admission, unless it can be related to previous hospitalization in the same hospital.

The health professional has a responsibility to break the infectious agent - transmission - host, that's results in the occurrence of nosocomial infection, in practical control measures that revolves around basic procedures such as handwashing among others.

In 1847, Ignaz Semmelweis, recommended washing hands with "chlorinated water" for any examiner, before touching the mother. This measure has helped to reduce dramatically maternal mortality by puerperal fever, in just seven months, from 12% to 3% (MARTINS, 2001).

Souza (2007) also points out that hand washing appears to be the simplest and most important measure in prevention of nosocomial infection and, when done properly, remove transient microorganisms acquired in contact with patients. It is considered a fairly low cost and easy, but worth much to the institutions and that is a big challenge their membership in daily practice by health professionals.

The Intensive Care Unit (ICU) is a sector where patients need multiple invasive procedures, due to their critical condition and maintenance of your own life. The life support that are needed for these patients, while in the ICU, leading to the breakdown of the integrity of organ systems, thereby increasing the risk of acquiring nosocomial infection (NI) (JUNIOR, 2003). According to Pittet (1998), more than one third of ICU patients eventually become unexpected infections. The sites of infection most common in these patients are pneumonia, bloodstream infection, urinary tract infection and wound infection.

Based on these data the following question arises: What degree of knowledge that nursing professionals have about the technique of hand washing? There are adequate in practice the technique of washing hands before and after nursing procedures in the ICU?

To answer these questions we make the following objective: to determine the relationship between knowledge and practice of hand washing technique by nursing team in the ICU of a university hospital.

METHODOLOGY

This is a descriptive study, quantitative and observational non-participant realized in the University Hospital Onofre Lopes (UHOL), located in the city of Natal/RN, which belongs to the complex of the Federal University of Rio Grande do Norte / UFRN characterized as an institution of university teaching medium.

The project was submitted to the ethics committee on research getting assent (No. 278/09).

The study population consists of the nursing team of ICU UHOL. Totalling 41 professionals of the nursing team that works in the ICU. Of the total, 07 were nurses (effective institution), 34 are nursing technique, with 13 permanent employees, 12 nursing trainee hired by Euvaldo Lodi Institute (IEL) and 7 of the Norte Riograndense Foundation for Research and Culture (FUNPEC).

Data collection was conducted by 13 nursing students trained using class theoretical and practical observation. After this step, the students were applying to the ICU the first instruments to test, about the direct responsibility of the master's degree and supervision of the leader.

Then began the collection of data and information through monitoring and observation of all procedures that occurred between periods of 7 to 22 hours, every day of the week, the researcher and nursing students trained and assigned.

The data collected were transferred to a the application Microsoft Excel, then exported and analyzed in Statistical Package for Social Science (SPSS) version 15.0 Windows.

RESULTS AND DISCUSSION

We surveyed 44 professional nursing staff, five (5) nurses and 39 practical nurses, 63.64% of them were outsourced (FUNPEC and trainee of IEL) and 36.36% of the servers UFRN, nurses and nursing technicians.

Table 1: Characterization of the population of the nurses professional surveyed second sex, age and education. ICU - HUOL. Natal / RN, 2009.

POPULATION CHARACTERISATION	INSTITUTIONAL				AFFILIATION		χ ² p
	Outsourced		Employee		Total		
	N	%	N	%	N	%	
Sex							
Male	9	21,4	4	9,5	13	31,0	0,654
Female	18	42,9	11	26,2	29	69,0	
Age group (years)							
21 a 35	19	45,2	6	14,3	25	59,5	0,055
36 a 50	8	19,0	9	21,4	17	40,5	
scholarity							
Average level	27	64,3	10	23,8	37	88,1	0,001
Top level	0	0	5	11,9	5	11,9	
Total	27	64,3	15	35,7	42	100	

Source: Own research

Looking at table 1, we observed that there is a predominance of female civil servants, 29 (69%), which is mainly the outsourced (trainee), with 18 (42.9%), with values not significant ($p = 0.654$).

For Shimizu (2002) also cites the prevalence of nurses were female, which can be justified by the need to have qualities inherent in the female to care for patients. Already Lopes (2005), complements with the fact that coexists with home care to children, the sick and the elderly, associated with the figure of the woman-mother, who has always been a healer and holds an informal knowledge of health practices beyond the religious brand printed, transmitted from woman to woman, and that support men's work in nursing is given by the attributes related to physical force.

In terms of age, we found that between 21 and 35 years was the most frequent, with values of 25 (59.5%), present mostly in the bond also outsourced 19 (45.2%), with a difference not significant ($p = 0.055$). We found statistical significance ($p = 0.001$) with respect to scholary, where 37 (88.1%) of participants are on average level, being 27 (64.3%) in the bond outsourced.

We realize that employees servers have more age than that outsourced, and that there is a predominance of young trainees in the institution, especially the nursing staff. This fact is probably explained by the type of procurement outsourcing, which have a certain time of the contract, are regularly exchanged for new and inexperienced, while maintaining new teams in years.

In respect of occupational data, we have the table 2

Table 2: Characterization of the nursing staff of ICU, according to institutional affiliation. ICU - HUOL. Natal / RN, 2009.

POPULATION CHARACTERISATION	PROFESSIONAL CATEGORY				Total		χ^2 p
	Nurse		Technical nursing				
	N	%	N	%	N	%	
Institutional Bond							
UFRN	5	11,6	10	23,3	15	34,9	0,001
Outsourced	0	0	28	65,1	28	65,1	
Another institution							
Yes	5	11,6	26	60,5	31	72,1	0,139
No	0	0	12	27,9	12	27,9	
Sex							
Male	1	2,3	12	27,9	13	30,2	0,596
Female	4	9,3	26	60,5	30	69,8	
Age group (years)							
21 a 35 anos	2	4,7	24	55,8	26	60,5	0,319
36 a 50 anos	3	7,0	14	32,6	17	39,6	
Time experience in ICU							
Up to 5 years	2	4,7	19	44,2	21	48,8	0,674
> 5 years	3	7,0	19	44,2	22	51,2	
Total	5	11,6	38	88,4	43	100	

Source: Own research

We saw that the professional UFRN with bond make up a total of 34.9%, with nurses servers (100%) and 23% of technicians, and 65.1% of nursing staff who have other employment contract, as FUNPEC and IEL. In the case of a much larger number of professionals who have no bond insurance, that have no link with the institution, are exchanged frequently (temporary contract) and there are always new professionals, theoretically in constant training, so undermining nursing care ($p = 0.001$).

Silva (2008) states that, as a teaching hospital would justify the hiring of technical outsourcing (IEL and FUNPEC) that they are here to be trained and would not carry in its entirety the direct care for critical patients, but accompanied by an effective employee and under the supervision of nurses in the industry. However, was evidenced that the trainee assume the care in its entirety.

About the existence of another employment relationship, it is noted that 72.1% of the observed showed the existence of another and 60% are nursing technicians, which leads us to believe that the duplicity of daily working hours to be met, can lead to a higher incidence of iatrogenic mistakes in daily practice ($p = 0.139$).

These occurrences iatrogenic are not only undesirable effects on the patient, it is extremely harmful, inevitably referring to the context of quality assurance in health services (PADILHA, 2001). Also reports on incidence reports, the majority were related to airway management and drains, tubes and catheters.

There was a predominance of women in nursing, with 30 (69.8%), followed by 13 male (30.2%) of the total, not observed statistically significant ($p = 0.596$).

While Lopes (2005) highlighted in his study that in 1987, existed in all categories of nursing staff, a female predominance, with 94.1% of nurses and 89% for technicians. The study showed that by 2003, these have a gradual increase in character and stable in quantity of nurses were male. Comparing the category of nurses, the index increased 5.9% (in 80) to 7.9% (20 years later). We found a predominance of nurses in full age, 36 - 50 years, with 3 (60%) followed by 2 nurses (40%) in the category 21 to 35 years.

Data similar to ours were found by Koizumi (1998) in a study of ICUs in São Paulo, where the predominant age group was up to 35 years, and had between 1 - 10 years after graduation.

Miyadahira (1999) disagrees and shows in his work in the Intensive Care Unit of São Paulo, a prevalence of 26 to 35 years (59.5%) of nurses.

In the sector under study, the professionals are younger, with a predominance of practical nurses, perhaps due the high number of outsourced trainee (FUNPEC AND IEL).

Regarding the length of experience in ICU, the table above shows that 22 (51.2%) of respondents had experience of more than five years in ICU, and 21 (48.8%) reported up to five years of experience, which leads us to conclude that there is no interference from their knowledge that their behavior observed.

Found in most surveyed the presence of another employment relationship, with 31 (72.1%) and 26 (60.5%) in the category of technical nursing and 5 (11.6%) nurses.

However contrary to our data were found by Miyadahira (1999), where more than half of those surveyed, 52.3% worked in the intensive care over a period of 1 to 5 years. And agreeing with us regarding the availability of other employment contracts (51.9%).

In the same study, Miyadahira (1999) asked nine nurses from various institutions on the question of whether to hire newly graduated nurses to work in ICU. Of them, four said yes, but before that would be trained in other areas until they are able to

take the sector alone, and five said they did not hire, preferring to have experienced nurses in the area.

The table below shows that most professionals (81.4%) say they wash their hands before and after any procedure performed on the patient, and 72.1% for nursing technicians and nurses 9.3%, showing no significance ($p = 0.932$).

Table 3. Knowledge of professionals surveyed about of hand washing before and after any procedure. ICU - HUOL. Natal / RN, 2009.

		PROFISSIONAL CATEGORY			Total
			Nurse	Nursing technique	
Hand washing	No	N	1	7	8
		%	2.3%	16.3%	18.6%
	Yes	N	4	31	35
		%	9.3%	72.1%	81.4%
Total		N	5	38	43
		%	11.6%	88.4%	100.0%

Source: Own research

We know the importance of hand washing for health professionals with regard to breaking the chain of transmission of infections associated with health care, adherence to this measure has been the greatest challenge to the Nosocomial Infection Control Committee (NICC) health institutions. However, when questioned about the professional knowledge and practice of such implementation, the matter becomes even embarrassing, because it assumes that hardly can have flaws in appearance simple, but fundamental.

Research developed in the Post Anesthesia Care Unit of a hospital school from Goiania shows that the frequency of hand washing before and after surgery was greater in the nurse. However, both the nurse and the technician had poor adherence to procedure (BARRETO, 2009).

During the observation of the of hand washing was found that the values and adjustments reached up to 44%, while the gaps have reached 56% in the professional nursing staff, since most errors occurred in the absence of hand washing before and after the procedures. The observation of the conduct of the professional nurse during the same procedure showed a percentage of 42.9% to 57.1% and adequacy of inadequacies.

Yet when it comes to hand washing, we cross-check on the categorization of knowledge (appropriate or inappropriate) to the level of knowledge calculated from the total of rights, as well as in: good (greater and equal to 21 adjustments), regular (20 to 15 adjustments) and bad (less than 15 adjustments).

This practice is a consensus about it, as when made with products and with inadequate technique, significantly increasing the transmission of microorganisms between patients (cross transmission), increasing rates of nosocomial infection, length of patient hospitalization, the risk of complications clinics, and hospital costs as a result of the foregoing, it is therefore essential to carry out institutional activities to facilitate the accession of professionals to hand washing.

Table 4. Categorization of the practice of hand washing according to the degree of knowledge of nursing technicians. ICU HUOL. Natal / RN, 2009.

		DEGREE OF KNOWLEDGE			Total	
			Good (≥ 21)	Regular (20 a 15)		Bad (<15)
Hand washing	Inadequate	N	1	21	12	34
		%	2.6	55.3	31.6	89.5
	Adequate	N	0	3	1	4
		%	0.0	7.9	2.6	10.5
Total		N	1	24	13	38
		%	2.6	63.2	34.2	100.0

Source: Own research

As shown in table 4 that the item hand-washing, the technicians had a deficiency in to execute it, showing higher percentage of the degree of knowledge concentrated in regular and bad, totaling 86.9% of inadequacy, not reaching significant values ($p = 0.849$).

When performing test Pearson correlation between the variables of knowledge correct total with inadequate hands washing before and after the procedures, we find significance $p = 0.021$, it is believed that the categories mentioned by professionals in the interviews, did not confirm the practice observed during the survey.

Turrini (2000) states in his work on the perception of nurses on risk factors for hospital infections, realized in a public hospital, a phenomenological approach, that hand washing may have been a factor related to maintaining the levels of nosocomial infection, but difficult accession. Even states that there is inadequate proportions between professionals and patients, leading to washing hands improperly on the technique and its duration, thus, the institution would be encouraging violations.

CONCLUSIONS

We conclude that the professionals surveyed here are characterized by being predominantly outsourced institutional affiliation (64.3%), women ($p = 0.654$) in age from 21 to 35 years ($p = 0.055$), with average level education ($p = 0.001$). Of these, 11.6% were nurses and 88.4% nursing technicians. In relation the time of experience in ICU, the majority reported having more than five years 51.2% ($p = 0.674$).

Thus, we deduce the existence of hardship in relation to nursing care provided in that sector to the users, since the high turnover of outsourcers let them in a situation constant training, being are always new in age as the age group we find this study (21 to 35 years).

We emphasize the importance of the data found on the knowledge and practice in the implementation of hand washing, where most of the professional refers that must be performed before and after every procedure (81.4%), but in practice

we have seen data not corresponding to the knowledge, where 40.3% of the professionals do it properly. This Data are concern, because hand washing is a mandatory practice in the prevention and control of nosocomial infections, and the professional should adhere to conduct as soon as possible, so you can minimize the damage to the patient. This fact can be regarded as iatrogenic due to hospitalization, since this practice has been agreed in their opinion, and the spread of diseases that occur with non-adherence to washing and hand hygiene.

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KNOWLEDGE AND PRACTICE OF THE NURSING TEAM IN A ICU OF A UNIVERSITY HOSPITAL ABOUT THE TECHNIQUE OF WASHING HANDS

This is a descriptive study, a quantitative and non-participant observation conducted at Hospital Universitário Onofre Lopes (HUOL). Aimed to verify the relationship between knowledge and practice the technique of hand washing by the nursing team in the ICU of a university hospital. The population was composed of 41 professionals of the nursing team that works in the ICU. The project was submitted to the ethics committee on research getting assent (No. 278/09). The results were tabulated in Excel and analyzed using descriptive and inferential statistics through SPSS version 15.0. During the monitoring and observation of all procedures of the professional nursing team in an ICU found a predominance of professional of IEL and FUNPEC - (64.3%), female (p = 0.654), aged 21 to 35 years (p = 0.055), with average level of education (p = 0.001). Of these, 11.6% were nurses and 88.4% nursing technicians. We emphasize the importance of what was found in knowledge and practice in the implementation of hand washing, most professionals regard it should be performed before and after every procedure (81.4%), but in practice we have seen conflicting data, where 40.3% of the professionals do it properly. In the category of technical nursing, to conduct more frequent was inadequate hand washing (56%), as well as among professional nurses (57.1%).

KEYWORDS: Technique for washing hands, Nursing care, ICU.

CONNAISSANCE ET PRATIQUE DE PROFESSIONNEL EN SOINS INFIRMIERS SOINS INTENSIFS D'UN HOPITAL UNIVERSITAIRE SUR LA TECHNIQUE DU LAVAGE DES MAINS

L'infection hospitalière (IH), les infections sont contractées à l'hôpital, dans ce contexte, les pratiques de santé professionnelle par des mesures de contrôle peut empêcher ces événements en contrôlant les procédures de base comme le lavage des mains, surtout lorsqu'ils traitent avec des patients gravement malades admis à USI. Lors de la surveillance et l'observation de toutes les procédures du professionnel en soins infirmiers dans un service de réanimation constaté une prédominance des membres du personnel de l'établissement sur l'externalisation - IEL et FUNPEC - (64,3%), femmes (p = 0,654), âgés de 21 à 35 ans (p = 0,055), avec le niveau d'études moyen (p = 0,001). De ce nombre, 11,6% étaient des infirmières et 88,4% des techniciens de soins infirmiers. Nous soulignons l'importance de ce qui a été trouvé dans la connaissance et la pratique dans l'application de lavage des mains, la plupart des professionnels égard, il devrait être réalisée avant et après chaque intervention (81,4%), mais dans la pratique, nous avons vu des données contradictoires, où 40 3% des professionnels de le faire correctement. Dans la catégorie des soins infirmiers techniques, effectuer plus fréquente était le lavage des mains insuffisante (56%), ainsi que chez les infirmières et infirmiers professionnels (57,1%).

MOTS-CLÉS: Technique pour le lavage des mains, soins infirmiers, soins intensifs.

CONOCIMIENTOS Y PRÁCTICAS PROFESIONALES DE ENFERMERÍA DE LA UCI DE UN HOSPITAL UNIVERSITARIO DE LA TÉCNICA DE LAVARSE LAS MANOS

Este es un estudio descriptivo, una observación participante cuantitativos y no llevó a realizado en el Hospital

Universitário Onofre Lopes (HUOL). El estudio objetivó verificar la relación entre conocimiento y práctica del arte de lavarse las manos por las enfermeras en la UCI de un hospital universitario. La población estaba compuesta de 41 profesionales en el equipo de enfermería lleno de gente en la UCI. El proyecto fue presentado al comité de ética y obtuvo aprobación (n° 278/09). Los resultados fueron tabulados en Excel y analizados utilizando estadística descriptiva e inferencial a través de SPSS versión 15.0. Durante la supervisión y observación de todos los procedimientos de los profesionales de enfermería en una UCI encontró un predominio de los miembros del personal de la institución sobre la contratación externa - IEL y FUNPEC - (64,3%), mujeres ($p = 0,654$), a la edad 21 a 35 años ($p = 0,055$), con nivel medio de educación ($p = 0,001$). De estos, 11,6% eran enfermeros y 88,4% técnicos de enfermería. Hacemos hincapié en la importancia de lo que se encontró en el conocimiento y la práctica en la aplicación de lavarse las manos, la mayoría de profesionales considera que debería realizarse antes y después de cada procedimiento (81,4%), pero en la práctica hemos visto datos contradictorios, donde el 40,3% de los profesionales de hacerlo bien. En la categoría de Técnico de Enfermería, la realización más frecuente fue el lavado de manos inadecuadas (56%), así como entre las enfermeras profesionales (57,1%).

PALABRAS CLAVE: Técnica para el lavado de manos, cuidado de enfermería, unidad de cuidados intensivos.

CONHECIMENTO E PRÁTICA DOS PROFISSIONIAS DE ENFERMAGEM DA UTI DE UM HOSPITAL UNIVERSITÁRIO SOBRE A TÉCNICA DE LAVAGEM DAS MÃOS

Trata-se de um estudo descritivo, de abordagem quantitativa e observacional não participante realizado no Hospital Universitário Onofre Lopes (HUOL). Que objetivou verificar a relação do conhecimento e prática da técnica de lavagem das mãos pelos profissionais de enfermagem da UTI de um hospital universitário. A população foi composta por 41 profissionais na equipe de enfermagem lotada na UTI. O projeto foi submetido ao comitê de ética em pesquisa obtendo parecer favorável (n° 278/09). Os resultados foram tabulados no Excel e analisados utilizando estatística descritiva e inferencial, através do programa estatístico SPSS, versão 15.0. Durante o acompanhamento e observação de todos os procedimentos dos profissionais de enfermagem em uma UTI constatamos a predominância de funcionários com vínculo institucional terceirizado – IEL e FUNPEC - (64,3%), do sexo feminino ($p = 0,654$), na faixa etária de 21 a 35 anos ($p = 0,055$), com nível médio de escolaridade ($p = 0,001$). Deles, 11,6% são enfermeiros e 88,4% técnicos de enfermagem. Ressaltamos a importância do que foi encontrado quanto ao conhecimento e conduta na execução da lavagem das mãos, a maioria dos profissionais refere que deve ser realizada antes e após todo procedimento (81,4%), mas que na prática vimos dados discordantes, onde 40,3% dos profissionais o fazem adequadamente. Na categoria de técnico de enfermagem, a conduta com maior ocorrência de inadequação foi a lavagem das mãos (56%), assim como entre os profissionais enfermeiros (57,1%).

PALAVRAS CHAVES: Técnica de lavagem das mãos, Assistência de enfermagem, UTI.

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