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ORIGINAL ARTICLE

MATERIAL RESOURCE MANAGEMENT IN PRACTICE OF HAND HYGIENE GERENCIAMENTO DE RECURSOS MATERIAIS NA PRÁTICA DA HIGIENIZAÇÃO DAS MÃOS GESTIÓN DE LOS RECURSOS MATERIALES EN LA PRÁCTICA DE HIGIENE DE LAS MANOS

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ABSTRACT

Objective: to analyze the paper towel in the coil as a stimulus for hand hygiene. **Method:** descriptive, cross-sectional study, quantitative nature retrospective, held in adult intensive care unit of a university hospital. The data collected in January 2013 portray the unit cost and consumption of this product in the years 2010 to 2012. The study is part of material resources management in Public Hospital and teaching Institution approved by the Research Ethics Committee CAAE: 03997212.8.0000.5231. **Results:** the data point to a relevant reduction of consumption of paper towels. In the current unit cost financial issue for acquisition if equipped. Assessed the satisfaction of health professionals with regard to incorporation of the coil by the absence of notification paper reporting quality deviation. **Conclusion:** the offer of products with quality promotes professional and patient safety and can be an incentive to hand hygiene. **Descriptors:** Management In Health; Economy and Health Organizations; Health Resources; Hospital Management; Nursing.

RESUMO

Objetivo: analisar a incorporação do papel toalha na apresentação bobina como estímulo para higienização das mãos. **Método:** estudotransversal, descritivo, retrospectivo de natureza quantitativa, realizado em Unidade de Terapia Intensiva para adultos de um hospital universitário público. Os dados coletados em janeiro de 2013 retratam o consumo e custo unitário deste produto nos anos 2010 a 2012. O estudo faz parte do projeto Gerenciamento de Recursos Materiais em Instituição Hospitalar Pública e de Ensino aprovado pelo Comitê de Ética em Pesquisa CAAE: 03997212.8.0000.5231. **Resultados:** os dados apontam para redução relevante do consumo de papel toalha. Em questão financeira o custo unitário atual para aquisição se equiparam. Avaliou-se a satisfação dos profissionais da saúde em relação à incorporação do papel bobina pela ausência de notificação relatando desvio de qualidade. **Conclusão:** a oferta de produtos com qualidade promove segurança para o profissional e paciente e pode ser um incentivo para a higienização das mãos. **Descritores:** Gestão em Saúde; Economia e Organizações de Saúde; Recursos em Saúde; Administração Hospitalar; Enfermagem.

RESUMEN

Objetivo: analizar la toalla de papel en la bobina como un estímulo para la higiene de las manos. **Método:** estudio descriptivo, transversal, retrospectivo de naturaleza cuantitativa, llevó a cabo en adultos unidad de cuidados intensivos de un hospital universitario. Los datos recogidos en enero de 2013 retratan el costo unitario y el consumo de este producto en los años 2010 y 2012. El estudio forma parte de la gestión de recursos materiales en el Hospital público y aprobada por el Comité de Ética de Investigación CAAE: 03997212.8.0000.5231. **Resultados:** los datos apuntan a una reducción correspondiente del consumo de toallas de papel. En la actual edición financiera costo unitario para la adquisición de haberlas. Evaluar la satisfacción de los profesionales de la salud con respecto a la incorporación de la bobina por la ausencia de papel de notificación, desviación de la calidad de la presentación de informes. **Conclusión:** la oferta de productos con calidad promueve seguridad profesional a paciente y puede ser un incentivo para la higiene de la mano. **Descriptors:** Gestión en Salud; Economía y Organizaciones de la Salud; Recursos de Salud; Gestión Hospitalaria; Enfermería.

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INTRODUCTION

The World Health Organization (who) launched in 2004 the World Alliance for patient safety. Among the 13 actions that make up the patient safety program mentions the first: "Global challenge for patient safety" (2005) with a focus on prevention and reduction of healthcare-related infections (IRAS), i.e., "Clean care is safer care". In the second time, in 2007, the theme was "Safe Surgery Save Lives".¹

One of the actions of the national health surveillance agency (ANVISA) and the Pan American Health Organization (PAHO) is program initiatives to encourage adherence to safe practices, such as hand hygiene by health professionals.

"Hand hygiene is the single simplest measure and less costly to prevent the spread of health care-related infections".^{2: 63; 3: 4} The term "hand washing" was replaced by sanitizing of hands, including the simple hygiene, hygiene antiseptic, friction and antiseptic surgical hand antisepsis.⁴

Despite the importance of epidemiological hygiene of the hands in the prevention of hospital-acquired infections, adherence to this measure has become a major challenge for the infection control Committees Hospital (CCIH) health institutions. Among various aspects to be worked, includes mainly professionals, both in training and in actions of awareness.⁵

The participation of health professionals involved in direct assistance contributes to the increased risk of hospital-acquired infections when they adopt or not adhere correctly to the control and prevention measures, among them the absence or reduction of hand hygiene, which contributes to the spread of microorganisms among patients.⁶⁻⁷

Among the many reasons for the low adherence to hand hygiene among professionals, identified in different investigations, lack of motivation, lack of sinks close to the patient and adequate material resources, skin reactions in the hands, lack of time and lack of awareness about the importance of the hands in the transmission of micro-organisms.⁸⁻¹²

There is recommendation that "[...] family members, and visitors hygiene your hands before and after contact with the patients in health services."^{10: 88}. An explanation so that health professionals do not address this theme in his practice would be the idea that common

sense would suffice for such conduct.¹³

Despite the involvement of health professionals in courses and workshops covering basic concepts regarding the correct hand hygiene, the knowledge must be linked to the availability of materials by the institution, suitable for this purpose, acting as a motivator of action.¹⁴

Escorts are among the difficulties existing in hospital institutions and facilities maintenance issues that compromise the hand hygiene procedure. They also mention that are aware of the importance of this action, as well as their periodicity.¹³

In this direction, it is necessary to include among the different strategies to be adopted by the institutions, the evaluation of the quality of the material resources made available to carry out this procedure such as SOAP, paper towels and antiseptic, considering that these can influence positively or negatively this process.

However, the higher expense and medical care costs, resulting from a growing range of factors, the rational use of material resources imposes itself as an urgency on survival scenario of health institutions.

This assumes greater proportions when it comes to the teaching hospitals and/or students. In addition to the provision of medical care, add teaching and research activities, and should be a benchmark in cutting-edge technology. These hospitals have characteristics that increase their costs, the volume of resources needed to maintain their complex structure, which demand the adoption of stringent controls both acquisition as in the use of different materials used there.¹⁵

With this, this study aimed to analyze the paper towel in the coil as a stimulus for hand hygiene.

METHODOLOGY

Cross-sectional study, descriptive, retrospective quantitative in nature, developed in a Hospital Universitário do Norte do Paraná. The institution takes care of patients of the unified health system (SUS) and have 316 beds, of which 17 are allocated in the ICU.

The analysis period covers the years from 2010 to 2012, and the data collected in January 2013 computerized reports made available by the institution in hospital management system module, named Esthos specific to the computerized management of the inventory of consumables. This system is

outsourced). This timeframe is justified due to the inclusion of the material studied in the unit from this date (2010), making it possible to establish comparative analyses that meet the objectives of the survey.

In this way, also examined data from the year 2009, the time used only the paper towel of type double sheets. To provide comparative analysis, we used a single standard of measure, that is, it was considered that the performance of a paper roll is equivalent, for his film, a bale of paper towel Inter puff.

This study is part of the research project << Resource Management in public hospital materials and teaching >>, nursing Assistance in the control of material resources and technical advice section, of this hospital. Was submitted to the Administration of the institution and then to the Committee of ethics in research having been approved as CAAE opinion No. 03997212.8.0000.5231.

RESULTS

At the hospital in the year 2009, the

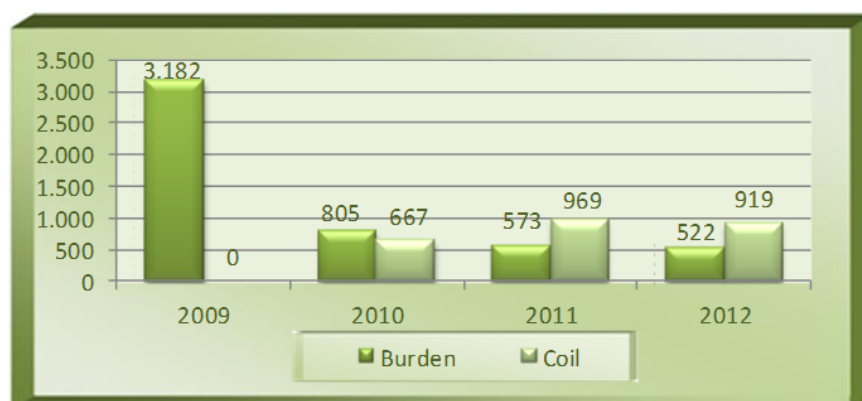


Image 1. Comparison of consumption for the period studied, of both types of paper Towel, in adult ICU. Londrina-PR, 2013.

DISCUSSION

The Ministry of health recommends that hand hygiene is done as many times as necessary, i.e. where contact with bodily sites; between each of the activities; before and after contact with body fluids and secretions; in the handling of materials and equipment that are in contact with the patient; in the preparation of medications and before and after the use of gloves.¹²

Among the tools needed in health services recommended by who for the cleaning of hands, in the aspect of patient and staff safety, the availability of water, washbasins/sinks, SOAP and paper towels are essential and indispensable.¹²

The study institution meets the standards required by ANVISA for the presentation of the paper towels used to be preferably in block and roll, allowing the single use, leaf foliage. This Agency also contraindicates the

consumption of paper towel in the presentation was of 42,410 double sheets bales, the percentage used in the Adult ICU corresponded to 7.50% i.e. 3,182 bales, with monthly average of 265 bales.

For the period 2010 to 2012, the paper consumption amounted to 19,962-hospital coil, being observed an increase gradually in this time interval, and 43,182 bales. The ICU Adult consumed 2,555 coils and 1,900 bales.

Within the hospital, the paper towel double sheets annual consumption is higher when compared to the coil as it is used in other areas of the institution.

Realize that the physical consumption of paper towel in the Adult ICU decreases after the incorporation of the coil type, as shown in Figure 1:

collective use of towels, as they can remain wet, favoring the bacterial proliferation.¹²

Another important aspect concerns the need to check out what the specific requirements according to the current legislation, for each type of material used for the cleaning of hands.¹¹

In study¹⁶ were cited low quality materials and direct influence on the cost and quantity dispensed, and to quote the paper towels used in the institution mentions to be extremely thin, which means there is in the use of at least six leaves to dry your hands. One can infer that occurs product waste, hospital waste increase, in addition to compromising the analysis for stock replenishment.

It is said that "water and paper towels are, respectively, input supply and in expendable for hand hygiene in health care."^{12: 60}It is recommended that the presentation of the "[...] paper towels for drying hands should be

smooth, composed of 100% cellulose fibers, without fragrance, impurity or holes, not release particles and has good drying property.^{17: 60}

In respect of the areas for hand hygiene inside the units, as the ICU, they need to be easily accessible, for both the professional, family members and other users, to greater public accession to the practice in question.¹²

It is expected in these critical units than the number of hands hygiene of professionals is larger when compared with the other units of the hospital, because of reliance on care, seriousness and complexity, and the numerous interventions provided.

With the incorporation of the coil, in adult ICU, was with the decrease in consumption in the physical aspect, that is, in 2009 it is consumed 3,182 bales and in the years 2010 to 2012 the sum of burden and totaled 4,455 coil units.

Front of the finding of material consumption reduction, sought to analyze some aspects that could have influenced such a scenario such as drive occupation rate, shortages of the product, but found no occurrences that had influenced such behavior.

In relation to the unit cost, considering the current values, if equipped financially, that is, the difference is 0.4%. It is believed that the fact of being small percentage is related to the review on paper Inter descriptive puff, occurred in 2009, aiming at acquisition of product that effectively meets the needs of users, ensuring quality and safety, especially in the case of healthcare. It is worth mentioning that the environmental issue should be present when the incorporation of new products.

Although there are difference in unit cost between the two presentations of papers, double sheets and coil were observed a higher degree of satisfaction reported by users of the unit by coil, evidenced by the absence of occurrences of internal notification of complaint/diversion of quality of this product, since its first purchase. For professionals in hospital hygiene team the feeling was significant, because the environment around the lavatory is kept clean and organized by time period.

With the implementation in 2010 of the paper towel roll, at first only for the assistance areas, the work process optimization of professionals of hospital hygiene of this institution. This occurs because of refueling is not as constant, since the dispenser for paper presentation reel has a much higher capacity compared to the role

double sheets. It is emphasized that the paper towel dispensers must be of easy cleaning and handling, both for the paper as a replacement for the user.

Another issue that deserves mention in this evaluation refers to the storage area. In this way, the physical area occupied by a burden is greater than the need for an inductor.

The nursing staff has a relevant role in the question of consumption management and consequently costs pertinent to the material resources needed to carry out its activities, especially in the face of scarce resources in the area of health. The nurse must know and follow the history and adopt strategies that contribute to minimize/avoid wastage, deploy protocols, aiming at better performance while preserving the quality and efficiency of the services provided.¹⁸⁻⁹

Stresses the importance of participation of health services, as well as of its users in vigilance and in formal notification of the complaint procedure and adverse event resulting from the use of products, in particular, under health surveillance.

On study of medical and nursing students both recognized the importance of hand hygiene in the prevention of hospital infection, but there is low and often not achievement, although there is indication for such. They said that the lack of materials such as SOAP and paper towels are the main obstacles to the absence of this practice.²⁰

In this study, it was not intended to assess the impact of the incorporation of the paper towel roll in relation to nosocomial infection, but it is believed that he has encouraged the practice of hand hygiene.

The material resources management comprises several steps so that you can make available to patients and professionals of proven quality products, following the minimum standards required by current legislation. One of these steps is directly related to the description of the product you want to purchase. A well written, descriptive clearly and objectively means great possibilities of success in the bidding process for public institutions. In addition to quality, there is a need to provide material in quantity, at the right time and at the lowest cost, so there is no prejudice to the activities carried out, including the cleaning of hands.²¹

The constraints that may occur, with regard to its supply, require constant adaptation of the professionals to carry out the daily tasks, meaning the need for new training for which the routines are re-established, in addition to time spent wasted material and contributing

to a poor working environment.

Effort of managers on the institutional and administrative policies for Standardization of services, and a greater commitment of the institutions with the health of the worker and the patient himself, could result in the provision of adequate material resources and contributing to the increase in the membership of the hand hygiene practice.²²

CONCLUSION

In the context of resource management, the incorporation of new materials should be systematized in the post-incorporation phase, the aim of financial evaluation is made and the reflection of this material in the care practice.

The offer of quality products for cleaning of hands, in addition to promoting professional and patient safety, can be translated as satisfaction and encouragement to their commitment.

The direct impact observed was a decrease in the frequency of paper towel replacement coil for part of the team of hospital hygiene; the maintenance of cleaning around the sinks and flooring, promoting clean and pleasant, user satisfaction, since the absence notification diversion product quality.

Emphasizes that the products used for cleaning of the hands should be carefully evaluated before its acquisition, seen the impact that can cause in the activities carried out in health institutions.

The fact that the study be teaching hospital in favor and at the same time increases their responsibility to promote the awareness and adherence to hand hygiene practices, through scientific research and teaching-learning process.

The questions involving the management of material resources and health care practice should be encouraged in the institution, in order to improve the supply of products that effectively meet the needs of users, including hand hygiene.

It is believed that the results of this review in the near future, triggering the incorporation of coil-type towel paper for the hospital, except for the areas that the specific dispenser installation is impossible.

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