Hand hygiene: knowledge and attitudes...



HAND HYGIENE: KNOWLEDGE AND ATTITUDES OF HEALTHCARE PROFESSIONALS

HIGIENIZAÇÃO DAS MÃOS: CONHECIMENTOS E ATITUDES DE PROFISSIONAIS DA SAÚDE HIGIENE DE MANOS: CONOCIMIENTOS Y ACTITUDES DE LOS PROFESIONALES DE LA SALUD

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ABSTRACT

Objective: to evaluate the knowledge and understanding of health professionals in relation to the practice of hand hygiene. **Method:** this is a quantitative, descriptive, cross-sectional study, with 56 professionals from a philanthropic hospital. Data collection occurred by means of two questionnaires. The data were entered into a database in Microsoft® Office Excel, analyzing them by means of descriptive statistics. The results are presented as tables. **Results:** 100% of the professionals consider hand hygiene important and recognize the hands as inducing agent of infection and that the practice of hygiene leads to its prevention; 64% reported carrying out a perfect hygiene before and after patient contact. However, the evaluation of the rate of adherence to opportunities of hand hygiene was low, with the 8.5%. **Conclusion:** although the team of professionals has an adequate perception of the importance of hand washing and has knowledge about the topic, this is not reflected in the routine. **Descriptors:** Hand Hygiene; Patient Safety; Cross Infection; Hospital; Health Care; Disease Prevention; Health Human Resources.

RESUMO

Objetivo: avaliar o conhecimento e a compreensão dos profissionais da saúde em relação à prática de higiene das mãos. Método: trata-se de estudo quantitativo, descritivo, transversal, com 56 profissionais de um hospital filantrópico. Utilizaram-se, para a coleta de dados, dois questionários. Inseriram-se os dados em um banco de dados no Programa Microsoft® Office Excel, analisando-os por meio de estatística descritiva. Apresentaram-se os resultados em forma de tabelas. Resultados: verificou-se que 100% dos profissionais consideram importante a higienização das mãos e reconhecem as mãos como agente indutor de infecção e que a prática da higiene leva à sua prevenção; 64% afirmaram que praticam uma perfeita higienização antes e após o contato com o paciente. Observou-se, entretanto, após a avaliação da taxa de adesão a oportunidades de higiene de mãos, baixa taxa de adesão de 8,5%. Conclusão: revela-se que, apesar de a equipe de profissionais ter uma percepção adequada da importância da higienização das mãos e de ter conhecimento sobre o tema, isso não se reflete no cotidiano. Descritores: Higiene das Mãos; Segurança do Paciente; Infecção Hospitalar; Hospital; Assistência à Saúde; Prevenção de Doenças; Recursos Humanos em Saúde.

RESUMEN

Objetivo: evaluar el conocimiento y la comprensión de los profesionales de la salud en relación con la práctica de la higiene de las manos. Método: se trata de un estudio cuantitativo, descriptivo, transversal, con 56 profesionales de un hospital filantrópico. Se utilizaron para la recolección de datos dos cuestionarios. Los datos fueron introducidos en una base de datos de Microsoft® Office Excel, y analizados por medio de estadísticas descriptivas. Los resultados se presentan en forma de tablas. Resultados: se encontró que 100% de los profesionales consideran importante la higiene de las manos y reconocen las manos como agentes inductores de la infección y que la práctica de la higiene conduce a su prevención; 64% dijieron que hacen una práctica perfecta de higiene antes y después del contacto con el paciente. También se observó, sin embargo, después de la evaluación de la tasa de adhesión a las oportunidades de higiene de manos, la baja adhesión, con 8,5%. Conclusión: se revela que, a pesar de que el equipo de profesionales tiene una adecuada percepción de la importancia de lavarse las manos y tiene conocimientos sobre el tema, pero no lo hacen en su cotidiano. Descriptores: Higiene de las Manos; Seguridad del Paciente; Infección Hospitalaria; Hospitales; Atención de Salud; Prevención de Enfermedades; Recursos Humanos en Salud.

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INTRODUCTION

Patient safety in the scientific and care contexts has been much discussed as a result of adverse events observed at hospital institutions. infections cause many deaths hospitalized patients, reaching 15% of hospitalized patients in Brazil and 10% in the United States of America and Europe.¹ Healthcare-related infections (HCRI) have increased considerably and caused great involvement in the life of patients, being currently considered a public health problem. They are responsible for increasing considerably the costs in care of the patient, in addition to increasing the length of hospital stay, morbidity and mortality at health services.²

One of the recommended measures to reduce healthcare-related infections is the hand hygiene. There are recommendations from normalizing organs regarding products, technique, frequency, among other aspects of the disinfection of hands, to be followed by professionals in the health area, which are based on the relationship between adherence to this practice and the decrease of the endemic rates of infection. However, adherence to hand hygiene is still low. Therefore, the information is not reaching its highest goal, which is changing professionals' behavior, which has caused concern.3 The authors of a study carried out in South Brazil corroborates this opinion when stating that, although the understanding regarding the effectiveness of hand hygiene in prevention of infection is widespread, health professionals inadequately adhere to this practice.4

Hands are essential tools for professionals who develop actions at health services. Consequently, patient safety depends directly on the adherence to protocols of hand hygiene (HH). Moreover, the health professionals behavior of regarding microbial hazards associated with non-adherence to hand hygiene is contradictory, being assigned to the false perception of a risk, the underestimation of individual responsibility and the minimization of the problem. Furthermore, the inappropriate behavior not always refers to the lack of knowledge about the dangers and forms of transmission of micro-organisms.5

Therefore, the non-hand hygiene constitutes a serious public health problem since it leads to the resistance of micro-organisms to pharmacological treatments; increased hospitalization time; increased costs to health systems and increased mortality.⁴

In this context, patient safety represents a global issue and the theme hand hygiene has been addressed primarily in relation to attitudes that contribute to the reduction of nosocomial infections.¹

In this context, the protocol for the Practice of Hand Hygiene in Health Services was created,

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whose purpose is to guide professionals on the practice of hand washing and preventing the transmission of microorganisms. This protocol aims to advise the correct technique and five times that health professionals should sanitize their hands: "before touching a patient"; "before clean/aseptic procedures"; "after body fluid exposure/risk"; "after touching a patient" and "after touching patient surroundings". The deployment of the protocol of hand hygiene is one of the six goals recommended by the Ministry of Health to improve patient safety in the hospital environment.

OBJECTIVES

- To assess the knowledge and understanding of health professionals in relation to the practice of hand hygiene
- To assess the adherence of health professionals to the five moments of hand hygiene.

METHOD

This is a quantitative, descriptive, observational, cross-sectional study, performed at a philanthropic hospital in the city of João Pessoa (PB). The data were collected during the months of September and October of 2017.

The researchers interviewed 56 professionals among doctors, nurses, nursing technicians and assistants, stretcher carriers, cleaning personnel, dieticians, pharmacists, physiotherapists, laboratory technician, receptionists and telemarketing. The instrument used for the survey about the knowledge in relation to the hygiene of hands was a self-administered questionnaire.

1 - Questionnaire to assess the knowledge on hand hygiene.

The participants answered a basic questionnaire adapted from the questionnaire recommended by the World Health Organization about the perception of health professionals about healthcare-related infections and to hand hygiene that addressed issues related to the perception and knowledge of the team related to hand hygiene, such as its importance, its efficiency and occasions they practiced hand hygiene.

The questionnaires were applied during the shift of professionals who were providing care assistance in the infirmaries, which were randomly chosen according to the availability in the service at the application of the same, respecting the criteria of secrecy.

2 - Questionnaire of observation of hand hygiene

Concomitant to the application of the questionnaire about the knowledge, the questionnaire of observation of hand hygiene of WHO,¹⁰ of blind nature to the team, was used in

order to assess the behavior of the team in daily clinical practice. The observation is carried out for 20 through 30 minutes, without disrupting the activities of the professionals, registering the total of opportunities for hand hygiene. The completed form of opportunities includes the five moments of hand hygiene recommended by the WHO, as Pessoa, under

1 - Before touching a patient;

described below:

- 2 - Before clean/aseptic procesures;
- After body fluis exposure/risk;
- 4 - After touching a patient;
- After touching patient surroudings.

An opportunity of hand hygiene is an opportunity where one of the indications for hand hygiene is present and is observed.

The opportunity is a unit that is responsible for the action. The need to sanitize hands is the simple or multiple ratio (the indication that leads to the action). It constitutes the denominator to measure the rate of adherence to hand hygiene by health professionals.

For each professional in observation, the aforementioned opportunities were evaluated, calculating the rate of compliance as follows: rate of adherence to opportunities for hand hygiene is equal to the number of hand hygiene actions performed by health professionals, divided by the number of opportunities performed for the hand hygiene multiplied by 100.

The professionals were approached at the hospitalization unit and, in case they accepted to participate in the study, they were invited to go to reserved room to ensure privacy. The participants signed the Informed Consent Form (ICF), in two copies, before starting the interview, as advocated by Resolution 466/2012, which regulates researches involving human beings.11 This study was approved by the Research Ethics Committee (REC) of the University Center of João Consubstantiated Opinion

1.209.075, September 1, 2017.

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The collected data were entered in a database built in Microsoft® Office Excel, analyzing them later by means of descriptive statistics. The proportions of affirmative answers in relation to the total number of responses obtained in relation to the knowledge on hand hygiene wwre calculated, as well as the number of adherecence to opportunities of hand hygiene in relation to the total number of opportunities observed.

RESULTS

Table 1 describes the questions related to the knowledge and perception on hand hygiene. It shows that 100% of the interviewed professionals considered hand hygiene important acknowledged the role of hands as inducing agent of infection and that the practice of hygiene leads to prevention of infection. Health professionals' hands were recognized as route of transmission of microorganisms by 94.7% of respondents; however, 36% admitted not practicing a perfect hygiene before and after touching a patient.

Table 1. Knowledge and perception about hand hygiene of the interviewed professionals. João Pessoa (PB), Brazil, 2018.

QUESTIONS	YES (%)	NO (%)
Do you consider hand hygiene important?	100	-
Do you consider hand hygiene efficient in the prevention of infections?	96	4.0
Are professionals' hands routes of transmission of microorganisms?	94.7	5.3
Do you practice a perfect hand hygiene before and after touching a patient?	63.5	36.5
Does the use of na alcoholic solution (alcohol gel) facilitate hand hygiene in the work routine?	87.5	12.5
Is it necessary to sanitize the hands after touching patient surroundings?	92.5	7.5

The general rate of adherence to hand hygiene was 8.5%, while the lower adherence observed was the hand hygiene after touching a patient (2.1%) (Table 2).

Table 2. Percentage of adherence to opportunities of hand hygiene of observed healthcare professionals. João Pessoa (PB), Brazil, 2018.

Opportunities	Adherence to hand hygiene (N) Yes	No	Total	Adherence (%)
Before touching a patient	4	24	28	14
Before an invasive procedure	4	24	28	14
After fluid exposure	3	20	23	13
After taking off the gloves	2	33	35	5.7
After touching a patient	1	45	46	2.1
After touching instruments	2	42	44	4.5
Total	16	188	204	8,5

DISCUSSION

Despite the dissemination of the understanding about the effectiveness of hand hygiene in the prevention of infections, the adherence of healthcare professionals to this practice is still insufficient.⁴

Therefore, the deployment of protocols in the care process becomes importante, which passes through the follow-up of recommendations and standardization of procedures aiming to increase patient safety. Hand hygiene constitutes the measure of greatest impact and proven efficacy in the prevention of infections, and its deployment is associated to reduced rates of infections at health services.²

This work shows that, although the team of professionals has an adequate perception of the importance of hand hygiene and has knowledge in relation to the basic concepts of hand hygiene, this is not reflected in their work routine. One of the great challenges in the implementation of the protocols is the adherence of the team to the change of the work process.

The rates of adherence to HH at health services are low, because the general rate has been around 40%, with a variation of 5% through 81%. 12-3-4

This work showed a rate around 8.5 % prior to the implementation of a structured program of hand hygiene. At university hospital, a research observed a compliance rate of 27%, with the emergency room as the area with the lowest adherence, with a rate of 9.4%.¹²

The low adherence of professionals to perform hand hygiene may not be directly associated with the theoretical knowledge of such action, but, rather, with the inclusion of this knowledge in daily practice and in the daily habit of the professional.⁴

In this perspective, the development of actions aiming to continuously foster the knowledge and practice of HH becomes important, by means of constant educational campaigns and mobilizing actions, being important in the perspective of providing instruments for the health work, in order to avoid the illness due to exposure to biological hazards. 13,15

Although the procedure of hand hygiene is simple and low-cost, the incorporation in the daily practice of professionals was not observed. Nevertheless, the adoption of this practice by health professionals is extremely important. The change of culture relates to the offer of training, allied to the support of the managers to this practice.

In addition to the permanent education, understanding and knowledge of the organizational culture of the institution are fundamental for adherence to protocols, since the adherence goes through the greater involvement of people and teams and the responsibility of each one in the work process, facilitating change and demonstrating improvement in the work process and the results expected by the implementation of protocols.¹²

CONCLUSION

The results show that 100% of the professionals consider the practice of hand hygiene important, 64% stated practicing a perfect hand hygiene before and after thouching a patient, but the assessment of the adherence rate to hand hygiene opportunities showed a low rate of only 8.5%.

This study shows the need for a training program directed to professionals, which will allow improving the knowledge about the theme, promoting changes in habits, which, in turn, lead to a reduced number of hospital infections.

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