

**Understanding of the Accompanying Family on the Prevention of Infections Related to Healthcare****Compreensão do Familiar Acompanhante sobre Prevenção das Infecções Relacionadas à Assistência em Saúde****Bárbara Sandra Pinheiro dos Santos<sup>1</sup>****Ivonizete Pires Ribeiro<sup>2</sup>****Sônia Maria Araújo Campelo<sup>3</sup>****Herica Emilia Félix de Carvalho<sup>4</sup>****Bruna Sabrina de Almeida Sousa<sup>5</sup>****Andréia Rodrigues Moura da Costa Valle<sup>6</sup>**

<sup>1</sup> Nurse. Graduated from the State University of Piauí. Teresina, PI, Brazil. Email: barbarapinheiro239@gmail.com

<sup>2</sup> Nurse. PhD in Tropical Medicine. Professor at the State University of Piauí and of the University Center UNINOVAFAPÍ. Teresina, PI, Brazil. Email: ivonizeteribeiro@gmail.com

<sup>3</sup> Nurse. Master in Nursing from the Federal University of Piauí. Professor of State University of Piauí. Teresina, PI, Brazil. Email: soniamariacampelo@yahoo.com.br

<sup>4</sup> Nurse. Master in Nursing. Federal University of Piauí. Teresina, PI, Brazil. E-mail: herica\_emilly@hotmail.com.br

<sup>5</sup> Nurse. Graduated from UNINOVAFAPÍ University Center. Master's degree in Nursing from the Federal University of Piauí. Teresina, PI, Brazil. Email: brunasabrina\_almeida14@hotmail.com

<sup>6</sup> Nurse. PhD in Fundamental Nursing. Professor at Federal University of Piauí. Teresina, PI, Brazil. E-mail: andreiarcmvalle@hotmail.com

**Abstract**

The objective of this study was to analyze the understanding of the accompanying family member regarding the prevention of Healthcare Related Infections (IRAS). A descriptive study with a qualitative approach, carried out with 20 companions of patients in the medical and urological clinics of a general hospital in Teresina-PI. The analysis and discussion were based on answers about demographic data and open-ended questions, in which the profile of the interviewees was obtained according to age, sex, schooling, period of stay, companions, and patient admission for understanding the thematic categories. Two thematic categories emerged: "Companions' Understanding on IRAS" and "Companions' Perception Regarding Orientations Received on IRAS". The results presented in this study facilitate the understanding, resolution and utilization of implementation strategies to improve the quality of the guidance provided by the health team to the companions. It is considered paramount that the nurse and the multi professional team promote quality guidelines that can benefit clients not only in the hospital environment, but also in high contact with society, improving the quality of life.

**Keywords:** Nursing; Cross Infection; Comprehensive Health Care; Infection Control.

**Resumo**

Objetivou-se analisar a compreensão do familiar acompanhante sobre a prevenção das Infecções Relacionadas à Assistência em Saúde (IRAS). Estudo descritivo com abordagem qualitativa, realizado com 20 acompanhantes de pacientes internados nas clínicas médica e urológica de um hospital geral de Teresina-PI. A análise e discussão basearam-se nas respostas sobre dados demográficos e perguntas abertas, no qual se obteve o perfil dos entrevistados segundo idade, sexo, escolaridade, tempo de internação, acompanhantes e admissão do paciente para compreensão das categorias temáticas. Emergiram duas categorias temáticas: "A compreensão dos acompanhantes sobre IRAS" e "Percepção dos acompanhantes relacionadas às orientações recebidas sobre IRAS". Os resultados apresentados nesse estudo facilitam a compreensão, resolução e utilização de estratégias de implementação para melhorar a qualidade das orientações realizadas pela equipe de saúde aos acompanhantes. Considera-se primordial que o enfermeiro e a equipe multiprofissional promovam orientações de qualidade que possa beneficiar os clientes não somente no ambiente hospitalar, mas também no pós-alta, em contato com a sociedade melhorando a qualidade de vida.

**Palavras-chave:** Enfermagem; Infecção Hospitalar; Assistência Integral à Saúde; Controle de infecções.

## Introduction

In recent years, infections have been placed as the focus of studies of researchers in the most diverse fields of healthcare<sup>(1)</sup>. Healthcare-related infection (IRAS) is defined as that acquired during or after the patient's hospitalization and that manifests during their stay or even after discharge when it is related to hospitalization or hospital procedures<sup>(2)</sup>.

IRAS represents a serious global problem that threatens patient safety and is one of the main causes of morbidity and lethality associated with clinical, diagnostic and therapeutic procedures provided to the population, requiring effective prevention and control actions by the health services<sup>(3)</sup>. Infections afflict both patients and professionals and can develop excessive suffering and financial expense<sup>(4)</sup>. They may also result in legal lawsuits and compensations in cases of proven negligence during the care provided<sup>(5)</sup>.

IRAS are considered public health challenges, affecting more than 15% of patients hospitalized, worsening with the emergence of bacterial resistance<sup>(6)</sup>. The control of IRAS in the health units includes hand hygiene practices, which, in compliance with legal and ethical requirements, improve the quality of patient care. The advantages of these practices are visible, from the reduction of morbidity and mortality of patients to the reduction of costs associated with the treatment of infections<sup>(7)</sup>.

Thus, the importance of implementing hand hygiene practices in reducing infection rates

is evident, and most practitioners agree that this practice is the simplest, most effective and most valuable way to prevent the transmission of microorganisms in the environment where nursing care occurs<sup>(6)</sup>.

The presence of family members in hospital units has become increasingly frequent, they develop care actions with their hospitalized relative, which is often based on empiricism. Care actions are carried out in face of the fragility related to the demand of nursing professionals within the hospitals and the family assumes a posture that resembles solidarity<sup>(8)</sup>.

One of the actions performed by family members refers to infection prevention measures. However, the meaning and usefulness of preventive measures of infection are often not well understood by the nursing team, increasing the possibility of transmission, and may cause harm to the patient's rehabilitation process and bring risks to the companions and professionals themselves<sup>(9)</sup>. The interaction of the caregivers with the health team is extremely important for both, because the valorization of this interaction is based on their greater participation in the care plan<sup>(8)</sup>.

In Brazil, companions' stay in hospitals have encountered difficulties due to the lack of structure and organization for the well-being of these people. The family, during the follow-up process in the public hospital, provides care such as patient hygiene, food and mobility at random, without guidelines or instructions, due to the scarcity of human resources<sup>(8)</sup>. These practices

performed without the support of the health team can cause harm to the patients due to the lack of safety in the empirical conducts employed.

Illness has a devastating impact on the family environment. The direct observation of the suffering process of one of the family members can provoke in the companion a series of controversial feelings, often caused by the lack of support and information from the health professionals; this situation reiterates the relevance of the present study.

In view of the above, the guiding question of the study is "What is the understanding of the accompanying family member about the prevention of IRAS?", From the guiding question, the objective was chosen: to analyze the understanding of the accompanying family member about the prevention of IRAS.

## Method

An exploratory study with a qualitative approach, carried out in the medical and urological clinics in a general, public, basic and teaching hospital, from April to May 2016. The study participants were the companions of patients hospitalized in the medical and urological study of the referred hospital, who agreed to participate, after clarifying the study and signing the Informed Consent Form (TCLE).

The criteria for inclusion in the research were: patients' companions, for more than 24 hours, who are literate, and aged over 18 years and under 60 years, who received guidance

during welcoming at the time of admission or in the ward, as well as those who agreed to participate in the study. The exclusion criteria were: companions with frequent shifts.

Data were collected through a semi-structured interview script, containing open and closed questions elaborated by the researchers, divided into two parts: the first part containing sociodemographic data of the relative, such as age, sex, schooling, hospitalization time, companions and admission of the patient; and the second part containing infection-related questions: 1. What do you know about IRAS? 2. Do you know how to prevent infections? 3. Which professional talked to you about IRAS? 4. What guidelines did you receive at admission or at another time of hospitalization on IRAS? 5. Were the guidelines received clear and satisfactory?

The analysis of the data was based on the thematic analysis, which is a set of techniques that allows the description and analysis of the content of the communications, using systematic procedures to describe the content of the messages. Thus, the data were judged from interview transcripts and careful reading of the speeches, in which it was possible to group the responses obtained into categories according to the degree of similarity, to better understand the statements<sup>(10)</sup>.

The research participants signed the two-way TCLE, which provides information on the nature of the research, guarantees complete anonymity and secrecy of the information, and the right to withdraw at any time from the

activities without causing them any harm. Study participants were invited to a private place (a room attached to the nursing station) for the interviews, which happened privately in order to preserve the privacy and confidentiality of the information.

The study was approved by the Research Ethics Committee of the State University of Piauí, under CAAE No. 51907515.2.0000.5209 and Hospital Getúlio Vargas, under CAAE No. 51907515.2.3001.5613. It should be emphasized that the inclusion of the participants in the research obeyed the principles of Resolution 466 of December 12, 2012 of the National Health Council, complying with the ethical precepts of freedom and autonomy.

## Results

The table below shows the profile of the companions who were interviewed according to age, sex, schooling, period of stay, companions and patient admission, which were used to understand the thematic categories.

**Table 1.** Socio-demographic Characterization of Companions (n = 20) Teresina, PI, Brazil, 2016.

Socio-demographic characterization		N	%
Age	20 to 30 years old	05	25
	35 to 40 years old	10	50
	50 to 59 years old	05	25
Gender	Female	13	65
	Male	07	35
Education	Basic education	10	50
	High school	07	35

Length of hospital stay	Higher education	03	15
	Less than 24h	-	-
	More than 24h	02	10
Companion	More than 48h	18	90
	Mother	05	25
	Father	06	30
	Sibling	-	-
Patient	Other(s)	09	45
	Arrived with IRAS	05	25
	Got IRAS	04	20
	There are no IRAS	11	55

Source: research data

Among the participants, the predominant age group was 35 to 40 years old (50%), with a prevalence of females, who were in 13 women (65%), and males who represented 07 men (35%). This circumstance corroborates a study, in which all the companions were women, due to the fact that the female figure is, in most cases, the main responsible for care actions<sup>(9)</sup>.

The data from the study showed that most of the companions were in a socially productive age group and needed to take time away from work for better inpatient care<sup>(11)</sup>.

Regarding the level of education, the following was predominant: basic education level with 10 (50%), high school was 07 (35%) and higher education 03 (15%). These data are in agreement with the research that revealed in the studied population, that the majority has incomplete basic education. The author<sup>(12)</sup> emphasizes that knowing the level of education of the companions is important, since they receive the information and orientation of the

health team, from the perspective of health education and the learning capacity of the people.

The predominant hospitalization time was the period from 48 hours with 18 of the subjects (90%), followed by subjects who have stayed for more than 24 hours, 02 (10%). The study <sup>(13)</sup> shows that the longer the patient's time in the hospital environment, the greater the probability of acquiring IRAS, since these are acquired after admission to the hospital and manifested during hospitalization or after discharge, provided that hospitalization or invasive procedures.

It was observed that the companions who were with the patients the most during hospitalizations according to the results were others (wives, uncles and persons hired by the family) with 09 people (45%), while mothers were represented by only 05 (25%), father 06 (30%) and sibling 0 (0%). A study <sup>(12)</sup> shows that wives are the ones to take care of their partners, mainly because of the common life project assumed by the marriage and the commitment to be together in sickness and health.

## Discussion

In the transcription analysis of the interviews, the central ideas, key expressions and also the organization of the discourses of the two themes that emerged from the two guiding categories were identified.

### The companions' understanding of IRAS

In this category, we sought to analyze the speeches of the companions regarding IRAS. It

was observed that most respondents (11) were totally unaware about the subject. However, for others, knowledge is restricted and linked to a specific type of microorganism: virus and / or bacteria. As can be seen from the following statements:

*It is when the virus enters the body and causes fever and malaise [Ent.1]*

*I only know it is caused by viruses [Ent.3]*

*I think viruses or bacteria [Ent.6]*

*You get it by the bacteria present in the hospital [Ent.7]*

Different microorganisms such as fungi, viruses and bacteria cause hospital infections. The most important are bacteria, because they normally constitute human flora and do not present risks to normal individuals, but if people have a compromised clinical status, they can develop, being called opportunistic bacteria <sup>(14)</sup>. There are also, multiresistant bacteria, which can be transmitted through direct or indirect contact with the patient <sup>(9)</sup>.

This study highlights that 11 (55%) of the respondents did not know how to answer what IRAS was, but when questioned how to prevent it, only 08 (40%) did not know how to respond. However, 12 (60%) described that the methods for prevention of IRAS were gloves and hand washing, which can be verified in the following statements:

*I know only the use of gloves [Ent.10]*

*I wash my hands and wear gloves to not get contaminated [Ent.5]*

One study <sup>(15)</sup> indicates that the level of understanding of family members / companions related to hand hygiene practice was significantly seen, since most of them stated that they understood the importance of this measure for the safety of the patient and for themselves.

Admittedly, the practice of hand hygiene reduces significantly the transmission of microorganisms and, consequently, decreases the incidence of predictable IRAS, reducing morbidity and mortality in health services <sup>(16)</sup>.

According to a study <sup>(17)</sup> on the control of hospital infection, the prevention of IRAS consists mainly of hand washing, correct use of gloves, masks, eye and face protectors, use of protective clothing, proper handling of puncturing materials and care of equipment.

In view of this category, it was possible to observe that the majority of respondents were totally or partially ignorant of the concept of IRAS, and knew superficially the forms of prevention, that is, a small amount knew the methods of prevention, but did not know what IRAS meant.

#### **Perception of accompanying persons related to guidance received on IRAS**

When they were approached about which professional had given the information, the majority (11) of the interviewees reported having been the nurse as the main advisor of care and in

the prevention of IRAS, eight (08) of the interviewees reported not having received any guidance and only one (01) identified the physiotherapist as a guiding professional. According to the following reports:

*The nurse came by and asked me to take some precautions, I did not understand much, but it was supposed to wash my hands before and after picking up my son [Ent.13]*

*I think it was the nurse, said to wear gloves and wash my hands, but here there is no soap in the bathrooms [Ent.14]*

*The nurse came to guide me to wash my hands, and to wear gloves when I touch my husband [Ent.15]*

*The physiotherapist told me to wear gloves because it was dangerous to contaminate myself when I touched my husband [Ent.17]*

As the executor of the Hospital Infection Control Program (PCIH), nurses play a fundamental role in the implementation of all necessary measures and changes in the control of IRAS <sup>(17)</sup>. According to a research <sup>(16)</sup> carried out with accompanying relatives of adults with chronic diseases, most of the time the nursing team is the main responsible for the guidelines transmitted to the companions. Thus, these

professionals have a preponderant role in the control and prevention of IRAS, because it is the largest group and does not have the most time with the hospitalized patients.

Health managers strive to keep health professionals up-to-date through frequent training courses on IRAS prevention measures, yet the knowledge gained is insufficient. Among the factors that hinder the described problem, we highlight the few associated professional experience and the lack of time to forget the practices, directly influencing the inadequate behavioral attitudes in the work environment <sup>(18)</sup>.

It is necessary that health professionals seek to provide information in a clear way, allowing the reduction of anxiety and informing the caregivers that precaution is important so that they do not become a means of disease dissemination within the hospital environment <sup>(9)</sup>.

The results found in the participants' discourses showed the importance of nurses and the nursing team in the hospital care in the control of IRAS. However, the deficiency in the guidelines to the companions is still perceptible, since they were dissatisfied, questioning better conditions related to hygiene as well as in relation to guidelines by the entire hospital team.

According to the questioning of which guidelines were received at admission or at another time of hospitalization on IRAS, the information was clear and satisfactory. Regarding the orientations given, 17 (85%) of the companions were dissatisfied, only 03 (15%)

showed satisfaction in their reports. As the following statements show:

*The nurse said that the hospital has a lot of bacteria and asked me to wear gloves and wash my hands [Ent.11]*

*I understood what infection was, how to take care of me, in the case the basics that is washing my hands [Ent.12]*

*I understood some things, like washing the hands that they speak about here, in the case the steps, I found it difficult to record [Ent.19]*

Nurses are aware of their responsibility for the quality of care they provide to patients and the guidelines given to caregivers, as well as those related to the institution, ethics, laws and standards of the profession, and the contribution of their performance in valuing the care and satisfaction of patients <sup>(19)</sup>.

Nurses are experiencing difficulties in the control of IRAS due to a lack of human and material resources, outdatedness and lack of preparation to implement care and better guidance to the caregivers <sup>(20)</sup>. It is essential to the organization, planning and implementation of protocols, prevention and control programs of IRAS, as well as investments in training for health professionals <sup>(21)</sup>. The IRAS Control Committee is responsible for the training of health professionals, aiming to minimize risks and



diseases related to IRAS (22). As the following speeches show:

*Achei as explicações muito vago e não entendi*[Ent.2]

*Recebi orientação na admissão, só que não entendi porque falta até sabão no banheiro, como vou lavar as mãos correto*[Ent. 8]

*Confesso que não entendi, se falta luvas e sabão*[Ent.9]

*Recebi orientação aqui na enfermaria, mas não entendi muita coisa não, só pra usar luvas, mas quase não dão*[Ent.16]

*I found the explanations very vague and did not understand it* [Ent.2]

*I received guidance on admission, but I did not understand why there is even soap in the bathroom, as I will wash my hands correctly* [Ent. 8]

*I confess that I do not understand, there is a lack of gloves and soap* [Ent.9]

*I received guidance here in the ward, but I did not understand much, not only to wear gloves, but almost did not give* [Ent.16]

In this category, the guidelines were few, but vague and imprecise, making it difficult for the companions to understand that they were dissatisfied, since all evidenced the desire for better information about the content addressed. It is known that hospitalization is a time of stress for patients and families, and that the guidelines given may not be absorbed in full, thus necessitating a new time during hospitalization to be remade.

In this section, health education is understood as the beginning of a teaching-learning relationship for health through dialogue and guidelines, creating possibilities for production or construction of knowledge, seeking to make the individual competent to perceive and understand their needs, as well as such as qualifying the companion to carry out care actions according to their capacity and responsibility<sup>(4-8)</sup>.

Health education for IRAS prevention is part of the patient safety culture that is being disseminated to solve old issues within hospitals. The guidelines passed by the nursing team to family members have the purpose of controlling the spread of potentially pathogenic microorganisms and contribute unequally to safe and harmless care to patients, family members and health professionals<sup>(23)</sup>.

## Conclusion

The objective of this study was to analyze the family member's perception about the IRAS

prevention, in which it was possible to characterize the socio-demographic profile of the participants and to describe the guidelines received on the IRAS during the patient's follow-up. Such information is extremely pertinent due to the importance of the companion in the patient recovery process, and the need for the companion to be well oriented to better offer support to the patient, according to their possibilities of contributing to health care.

The perception of the companions in relation to the IRAS still occurs superficially, because when the nurse transmits the guidelines, there is a failure in the process of verbal and non-verbal communication and, consequently, there is a deficiency in this transmission of information. The companions were dissatisfied and questioned better conditions regarding hygiene as well as the guidelines by the entire health team.

Regarding the guidelines given by the health team, nurses are cited by the caregivers as the main responsible for providing guidelines related to the prevention of IRAS, which is of paramount importance in the midst of the need to implement effective preventive measures in the services of health. It is of the utmost importance that every health professional, especially nurses, should be aware of the risks of infection and their respective prevention measures in order to improve healthcare by continually seeking alternative ways of transmitting meaningful guidance.

The perception of the accompanying family member about IRAS is of paramount importance,

considering that the nurse and the whole multiprofessional team must effectively exercise the necessary orientations through the process of verbal and non-verbal communication to offer a better assistance to this clientele within of hospital institutions.

The assistance of the multiprofessional team also aims to guide clients and companions about the main preventive measures, being hand washing, wearing masks, gloves and caps the most cited within the hospital environment. As far as professionals are concerned these measures become more comprehensive including also wearing glasses, coats and gowns. These measures contribute to the reduction of the IRAS indices in the hospital environment, improving the quality of care provided by professionals and the multiprofessional-family relationship.

In summary, the relevance of this study to the contribution of knowledge and discussion about IRAS in the hospital context is evidenced, bringing to the scientific community the accompanying family member's perception about the prevention of these infections since these are potential agents in the chain of transmission if not have an orientation, an adequate understanding on the importance of this subject for the recovery and safety of the patient.

The results presented in this study facilitate the understanding, resolution and use of implementation strategies to improve the quality of the guidance provided by the health team to the companions, especially the nursing team, since they are the closest professionals and

in direct contact with the patient and the family, thus collaborating with the assistance provided, counseling future health professionals and society in the understanding of their instruction on the prevention of IRAS within the hospital environment.

It is considered paramount that nurses and multiprofessional teams promote quality guidelines that can benefit clients not only in the hospital environment, but also post-discharge in contact with society, improving the quality of life.

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