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*Corresponding Author:

* FABIO SANTOS BARBOSA

Estácio de Sá University

Hand Hygiene: Monitoring the Accession of Health Professionals in a Public Institution of the State Network of Rio de Janeiro

*Fabio Santos Barbosa

Abstract

One of the main challenges faced by the Hospital Infection Control Service is the monitoring of Health Professionals regarding adherence to Hand Hygiene. This study seeks to know and collect data on the subject that involves the multidisciplinary health team regarding the prevention of hospital infections in a hospital, based on studies that show us that many infections are preventable by simply washing the hands. This work has as initial proposal the accomplishment of a literature review, complemented by a field research. This is a descriptive, quantitative case study that was carried out at the adult intensive care center for a five-week period, where ninety CTI health professionals were observed for a period of five weeks for 1h30 each section on several shifts - always diurnal at the beginning of each shift - on two occasions: Before and after contact with the patient. These data will be tabulated and analyzed, using WHO PAHO validated check sheets and questionnaires.

Key Words: Administration, hygiene, hospital infection, health professionals.

Introduction

In the middle of the 21st century, even with the appearance of new technologies and increased clinical knowledge, there is an accelerated and unrestrained increase of highly resistant bacteria that cause infections that can lead to death. This study seeks to know and collect data on the subject that involves the multidisciplinary health team regarding the prevention of hospital infections in a hospital, based on studies that show us that many of the infections are preventable by the simple act of washing the hands. Infections are now a problem that encompasses most or all health institutions, which seek measures that can prevent or ameliorate the number of patients affected by this disease. Assistance should not be based solely on routines, it is necessary to invest in qualified human material, multidisciplinary team training, patient guidance. In addition to the mentioned aspects, our vision will be directed mainly to the nurse, who is the great educator of the community, complementing the process of training, and training of personnel. The Challenge Faced by the Hospital Infection Control Service regarding the monitoring of Health

Professionals regarding adherence to Hand Hygiene. Do health professionals perform hand hygiene procedures frequently? Hand hygiene is the most basic and effective measure in preventing and reducing nosocomial infections. How can managerial and administrative practices guide healthcare professionals toward good care practices? Although there is no doubt about the effectiveness of hand hygiene, studies report worldwide a low adherence of health professionals to this practice. The monitoring of health professionals regarding adherence to hand hygiene is a measure adopted to identify the main difficulties encountered and propose changes for the health professionals' awareness. This work has as initial proposal the accomplishment of a literature review, complemented by a field research. This is a descriptive, quantitative case study that was carried out at the adult intensive care center for a five-week period, where ninety CTI health professionals were observed for a period of five weeks for 1h30 each section on several shifts - always diurnal at the beginning of each shift - on two occasions: Before

and after contact with the patient. These data will be tabulated and, after analyzing them, using check sheets and questionnaires validated by WHO PAHO (PAHO ANVISA 2008), the proposals will be drawn up to raise awareness among health professionals about the practice of hand hygiene.

Literature Review

The management of a health unit is complex, from a large public emergency hospital with intensive care center, with maternity and intensive care unit - neonatal, more complex still. There are several correlated services that need to work in tune so that the whole hospital system is satisfactory, that is, to return to patients their health condition that they had before their hospitalization.

Theory of Administration: The transformations point to a redirection of the organization's objectives, previously focused on the control of production, (...) to another based on information and technology, and hospitals and other health services did not fail to adopt this trend, administrative decentralization and informal communication and flexibility in processes as well as the stimulation of creativity. Since the beginning of the century, companies were organized on the basis of the principles of Scientific Theory, whose precursor, Frederick Taylor, advocated the division of labor, discipline, rationalization of working methods and systems, and standardization of production. In order to ensure that product production standards were met, he suggested the selection, training, and control of workers, including payment for the production generated in each of them. Henry Fayol, seeking to rationalize the administrative structure, proposes the adoption of an adequate structure and functioning compatible with this structure. Fayol emphasizes the principle of unity of command, division of labor, specialization and breadth of control. CHIAVENATO (2011) In the 1930s, management began to value human resources, corresponding to a shift from the emphasis on formal to informal organization, understood as the set of social relations not provided for in regulations and organizational charts and in labor relations, characterized by spontaneity and lack of common purpose. In the 1960s, Systems Theory, according to Kurgant apud Chiavenato (2011), was introduced in organizational analysis, based on the premise that systems exist within systems, are open and their functions depend on their structure. In this context, the system is understood as a set of related parts, whose objectives make the arrangement of the parts not happen at random. Contemporary management models, driven by strategies that allow flexibility in production processes, provide an analysis and

diagnosis of the environment, giving managers the ability to anticipate the future and reduce risks and uncertainties in decision making. Companies should be able to meet the demands of the market in a timely manner, responding to the clientele and the technological advance, making their companies increasingly competitive and thus guaranteeing institutional development.

Models of Management in Health Institutions: In the health area, some attempts have been made to seek management models that are alternative to traditional management models, in which the quality of the services provided, the maintenance of the organization and the satisfaction of the employees must be guaranteed. Health care institutions, especially hospitals, have traditionally been organized in the light of classical administrative theories, which can be seen in extremely rigid structures with multiple hierarchical levels, centralization of power and limited autonomy and responsibility at intermediate / managerial and operational aspects, as well as the marked valorization of the control function, as "production control". As an example of this situation, we cite the logic of organizational design that maintains the dichotomy between the various professional segments involved in health care, with the creation of directories, departments, divisions, sections, sectors and reproduced within each one levels. This logic privileges the mechanized, repetitive work, and limits the initiative and creativity of the professionals. The rigidity of standards and standards defines what and how to do the job. The current health system is fragmented towards the complementarity of health care, characterized by high consumption of resources and low productivity and fails to respond to the expectations of the population and the professionals involved. The current political proposal for the health sector - SUS (Unified Health System) - envisages a technical and managerial reorganization of services, through the adoption of flexible management models and the guarantee of popular participation as a strategy for action. However, for changes to the health system, it is necessary to have a transformation in the practice of health actions, through the involvement of professionals with the service and with the patient, providing greater resolution. As a consequence, it is expected a transformation in the form of organization of the institution, to respond to the needs of the new managerial model. The new management models, according to Campos apud CHIAVENATO (2011), suggest "changes in the structure of the organization, extinguishing the departmentalization and creating units of production according to the logic of each

work process. In this way, all the professionals involved with a certain product will constitute a production unit, that is, the teams will be multiprofessional ". In our opinion, this new organizational logic breaks with the established dichotomy in patient care, in which "each professional does his part", allowing an integral view of care and that of all professionals in the new organizational design. In this new organizational design, communication plays a fundamental role in the articulation between the production units, and the lateral communication flow is privileged in relation to the other senses, since it enables a greater approximation and articulation between services. Faced with these transformations, there must also be changes in the way managers act, understood here as those who respond to the achievement of the organization's objectives. Therefore, the manager must be aware of the need to redefine his role in the organization.

Information Systems for Decision-Making: In the work process, the decision making is considered the function that characterizes the performance of the management. Regardless of the aspect of the decision, this attitude must be the result of a systematic process, which involves the study of the problem from a data collection, information production, establishment of proposals for solutions, choice of decision, feasibility and implementation of the decision and analysis of the results obtained. In the various decision models studied, it is possible to recognize that the decision is not always the result of a sequential process, structured and directed to a single solution. But it is possible to affirm that information is a primordial resource for decision making and that the more structured this process, as in the case of rational and process models, the more indicated is the use of information systems that can respond to demands and informational needs of the decision maker. Likewise, the information required for this type of decision is more objective and quantifiable, making it more appropriate to use information resources that can organize, retrieve and make available the information collected during the work process. Information systems can contribute data that will be analyzed and modified for use in decision making. The study of the structure of the organization allows to know the process of formal and informal communication, recognizing it as a means by which individuals relate within the organization and how it is used to support decisions, aiming at the achievement of institutional objectives. In these environments, values are aggregated to information, transforming it into raw material for the development of the institution's product. Its main

objective is the pursuit of decision-making appropriate, timely, with appropriate people, from the appropriate information, with the least possible cost. In the exercise of the managerial function, the emphasis must be given to information. Some strategies are cited by Davenport (1998) for the management of informational behavior in business environments, such as clarifying the organization's objectives and strategies, identifying informational competencies, concentrating on the administration of specific types of information content, assign responsibilities for informational behavior, create a work network responsible for informational behavior and present all information management problems. Given these strategies, it is possible to verify that information is more a resource for management in business environments and that it is the responsibility of all actors involved in the work process to collect, organize, distribute and make available. In this way, an information system that serves the work process must respond to the demands and needs of the various services and units of the institution. Therefore, information systems for decision support are systems that collect, organize, distribute and make available the information used in this process. In general, decision support systems obtain data from the internal and external environment to the organization and process this data into information. The system operates through softwares that allow the availability of this information in the form of reports, mathematical models expressed in graphs and tables and also allows a virtual meeting between several individuals working with a group within the organization. Information systems in business environments consist of information management, based on the information needs of decision-makers, the collection and collection of data, the analysis of data into information, the distribution of information according to the needs the use of the information by its incorporation in the work process, and finally, the constant evaluation of the results obtained and redirects in the system to meet the demands and anticipate the needs of the decision makers. It is important to note that these systems have contributed to the development of the production process in the institutions and that, in hospital environments, in particular, has made possible greater security for decision making, which results in better patient care.

Administration General Theory: The Theory of Organizations (T.O.) is the field of human knowledge that deals with the study of organizations in general. (...) The administration is nothing more than the rational conduction of the activities of an organization. (...) It deals with the planning,

organization, direction and control of all activities differentiated by the division of labor that occurs within an organization. (Chiavenato 2011) And it is under this latter aspect that this work is structured: the control of the differentiated activities in a hospital organization. In an Intensive Care Center - CTI - it is fundamental that the professionals adopt the hygiene of the hands. The control of the activities of the professionals needs to be exercised by well defined actions and tools and historically we can relate them. The Hospital Infection Control Service that monitors, through its control tools the dissemination and its counter-containment of infections, between patients and their migration within the hospital unit. "At the beginning of the twentieth century, Max Weber, a German sociologist, published a bibliography on the great organizations of his day. He called them Bureaucracy and considered the twentieth century as the century of bureaucracies." (Chiavenato 2011) Thus, the first theoretical of organizations was Weber, he was concerned with its rationality, the relation between the means and resources used and still with the objectives to be achieved. Thus, the organization (whatever) is bureaucratic par excellence. (...) "With the emergence, growth and proliferation of bureaucracies, the administrative theory - hitherto introspective and focused on the internal phenomena of the organization through the structuralist approach, in addition to the intraorganizational approach, has emerged the interorganizational approach. and limited to internal aspects has been expanded and replaced by a broader ". (CHIAVENATO, 2011). The bureaucratic theory developed in the Administration around 1940 by the necessity of organizational model, by the increasing size and complexity of the companies. As a form of human organization based on rationality in order to achieve maximum efficiency. The search for maximum efficiency defined the need for establishing authority in the sense of the probability that a specific command or order is obeyed because it represents institutionalized and official power, with the potential to influence other people. Authority provides power, therefore, to have authority is to have power that depends on legitimacy which is the ability to justify its exercise. Legitimacy explains why a particular group obeys someone's orders. This power requires an administrative apparatus to execute the orders and serve as a point of connection between the command and the commanded. For common sense bureaucracy means paperwork, impeding speed and efficiency, or the adherence of employees to regulations and routines or even the inefficiency of organizations. The Weber

Bureaucracy Concept is just the opposite: "bureaucracy is the efficient organization par excellence." A concept of rationality is intrinsically linked to bureaucracy and in the sense proposed by Weber, rationality implies adequacy of means to ends, this means efficiency. And how to choose a path among the possibilities that each problem or difficulty can present? In this, Lousada and Valentim propose the analysis of what they call "Organic Information" that is defined as the information that is produced internally by the organization, resulting from its activities and functions: "Information is an input of the decision making process, so it plays a fundamental role for any In order to make the right decision, the manager must have selected, treated, organized and accessible internal and external information in a way that allows for the reduction of uncertainties. Therefore, it is of the utmost importance that access to information be in the we name the information produced internally to a certain organization as organic information, since it is generated as a result of the fulfillment of the organizational functions, by the organization's own employees who, at the same time, are producers and consumers. " (2006) The activities of the Hospital Organization obviously produce in-house hospital information. Among the various information and data that a hospital institution can produce are the various indicators of control and monitoring of hospital infection. According to Tadeu Fernandes: "Hospital infection is the most obvious symptom of the inadequacy of a health system. Often mistaken for medical error in the lay press, it places responsibility for its occurrence on the health professional, when in fact it is the final link of a complex chain of events. " (...) It is not logical to believe that the health professional voluntarily contaminates his patients, but failure to observe the control measures has serious consequences and hospital infection continues as one of the main causes of mortality and its control has great relevance in health collective (FERNANDES apud CHIAVENATO, 2011). There are several studies that support the affirmation of the urgent need for measures to control the spread of nosocomial infection and which attest to the hygiene of the hands as the most effective primary control. "Despite this finding of the efficiency of hands hygiene in the prevention of infection transmission, health professionals despise the value of a simple action and do not understand the basic mechanisms of the transmission dynamics of the hands," says Da Silva and Raul (2012). Hand hygiene, besides being a basic and inexpensive measure, is the most efficient and economical way for the prevention of

nosocomial infections and this fact is worldwide recognized and proven by several studies. Anvisa affirms in the Report on self-assessment for Hand Hygiene (HM) presents the Brazilian results for the instrument elaborated by the World Health Organization (WHO). The work is unprecedented and reveals important data about the routines of health security performed by managers and professionals working in health facilities throughout Brazil. Hand hygiene is the most important and inexpensive procedure to prevent transmission of health care-related infections. The Digital Journal "EDPortes (2012) publishes a study that states: Hand hygiene has always been considered a basic measure of patient care. (...) The hands of health professionals have been implicated as a source of transmission of microorganisms in the environment hospital Contamination of the hands of healthcare professionals may occur during direct contact with the patient or through indirect contact with products and equipment around them. Currently, professionals working in health institutions need to be aware of the true importance of handwashing and proper sanitation. This measure is related to good environmental hygiene practices and enables the patient to protect against infections throughout the hospitalization period, since hospital infections are present in the routine of nursing work and are always presented as a risk (EFDPORTES, 2012). The theoretical reference of this work encompasses the administrative need for work control and also the analysis of internal information of the hospital to establish a guideline that, in a change of habits and concepts can change the actions and knowledge rooted in an effective model of administrative work and in this sense the work of the Hospital Infection Control Service - SCIH. It is decisive for the success or otherwise of this control. Hand hygiene (HM) has been recognized and recommended since 1846 as a mandatory practice for healthcare professionals, based on the finding of effectiveness in reducing infections and, consequently, mortality among patients. Although there is no doubt about the effectiveness of hand hygiene and the simplicity of this practice, a low adherence to HM has been reported by several studies worldwide. Therefore, the increase in HM adherence rates during care is considered a priority by several national and international agencies, as is also reaffirmed by the World Health Organization (WHO). In spite of this, in the literature, a standardization of the methods of evaluation to adherence to HM has not been observed. It is understood as hygiene of the hands any act practiced by the health professional in order to clean them, either through the use of soap and

water or alcoholic solutions. The WHO and the Centers for Disease Control and Prevention (USA) recommend that HM occur: before contact with the patient, before invasive procedures, after contact with body fluids, after contact with inanimate surfaces close to the patient, after removing gloves, when hands are visibly dirty, after exposure to spores or pathogens, and when there is a change from a contaminated site from one patient to another site in the same patient. Indications for hand hygiene, which are represented by the situations defined above, refer to moments considered to be high risk for microorganism transmission. On the other hand, each of these situations can also be understood as an opportunity for the performance of HM, regardless of the presence of visible dirt in the hands. For each sanitation opportunity, this act is expected to be performed, and on some occasions more than one HM opportunity may be contemplated by only one HM act. The use of soap and water is highly recommended when hands are visibly soiled in the case of potential contact with spore-forming microorganisms after using the bathroom, and the use of alcoholic solutions is recommended for all other assistance situations where hands are not visibly soiled. Perhaps because of the great diversity of HM indications and the need to be performed according to the professional's judgment, when there is no visible dirt on the hands and the presence of the microorganisms cannot be verified, this practice constitutes a great challenge for control of IRCS. Direct observation of hand hygiene opportunities. The direct observation of HM opportunities has been the most widely used and well accepted approach by researchers to evaluate the behavior and adherence of health professionals to infection control measures, and is considered by the WHO to be the gold standard for monitoring this practice. Such an approach consists of introducing an observer into the work environment to examine whether the health professional in question is performing hand hygiene as recommended by observing HM opportunities and HM acts. The calculation is done by dividing the number of HM acts by the number of HM opportunities observed. For the direct observations, it is possible to analyze different professional categories, different shifts of work, besides several techniques available for HM, which becomes an advantage to the institutions that wish to improve the adherence to HM, because it allows to evaluate specific characteristics of each locality. Oliveira et al (2010)

About the Scih Structure: SCIH is an integral part of the Nucleus of Hospital Surveillance, composed of four commissions with well-defined attributions

that are not part of the interest of this work, but will only be mentioned in order to focus on the work of the service that we want to focus on: CVE - of Epidemiological Surveillance; CAO - Death Analysis Commission; CRP - Chart Review Committee; CCIH / SCIH - Hospital Infection Control Committee. Composition of CCIH: Four Nurses, Two Nursing Techniques, One Nursing Assistant, One Administrative Technician - called Executing Members - And a Biologist - Consultant Member. This is the formation of the CCIH Team currently, at a time of reduction of its cadre that previously was sixteen professionals: eight advisory members and eight executor members.

On the operation and methods of SCIH: The work of SCIH is defined by the POP - Standard Operational Protocol - that has as reference for its elaboration Resolution 227/2010 ANVISA; Ordinance 2616/1998 MS; Manual of Attributions of the nursing team APECIH 2002, which determine their activities which are:- Elaborate and supervise the implementation of measures to prevent the transmission of microorganisms in the hospital environment through the implementation of standards of precaution and isolation of communicable diseases. Assist health surveillance programs such as pharmacovigilance, technovigilance and haemovigilance. Participate with other sectors involved in the elaboration of quality programs, waste treatment and control of environmental contamination.

- Adequate and supervise technical and operational norms and routines - aiming at the prevention and control of IHs - especially those related to invasive procedures

- To notify the Epidemiological and Sanitary Surveillance Service of the SUS management agency of the cases and outbreaks diagnosed or suspected of infections associated with the use of industrialized products.

- Develop, implement, maintain and evaluate the hospital infection control program, adequate to the characteristics and needs of the institution, including at least actions related to:

- Implementation of an Epidemiological Surveillance System for Hospital Infections;
- Adequacy, implementation and supervision of standards and technical-operational routines, aiming at the prevention and control of Health Care Related Infections (IRAS)
- Cooperate with the training and continuing education of health professionals

- To carry out training of the staff and professionals of the institution, with regard to the prevention and control of hospital infections;
- Define, together with the Pharmacy and Therapeutics Commission, the rules for the rational use of antimicrobials - both for therapeutics and for the prophylaxis of infections - germicides, antiseptics and medical and hospital materials
- Evaluate, periodically and systematically, the information provided by the Epidemiological Surveillance System of the infections related to Health Care and define control measures.

On SCIH data collection: There are visits - active search - to critical sectors of the Institution - CTI; Yellow Room (for intermediate care); UPO (postoperative), where Leito a Leito is evaluated to the conditions of health care given to each patient, their condition of hygiene and well-being. And to the Laboratory of clinical analyzes where the results tests that indicate infection or colonization by bacteria are evaluated and through which indicate care in the treatment and care of these patients.

Implantation of an Epidemiological Surveillance System for Hospital Infections;

Adequacy, implementation and supervision of standards and technical-operational routines, aiming at the prevention and control of Health Care Related Infections (IRAS)

External Strategic Diagnosis

The main objective of strategic planning is to provide the necessary foundations for maneuvers that allow organizations to navigate and perpetuate themselves even within changing and dynamic conditions that are increasingly adverse and unpredictable. Successful organizations are those able to adapt and adjust appropriately to the continuous process of changes in the dynamic and competitive world of business; success is all the greater as they can proactively and competitively anticipate these changes. Organizations that survive the changing environmental conditions are those that not only fit in, but anticipate proactively and create the conditions for change that impact the environment and other organizations. To plan is to know and understand the context; it is knowing what one wants and how to achieve goals; is knowing how to prevent and avoid threats; is to calculate the risks and seek to minimize them avoiding vulnerability; is to prepare itself tactically in order to rearrange itself internally; is to dare in relation to the goals proposed and to overcome in a continuous and constant way to offer results every time best. Planning is not only a

glimpse of the future, but above all a way of survival and business continuity as plans, programs and procedures are formalized to act consciously and consistently in the face of contingencies and organizations. Strategic planning is an essential process within the organization as it outlines the guidelines for defining action plans that will result in long-term competitive advantage and sustainability. Strategic planning identifies potential resources, aligns competencies, recognizes strengths and weaknesses, and establishes a set of integrated measures to be implemented to ensure the achievement of planned results. SAPIRO (2009) Managers need only select those components of the environment that are relevant to the strategic process, which are then tracked through indicators. The identification of the boundaries between the organization, the contextual environment and the relational or transference environment - is of fundamental importance for the strategic planning process. Relational environment or microenvironment: Also called transactional environment. It is the immediate and immediate environment of the organization. It is the dimension of the environment in which the organization is an effective participant, influencing the results and being at the same time influenced by them. It is the specific business sector of the organization, made up of customers and consumers, suppliers, competitors and regulatory agencies, where it obtains its resources and places its products and services. This is the field where the organization elaborates and applies its strategy. Identify real opportunities or threats that require some strategic organizational decision. Locate future opportunities or potential threats that have not yet been clearly perceived by the organization. Due to the very nature of the information, it is necessary that its processing takes place on a continuous basis and in constant evolution through four well-identified steps - scanning, monitoring, forecasting and evaluation. The purpose of this process is to ensure the evolution of the organization by identifying the opportunities and threats that emerge from the analyzed environment (SAPIRO, 2009). Strategic knowledge must be built from its roots. In the first part, the organization must look at the world around it, know the environmental context - the macro environment in general and the business sector in particular - to make the external strategic diagnosis and to know the seas where the organization navigates. This means knowing the external context, that is, the organization's business arena as presented in the previous chapter. In the second strand, the next task is to make the strategic diagnosis of the organization. It is now a question of

looking within the organization to analyze its potentialities and strengths, on the one hand, and its frailties and weaknesses, on the other. Through the strategic diagnosis of the organization - also called organizational analysis or internal audit of the organization - a competitive assessment of its potentialities is made - strengths that need to be explored more intensively - and its fragilities - weaknesses that need to be corrected and improved (SAPIRO, 2009).

Hospital: Health is the greatest good of the human being, and he is increasingly striving to promote actions, in order to maintain or improve it. In the words of Ribeiro (1977): Health is a real good, at the same time abstract, that only wants to obtain when it loses it and it becomes necessity, materialized in its opposite, illness, thus, the felt need in health is determined by its opposite, that is, their loss. The possession of this good, health, can involute to this other state, the necessity, by accident or perceived illness. In this case, we do not know where the good ends - the health - and the disease begins - necessity, where it ends the normal and starts the pathological. For Ribeiro (1977, p.25), the hospital is an "institution destined to hospitalize, for diagnosis and treatment, people who need daily medical care and constant nursing care."

According to WHO report apud Borba (2006): The hospital is an integral part of a medical and social organization, whose basic function is to provide the population with comprehensive medical care, curative and preventive, under any care regimen, including the home, and is also a center for education, capacity building human resources and health research, as well as referral of patients, and it is responsible for supervising and guiding the technically linked health establishments. The hospital according to Kawamoto (1986) has five distinct functions of service delivery, namely: preventive function, being restricted basically to outpatient clinics. For hospital discharge post-discharge control and prevention of pathologies and complications; educational function, with public health information for the family, training and improvement of health professionals; scientific research, directly related to health; rehabilitation function, with return of the patient to their environment and activities, and finally curative function, which is their main function, mainly in the Brazilian health scenario. Shaw (2003), hospital organizations have the functions of: (a) preventing diseases, offering assistance and surveillance to the population, and contributing to health education and hygiene at work; (b) restore health, performing

diagnosis and curative treatment of diseases in general; and (c) promote research and teaching undergraduate, postgraduate and continuing education.

Hospitals, according to the concept of Bezerra (2002), can be classified in: General, specialized, short-term, long-term, official and private individuals. For this author, the General Hospital is the one that serves the patients who carry diseases of varied medical specialties. This type of hospital may have its action limited to an age group, particular layer of the population or specific purpose. In turn, the Specialized Hospital is the one that serves, predominantly, patients who need a certain medical specialty. The short stay hospital can be understood as the one in which the average number of days in which the patients are hospitalized is less than 30 days, whereas in the long-stay hospital, patients are hospitalized for a period of more than 30 days. Finally, Official Hospitals are those maintained by different levels of government (federal, state or municipal), while Private Hospitals are those legally constituted as a private law legal entity. The hospital can be classified by clinical aspects, number of beds and how much the model of construction. Being considered as a general hospital, when this service is intended to attend and offer assistance to all medical specialties, and may have specifics regarding the age group, social layer and purpose (school or university hospital etc.). The special hospital is designed to treat certain conditions, and is limited to it. Another way to better understand the hospital universe, and its distribution is number of beds, this also reveals its ability to meet the demand and its work potential. A hospital of up to fifty beds is considered small, while a hospital of fifty to one hundred and fifty beds is of medium size. A hospital to be considered of large size should have from one hundred and fifty to five hundred beds, while a hospital with a capacity of more than five hundred beds and considered special or extra (KAWAMOTO, 1986).

The Hospital in History: According to Góes (2004), the word hospital comes from the Latin *hospitalis*, adjective derived from *hostes* (guest, foreigner, traveler, conviva). By extension, what gives warm clothing, which hosts. Other names have been added, hospital, host, etc. At the beginning of the Christian era, the terminology most used was of Greek or Latin origin: *Nosocomium* Place to treat patients, *asylum*, sick; *Nosodochium* Place to receive patients; *Ptochotrophium* Asylum for the poor; *Poedotrophium* Asylum for children; *Xentrophium* Asylum of refuge for foreign travelers; *Gynetrophium* Hospital for Women;

Gerontokomium Asylum for old people; *Hospitium* Place where guests were received, hence the name hospice for establishments that received poor, incurable or insane patients. The hospital as a therapeutic instrument is a relatively new invention, dating from the late eighteenth century. The awareness that the hospital can and should be an instrument for healing appears clearly around 1780 and is signaled by a new practice: the visit and the systematic and comparative observation of hospitals (FOUCAULT, 1979). For the A.C. times there are no historical sources, assistance is mixed with religious, medical and social matters. "While for the Western world a structure of social medicine and hospitals was formed in the eighteenth century, for the civilizations of Mesopotamia and the East, health care takes place in another context and culture, which has been absorbed by the Western world, the Eastern and Mesopotamian practices, consisted in a practice of administering medicines and care followed by prayers to Isis and Horus, principle of all good" (PASSION, 1987). However, Costi (2002) states that the essence of the hospital began with Christianity *nosocomium* came to be regarded as a place to treat the sick, the poor and the pilgrims. For some authors, a *nosocomium* founded by St. Basil (269-372 AD) at Caesarea, Cappadocia, in the second half of the fourth century, is the first Christian hospital. For others, it was the hospital built in Rome in the same century. The religious foundations existing in the hospital organizations go back to the seventh century from the monasteries. Religious learned medical notions and soon extended their practices outside the convents (GÓES, 2004).

For Góes (2004, p.9) the church played a fundamental role in the development of hospitals: As religion takes into account various aspects of human hygiene, those concerns have been transferred to the buildings of their hospitals. Nurseries separated by sex, by convalescent, by medical specialty, dietetic cuisine, library and asylum of orphans. It also enabled those who were discharged to get financial help for the first out-of-hospital expenses. The food was good and the patients suffering from insomnia offered music and personal assistance to make him sleep. In the Renaissance (14th century), religious congregations were losing control of hospitals and these became more municipal (COSTI, 2002, 32). The hospital setting of Western and European societies and that is being described in this first moment of formation and origin of hospitals depict a civilization and a historical period of humanity, with formation and contributions to the current model of health in much of the world. In India the assistance had its pinnacle with Buddhism, whose doctrines of

kindness, were very encouraged. "These treated diseases with diets, baths, cysteines, inhalations, and sangrias" (PAIXÃO, 1987). They also used medicinal plants, and they had great demands on the nurses, they demanded a set of qualities and knowledge. Until the beginning of the eighteenth century the hospital maintained the basic functions of spiritual transformation and assistance to death, and the general hospital was a place of internment, where sick people, fools, thieves, prostitutes, etc. are juxtaposed and mixed. It is also, in the middle of the eighteenth century, a kind of mixed instrument of exclusion, assistance and spiritual transformation, in which medical function does not appear (FOUCAULT, 1979). In Brazil, hospital care began soon after the Discovery (1500). Portugal had the habit of transferring all its collection to the colonies cultural and in the period of discovery was the system created by Queen Leonor de Lencastre, which gave rise to works of mercy, cultivating with the institution of the Holy Houses. Brás Cubas founded in Santos, in 1543, the first hospital in Brazil. Some years later, Olinda, in Pernambuco, built his first hospital and before the end of the sixteenth century St. Paul created his Holy House. With Independence and the republican regime, there were practically no governmental initiatives that established norms for the construction of hospitals. Only after the Revolution of 1930 did new initiatives attempt to restructure concepts, standards and standards of hospital construction (GÓES, 2004, p.11). From military tents and palatial types, the hospital has come a long way along the dominant architecture. The hospital typology seems to have not yet found its own character. It appropriates several architectural types, but maintains the same objective since the eighteenth century: to be a curing machine (COSTI, 2002).

Nursing in this historical context of the hospital and its insertion in this scenario, is a result of the historical moment of each people, their beliefs, religion and customs. For the Christian era, nursing was represented by the deaconesses, and by religious orders, who performed the tasks of caring for and healing the sick, it was an activity, a work of an exclusively spiritual character, directed toward charity and benevolence. Nowadays this feature is still much sought after by hospitalized clients, who appeal to the nurse's kindness to heal their pain, despair, pampering, and even to vent their petty feelings of hatred and rancor for assistance, food, and anger of the period of hospitalization.

Incidence of Hospital Infection: The hospital environment may represent one of the factors that

cause nosocomial infections, due to the survival of the microorganisms in the hospital, which is related to the temperature and humidity of the place. there is adequate heating. They become predisposed to acquire hospital infections through exposure to microorganisms, which can be caused either by preexisting infectious agents in the endogenous or exogenous flora, and there is a great influence with the relationship between the client, the pathogens and the environment where found. The etiological profile of hospital infections has been changing in the last decades, which are attributed especially to the indiscriminate use of antimicrobial agents with consequent development of microbial resistance (BARBOSA et al., 2006). It is understood that the factors that determine the occurrence of infections are related to the debilitating state of the clients themselves and those that are independent of the client and that can be associated to the place of hospitalization, the aggressions and the care provided. It is possible to verify in this sense that age is one of the factors to be considered, raising questions about the application of resources in the ICU, since in Brazil the rapid and continuous increase in the number of elderly (> 60 years old) increased from 03 million in 1960, to 07 million in 1975 and 14 million in 2002, with an increase of 500% in 40 years, and an estimate that will reach 32 million in 2020, has provoked discussions related to health care with repercussions in ICUs (DAVID, 2005). Hospital infections become a serious problem for health institutions that do not carry out adequate control, which leads to unnecessary expenses with medication, control, active search and search of the infection focus within the institution, control must be performed to prevent incidence of hospital-acquired infections, as well as continuing education for employees, making them aware of the major problem of infections (PRADE, 2004). In order to support the National Program for the Control of Hospital Infection, Federal Law 9.431 was promulgated, which obliged all Brazilian hospitals to establish a Hospital Infection Control Committee (CCIH). This commission is represented by doctors, nurses, others, that create a set of actions to be followed to reduce as much as possible the incidence and severity of hospital infections (PRADE, 2004). It is the responsibility of the hospital manager to formally establish the CCIH, appoint its components by means of an act of its own, provide the necessary infrastructure for the correct operation of this commission, approve and enforce its internal regulations, guarantee the participation of the CCIH President in the collegiate bodies deliberative and policy-makers of the institution (such as technical

councils, regardless of the nature of the entity that maintains the health institution). Ensure compliance with the recommendations formulated by the Municipal, State / District Control of Hospital Infection Control, inform the official municipal or state agency about the composition of the CCIH and any changes that may occur, promote the education and training of all personnel hospital care (PRADE, 2004).

Results and Discussion

Calculation of Accession: The adherence to hand hygiene is the ratio of the number of shares to the number of opportunities as expressed by the following formula:

$$\text{Adhesion (\%)} = \frac{\text{Hand hygiene actions}}{\text{Opportunities}} * 100$$

In the observation form, the observed indications are "classified" as opportunities for hand hygiene (the denominator) against which the actual hand hygiene action is placed (the action serving as a numerator). These two variables allow membership to be calculated. The results for membership can be calculated globally, but can also be divided by professional category or indication. Such results, when presented, may be appropriate by the user who can relate them to their professional category or the types of contact they have with patients and their environments. (PAHO ANVISA 2008)

How can one observe the hygiene of the hands?

The direct observation of health professionals during their daily work routine is the most accurate way to study hand hygiene practices. It provides opportunity to identify the behavior of health professionals and to evaluate the lessons learned as well as the remaining failures. Observation results help determine the most appropriate interventions for promotion, instruction, and hand hygiene training. The main purpose of the method proposed here is to produce large-scale data on adherence to hand hygiene. These data should be collected through the direct observation of health professionals in charge of patient care.

What is the role of observers?

The observer's primary role is to openly observe practices and gather data on hand hygiene using the proposed methodology and instructions. Before doing this, observers should be familiar with the methods used in a promotional campaign, learn how to use the tools available, familiarize themselves with the concept of the five indications, and be able to identify and distinguish the five indications over

numerous activities. The objective of the observer's job is to provide a general picture of how health professionals adhere to hand hygiene. The results of the observations are used only to promote, instruct and train health professionals as part of the Global Patient Safety Challenge. "Clean assistance is a safer care." The results of the observations should be anonymous and should not be used in the team's administrative assessments. This ensures that the data collected is confidential.

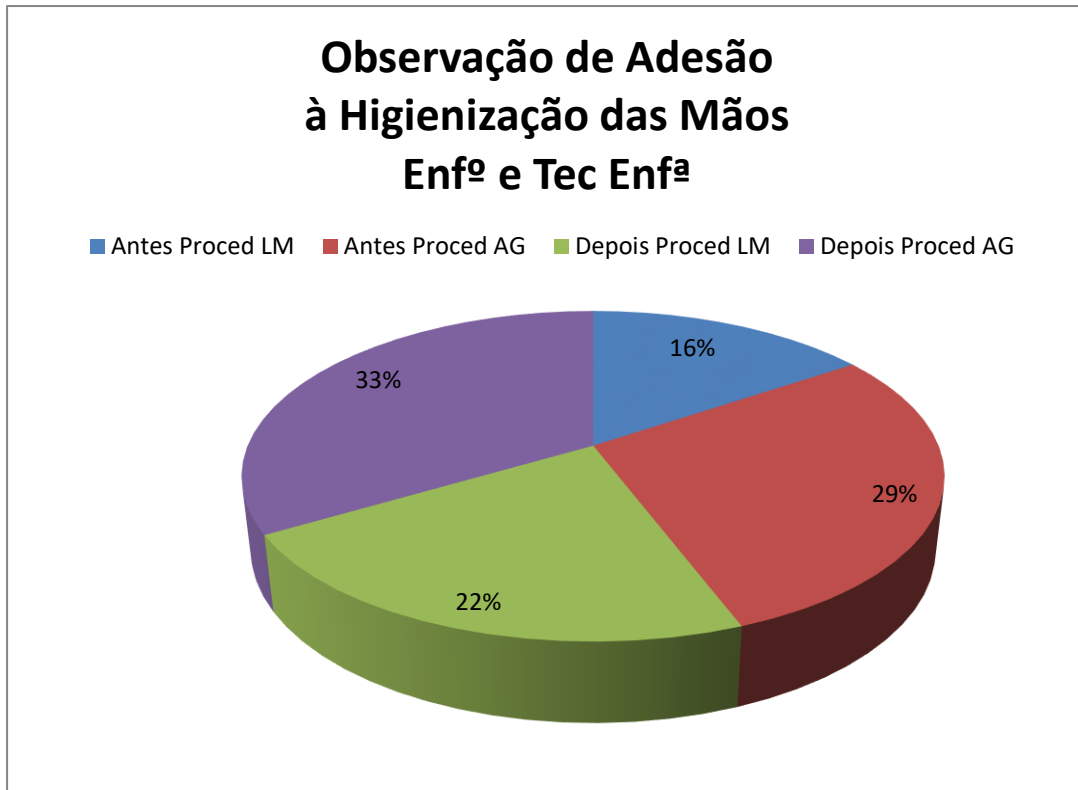
Why observe hand hygiene?

The purpose of hand hygiene observation is initially to determine the degree of adherence of health professionals to hand hygiene practices, as well as to assess the quality of performance of procedures and facilities. Depending on the level of adherence of health professionals and the environment, together with unit priorities, measures are developed to promote and improve hand hygiene practices. An observation immediately after the intervention period makes it possible not only to assess adherence to hygiene but also the impact measures achieved by the intervention. In addition, observation is a way to draw the attention of health professionals to the importance of the act: simply by paying attention and showing interest in hand hygiene, an immediate promotional effect is achieved. The results related to adherence to hand hygiene, measured during two different periods (baseline and follow-up / monitoring) corresponding to the periods before and after implementation of the improvement strategy hand hygiene, can be very useful for the health service. For example, interpret rates of healthcare-related infections measured in the same periods as the primary indicator of success. Depending on the intensity of the activities and indications, observers should decide to observe one or two health professionals so as not to miss opportunities during the care sequence. For example, if practices are being observed in an Intensive Care Unit, only one health care provider should be observed at a time. For observation purposes, only health professionals working with and around patients are involved and, depending on the institution's objectives, all or only a certain category of professionals will be observed.

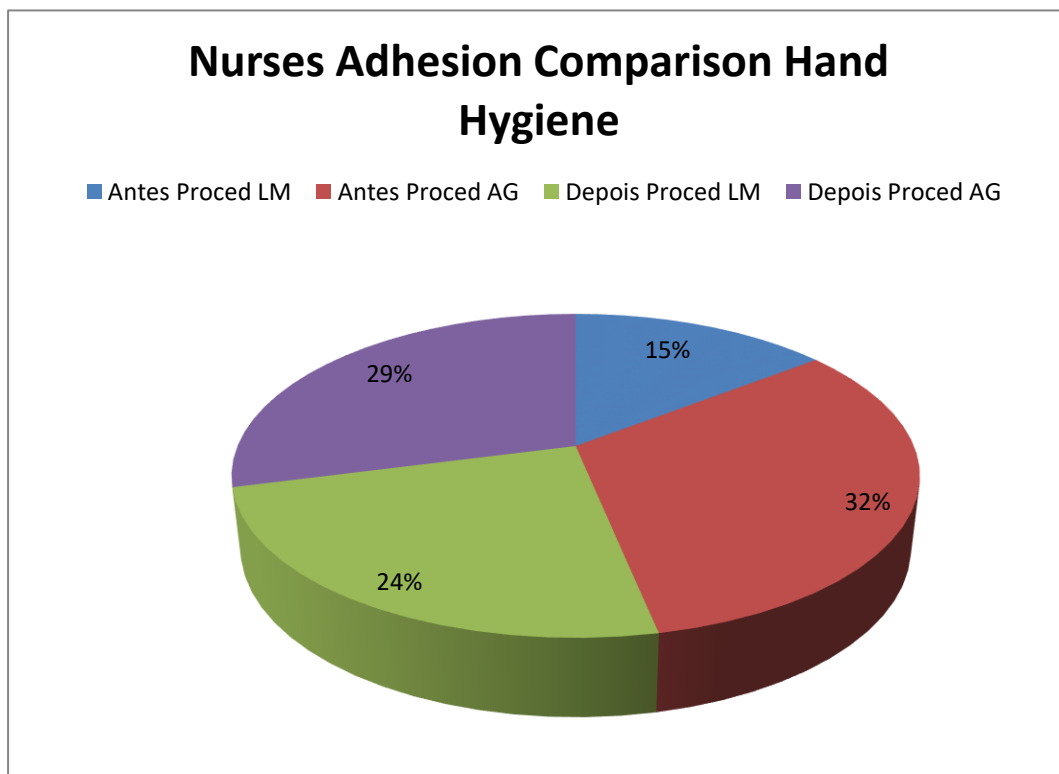
The Lifted Numbers that were Observed in Field Work: The percentages of the total number of Nurses and Nursing Technicians observed. Graph 1 shows the total percentages for both professional categories, whereas graph 2 shows the percentage observed only for the Nurses. Figure 3 shows the percentages observed only for Nursing Technicians.

Subtitle
LM = Wash your hands with soap and water
AG= Used Alcohol gel

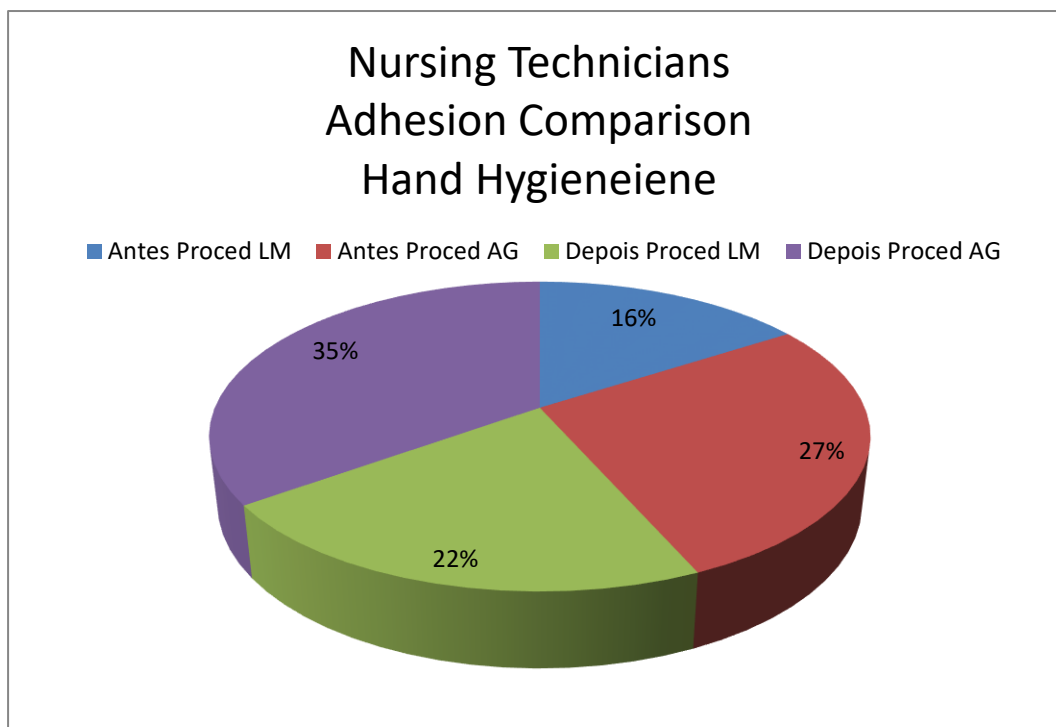
Graph 1: Observation of adherence to Hand Hygiene: Nursing and Nursing Technician



Graph 2: Nurses: Comparison of Hand Hygiene Adhesion



Graph 3: Nursing Technicians: Comparison of Hand Hygiene Adhesion



Strategies for Hygienization of Hands: Health care-related infections are considered a global public health problem, as they affect patient safety, as they contribute to prolong hospitalizations, increase the resistance of microorganisms to antimicrobials, generate additional costs for patients, their families and health services and increase mortality. In patients admitted to the Intensive Care Unit (ICU), the risk of acquiring infections is increased five to ten times in relation to the others, given their intrinsic vulnerability and exposure to risk factors, which include invasive procedures, surgeries complex drugs, immunosuppressive and antimicrobial drugs and interactions with the health team. In this sense, to prevent and control infections related to health care, hand hygiene is recognized worldwide as a simpler and more efficient procedure in the fulfillment of this function, since many of these infections are transmitted by contaminated hands of health professionals during their practice care. Although scientific evidence shows the relationship between increased hand hygiene and reduction in the rate of infection, adherence to this procedure still remains unacceptably low, with an average rate of 40%. To promote hand hygiene and, consequently, patient safety worldwide, the World Health Organization (WHO) has created the multimodal strategy with the theme "Clean assistance is a safer care", stimulating health services to hygiene of the hands as an institutional priority. This strategy covers the education of professionals, the fixing of visual reminders at strategic points, the monitoring

of hand hygiene practices and performance feedback. (PRADO et al., 2012) Several studies show the positive impact of promotion strategies on hand hygiene in the rate of adherence of professionals to this practice. In Brazil, although the subject of hand hygiene is discussed, the impact of promotion strategies on hand hygiene in the rate of adherence is little investigated. Thus, given the problems related to healthcare-related infections, the vulnerability of patients hospitalized in ICUs to infections, the importance of hand hygiene in this context, and the urgency of changing the current care model by reversing care technologies in favor of comprehensive health care, the present study is proposed. To ensure proper performance, WHO recommends that hand hygiene promotion campaigns emphasize the elements related to the technique and indications to sanitize them, ie the five moments. It is noted that health professionals adhered to hand hygiene more as a measure of individual protection than to promote patient safety, since adherence was greater after contact with the patient. (PRADO et al., 2012) In this study, the limitations of some variables that could influence the hand hygiene adherence rate, such as the nursing team dimension, the complexity of the hospitalized cases, the workload, the time of training, the number of employment relationships that were not measured.

And how do you see the hand hygiene?

The direct observation of health professionals during their daily work routine is the most accurate way to

study hand hygiene practices. It provides opportunity to identify the behavior of health professionals and to evaluate the lessons learned as well as the remaining failures. Observation results help determine the most appropriate interventions for promotion, instruction, and hand hygiene training. (PAHO / WHO, 2008). The main purpose of the method proposed here is to produce large-scale data on adherence to hand hygiene. These data should be collected through the direct observation of health professionals in charge of patient care. The observer's primary role is to openly observe practices and gather data on hand hygiene using the proposed methodology and instructions. Before doing this, observers should be familiar with the methods used in a promotional campaign, learn how to use the tools available, familiarize themselves with the concept of the five indications, and be able to identify and distinguish the five indications over numerous activities. objective of the observer's work is to provide a general picture of how health professionals adhere to hand hygiene. The results of the observations are used only to promote, instruct and train health professionals as part of the Global Patient Safety Challenge. "Clean assistance is a safer care." The results of the observations should be anonymous and should not be used in the team's administrative assessments. This ensures that the data collected is confidential. The purpose of hand hygiene observation is initially to determine the degree of adherence of health professionals to hand hygiene practices, as well as to assess the quality of performance of procedures and facilities. Depending on the level of adherence of health professionals and the environment, together with unit priorities, measures are developed to promote and improve hand hygiene practices. An observation immediately after the intervention period makes it possible not only to assess adherence to hygiene but also the impact measures achieved by the intervention. (PAHO / WHO, 2008) In addition, observation is a way to draw the attention of health professionals to the importance of the act: simply by paying attention and showing interest in hand hygiene, an immediate promotional effect is achieved. The results related to adherence to hand hygiene, measured during two different periods (baseline and follow-up / monitoring) corresponding to the periods before and after the implantation of the hand hygiene improvement strategy, can be very useful for the health service. For example, interpret rates of healthcare-related infections measured in the same periods as the primary indicator of success. Depending on the intensity of the activities and indications, observers should decide to observe one

or two health professionals so as not to miss opportunities during the care sequence. For example, if practices are being observed in an Intensive Care Unit, only one health care provider should be observed at a time. For observation purposes, only health professionals working with and in the vicinity of patients are involved and, depending on the objectives of the institution, all or only a certain category of professionals will be observed. What is the appropriate behavior during observations? Observers should inform observers of their role. At each session, they should introduce themselves by telling their names, position and explain why they are there. The observations do not justify breaching the principle of patient privacy. This means that observers should be discreet in their positioning and in their movements on the spot. During the session, observers should not interfere with activities. Inherent in an organizational position. Knowledge of role is important for nurses to facilitate their performance in health care systems. The conflict of roles in an interpersonal system, that is, the non-adequacy of the self to the role to be played, can increase the tension or stress in the environment, interfering positively or not in human interactions. In the experiences nurses experience, a knowledge base on social systems is essential, provides the framework for the definition of social relations and establishes rules of behavior, mode and action. The social system is a system of organized limits of social roles, behaviors and practices developed to maintain values and mechanisms of regulation of these reactions. Organization, which is how ongoing activities are managed to achieve goals. In it, human beings spend most of their lives because individuals and groups are their social units. Understanding the organizational structure helps nurses identify and address conflicts between the organization and its professional roles and functions. Health care-related infections are considered a global public health problem, as they affect patient safety, as they contribute to prolong hospitalizations, increase the resistance of microorganisms to antimicrobials, generate additional costs for patients, their family and health services and increase mortality. The numbers raised in the field survey are shown in the charts on pages 26 and 27 which demonstrate poor adherence to the hand hygiene routine. In order to control them - IRAS - hand hygiene - their adhesion by as many professionals as possible - should be sought with information that can be implemented with posters in the sinks and alcohol gel points and weekly training of professional teams using techniques that sensitize the professional to good health care practices.

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