Infection in intensive care Unit: the Hospital audit on prevention and control

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SUMMARY

The hospital audit this is a branch of accounting that has been used by various professions, including for health, nursing, more specifically in healthcare organizations. The audit appears as an important tool in the transformation of work processes that has taken place in hospitals, as the infection prevention and control, this control is done by the hospital infection control Committee (CCIH) that has to perform internal audits, evaluating the performance of hospital infection control program and minimization of incidence and severity of nosocomial infections. Internal audits should be carried out periodically by the hospital units to observe the degree of infection present. **Objective**: to Analyze the functionality of an audit in the prevention and control of hospital infections in the intensive care unit. **Methods**: data will be collected through bibliographical study in 2005 to 2014 period in the following databases: SCIELO (Scientific Electronic Library) and LILACS (Latin American and Caribbean Literature on health sciences), the University Library from Amazon. This research is quantitative in character. **Conclusion**: at
the end of this work concluded that only through a team of extensively trained health and universal care suggestions is it possible the prevention of hospital-acquired infections, requiring that all professionals involved respect and carry out all the norms established by the CCIH. It is important to note that hospital infections are acquired after admission of the patient in a hospital, which may appear during the hospitalization of the patient or after its high and can be raised because some hospital procedures or even hospitalization.

**Keywords:** Hospital Audit. Prevention. Infection.

**INTRODUCTION**

According to Motta (2005), Riollino (2007) the audit word stems from the Latin *audire* meaning to hear. However, the term can be better clarified by the word of the English language audit, which has the meaning of scan, fix and make sure. Therefore, the audit focuses on systematic and formal evaluation of an activity to establish whether she is being achieved according to your goals. It is a branch of accounting that has been used by various professions, including for health, more specific nursing, due to globalization and given the need of companies to earn the job of nursing at medical auditor auditor, considering his General function. According to Raja (2009) currently, the audit in health has in some subdivisions ranging from classification to its execution.

In healthcare organizations, the audit appears as an important key in the transformation of work processes that has taken place in hospitals, such as the control and prevention of infections (SCARPARO, 2007). The audit that is consistent in this regard is the doctor that consists of an assessment of the qualitative and quantitative aspects based on health assistance. Also covers organizational, operational and financial aspects, with the objective to seek quality of care provided to patients (SCARPARO, 2005). He is currently a large number of professionals that make health and audit, so that it is executed correctly, it is necessary that the Auditors (internal) are aware of the activities being audited, as well as audit and cost flow of materials and medicines (KINGS, 2008).

According to the Audit Standards Manual (1998) the national audit System-SNA, established by art. 6 of Law 8,689, 27 July 1993 and regulated by Decree 1651, of 28 September 1995, covers the three management levels that make up the SUS-Federal, State and Municipal levels. He is auditing activities, supplementing other instances of control and subsidizing the planning process of health actions, execution, technical management and qualitative assessment of the results obtained.

In this vision, is the preparation of the guidance document, driven to the Auditors of the SNA, with General and conceptual aspects of auditing, as well as the set of technical and administrative actions that make up this activity. Aims at the acquisition of the quality of the actions and services provided in the
field of health, the audit noted action in analytic and operative investigation activities, focusing on a systematic and independent examination of an activity element or system, to define whether the health actions and their results, are of Concordat with the provisions designed and with standards and legislation in force (MANUAL of AUDIT STANDARDS, 1998).

The infection is acquired or transmitted infection in the whole hospital space. Currently, 15.5% of hospitalized patients have some sort of infection. This condition alludes high costs for the health system as a result of the increase in the length of stay and additional diagnostic and therapeutic care (MARTINEZ; Fields; Nogueira, 2008). Second Gastmeier (2009) this situation is associated due to long hospitalization, both in hospital and in intensive care unit.

With the advent of antibiotics, physicians trusted that infections would disappear; However, the abuse by their use, resistant germs, increasing the problem. The only way to decrease this evil is for control and prevention, coordinated by a hospital infection control Committee, which, although it is a requirement, only half of the Brazilian Commission, has this hospitals and yet a minority carries basic activities of control, according to a survey conducted by the Ministry of health (CALVALLINI; BISSON, 2005). The Commission of infection control in Health Services is a body that provides advice to Clinical Direction of the unit, with the fitness program control of hospital-acquired infections, with the purpose of promoting the community advised and protect the clinical staff and the hospital (EVORA, 2008).

So on 6 January 1997 the 6,431 Federal law, which requires all hospitals to constitute Brazilian hospital infection control Committee (CCIH) that will need to act in accordance with the program developed by the institution itself. The Act also established the obligation to establish a hospital infection control program (PCIH), defined as a set of actions developed deliberately and systematically with the goal of minimizing the maximum incidence and severity of nosocomial infections (LIGHT; Martins, 2007).

The hospital infection control Committee consists of 2 levels of performance, consultants and performers. The consultants will be represented by services: doctors, nursing, pharmacy and microbiology, the executioners will be members, at least 2 technicians of the health area or at the top level for each 200 beds or fraction of this number with load time of 6 hours for the nurse and 4 hours for other professionals, and 1 of the members must be performers, a nurse (ARAÚJO, 2009)

Thus, the present work had as objective to analyze the functionality of an audit in the prevention and control of hospital infections in the intensive care unit.

**METHODOLOGY**

Data were collected by means of bibliographical study, being searched 35 articles in the period from 2005
to 2014 in the following databases: SCIELO (Scientific Electronic Library) and LILACS (Latin American and Caribbean Literature on health sciences), the University Library of the Amazon, for the research was used to Audit key word, CCIH and infections. and hate, used 22 more relevant information, this research is quantitative in character.

RESULTS AND DISCUSSION

CONCEPT OF MEDICAL AUDIT

The internal audit Institute of Brazil (AUDIBRA RULES, 2011) States that the internal audit is an independent appraisal, founded within the Organization to search and judging its activities as a service to this organization. The same Institute shows, clearly, that from a legal standpoint is private function the audit of accounting. An auditing firm that is willing, in the Social contract, make clear such imputation on the object of the company, will be forced to have a partner-accountant and record in Regional Accounting Council (CRC).

The medical audit is defined as the set of activities and actions of monitoring, evaluation and control of the processes and procedures adopted, as well as the service provided, aiming at their best fitness and quality, detecting and saneando them any distortion and proposing measures for their best performance and resolution. (CIAMPONE; KURCGANT, 2004). The definition of health audit, according to 64.3% of the authors, is related to the qualitative analysis of the assistance, corroborating with the premise of the professional's work, which is to offer to your customer assistance of good quality (SCARPARO, 2008).

To measure the effectiveness and efficiency of administrative processes and assistance, auditing practices may be used. The audit is exposed, discussed and given as one of the items effective quality management. Through it, it is possible to detect problems, analyze them and find the causes that operate on the same (MOTTA; LEAO; ZAGATTO, 2005).

Good auditor must be an Honorable negotiator in various situations, expressing domain of its activity. Finally, it should be ethical, respecting their professional code and impartial regulatory applications, performing judiciously, honestly and objectively their work, maintaining absolute confidentiality of confidential information which come to their knowledge (CHEBLI, 2007).

Medical auditing can be achieved in different ways, they are: medical audit which is achieved in order that the procedures are audited before they occur. Usually is attached to the procedures or releases health plan guides, and is performed by doctors (Greek, 2005; CIAMPONE, 2004). In the area of health, the professionals who develop must be trained specifically for this function (BRITO, 2006).
The audit operational medical is the time in which are audited the procedures during and after the hearing officer acts with the service, with the purpose of monitoring the condition of the patient in the hospital, giving the origin and managing the relocation, helping in the release of procedures or materials and medicines of high cost, and also checking the quality of assistance provided. It is at this time that the auditor may suggest, with the agreement of the attending physician, other medical alternative to the user, such as Chronic case management (Greek, 2005; GAIDZINSKI, 2004).

Medical analytic audit covers the activities of examination of the data collected by Preventive and operational Auditing, and conferring with management and indicators with indicators from other organizations. In this process, the Auditors should have knowledge relevant to health and administrative indicators, and that hurts the use of tables, charts, and databases. In this way, are good at gathering information related to the health plan, as well as about the problems detected in each health service provider. Consequently, such analyses cooperate substantially for the management of the resources of the organisation or public enterprises (white, 2001; ATTIÊ, 2005).

There are various ways and methods of auditing in health, which direct the work to a specific character, but in General, all State that the auditor is responsible in its activities (MELO, 2008).

Medical audit activity is mentioned in the list of the medical functions, through RESOLUTION nº 1,627 CFM/2001: "coordination activities, direction, leadership, expertise, audit, supervision and teaching of the private medical procedures include medical acts and shall be used solely by doctor".

Even the resolutions that define the medical specialties, such as CFM RESOLUTION No. 1,763/2005, leave the question of audit to another instance, according to the text: "audit will be designated special area and will receive another 3 type specification".

The audit included operating medical audit of accounts-labeled high hospital visit – what happens after the discharge of the patient. However, still in the hospital environment, such process comes before this account be sent to payer source, having the auditor the right of full medical records for review. In this case, possible deficiencies or non-conformities can be negotiated prior to submission of the hospital bill payer source, with mutual and formal agreement. Another possibility is the audit of accounts being hit at the premises of the paying organization. On audit of accounts are the standards of Hospital infection control Committees (CCIH) (KOTLER, 2005; FALK, 2001).

Audit, however, is a function in primary application throughout the systematic/mechanical gear/composing with the business planning, implementation, administrative cycle domain, expansion of quality to be practiced by all professionals/participants of organizations (SANTOS, 2008; TIPPLE, 2003).
In the area of health, eventually emerging hospital audit that comes with new dimensions, manifesting its importance within the hospitals. It is a systematic and formal evaluation of an activity that is developed by a professional, subsidizing care quality presented by encouraging customers, families and professionals. When applying the technique of auditing, identifying and solving the problems, we can guarantee quality healthcare administration (ALMEIDA, Saints 2008).

When the auditing service is implemented in the hospital, she will be joining the other departments, and that interconnection will enable the success of this work (RAM, 2009; SANTOS, 2008).

HOSPITAL INFECTION CONTROL COMMITTEE

The history of hospital infection is deployed in medical history that began with the struggle for survival and even a world clearly ruled by powerful forces and hidden. For centuries mankind has used archaic medicine, however, with the demonstration and observation, especially in Greece, India and China the knowledge was scientific paper expounding to medicine to settle as a science (OLIVEIRA, 2005; CORREA, 2008).

Only in 460 BC. that Hippocrates recorded the biological phenomena, collaborated in order to take care of the injured, highlighted the importance of washing hands before surgery, the use of boiled water and wine for cleaning wounds. Subsequent to Hippocrates, Galen, a Greek physician, reported the cure without the formation of secretions in gladiatorial wounds after washing with wine and with linen yarns (FONTANA, 2006).

From the first half of the 19th century that the infection started to be focused by health professionals. Reports show that in 1847, the physician Ignaz Semmelweis, Phiipp in Vienna, recommended hand washing with chlorinated water to all examiner, before touching the mother. With this measure can reduce drastically the rate of maternal mortality by puerperal fever (FONTANA, 2006; TURRINI, 2004).

However, the beginning of the concerns with the hospital-acquired infections in Brazil followed the rapid industrialisation process that started in the Government of Juscelino Kubischek and with the event of penicillin-resistant staph outbreaks, by reports from other countries with technologically advanced medicine (ANVISA, 2000).

The 80 was the more respectable to the occasion for the development of hospital infection control in Brazil. Started a health awareness to the importance of the subject and formed several control committees in hospitals. In this context, the national health surveillance Agency (ANVISA) is responsible for coordinating the national programme for hospital infection control (PNCIH). The PNCIH commands national actions for the prevention and control of nosocomial infection, establishing criteria, parameters,
and methods for the development of activities (AGU, 2009; GIUNTA, 2006).

The Foundation of these programs is very important because the hospital infections commonly collaborate to increase the duration of hospital patient and costly resources for its treatment, allow legal actions against the professional and the hospital and surrounding the image of the Organization in front of consumers (GEORGE, 2006; GIUNTA, 2006).

For an effective hospital infection control you have to be in the hospital motivated professionals, working in a team, respecting each within their duties, updating frequently and with ability to auto assess (BRITO, 2006).

On 6 January 1997, founded 6,431 Federal law, which establishes the obligation of the existence of a hospital infection control Committee (CCIH) and a hospital infection control program (PCIH), given as a set of actions, developed, deliberately and systematically, with the aim of reducing, as much as possible, the incidence and severity of infections (FERRAZ, 2010; PATEL, 2008).

CCIH should be composed of health professionals, top level, designated; will be divided into two types: consultants and executors, being the consultants emissaries of the following services: medical, nursing, pharmacy and microbiology; and the members of the executors SCIH representatives, CCIH and, therefore, are responsible for implementation of actions planned for the control (SEQUEIRA, 2005; PEREIRA, 2005).

According to the Secretary of State of Goias Cup (2010) the CCIH purposes are: countersign an epidemiological surveillance system; assess technical standards, according to the particular requirements of motherhood, for the prevention of infections, particularly in the regulation of the obligations and measures of isolation and monitoring of your attention; recommend measures to proceed in the prevention or reduction of hospital infections; deploy via the SCIH, control of the use of antimicrobials; reporting on the internal rules, its mission, goals and objectives, aiming for the understanding and cooperation of all servers.

Other purposes are: insert an information system and prevention of endemic diseases that contribute to smooth out the hospital infection rates; notify update programs for the exchange of information and experiences, with other institutions, under local, State, national and international levels; encourage and contribute, within the framework of its competence, to the research and deployment of rational methodologies that can contribute to the promotion of hospital infection controls; standardization and routines for use of the products and methods of quality control of germicidal, insecticides, antiseptics and disinfectants (SECRETARY of STATE of GOIAS CUP, 2010).
The control of nosocomial infection (CIH) is an executive body, connected to the Vice Presidency in charge of Medical compliance with the planned actions of prevention and hospital-acquired infections admitted by CCIH (HCPA, 2010).

As describes, 1998 2,616 Ordinance, is the competence to conduct internal audits evaluating CCIH compliance with hospital infection control program and register them. Internal audits should be carried out periodically by the hospital units, through specific protocols to verify compliance with the specific legislation that deals with hospital infection control.

The function of audit in CCIH is to identify problems in the structure, in the process and in consequence, giving information to approve actions that improve the quality of care. The hospital audit is an administrative unit that has the ability to assist managers in implementing the mission and in the continuity of the entity, as a result, ability to innovate, making more and better with less resources, reaching predefined targets and aggregation of people increasingly satisfied with the standard of services submitted (BRITO; FERREIRA, 2006)

The lack of standardization and socialization of the various practices are commonly observed and cause the inefficiency of the service of organizing the rules and routines (standard operating procedures-POP) for its operation, which should be adopted uniformly by all professionals. Its preparation can be done in partnership with the continuing education Service and the hospital infection control Committee, followed by training for the socialization of information imposed in service to health care professionals (PARAMESWARAN, 2005; Fernandes, 2000).

The inactivity or inefficiency of hospital infection control Committee (CCIH) is another very common found in hospitals and causing damage to the institution, either by lack of capacity or profile of the professionals to play in the area or by lack of awareness of the Manager as suggested by CCIH needs are not always met. Often occurs the CCIH does not have a hospital infection control program (PCIH) deployed and implemented, working without a direction for their actions (SILVA, 2005; ADAMS, 2002).

Many hospitals still do not realize the importance of the contribution of the institution's administrative Advisory CCIH, diagnosing and considering the attendance and distribution of hospital infection among inpatients and graduates, interfering through the deployment and/or implementation of infection control measures to ensure the quality and safety of your assistance (SCARPARO, 2005; Brito, 2006).

**CCIH IN INTENSIVE CARE UNIT**

The concern in sustaining control of hospital-acquired infections in Brazil appeared in the Decade of 60, coming up to the first publications and reports listed by theme (rock; HELM, 2010).
There are several factors that increase the numbers of cases of infection in the ICU. We can mention those related to patient: transplants, immunodepression, Burns, procedures and techniques to which patients are displayed (ŁICHY; MARQUES, 2007).

Hospital infections are the most obvious indicators of the nonconformity of the health care system, although the responsibility is, in General, bestowed to the health care professional or institution providing assistance (OLIVEIRA, 2005).

The control of infections in INTENSIVE CARE is a difficult and of great importance for the proper functioning of the unit, showing thus the precision of both individual and protection of the patients, as well as the implementation of appropriate techniques and procedures in order to prevent any injury to the patient, another factor, not least is cleaning the hospital environment (pine; NICOLETTI, 2008). Therefore, hygiene of the hands in the hospital environment, becomes a priority, evaluating practice to be the most important in isolation to reduce the rates of these infections in the hospital environment, by reducing the transmission of microorganisms by hands (LIRA, 2008)

It is extremely important to stress the need for a Hospital inside the unit and HICC mainly inside the intensive care Unit. So also assume how important is the participation of nurses, to have an appropriate performance on the difficulties presented caused by recklessness, ineptitude and even lack of information from some professionals in this environment (PEREIRA; SHARMA, 2005).

The work of a multidisciplinary team of Auditors tend to achieve greater success in the results of the work carried out only by a professional category because each of these audits and evaluates better the procedures of your specific training area (King, 2007).

CCIH brings the objective not only to prevent and fight the infection, favouring in this way the whole community, but also to protect the hospital and clinical staff. In a unit of health, CCIH is a basis for all professionals who operate directly with patients for the purpose of preventing and controlling hospital infection and its probable consequences (CHI, 2008; CAVALLINI, 2005).

The CCIHs of the institutions have an important role to analyze and determine the cause or culprit in cases of IH (ANTONY, 2000).

The annihilation of IH's impossible task, and its etiology and installation conditions in man in imbalance in the disease process. Therefore, the prevention and reduction have been shown to be viable in various cases and situations, as already proven in practice Hospital (CHI, 2008; CAVALLINI, 2005). The CCIHs work with a policy of epidemiological surveillance of IH set, linked to workers ' health and occupational risk prevention (MOSCOVICI, 2007).
The establishment and functioning of the CCIH conceive a progress in the Organization of the hospital structure for the reduction of multiple problems, such as the need to reduce and control rates of infections, which determined the application of preventive, educational and epidemiological control, which, through a process of collective awareness, to bring infection rates to acceptable limits (ZAVASCKI; Cross, 2005).

Therefore, it is necessary to study and determine the CCIH, collective and institutional form, monitoring actions, training and bureaucratic measures (control and routing) covering the healthcare professionals and all those who make hospital assistance (ODELET, 2007).

Regarding the strong evidence of the effectiveness and efficiency of activities of monitoring and control of infection, there is no study showing exactly which methods and programs should be taken in implementing the monitoring and control of nosocomial infection. The behavior modification, so necessary in this context focuses on the double. It takes the practical and theoretical substantiation and the absorption and application of preventive measures, the adequate assistance imperative. The formation of habits by professionals and not only the theory of knowledge, in objective to be achieved by the CCIH (PITET, 2005; PUCCINI, 2008).

Thus, the problem of hospital-acquired infections also requires governmental order changes, as the design of a policy for the maximum effectiveness of infection control, which goes beyond the establishment of legal and regulatory mechanisms for the regulation, which embraces the user population of the services, making it a participant in the process (TURRINI, 2002; PUCCINI, 2008).

We need to reflect on all the acceptable can collaborate in strategic change of the current panorama that is exposed, such as: the introduction of the subject in the curricula of undergraduate courses in the area of health; the investment in the provision of postgraduate courses in infection control for healthcare professionals, especially outside the big cities; legal guarantees on recognition and professional autonomy infection controller; review of current legislation aiming at compliance with effective prevention and control measures for both public and private institutions; investments in research, seminars and updates (COUTO, 2003; LENTZ, 2003).

As well, the audit area in Brazil's health is a field open to new studies, researches and records that can increase the practice of the activity, which has been gaining more and more importance in the face of rising costs in health care (KINGS, 2007).

**CONCLUSION**

At the end of this study concluded that only through a team of extensively trained health how to universal care suggestions is likely the prevention of hospital-acquired infections, requiring that all professional
respect and exercise all the norms established by the CCIH.

The hospital infection control Committee (CCIH) consists of a group of professionals that have functions of preventing hospital-acquired infections, sustain and evaluate hospital infection control program (PCIH), among other functions.

It is important to note that hospital infections are acquired after admission of the patient to a Hospital that can appear during the hospitalization of the patient or after its high and can be caused due to some hospital procedures or even hospitalization.

The social reality of the development of the dominant production of health care comes demanding new work processes not related to direct patient care, with several of them carried out by nurses as: CIH, hospital quality control, as well as the management of hospital hygiene.

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