INTERVENIENT VARIABLES IN THE PERFORMANCE OF HEALTH CARE-ASSOCIATED INFECTION CONTROL PROGRAMS

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Rúbia Aparecida Lacerda**

ABSTRACT

Objective: To assess variables interfering in the performance of Healthcare-Associated Infection Control Programs. Method: Quantitative study presenting descriptive statistics from hospitals with more than 50 beds. Two instruments were used in data collection: one to establish a general characterization of hospitals and their respective healthcare-associated infection control programs and one previously validated instrument presenting four clinical indicators to assess the healthcare-associated infection control programs. Results: The best scores were obtained by private healthcare facilities and associated with the existence of some type of certificate/accreditation; having a healthcare-associated Infection Service staff composed of at least one nurse, one physician and other professionals (e.g., nursing and/or biochemical technician and/or one administrative technician); having a formal employment contract with a nurse and physician; nurses and physician working in the healthcare-associated infection service with a minimum number of work hours exclusively dedicated to the service; nurses' and physicians' experience; considering training in the prevention and control of healthcare associated infection when hiring. Conclusion: Variables interfere in the performance of healthcare-associated infection control programs.

Keywords: Health evaluation. Indicators of health services. Hospital infection control program. Patient safety. Public health policy.

INTRODUCTION

Healthcare-Associated Infections (HAIs) are considered multifactorial occurrences that threaten the safety of patients, being one of the sources of avoidable adverse events\(^1\), thus, controlling and preventing HAIs is necessary. Much advancement has been employed in order to improve the quality of health care delivery.

Despite the advancements achieved after Law 9.431/19971 (ordinance 2.616/19982 of Ministry of Health) was promulgated, there has been a continuous battle in hospital settings to control and prevent HAIs in everyday practice, with a direct impact on how Healthcare-Associated Infection Control Programs (HAICPs) are implemented\(^3-4\).

The continuous assessment performed by HAICPs is complex because there are many factors linked to the quality of care delivered to patients, considering that avoidable adverse events, among which are HAIs, may cause irreversible damage to patients.

Studies using clinical indicators to assess the performance of HAICPs in states located in the southeast of Brazil reveal these indicators are an important tool to enhance understanding of these programs at a national level with a view to improve the quality of care delivery\(^5-7\). Therefore, it motivates us to investigate the performance of HAICPs in other Brazilian regions, specifically in the north of Brazil.

The Manual de Avaliação da Qualidade de Práticas de Controle e Prevenção de Infecção Hospitalar [Assessment of Healthcare-Associated Infection Prevention and Control Practices Handbook] presents these validated clinical indicators to assess the structure, process and outcomes according to types of specific procedures based on the Donabedian Quality-of-Care framework considering three categories: structure (physical area, equipment, input, staff), processes (procedures and properly applied technology) and outcomes (effects of healthcare)\(^8,9\).

In this study, the application of these indicators, taking into account associations with selected variables to verify correlations with the HAICPs’ results, is important for continuous assessment intended to improve...
and expand the ability to reduce HAIs in hospital settings with the possibility to make comparisons among studies addressing standardized data as these indicators have already been adopted by other studies.

Given the previous discussion, this study’s objective is to assess variables that interfere in the performance of Healthcare-Associated Infections Control Programs (HAICPs).

**MATERIAL AND METHOD**

Quantitative and evaluative study addressing variables that interfere in compliance with HAICPs by applying previously developed and validated assessment indicators.

This study was conducted in hospital facilities with at least 50 beds in the city of Manaus, AM, Brazil addressing nurses and physicians working in HAICPs by applying two instruments to collect data.

A list of hospitals was obtained from CNES (National Register of Health Facilities), DATASUS (Information Department of the Brazilian Unified Health System), in the first semester of 2015. Specialized outpatient facilities, health houses, home care, day-care hospitals, healthcare units, and mental healthcare units, and other facilities without beds were excluded. Current legislation for the control and prevention of HAIs does not enforce HAICPs in facilities other than hospitals; thus, a total of 28 hospital facilities located in the city of Manaus were considered eligible.

Data were collected from nurses and only one physician working in the HAICPs implemented in the hospitals included in this study. Two instruments were used to collect data: one to obtain a general characterization of hospitals and their respective HAICPs, including open- and closed-ended questions; and one instrument, which was based on the Assessment of Healthcare-Associated Infection Prevention and Control Practices Handbook, addressed previously established indicators to assess HAICPs, presented in Figure 1.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Elements Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical and operational structure of Healthcare-Associated Infection Control Programs (CPTOS)</td>
<td>It assesses the control programs’ structure, including technical-operational training and support, such as human resources, physical infrastructure, and technical and administrative tools. It includes ten assessment components.</td>
</tr>
<tr>
<td>Operational Guidelines of Healthcare-Associated Infection Control and Prevention (CPOG)</td>
<td>It assesses operational guidelines of hospital wards or services, such as handbooks, standards and operational procedures developed or incorporated to the HAI control program. It includes 15 assessment components.</td>
</tr>
<tr>
<td>Healthcare-Associated Infection Epidemiological Surveillance System (CPESS)</td>
<td>It assesses whether HAI control programs include and implement an epidemiological surveillance system through activities that include active searching, profile of epidemiological indicators, identification and reporting of HAI events. It includes ten assessment components.</td>
</tr>
<tr>
<td>Healthcare-Associated Infection Control and Prevention Activities (CPA)</td>
<td>It assesses HAI prevention and control activities in the various hospital wards and services, including inspection, orientation and assessment of the adopted guidelines, participation in the meetings held in different sectors, consultations and routine clarification of spontaneous demands. It includes 14 assessment components.</td>
</tr>
</tbody>
</table>

Analyses were performed to verify whether some of the HAIPC variables and compliance were associated. Because it is a census-survey, all the results originate from analyses of population parameters using some of the facilities’ variables, in addition to variables that concern the HAIPC, namely: 1) Hospital sponsor entity: private/philanthropic or public; 2) Accreditation/certification; 3) Internal auditing; 4) Minimum representative services in the HAI Service: nursing, medicine, administration, pharmacy; 5) Daily workload of nurses and physicians exclusively dedicated to the HAI Service: a minimum of six hours for nurses and a minimum of four hours for physicians; 6) Length of experience of nurses and physicians in the HAI Service; 8) Prior knowledge of nurses related to the HAI Service; 9) Considering training in the control and prevention of HAIs at the time of hiring.
The formulas provided in the operational handbook for each indicator were used to analyze compliance in the assessment process of HAICPs.

This study is part of a PhD dissertation and was approved by the Institutional Review Board at the University of São Paulo, College of Nursing, Opinion Report 952.178, from 2015. The participants signed free and informed consent forms at the time of their interviews.

RESULTS

Table 1 presents the indicators’ mean scores per type of sponsoring entity (public, private or mixed). Note that private and mixed facilities presented higher scores in all indicators when compared to public facilities, while standard deviation is greater among public facilities than among private and mixed facilities. A greater standard deviation indicates heterogeneity, that is, a greater variability among the scores obtained by public facilities.

We verified whether having an accreditation/quality certification influences the scores HAICPs obtained. Table 2 shows that 68.00% of the facilities scored between 75.00% and 100% on the CPTOS indicator regardless of having a quality certification, while 32% of the facilities scored below 75.00%. A total of 78% of the facilities with a certification scored between 75.00% and 100%, while 22.00% scored below 75.00%. Among those without certification, 63.00% scored between 75.00% and 100%, followed by 38.00% that scored below 75.00%.

In regard to the CPOG indicator, the scores obtained by 48% of the facilities were between 75.00% and 100%, regardless of whether they had a quality certificate, while 52.00% of the facilities scored below 75.00%. When the existence of a quality certificate was taken into account, 56.00% of the facilities scored between 75.00% and 100%, while 44.00% of the facilities scored below 75.00%. Among those facilities that lacked certification, 44.00% scored between 75.00% and 100%, and 56.00% scored below 75.00%.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Certification</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
| CPTOS      | [0%, 75%)     | 9(100%)| 16(100%)| 25(100%)
|            | [75%, 100%]   | 7(78%) | 10(63%) | 17(68%)
| Total      |               | 16(100%)| 25(100%)
| CPOG       | [0%, 75%)     | 4(44%)  | 9(56%)  | 13(52%)
|            | [75%, 100%]   | 5(56%)  | 7(44%)  | 12(48%)
| Total      |               | 11(100%)| 21(100%)
| CPESS      | [0%, 75%)     | 3(33%)  | 7(44%)  | 10(40%)
|            | [75%, 100%]   | 6(67%)  | 9(56%)  | 15(60%)
| Total      |               | 9(100%)| 16(100%)| 25(100%)
| CPA        | [0%, 75%)     | 7(78%)  | 15(94%) | 22(88%)
|            | [75%, 100%]   | 2(22%)  | 1(6%)   | 3(12%)
| Total      |               | 9(100%)| 16(100%)| 25(100%)

Table 1. Compliance of HAICPs according to sponsor entity (public, private or mixed). Manaus, AM, Brazil 2015.

Table 2. Compliance of HAICPs associated with the existence of accreditation/quality certificate. Manaus, AM, Brazil 2015.
Still without considering the presence of certification, 60% of the facilities scored between 75.00% and 100% on the CPESS indicator, while 40.00% scored below 75.00%. Among those facilities with a quality certificate, 67.00% scored between 75.00% and 100% while 33.00% scored below 75.00%. Among those without a certificate, 56.00% scored between 75.00% and 100% and 44.00% scored below 75.00%.

In regard to the CPA indicator, regardless of certification, 12.00% of the facilities scored between 75.00% and 100%, while 88.00% scored below 75.00%. A total of 22% of the facilities with a certificate scored between 75.00% and 100% while 78.00% scored below 75.00%. Among those without a certificate, 6.00% scored between 75.00% and 100%, while 94.00% scored below 75.00%.

An analysis was performed to verify whether there was an association between scores obtained for the indicators and whether internal auditing was implemented. A small disparity was found between the marginal proportions of the scores’ intervals and proportions given auditing implementation for the CPTOS, CPOG and CPESS indicators. Thus, there may be a relationship between performance for the indicators and auditing implementation. No association was found with the CPA indicator; that is, internal auditing seems not to influence performance obtained in the CPA indicator. Note that the scores obtained by the unit that does not implement auditing were equal to zero for the CPESS and PA indicators.

Table 3 presents the mean scores obtained for the indicators associated with the exclusive daily workload of physicians, which is supposed to be at least four hours. The mean scores obtained by the facilities with physicians working four hours daily were compared to the score obtained by the only facility with physicians working more than four hours.

Table 3. Compliance of HAICPs associated with exclusive daily workload of physicians (minimum of 4hrs). Manaus, AM, Brazil 2015.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>4 hours</th>
<th>More than 4 hours*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>CPTOS</td>
<td>87.98</td>
<td>10.16</td>
</tr>
<tr>
<td>CPOG</td>
<td>77.71</td>
<td>15.47</td>
</tr>
<tr>
<td>CPESS</td>
<td>79.38</td>
<td>22.77</td>
</tr>
<tr>
<td>CPA</td>
<td>44.86</td>
<td>21.40</td>
</tr>
</tbody>
</table>

*Only one observation

The mean scores obtained for the indicators associated with nurses’ exclusive daily workload, which is supposed to be a minimum of six hours, are presented in Table 4. Comparison of the facilities with nurses working six hours daily and those with nurses working more than six hours daily shows that higher scores, on average, were obtained by the group of facilities with nurses working more than six hours.

Table 4. Compliance of HAICPs associated with exclusive daily workload of nurses (minimum of 6hrs). Manaus, AM, Brazil 2015.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>6 hours</th>
<th>More than 6 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>CPTOS</td>
<td>81.9</td>
<td>19.6</td>
</tr>
<tr>
<td>CPOG</td>
<td>68.2</td>
<td>24.9</td>
</tr>
<tr>
<td>CPESS</td>
<td>71.0</td>
<td>29.9</td>
</tr>
<tr>
<td>CPA</td>
<td>34.9</td>
<td>22.2</td>
</tr>
</tbody>
</table>
Table 5 presents the mean scores obtained for the indicators associated with length of experience of nurses in the HAI Service. In regard to the CPTOS indicator, the group of facilities having nurses with 5 to 10 years of experience presented the highest mean score (91.35%), while the group with more than 10 years of experience presented the highest performance in the CPA indicator, with a mean score equal to 41.51%. The group with 5 to 10 years of experience presented the best performance for the CPESS indicator, with a mean score equal to 90.00%, and also the best performance for the CPA indicator, with a mean score equal to 90.38%.

<table>
<thead>
<tr>
<th>Length of experience</th>
<th>CPTOS Mean</th>
<th>SD</th>
<th>CPOG Mean</th>
<th>SD</th>
<th>CPESS Mean</th>
<th>SD</th>
<th>CPA Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 5 years</td>
<td>73.59</td>
<td>26.35</td>
<td>71.45</td>
<td>23.84</td>
<td>56.00</td>
<td>32.31</td>
<td>38.47</td>
<td>25.66</td>
</tr>
<tr>
<td>Between 5 and 10 years</td>
<td>91.35</td>
<td>10.49</td>
<td>63.62</td>
<td>27.33</td>
<td>90.00</td>
<td>10.00</td>
<td>41.51</td>
<td>29.46</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>83.15</td>
<td>9.18</td>
<td>81.90</td>
<td>13.20</td>
<td>78.57</td>
<td>19.59</td>
<td>40.03</td>
<td>13.79</td>
</tr>
</tbody>
</table>

The mean scores obtained for the indicators were associated with the physicians’ time of experience in the HAI Service. The group of facilities with physicians with fewer than five years of experience presented the highest mean score for the CPTOS indicator, 90.38%. The group of physicians with 5 to 10 years of experience presented the highest mean score for the CPOG indicator, 82.50%. The group of facilities with physicians from 5 to 10 years of experience presented the highest mean score for the CPA indicator, 60.17%.

Analysis of the mean scores obtained for the indicators associated with the nurses’ prior knowledge related to their work in the HAI Service revealed that the mean scores obtained by facilities with nurses who did not present prior knowledge were higher for all the indicators compared to the mean scores obtained by facilities where nurses presented prior knowledge. The highest difference was observed for the CP6S indicator where the group without prior knowledge presented a mean score of 85.83%, compared to 61.54% obtained by the group of facilities where nurses presented prior knowledge. The CPTOS and CPESS indicators presented the smallest variability in the group of facilities with nurses without prior knowledge, with standard deviations equal to 11.09% and 13.82, respectively, compared to 22.67% and 32.07%.

In regard to the CPOG and CPA indicators, standard deviations were smaller in the group with prior knowledge, 22.55% and 22.76%, respectively, compared to 24.61% and 24.41%.

Associating the mean scores with the nurses’ prior training in the control and prevention of HAI revealed that facilities in which nurses had a Master’s degree presented the best performance, followed by those with workers who had attended a specialization program. The facilities with nurses who attended short-duration training programs presented the lowest mean scores. Similarly, when the standard deviations were compared, the group of facilities with nurses who held a Master’s degree presented the smallest variability, followed by the group with specializations, except for the CPA indicator, in which case the group with short-duration training programs presented a standard deviation less than those presented by the group with specialization; 20.33% and 21.49%, respectively.

**DISCUSSION**

Some studies have already assessed the performance of HAICPs in Brazil by applying clinical indicators. These studies are relevant not only to acquiring knowledge regarding the performance of these programs in different regions of Brazil, but also to consolidating and
disseminating this methodology and its assessment systems as important tools for researching and assessing HAICPs.

Of a total of 28 hospitals, 25 (89.3%), voluntarily took part in the study; no resistance or difficulties were faced in any of the facilities. These hospitals are equally distributed in all the regions of the city of Manaus (North, South, East and West). Additionally, the participation of this large number of hospitals in the sample is relevant to acquiring knowledge regarding HAICPs hosted by hospitals located in Manaus, AM, Brazil. The unanimous interest of HAI control committee’s members in the research was surprising. They envisaged the possibility of improving and growing HAICPs in the state.

Results concerning association of variables with the type of sponsoring entity suggest that private and mixed facilities have a greater concern and are better organized in terms of HAICPs, revealing that, even though public facilities have a larger number of beds and provided more complex services, their HAICPs face structural and organizational problems in controlling healthcare-associated infections.

Public facilities present heterogeneous behavior; that is, the standard deviation of this group of facilities is greater than that of private and mixed facilities. The HAICPs of some hospitals presented better compliance in terms of indicators, but the work performed by the HAICPs of some hospitals fail to meet all the indicators.

One study conducted in Paraná, however, addressed general compliance with the four indicators of HAICPs, but presented no statistically significant difference between programs hosted by public or private hospitals. Internal auditing is a systematic investigative process in which solid evidence is collected and analyzed. Auditors verify whether the program conforms to selected comparable criteria and communicate the results to stakeholders, as the management of an organization requires knowledge, skills, competence, strategic views, and most importantly, methods to support decision-making.

It is essential that HAICPs perform internal auditing to control the actions implemented, as well as to assess structures, processes and the outcomes of such actions, together with the study, only ten have some kind of quality certification. There is a small number of hospitals with certification, but the fact is that these facilities conform better to the indicators. The same result was found in a study conducted in the city of São Paulo, in which having certification/accreditation was associated with HAICPs presenting better performance in the assessment indicators. One study shows that hospital accreditation contributes to improved patient safety. It is known that for a hospital to receive accreditation, services provided need to comply with quality criteria and HAICPs are an important aspect of quality control for healthcare delivery. It is therefore expected that hospitals with certification/accreditation will perform better for the indicators, as this study and other studies applying these indicators to assess HAICPs show.

The number of hospitals in Manaus that present some type of accreditation or quality certification is low, at nine (36.00%). One study found an ever lower number among hospitals in the state of Paraná, (20.00%)<sup>(6)</sup>. There are a larger number of hospitals located in the city of São Paulo that present accreditation/certification (50.00%)<sup>(5)</sup>. Note that 96% of the facilities addressed here reported technical visits, with a priority for ICUs, though most of these facilities did not provide any records of these visits in the various wards during data collection.

The study shows there is a significant association between indicators and internal auditing; 42% of the hospitals performed some type of internal auditing<sup>(6)</sup>. Internal auditing is a systematic investigative process in which solid evidence is collected and analyzed. Auditors verify whether the program conforms to selected comparable criteria and communicate the results to stakeholders, as the management of an organization requires knowledge, skills, competence, strategic views, and most importantly, methods to support decision-making<sup>(11)</sup>.
health staff, managers, and collaborators of health institutions to control the quality of healthcare delivery.

These concepts reinforce the need for effective HAICPs in the health facilities located in Manaus, to improve outcomes concerning the control and prevention of HAI; as such, internal auditing is an important management tool.

Decree No. 2.616/1998 demands that executing members, that is, the HAI Service’s members, include at least two technicians with a bachelor’s degree in the health field for every 200 beds, or a fraction of it, with a daily workload of at least six hours for nurses and four hours for the remaining workers (3).

The results show that there is an association between indicators and the workload of the nurses and physicians working in the HAI Service, indicating there is greater compliance with the indicators among hospitals in which nurses exclusively work more than six hours for the HAI Service. None of the hospitals addressed here presented nurses without exclusive dedication. During data collection, we verified that three nurses, each working in two HAI Services hosted by different hospitals, work only six hours in total.

There are physicians with four hours of exclusive dedication, but there are also facilities with physicians working more than four hours in the HAI Service. Facilities with physicians providing more than four hours of exclusive dedication to the HAI Service scored higher, while facilities with physicians working fewer than four hours of exclusive dedication were not found.

The study shows that compliance was greater when nurses presented six daily hours of exclusive dedication (82.2%), when compared to facilities that had no nurses exclusively dedicated to the HAI Service. In contrast with the study conducted in Manaus, the study conducted in Paraná did not analyze nurses with more than six hours of daily work in the HAI Service. A greater score was found among facilities whose physicians presented four or more hours of exclusive dedication, compared to the units whose physicians presented a workload below four hours daily (6).

The HAI Service has many responsibilities and complying with legal obligations regarding the workload of workers who are dedicated full-time creates the conditions to develop activities intended to control nosocomial infection.

Analysis of the association of indicators with the length of experience of nurses working in the HAI Service shows that hospitals whose nurses with between 5 and 10 years experience in the HAI Service scored higher for the following indicators: CPTOS (91.3%), CPESS (90.0%) and CPA (41.5%), except the CPOG indicator, for which the group of nurses with more than 10 years of experience obtained a score equal to 81.9%.

The practice of nurses within the HAI Service requires knowledge, skills and planning, as well as time and experience, such that these professionals are expected to positively intervene with a view to improve the performance of the staff, seeking better quality of care delivery.

The results concerning association of the experiences of physicians working in the HAI Service with indicators revealed that the facilities with physicians less than five years experience in the HAI Service obtained the highest mean score (90.4%) for the CPTOS indicator. The group of facilities with physicians with between 5 and 10 years of experience obtained the highest mean scores forth CPOG (82.5%), CPESS (90.0%) and CPA (60.2%) indicators.

The study conducted in Paraná presented an association between the experience of physicians and nurses working in the HAI Service, showing that the greater one’s experience, the higher the score (6). This result contrasts with those found in Manaus, especially in regard to the CPTOS indicator, for which the less experience the physicians have, the greater the unit’s compliance with the indicators.

Similar to nurses, physicians play an important role in the HAI Service so that the greater their experience, the better the HAI control and preventive actions. However as the results show, this rationale does not always prove to be true.

Results regarding association between
compliance with indicators and the prior knowledge of nurses working in the HAI Service revealed that facilities with nurses who retained prior knowledge scored higher in all the indicators compared to facilities with nurses without prior knowledge.

The knowledge and background of those working in the healthcare-associated infection control committee of health services is essential to developing actions intended to ensure safe delivery of care\(^{(13)}\).

One study conducted in the city of Santa Catarina concluded that institutions tend to appoint nurses who already work in the facility, rather than hiring specialist professionals\(^{(14)}\).

An active, well-structured and organized HAI Service with proper infrastructure, among other factors, is required for adherence to infection control practices, complying with the established standards and protocols, and obtaining the effective participation of all workers of health facilities, as well as of all those who collaborate with the facilities, which in turn are essential to decreasing infection rates and improving patient safety.

HAICPs are outdated in many health facilities and, in some cases, preventive and control actions and committees do not meet legal requirements, situations that are in disagreement with bioethical principles (e.g., principles of beneficence, autonomy and justice)\(^{(15)}\).

According to Donabedian, the assessment of structure includes administrative and related processes that support and guide the delivery of care. It refers to the characteristics of resources such as personnel, care systems, financial support, physical area, equipment, and accessibility. However, there is an additional difficulty, because the relationship between structure and process or structure and outcome is seldom well-established, which becomes a limitation\(^{(9)}\).

In regard to procedural assessment, it is more than just assessing the outcome of care, that is, the very care process needs to be assessed. The assumption is that an individual is not interested in the power of medical technology to achieve results. Thus, procedural evaluation includes: actions of clinical history; physical examinations; diagnostic exams; explanation of diagnosis and therapy; technical competency when performing diagnostic and therapeutic procedures, including surgeries; evidence of preventive health and disease management; coordination and procedure of care; how well patients accept care; communication; accessibility; education; length of time to obtain a diagnosis, as well as how efficacious and efficient diagnoses are; and complications, among others. In summary, it allows analyzing who, what, how and why\(^{(9)}\).

Despite limitations regarding problems identified over the course of the study, such as committees working without having a nominating ordinance; having an HAI Service staff lacking a physician; apparent delay in implementing patient safety measures; low quality certification; and physical structure, organizational or personnel problems, the results provide a comprehensive view of the structure and work process conditions of the HAICP hosted by hospitals located in Manaus, AM, Brazil.

CONCLUSION

This study enabled assessing variables that influence compliance of Healthcare-Associated Infection Control Programs hosted by hospitals located in the city of Manaus, AM, Brazil, information that is relevant to establishing public health policies.

These indicators, which have been used over the years in diverse settings, represent an important tool for obtaining knowledge regarding HAICPs in the entire Brazilian territory.

In general, the results indicate that the culture on the part of hospitals to search for the consolidation of HAICPs in Brazil is not homogeneous and presents problems that concern the structure and work process, regardless of the region.

VARIÁVEIS INTERVENIENTES NO DESEMPENHO DOS PROGRAMAS DE CONTROLE E PREVENÇÃO DE INFECÇÃO RELACIONADA À ASSISTÊNCIA À SAÚDE
RESUMO

Objetivo: Avaliar as variáveis que interferem no desempenho Programas de Controle e Prevenção de Infecção Relacionada à Assistência à Saúde. Método: Estudo quantitativo de análise por estatística descritiva, em hospitais, a partir de 50 leitos. Dois instrumentos de forma utilizados na coleta de dados: O primeiro, com caracterização geral dos hospitais e dos Programas de Controle e Prevenção de Infecção Relacionada à Assistência à Saúde. O segundo, com os quatro indicadores clínicos de avaliação de Programas de Controle e Prevenção de Infecção Relacionada à Assistência à Saúde, previamente construídos e validados. Resultados: Os melhores escores foram relacionados à: entidades mantenedoras privadas; existência de algum tipo de certificação/acreditação; composição da equipe do Serviço de Controle de Infecção Hospitalar formada por enfermeiro, médico e outros (técnico de enfermagem e/ou bioquímico e/ou administrativo); vínculo empregatício institucionalizado do enfermeiro e médico; carga horária exclusiva dos enfermeiros e médicos que atuam no Serviço de Controle de Infecção Hospitalar; tempo de experiência dos enfermeiros e médicos; capacitação em controle e prevenção de Infecção Hospitalar na admissão de recursos humanos. Conclusão: Foi possível verificar as interferências das variáveis no desempenho dos programas de controle de infecção hospitalar.


VARIABLES INTERVINIENTES EN EL DESEMPEÑO DE LOS PROGRAMAS DE CONTROL Y PREVENCIÓN DE INFECCIÓN RELACIONADA A LA ASISTENCIA A LA SALUD

RESUMEN

Objetivo: evaluar las variables que interfieren en el desempeño de Programas de Control y Prevencción de Infección Relacionada a la Asistencia a la Salud. Método: estudio cuantitativo de análisis por estadística descriptiva, en hospitales, con el uso de 50 camas de hospital. Dos instrumentos fueron utilizados en la recolección de datos: el primero, con caracterización general de los hospitales y de los Programas de Control y Prevencción de Infección Relacionada a la Asistencia a la Salud. El segundo, con los cuatro indicadores clínicos de evaluación de Programas de Control y Prevenção de Infección Relacionada a la Asistencia a la Salud, previamente construidos y validados. Resultados: las mejores puntuaciones fueron relacionadas a: entidades mantenedoras privadas; existencia de algún tipo de certificación/acreditación; composición del equipo del Servicio de Control de Infección Hospitalaria formada por enfermero, médico y otros (técnico de enfermería y/o bioquímico y/o administrativo); vínculo laboral institucionalizado del enfermero y médico; carga horaria exclusiva de los enfermeros y médicos que actúan en el Servicio de Control de Infección Hospitalaria; tiempo de experiencia de los enfermeros y médicos; capacitación en control y prevención de Infección Hospitalaria en la admisión de recursos humanos. Conclusión: fue posible verificar las interferencias de las variables en el desempeño de los programas de control de infeción hospitalaria.


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