

THE USE OF THE CARE INDICATORS SYSTEM BY NURSE MANAGERS AT A TEACHING HOSPITAL

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ABSTRACT: The objectives were to get to know the use of a computerized nursing indicator system at a teaching hospital in the city of São Paulo, to identify the applicability of the indicator outcomes and to verify the information return for the nursing team. Descriptive survey with a quantitative approach and a population of 27 nurses, members of the Nursing Board. The data were collected between May and June 2014 through a survey of these managers' opinion on the use of the system. It was evidenced that 25 (92.59%) subjects agree that the system is easy to handle. Thirteen (48.14%) report adverse events while eight (29.63%) do not. Twelve (44.44%) managers use the system to monitor patient care, but five (18.51%) do not present the indicators during periodical team meetings. The managers use the indicators to plan improvements, although frailties exist in the reporting of adverse events, demonstrating the need to develop the indicator management culture at the institution.

DESCRIPTORS: Quality indicators, health care; Quality of health care; Health services administration; Quality management; Nursing services.

A UTILIZAÇÃO DO SISTEMA DE INDICADORES ASSISTENCIAIS POR GESTORES DE ENFERMAGEM DE UM HOSPITAL UNIVERSITÁRIO

RESUMO: Os objetivos foram conhecer a utilização de sistema informatizado de indicadores de enfermagem de um hospital universitário do município de São Paulo, identificar a aplicabilidade dos resultados dos indicadores e verificar o retorno das informações para a equipe de enfermagem. Estudo descritivo, tipo *survey*, com abordagem quantitativa e população de 27 enfermeiros integrantes da Diretoria de Enfermagem. A coleta de dados ocorreu de maio a junho de 2014, por meio de um instrumento para avaliar a opinião desses gestores quanto à utilização do sistema. Evidenciou-se que 25 (92,59%) dos sujeitos concordam que o sistema é de fácil manuseio, 13 (48,14%) notificam eventos adversos e oito (29,63%) não notificam. 12 (44,44%) dos gestores utilizam o sistema para acompanhar a assistência prestada aos pacientes, entretanto, cinco (18,51%) não apresentam os indicadores em reuniões periódicas para sua equipe. Os gestores utilizam os indicadores para planejar ações de melhoria, porém há fragilidades nas notificações de eventos adversos, demonstrando a necessidade de desenvolver a cultura da gestão de indicadores na instituição.

DESCRIPTORES: Indicadores de qualidade em assistência à saúde; Qualidade da assistência à saúde; Administração de serviços de saúde; Gestão da qualidade; Serviços de enfermagem.

LA UTILIZACIÓN DEL SISTEMA DE INDICADORES ASISTENCIALES POR GESTORES DE ENFERMERÍA DE UN HOSPITAL UNIVERSITARIO

RESUMEN: Los objetivos fueron conocer la utilización de sistema informatizado de indicadores de enfermería de un hospital universitario del municipio de São Paulo, identificar a aplicabilidad de los resultados de los indicadores y verificar el retorno de las informaciones para el equipo de enfermería. Estudio descriptivo, tipo *survey*, con aproximación cuantitativa y población de 27 enfermeros directores de Enfermería. Los datos fueron recolectados de mayo a junio del 2014 mediante un instrumento para evaluar la opinión de esos gestores respecto a la utilización del sistema. Fue evidenciado que 25 (92,59%) de los sujetos concuerdan que el sistema es de fácil manejo, 13 (48,14%) notifican eventos adversos ocho (29,63%) no notifican. 12 (44,44%) gestores utilizan el sistema para acompañar la atención prestada a los pacientes, pero cinco (18,51%) no presentan los indicadores durante reuniones periódicas para su equipo. Los gestores utilizan los indicadores para planificar acciones de mejora. Sin embargo, hay fragilidades en las notificaciones de eventos adversos, demostrando la necesidad de desarrollar la cultura de gestión de indicadores en la institución.

DESCRIPTORES: Indicadores de calidad de la atención de salud; Calidad de la atención de salud; Administración de los servicios de salud; Gestión de la calidad; Servicios de enfermería.

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● INTRODUCTION

The search for quality represents a constant challenge to maintain the efficacy of health services and requires the use of tools to identify and monitor the structure, processes and outcomes of organizations and support improvement actions over time. The numerical data that offer this picture are the quality indicators⁽¹⁾.

The nurses are increasingly concerned with the construction, validation and use of indicators that reflect their work context and support the improvement of Nursing service quality in care and personnel management⁽²⁾.

Computerized systems of Nursing indicators can strongly contribute to the collection, storage and availability of these data for analysis, permitting the assessment of the obtained results⁽³⁾ and, consequently, the management of the care outcomes, favoring the continuous improvement and delivery of evidence-based care⁽⁴⁾.

The nursing team members' correct use of these systems is crucial for the reliability and usability of the collected information⁽⁴⁾, particularly by people in leading positions – such as managers, coordinators and foremen. They produce the guidelines for the use and supervision of the professionals who use the system, educational actions for continuing education and, mainly, the management of the collected data for the sake of improvements.

Different studies describe the creation and implementation of these systems since the 1990's until today^(3,5), but publications on their use among nursing team members are scarce.

In that scenario, the following question is raised: how can Nurse managers and coordinators use the computerized indicator system? The answer can enhance reflections on the use of the information deriving from this system to support decision making in Nursing, evidence-based practice and continuing improvement processes of health services.

Thus, the objectives were to get to know the use of the computerized nursing indicator system by the service managers and sector coordinators of the Nursing Board at a teaching hospital in the city of São Paulo, to identify the applicability of the indicator outcomes in the actions to improve the care delivered at the hospital and to verify how the information deriving from the indicator system returns to the nursing team.

● METHOD

Descriptive survey with a quantitative approach. This study design permits the collection of detailed information on existing variables and to use the data to justify and assess the conditions of certain practices, as well as to propose correction plans⁽⁶⁾.

The study was developed at a large and high-complexity tertiary teaching hospital in the city of São Paulo, which offers 712 beds. The hospital mainly receives patients from the Unified Health System (SUS) and its objectives are care, teaching and research.

The population included the 27 nurse managers and sector coordinators who are member of the hospital's Nursing Board, representing all professionals occupying these functions at the institution and who use the computerized indicator system.

The following inclusion criterion was set: nurse managers and coordinators of the services that used the Computerized Indicator System. The exclusion criterion was: managers and coordinators who had occupied the function less than three months.

The data were collected in May and June 2014, through a tool with questions to characterize the participants and the use of the hospital's indicator system. To answer the questions on the use of the indicators, a five-point Likert scale was used [I completely agree; I agree; I neither agree nor disagree; I disagree and I completely disagree]. This tool was elaborated by the researchers and assessed by three nurses experienced in Nursing Service Management and in the use of the indicators, including two

faculty in Nursing Administration and one manager of a care institution. The changes these evaluators proposed were discussed and incorporated in the final version of the tool, which was forwarded to the subjects and answered by all of them.

The collected data were stored and organized in a Microsoft Excel® worksheet, submitted to descriptive statistical analysis, presented as relative and absolute frequencies and discussed in the light of the available literature on the theme.

All subjects were invited, participated voluntarily in the research and signed the Informed Consent Form. Approval for the study was obtained on 4/23/2014 from the Research Ethics Committee at Universidade Federal de São Paulo, opinion 63.026, e pela Diretoria de Enfermagem do hospital.

● RESULTS

All 27 managers and coordinators complied with the inclusion criteria. Seven (25.93%) of them worked as service managers and 20 (74.07%) as sector coordinators of the Nursing Board at the hospital under analysis. The median age of the coordinators was 36 and that of the managers 38 years. The female sex was predominant with 23 (85.19%), the mean time since graduation was 15 years for the managers and 11 years for the coordinators and 18 (66.67%) subjects had been in their current function for at least eight years.

Most nurses, 23 (85.19%), had received background training to use the Computerized Indicator System and 19 (70.37%) reported doing so daily. Table 1 shows that 25 (92.59%) found the system easy to handle; only 13 (48.15%) informed that their teams notify adverse events and eight (29.63%) that they still do not report such events.

In addition, 14 (51.85%) affirmed that they assess these reports, while eight (29.63%) do not; only 12 (44.44%) indicated using the system to monitor patient care and four (14.81%) affirmed not doing so. It is highlighted that 11 (40.74%) did not manifest their agreement or disagreement regarding the use

Table 1 - Opinion of subjects on the indicator system (n=27). São Paulo, SP, Brazil, 2016

Assertions	I completely agree		I agree		I neither agree nor disagree		I disagree		I completely disagree	
	n	%	n	%	n	%	n	%	n	%
I find the nursing care indicator system used at the hospital easy to handle.	13	48.15	12	44.44	2	7.41	0	0	0	0
My team reports on adverse events related to the Quality Indicators at the services.	3	11.11	10	37.04	6	22.22	8	29.63	0	0
I assess the reports of adverse events at the services daily.	4	14.81	10	37.04	5	18.52	7	25.93	1	3.70
I use the indicator system to monitor the care delivered to the patients.	3	11.11	9	33.33	11	40.74	4	14.81	0	0
I analyze the indicator data monthly.	7	25.93	13	48.15	4	14.81	2	7.41	1	3.70
I present the information obtained from the indicators to my team after analysis during periodical meetings.	3	11.11	8	29.63	11	40.74	4	14.81	1	3.70
I use the indicator outcomes to plan improvement actions.	2	7.41	16	59.26	7	25.93	2	7.41	0	0
I comparatively analyze the indicator data after the improvement actions.	1	3.70	9	33.33	13	48.15	4	14.81	0	0

of the system. As opposed to this result, 20 (74.07%) affirmed that they analyze the data resulting from the system monthly.

Most subjects, 16 (59.25%), did not present the outcomes to their teams during periodical meetings, while 18 (66.67%) affirmed using this information to plan improvement actions. Also, 17 (62.96%) did not elaborate any comparative analysis of the indicators after improvement actions.

● DISCUSSION

The participants' profile is similar to the literature, appointing nursing as a predominantly female profession⁽⁷⁻⁸⁾, with a positive correlation between the time since graduation and length of experience at the service and the gaining of experience for leadership functions^(7,9). The results revealed that the nurse managers are professionals who graduated more than ten years earlier and who had been working at the institution for at least eight years, in line with the hospital's Internal Nursing Regimen, whose criteria for management and coordination functions is to have at least five years of professional experience and two years at the institution, respectively.

It is acknowledged that nursing education contains gaps regarding the identification and application of indicators in professional practice. Therefore, technical and conceptual training to use the computerized indicator system is fundamental to put in practice the quality culture, including the reporting of adverse events to the patient⁽¹⁰⁾.

As most of the managers received training to use the system and found it easy to handle, it is noteworthy that the use of the outcomes does not score that high yet. It is highlighted that, although the subjects refer the analysis of the data and the assessment of reports, the use of this information as signals of the need for improvement actions has not been consolidated yet in all leaders. This fact is in accordance with studies that demonstrate the nurses' difficulties to transform their professional practice through the analysis and comparison of quality indicator outcomes⁽¹¹⁻¹²⁾.

This picture indicates the frailty of the processes involving patient safety and could be improved by using the information available in the system. The findings that the managers do not present the results to their teams and do not elaborate comparative analyses to monitor the evolution of the nursing service quality demonstrates the existing gap between the evidence deriving from practice and these professionals' decision making.

● FINAL CONSIDERATIONS

This study presented the use of the computerized nursing indicator system by the 27 nurse managers and coordinators of the Nursing Board at a teaching hospital in the city of São Paulo.

Despite the difficulties met, the managers used the outcomes deriving from the indicators to plan improvement actions. That underlines the need for educational interventions, as the consolidation of the knowledge on quality management focused on patient safety was not observed in the entire nursing team.

It can be observed that the indicator management culture at the institution has not been well established yet, demanding future implementation strategies focused on quality and patient safety. These results can support the elaboration of improvement actions in the hospital management.

It was concluded that the adverse event reports still present a weakness in the nurse managers' activities, who should focus on actions involving the team under their responsibility to increase these reports and share the collected information, after an analysis of the indicators, during periodical meetings with the nursing team.

It should be highlighted that this study pictures the reality of a teaching hospital in the city of São Paulo, with its own Computerized Indicator System. Therefore, its replication in other contexts is suggested.

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