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Patients Classification Systems-The Brazilian Experience

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Patient Classification Systems (PCSs) are an important tool in healthcare management to improve the efficacy and effectiveness of resource use. An overview of the concept, benefits and limitations of the use of a PCS, their development and implementation in Brazil, as well as the difficulties still faced and perspectives are discussed.

Patient Classification System - Concept and Structure

Patient classification systems (PCSs), also known as patient acuity systems, consist in the identification of individual care needs of patients grouped in categories. Since their development in the US in the 1960s, their utilization has been internationally acknowledged as being highly important to assist management decision making.

Originally used to determine the workload of the nursing team and, thus, support staff allocation and the calculation of staffing requirements, the range of applications of PCSs gradually expanded during the following decades, marked by the proliferation of innovative systems, mainly in the United States and Canada.

Due to the difficulty in determining the entire range of patient care needs, the amount of nursing care required is established by the use of a number of indicators, highlighting the most representative dimensions of the care process such as breathing, locomotion, personal hygiene and therapy among others.

In general, every care indicator is scored from one to four (a few systems use one to five) demonstrating an increasing level of care complexity; in other words, score one corresponds to the lowest level of care complexity and four to the highest level. Thus, the sum of scores of the different care indicators classifies patients in specific care categories: minimum care, intermediate care, semi-intensive care and intensive care.

Each tool is composed of a different number of care areas and so each one is tested in respect to its reliability and validity. Reliability is the extent to which results are consistent over time or the degree to which an instrument produces an identical result each time it is used under similar conditions with the same subject. Validity refers to the degree in which the tool is truly measuring what it is intended to measure.

Assessing validity and reliability of a measuring instrument is extremely important to guarantee that users have confidence in the information generated and utilize it to make management decisions.

Why utilize Patient Classification tools?

The utilization of PC tools enables the construction of a database favoring decision making and supplying information to healthcare managers on the:

Ó Characterisation of the institution's customer care profile such as minimum care, intermediate care, etc;

Ó Identification of the amount of nursing care provided thereby allowing planning of care and of patient discharge;

Ó Nursing workload and hence support staff allocation and nursing staff requirements; measurement of the workload, i.e. the amount of nursing care provided, constitutes the basis on which staffing needs and nursing costs are calculated. The main purpose of classification tools is to achieve optimal resource utilization in relation to patient care needs;

Ó Productivity and hence nursing service costs.

Additionally, other benefits of using PC tools may be identified, such as assisting in providing quality nursing care by the individualisation of patient care needs, thus backing arguments in the process of negotiation and supporting managerial decisions regarding service organisation.

PCSs have also been criticised and questions have been raised concerning their task-oriented approach which does not take into account the significant scope of patient care and the complexity of nursing. It is important to note that the activities performed by the nursing personnel are complex, dynamic, simultaneous and interrelated making a measurement of all their scope difficult and also that the perfect tool for measuring nursing workload still constitutes a challenge.

Patient Classification Systems in Brazil

The Brazilian Healthcare System

The healthcare model adopted in Brazil is divided in two; the public and private sectors. The first, the Government Health-care System (SUS in Portuguese), is based on principles of universal and equal access for all and, integrates government healthcare providers, including hospitals and primary health centres that belong to federal, state, and local governments and private profitand nonprofit-making providers contracted by the system.

The second sector constitutes the supplementary medical care system represented by group medicine and medical cooperatives with predominance of a pre-payment medical health insurance system.

Data from a census carried out in 2005 regarding healthcare in Brazil listed 77,004 healthcare institutions, including government healthcare centers, polyclinics, emergency clinics and hospitals. Healthcare services for inpatients total 7,155 institutions. It is possible to observe that private institutes are more numerous than government institutions (62% of the total) and are also more specialised. About 78.9% of the institutions provide care for government healthcare patients.

History and Development

In Brazil, the issue of patient classification systems was first addressed in 1972, as a concept of Progressive Patient Care (PPC), i.e. a way of organising medical and nursing care according to the degree of the disease and the required care (for example, intensive, intermediate, minimal care, etc). However, despite this study, it was not until the middle of the 1990s that PCSs started to be developed and applied in healthcare settings.

Their use was recommended in 1996 in the guidelines of the Brazilian Nursing suggested that the calculation of nursing staff requirements should be based on PCSs and also that their implementation should be exclusively the responsibility of nurses. However, patient classification tools have not been employed to a great extent regardless of the Brazilian Nursing Council's (COFEn) recommendations and are still in the initial development stages.

Concern about the quality provided in healthcare services in the country, led to the foundation of the National Accreditation Organisation (ONA) in 1998 aiming at promoting and evaluating the care provided in institutions nationwide.

This evaluation instrument is organised by increasing the level related to complexity or to quality performance, so that, to reach a higher classification, the previous levels must have been satisfied. In this way, hospitals can be certified at three levels:

Ó accredited (reliable and organised),

Ó fully accredited (reliable, organised and with quality practices),

Ó accredited with excellence (reliable, organised and with quality practices, emphasising the standards of outcomes).

To achieve higher levels of quality, hospitals need to assess their results using indicators that reflect the performance of the services provided. Classification instruments may be considered a performance indicator of human resources regarding nursing staff.

Since the accreditation programme was implemented, the use of PC tools has gradually increased. However, considering the large number of hospitals throughout the country, its use in the nursing practice is still inexpressive.

Currently, the Fugulin and Perroca systems are the most commonly used instruments. Fugulin's tool, developed in 1994, comprises nine indicators and classifies patients in five care categories: minimum care, intermediate care, high dependence, semi-intensive care and intensive

care.

Perroca's instrument was constructed in 1996 for adult patients and is composed of 13 care areas. The total score obtained classifies patients in four care categories: minimum care, intermediate care, semi-intensive care and intensive care. Investigations were conducted to monitor the reliability and the validity of the instrument.

At present, Perroca´s instrument is undergoing a systematic review of its structure and content in order for it to be updated to more accurately measure the degree of complexity of patient care and the nursing resources used.

It is important to highlight that PC tools in Brazil have been used mostly to identify patient care needs and to measure workload, contrary to other countries including the USA, Canada and some European countries where, for a long time, they have also been used for the purpose of costing.

Difficulties Faced and Perspectives

There are some factors that have influenced the use of PCSs in Brazil. The senior management of hospitals is usually unaware of their significance.

Moreover, a great number of nurses still do not have knowledge about the instruments available and how to implement them in their clinical and administrative practice, mostly due to insufficient access to information on this issue.

Over the last decade, the expansion of scientific online databases of different national nursing journals that provide free access has enabled nurses to become more familiar with the concept, as well as the experience of the utilization of PCSs in some hospitals. Additionally, nursing schools have gradually included workload measurement in their curriculum thereby helping to spread knowledge about PCSs.

Another aspect to be considered is that many nurses do not understand the importance of using this kind of tool and the benefits that emerge from its implementation. Its daily use is still seen by many professionals as more paperwork to be filled in and consequently a greater workload. Indeed, the use of computers can be extremely helpful to reduce the time involved with this activity.

As the cost of acquiring and using information systems is considerably high a more appropriate use of the information provided would assist in the management of care provided to patients.

Many services do not use the tool in their daily practice as internationally rec ommended. Utilization is occasional and mainly when calculation of nursing staff is required. Moreover, the information obtained through PCSs in hospitals is still underutilized.

There is a trend towards an increase in the use of PC tools in the hospital setting and an expansion in the application of the information generated. To remain competitive in the market, organisations need to improve their quality standards and productivity. The implementation of PCSs may contribute to achieve certification of services and in the management of costs, which is a widely sought goal.

The growing interest in the cost of care in health services has led to the need of monitoring and analysing resources employed or to find a balance between care quality and viable costs.

Remembering that patients do not require the same amount of resources due to variations in the complexity of care, the use of PCSs may identify these variations and more accurately estimate the cost of the involvement of nursing staff in the care process. Hence, the assessment of patients by means of PCSs may become a valuable instrument to monitor expenditure in healthcare institutions.

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