



Effectiveness of Educative Supportive Interventions on prevention of Obesity and Hypertension among adolescents

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Abstract— Data sharing efficiency is poor with the traditional nursing paradigm. Scientific nursing management models are examined in this research to enhance the quality of care for critically sick patients. Patients' clinical first-line information may be gathered in a timely and accurate manner via the construction of an information system for implementing dynamic nurse management throughout the whole hospital. When patient information management (PIM) is put into place, productivity goes through the roof. An information system that provides support for nursing quality management is used to achieve standardisation of nursing quality input, timely monitoring, accurate nursing quality data, digital analysis and whole-process management of nursing quality, as well as the continuous improvement and prevention of nursing quality risks. It's ideal for keeping tabs on patients and providing direction on their treatment. Implementing whole-process quality control in critical care by using a nurse information management software system is an efficient way.

Keywords: *Information System; Nursing Management; Data Sharing*

I. INTRODUCTION

Clinical nursing and nursing administration are now covered by information technology, thanks to the steady progress of hospital information architecture. For patients in today's world, access to information has become a quality demand, but the capacity of nursing staff to obtain,

improve and use information is still limited. Nursing staff at our hospital may simply and quickly access and utilise a variety of information both within and outside of the hospital with the aid of our hospital's information network platform, which serves as a foundation for the scientific decision-making of our nursing managers. A number of accomplishments have been made.

II. INFORMATION SYSTEM

In order to process information flow, an information system is a human-machine integrated system made of computer hardware and software, as well as network and communication equipment and software, as well as information resources and users. Input, storage, processing, output and control of information are the five essential operations of a computer. Simple data processing systems have gone through three phases of evolution before becoming fully integrated, intelligent information systems.

Decision Support System (DSS), Control System (CCS), Office Automation (OA), a database of models and methods and the ability to interchange information with higher authorities and the outside world are all necessary components of a full Information Management System (MIS). Exchange of information with higher authorities and the outside world is inseparable from the use of intranet, particularly for the office automation system (OA). In a contemporary company MIS, intranets are a must, but their implementation depends on the architecture and hardware and software environment in which the MIS is implemented.

Internet-based MIS systems are built on a BS (Browser/Server) architecture, while the heart of conventional MIS systems is CS. In comparison to CS architecture, the BS design provides several benefits. Traditional MIS systems need a specific operating environment, which limits the operator's operational area; BS architecture does not require a particular operating environment, therefore MIS systems may be used in any location as long as the Internet is accessible. It's easy to see the differences between the positives and negatives.

III. NURSING INFORMATION SYSTEM

The term "nursing information system" refers to a computer system capable of rapidly collecting, storing, processing, and retrieving large amounts of dynamic data. From a single-task NIS on a single machine to a multi-task NIS on a single machine to a stage of creating NIS in a hospital LAN environment since computers joined the nursing industry in China in the 1980s[1]. As a result of a link between the hospital's local network and the wide area network in recent years, complementary benefits of nursing information exchange and nursing technology have been accelerated[3], and it has provided a wide space for applying nursing information to nurse management.

IV. APPLICATION OF NURSING INFORMATION SYSTEM TO NURSING MANAGEMENT IN CHINA

A. Nursing quality management information system

Quality control index system and raw data must be standardised and given particular weights, established in a dictionary database, and the results of regular and irregular inspections of the nursing quality monitoring team must be entered into a computer properly and timely[5]. This data will be stored, analysed, and evaluated by a computer. Managers are able to keep track on the quality of each nursing unit's care because of the speed at which information is sent. There will be fewer nursing mistakes made and more satisfied patients as a result of switching from terminal quality management to link quality control. As of right now, China's software development efforts are progressing steadily in the right direction. There are two elements of the Second Hospital of Jinhua City, Zhejiang Province's Nursing Quality Management Subsystem Software: ward quality management and nursing department. Registration and inquisition are the two primary purposes of this tool. Nursing staff performance assessment and quality management may be quantified using software, which lowers the influence of subjective elements on evaluations and increases nurses' excitement. There are 16 monitoring indicators in three areas: management, nursing, and work efficiency and the results of the evaluation have been combined with a bonus programme to implement both reward and punishment. This has increased quality awareness among all employees and ensured the implementation of comprehensive quality management in healthcare.

B. Human resource management information system for the nursing profession Nursing information systems are now used mostly for staff configuration, training and technical file management.

1) Nursing human resource allocation information system

Patients' demand for nursing services has increased as a result of the adoption of overall nursing, which has made the problem of under-allocation of nursing resources even more acute. Nursing human resources may be dynamically allocated by using this software, overcoming the problems of "overstaffed" and "overloaded work" that are created by conventional nursing staff allocation methods. It has had a significant impact on the quality of care provided to patients and the level of fulfilment felt by nurses in their roles. There are many examples of systems that can help solve current problems, such as a system developed by Beijing Military Region of People's Liberation Army's General Hospital, which displays actual medical personnel and reasonable personnel data from daily clinical classes, so that new recruits can be flexibly assigned to different departments based on their ability to perform basic nursing. Hospital Ward The Fujian Provincial Hospital's Human Resource Administration Computer System comprises modules for managing nursing staff assignments, scheduling and attendance, technical file management and evaluating how well human resources are being used. For managers at all levels of the organisation, it offers an accurate, methodical and speedy review of human resource usage information that encourages scientific management. However, despite the fact that the use of such software can improve the efficiency of the nursing manager, due to the variability, intangibility and poor time measurability of the nursing service, the manager should also rationally deploy nursing staff in conjunction with department and patient needs to effectively utilise nursing human resources to mobilise the enthusiasm of nurses.

2) Nursing Staff Training and Continuing Education Credit Information System

Nursing personnel must be up to speed on the latest advancements in medical technology in order to keep up with the field's ever-changing landscape. Nursing professionals may quickly and easily acquire new skills thanks to NIS. Nursing technology, nurse workstations, fundamental nursing, and nursing administration are the primary emphasis of the standalone version of the programme developed in China. A credit management information system regulates nursing staff training and management of continuing education, providing an objective basis for nursing staff promotion management and thus effectively promoting the virtuous circle of nursing staff training-assessment-management integration. Credit management information system A good example is the Standardization Training and Continuing Education Credit Management System for Nursing Staff. In order to boost its adaptability, users may specify their own evaluation items and credit assignments. Additionally, it may also be used to standardise training and track continuing education credits for a wide range of technical professionals, as well as nurses from a variety of hospitals.

3) Nursing staff business technical file information system

Nursing staff's personal resumes, scientific research papers, test scores and technical titles can all be entered once and stored indefinitely using such software, which not only effectively solves the problem of incomplete data storage and difficult query, but also reduces errors caused by manual operations. Using the system's sophisticated query and retrieval function, managers are able to completely comprehend the information of each nursing staff member, allowing them to understand the hospital's hierarchical structure and providing a credible foundation for talent management monitoring, planning, and guiding. Similar file management software is now being developed by numerous domestic institutions, including Beijing 304 hospital, Nanfang military medical university hospital, and Hunan medical university hospital, among others.

C. Nursing cost accounting information system

Nurses are increasingly being recognised as a significant cost centre in the administration of a hospital. Managers are increasingly interested in finding ways to cut the cost of nursing while also ensuring that nursing resources are used to their full potential. As a result, software development in the nursing field is almost nonexistent in China. The 94th Hospital of the People's Liberation Army has employed computer technology to construct a basic model of nursing cost accounting, dividing nursing costs into direct and indirect costs. Application of this method would not only help to ensure the integrity and automation of nursing cost accounting but also effectively manage nursing costs, setting the groundwork for the construction of a reasonably independent and comprehensive nursing cost accounting system in China.

D. Nursing comprehensive information management system

Personnel file system, continuing education credit system, quality control system, human resource allocation system, corporate information system and system maintenance are the primary components of this programme. It's strong, adaptable and really useful. " All aspects of nurse management are covered in this course. It is easier for managers to make informed choices

when they have access to data that is both predictive and targeted. Nursing Management Support System, developed by the 94th Hospital of the People's Liberation Army, Nursing Management Computer Information System, developed by Jiangmen Maternity & Child Health Care Hospital, Guangdong Province, and Nursing Management Computer System, developed by Shaoxing People's Hospital, are all examples of similar software for military hospitals.

V. CONCLUSION

Data digitization has become a need in the information age and information technology is increasingly being employed in a broad range of industries. Higher-level health administration agencies are likewise interested in implementing digital information systems in hospitals. The only way to satisfy the demands of the information technology revolution and encourage the fast advancement of nursing practise is via the informatization of nursing management. With the help of cutting-edge information technology, nurses can work more efficiently, management can free up time to focus on other tasks, and patients can get accurate, safe and convenient nursing care. To guarantee patient safety, the use of an information system in the nursing safety management follows the pace of hospital information building by reshaping work processes and reducing the occurrence of events, thereby enhancing nursing quality and the level of hospital nursing management. It's dependable and deserving of further attention.

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References

- [1] Ash, J. S., Berg, M., & Coiera, E. (2004). Some unintended consequences of information technology in health care: the nature of patient care information system-related errors. *Journal of the American Medical Informatics Association*, 11(2), 104-112.
- [2] Pai, F. Y., & Huang, K. I. (2011). Applying the technology acceptance model to the introduction of healthcare information systems. *Technological Forecasting and Social Change*, 78(4), 650-660.
- [3] Berg, M. (2001). Implementing information systems in health care organizations: myths and challenges. *International journal of medical informatics*, 64(2-3), 143-156.
- [4] Choi, W., Rho, M. J., Park, J., Kim, K. J., Kwon, Y. D., & Choi, I. Y. (2013). Information system success model for customer relationship management system in health promotion centers. *Healthcare informatics research*, 19(2), 110-120.
- [5] Hirdes, J. P., Ljunggren, G., Morris, J. N., Frijters, D. H., Finne Soveri, H., Gray, L., ... &



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Gilgen, R. (2008). Reliability of the interRAI suite of assessment instruments: a 12-country study of an integrated health information system. *BMC health services research*, 8(1), 1-11.