

A Study On The Importance Of Developing The Management Systems In Healthcare And Nursing Institutions And Organizations And Its Effect On Patients

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ABSTRACT

Some healthcare systems throughout the world are increasing their focus on human resource management (HRM). In addition to equipment and supplies, human resources are crucial to the success of any healthcare system. The various clinical and non-clinical staff who are entrusted with promoting public and individual health are collectively referred to as "human resources" in the context of health care. The effectiveness and benefits of the system depend on the knowledge, skills, and drive of the individuals delivering care.

A variety of health promoters and caregivers, as well as an equitable allocation of human and material resources, are essential to the system's success. Due to their obvious and crucial differences, human capital and physical capital need quite different approaches to management and treatment. More investigation into the interplay between human resources and healthcare is required.

The skyrocketing increase in the production and retail cost of healthcare supplies has the potential to significantly drive-up healthcare costs (drugs, prostheses, and disposable equipment). The ability of public services to recruit and retain talented individuals might be enhanced by funds allocated here. To find a happy medium between the available workforce and the skillsets of its members, innovative approaches to human resource management need to be developed in both publicly funded and employer-paid systems. Having a practitioner who isn't adequately prepared is the same as having the correct equipment but no one to utilize it, especially in the medical industry.

KEYWORDS: *Nursing, Supervisory, Hospitals Units, Medical Informatics, patient satisfaction.*

INTRODUCTION:

The delivery of healthcare in today's society is influenced by a number of global shifts, including developments in communication and technology, as well as shifts in policy, the economy, population, and other socio-environmental factors. Specifically, these global shifts can be broken down into three categories: These days, information technology is an integral aspect of the day-to-day operations of many firms. In point of fact, the term "informatics" refers to the application of computer tools to the processes of data collection, analysis, and presentation with the goal of enhancing human knowledge and decision-making abilities. Past studies have demonstrated that implementing informatics into a variety of nursing tasks and procedures, such as financial, clinical, and administrative transactions, may assist reduce costs and save time respectively (**Groah, 2014**). Informatics has a number of potential applications, one of which is within the nursing profession. There is more than one interpretation of the term "nursing informatics." One example is the "application of information technology in connection with any practice within the nursing domain and is suggested by nurses," which includes patient care, management, education, and research. Another example is "the application of information technology in connection with any practice within the nursing domain and is suggested by nurses." It is possible that nursing service delivery, resource management, and patient care might all benefit from the use of a computer and HIS to collect, store, process, and modify data in the field of nursing (**Glennister, 2015**).

The practice of contemporary nursing is increasingly including the use of informatics. There is rising evidence that clients' own use of IT may improve their engagement in their own treatment. Some study indicates that nurses frequently utilize informatics in all parts of their job, and there is also growing evidence that clients themselves use IT. As a consequence of this, a number of reports have been compiled about the applicability of IT in medical settings. Informatics helps cut down on medical and drug errors, boosts care quality, ensures patients are safer, provides clinical warnings and reminders,

facilitates nurses' access to patient records, improves preventative care, makes patients happier, and lowers the cost of healthcare. These are just a few examples of the benefits of informatics. Other benefits include enhancing preventative care, making patients happier, and lowering costs. Yet, additional study shows that the adoption of this technology is proceeding at a slow pace, and users are, on the whole, dissatisfied with its use (**James, 2014**).

BACKGROUND OF THE STUDY:

Similar to businesses in other sectors, healthcare organizations (HCOs) place a significant emphasis on the reliability and usability of their data. Access to sufficient data and information management technology is required for healthcare personnel in order for them to provide care for patients, run the company, document and communicate plans and operations, and fulfill the requirements of regulatory and accreditation organizations. Clinicians assess the health of their patients, devise treatment plans, administer care, and educate patients as well as the patients' loved ones on the most effective ways to manage the patients' medical issues (**Griffiths et al., 2014**). Primary care physicians and care managers conduct evaluations of newly enrolled individuals in health plans. The clinical outcomes, the service quality, and the total expenditures for healthcare are some of the aspects that are considered by medical directors. Administrators are accountable for the establishment of budgets, the management of drug and supply supplies, and the coordination of payment arrangements for patients. The board of directors is in charge of making decisions on the creation of new goods and services, the establishment of strategic partnerships, and the termination of initiatives that are not lucrative. Those who work in the healthcare industry come from a variety of backgrounds and bring vastly diverse motives and expectations to the information sources they use in their jobs (**Roussel, 2015**).

HCISs have been created in order to better organize the data that medical staff members utilize in the course of their everyday job. The goal of healthcare information and communication systems, or HCISs, is to facilitate better teamwork among healthcare practitioners by facilitating better information and communication flows between them (**Schramm, 2014**). In addition to this, they are useful for the storing and administration of data, as well as some elements of record-keeping and reporting. Together with the operations of the health organization as a whole, the responsibilities of a financial and administrative nature, such as those carried out by auxiliary and other clinical-support departments, are strengthened by an HCIS. Every HCIS will tell them that it is a difficult task to keep up with the ever-increasing complexity of HCOs. The HCIS is tasked with organizing, managing, and integrating enormous volumes of clinical and financial data generated by a wide variety of users operating in a variety of settings. This is necessary because healthcare professionals (and, increasingly, patients) require immediate access to information that is complete, accurate, and up to date and is presented in a manner that is meaningful (**Wise, 2015**).

LITERATURE REVIEW:

In a government poll using data from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), many consumers in the United States voiced unhappiness with different aspects of their treatment. Many patients expressed frustration with the ineffective pain management and poor communication provided by their doctors. In order to better anticipate patients' needs and design ways to satisfy those needs, it is vital for carers to have insight into patients' levels of satisfaction. Understanding the relationships between hospitals and nursing unit characteristics and patient happiness is vital from an organisational aspect for developing work environments that encourage improved levels of patient satisfaction. Thus, they looked into the nexus between organisational setting (specific features of hospitals and nursing units), patient attributes, nursing unit architecture (unit capacity, staff engagement, and working conditions), and effectiveness (patient satisfaction) in acute care hospitals. Although the patient safety movement has emphasised protocols for eliminating errors of commission in the delivery of health care (such as labelling the wrong eye for surgery), the lack of meaningful therapy is an intrinsic part of poor nursing care. Research from China found that in units assessed as providing subpar quality of care by nurses, key patient care duties were often missed or omitted (**Eliam, 2015**).

This article provides more explanation of the correlation between the organisational framework of hospital nursing and patients' evaluations of their treatment by zeroing in on the supply of nursing care and, more specifically, the breadth of nursing care duties that go uncompleted. The theoretical foundations of this research build upon and extend Donabedian's (1988) theory of Quality Health Care to account for the "hidden rationing of nursing care" that is often cited as the root cause of nursing care gaps. Donabedian suggests that the relationship between healthcare structures, processes, and outcomes may be used to assess the quality of treatment provided. Patient outcomes improve when healthcare facilities (hospitals, nursing units) provide better working conditions and access to better resources (i.e., more and better-trained nurses). For nurses to provide safe, high-quality care to their patients, they need the freedom and time to apply all of their training and experience to the care they provide. Indicators of high-quality labour, which have been shown to provide better outcomes than low-quality labour, include greater nurse staffing (or lower patient-to-nurse ratios) and bigger

percentage of nurses with bachelor levels or above. Theoretically speaking, greater patient outcomes may be obtained when companies offer more acceptable working circumstances, adequate nurse staffing levels, and a well-trained nursing workforce (Kepner, 2015).

The health care industry in China is lagging behind many others in terms of the acceptance and development of IT at the present time. Patients will be happier with their treatment, the healthcare system as a whole will run more smoothly, and expenses will decrease as a result of the use of these technology. Therefore, healthcare organisations should be open to adopting new technologies and finding answers to the challenges their implementation will create, since doing so will hasten the transition towards a more desired future. Despite widespread recognition of informatics' significance in nursing, most studies have concentrated on how to apply technology in practise rather than how to oversee the administration of care. Restructuring care management and nursing services for the better is feasible with a thorough understanding of the current state of affairs, the identification of any problems or roadblocks, and the application of appropriate solutions. This will make the restructuring possible (Robinson, 2015).

RESEARCH OBJECTIVE:

- To investigate how people who have recently suffered a significant cardiovascular event, such as patients, patient advocates, healthcare providers, and upper-level managers, conceptualize follow-up treatment.
- To explore if and how healthcare workers' actions through time have altered their conceptualization of care frameworks and procedures.
- During a time of downsizing and restructuring in an intensive care unit, this research aims to examine the knowledge of structure and process held by healthcare executives.

RESEARCH METHODOLOGY:

- **Research Design**

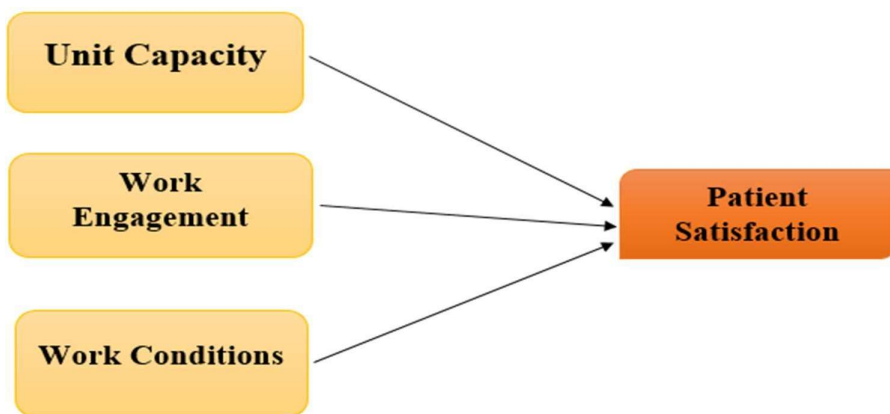
This study made use of data from the Outcomes Research in Nursing Administration Project-II. Organisational, Nurse, and Patient Outcomes in a Multi-Site Hospital Setting (ORNAVII) was a major, multi-site study with this objective in mind. From 2003 to 2004, the ORNA-II research used the 2002 American Hospitals Association Guide to Hospitals to collect data on two medical-surgical units at 146 randomly selected U.S. acute care hospitals. The research was given the go light by the appropriate authorities. After eight nursing homes were eliminated from the study's sample, the final count was 278.

- **Data Collection**

After participating in a training session with the research team lasting 1.5 days, each institution designated a local coordinator to help with data gathering. During the course of 6 months, RNs with more than 3 months of experience on their unit answered 3 surveys using various tools. Out of 6548 respondents, the first data collection had a 75% response rate (N=4,911) from RNs, out of 6360 respondents the second saw a 58% response rate (N=3,689), and out of 6174 respondents the third saw a 53% response rate (N=3,272). The study presented here used information from the first two data collecting waves for nurses. A patient satisfaction survey was filled out by those who received treatment. Each nursing unit had ten patients (18+) randomly chosen who were able to read and speak English, had been in the hospital for at least 48 hours, and were not scheduled for release any time soon. The response rate was 91%, with 2720 patients participating. Likert scale, rating system, used in questionnaires, that was designed to measure people's attitudes, opinions, or perceptions. Subjects choose from a range of possible responses to a specific question or statement; responses typically include "strongly agree," "agree," "did not answer," "disagree," and "strongly disagree." Often, the categories of response are coded numerically, in which case the numerical values must be defined for that specific study, such as 5 = strongly agree, 4 = agree, and so on.

- **Statistical Software:** MS-Excel and SPSS 25 will be used for Statistical analysis.
- **Statistical tools:** Descriptive analysis was applied to understand the basic nature of the data. Validity will be tested through factor analysis.

CONCEPTUAL FRAMEWORK:



RESULTS:

Test for hypothesis:

The level of contentment experienced by patients was an important indicator of the quality of a healthcare system. The Patient Satisfaction Survey was a helpful instrument that may be used for monitoring client input and making improvements to the Patient Experience over the course of time. It was an excellent and convenient method for gathering feedback from patients.

- **Unit Capacity:**

The phrase "quality of health care" refers to the degree to which patients get treatment that satisfies a specified level of treatments that are both safe and effective in improving patients' health while being within the financial means of the patients themselves. It should come as no surprise that an increasing focus has been placed on this part of hospital care in recent years given that studies have shown that patients report the highest levels of satisfaction with interpersonal interactions such as bonds between staff and patients. A recent study that was carried out in China concluded that the degree to which a patient was satisfied with the therapy they get was an essential indicator of the treatment's overall fairness. The referral hospital's privileged position at the apex of the healthcare delivery pyramid, where super-specialized treatment was delivered, may be ascribed in large part to the high levels of happiness that were reported by the respondents. Despite this, a number of patients were dissatisfied with the long wait periods, costly treatment charges, and extra investigation expenditures. It was a well-known fact that patients will look for treatment elsewhere if they are unhappy with the level of care they are receiving from their current provider.

- **Results in a Descriptive Form**

Table 1 displays descriptive statistics for all research variables in addition to pertinent psychometric information. On average, hospitals reported having 345 available beds (Standard Deviation: 185), while the case mix index recorded by these hospitals was 1.44 (Standard Deviation: .317). The average patient was a 56-year-old woman who had been hospitalized many times in the previous 12 months. Patients' levels of satisfaction with their health ranged from "fair" to "excellent." Satisfaction levels among patients ranged from "good" to "outstanding," with a mean score of 44.4 (out of a possible 52).

- **Unit Structure as Influenced by Hospital and Nursing Unit Qualities**

Number of Units Unit capacity was shown to be greater in bigger hospital, teaching hospitals, and hospitals with more critically sick patients, and lower in hospitals with decreasing or very unstable admission patterns (unstandardized regression coefficients, Table 1). The presence or absence of magnets has no effect on the efficiency of the machinery. There was no statistically significant relationship between any of the variables and nursing home capacity.

On basis of the above discussion, the researcher formulated the following hypothesis, which was analyse the relationship between Unit capacity and Patient satisfaction.

H₀: There is a no significant relationship between Unit capacity and Patient satisfaction.

H₁: There is a significant relationship between Unit capacity and Patient satisfaction.

Table 1: Model	Variable	Estimates and Standard Errors without Normalization							
		Unit Capacity		Work Engagement		Work Conditions		Patient Satisfaction	
		Estimate	Std Error	Estimate	Std Error	Estimate	Std Error	Estimate	Std Error
Hospital Environment									
	Hospital Size	0.001 [*]	0.001	0.000	0.001	0.000	0.001		
	Teaching Status	1.808 ^{**}	0.425	-0.028	0.554	0.016	0.914		
	Case Mix Index	0.545 [*]	0.257	0.998	0.527	0.464	0.390		
	Magnet Certification	0.377	0.317	0.181	0.455	1.116 ^{**}	0.383		
	Organizational Life Cycle								
	Growers	0.483	0.273	-1.299 [*]	0.626	-0.900	0.555		
	Decliner	-0.963 [*]	0.448	-0.724	0.580	-1.565 [*]	0.731		
	Highly Unstable	-1.014 [*]	0.464	0.667	0.500	-0.789	0.665		
	Unstable	-0.257	0.210	-0.152	0.350	-0.041	0.306		
Nursing Unit Environment									
	Unit Size	-0.002	0.008	0.001	0.010	-0.009	0.011		
	Support Services Availability	0.016	0.042	0.090	0.068	0.214 ^{**}	0.066	0.219 ^{***}	0.061
	Patient Acuity	0.024	0.022	0.007	0.034	0.028	0.037		
	Work Complexity	-0.051	0.026	-0.114 ^{**}	0.048	-0.212 ^{**}	0.042		
Patient Characteristics									
	Age							0.047 ^{**}	0.019
	Gender (% Females)							1.309	0.769
	Health Status							0.762 ^{**}	0.326
	Education							-0.354	0.621
	Hospitalization in Past Year							-0.090	0.809
	Symptom Management							0.367 ^{***}	0.078
Nursing Unit Structure									
	Unit Capacity							-0.112	0.106
	Work Engagement							0.202 ^{***}	0.063
	Work Conditions							0.092	0.065
	Intercept	-1.571	1.814	-1.594	3.575	-3.056	3.024	21.465	3.517
	R ²	0.255		0.097		0.258		0.313	

Accessibility to support services as a regressor in analyses of patient satisfaction on unit capacity, work engagement, work conditions, and patient characteristics has the potential to increase patient satisfaction (chi square value = 49.7, p = .009; CFI = .92; TLI = .79; RMSEA = .05), according to the Contentment of Patients Modification index. After making the modification we suggested, they found that offering help services was significantly associated with higher levels of staff engagement and patient satisfaction. When patients were younger, healthier, and had less symptoms, they reported a higher level of satisfaction with their treatment. A very excellent match to the data was found using many different statistics (chi-square = 39.5 (df = 31; p = 0.14), CFI = 0.97, TLI = 0.92, and RMSEA = 0.03). This means the “*H1: There is a significant relationship between Unit capacity and Patient satisfaction*” is accepted and the null hypothesis is rejected.

CONCLUSION:

High-quality medical treatment relies heavily on the efficient administration of available human resources. New policies can't be formulated without a renewed emphasis on health care human resource management. In order to improve health care results and accessibility on a global scale, effective human resource management practices are essential. This research was the first of its kind to use an integrated theoretical and statistical framework to demonstrate how patients' perspectives on their care provide an essential contextualization of nursing's organizational and procedural components. Having a larger

percentage of nurses with a bachelor's degree and a lower percentage of uncompleted clinical care activities are two indicators of nursing excellence. These results highlight the importance of nursing administration prioritizing the direct care of patients by implementing process improvement measures. There was mounting evidence linking nurses with bachelor's degrees to improved patient safety and care, and hospitals should reflect this in their employment practices. Patient satisfaction was significantly impacted by organizational elements in hospitals and nursing units, notably nursing unit support services and procedures that enhance nurses' job engagement and successful symptom management. The use of cutting-edge ICT in hospitals not only speeds up the flow of patients entering and leaving the facility, but also improves communication between departments, streamlines the acquisition of necessary medical equipment, and improves the accuracy of diagnostic tests. Yet, the electronic record and the nurse's clinical judgment and evidence-based care may have a greater influence on care management procedures if organizational policies, infrastructure, and nurses' incentive to write nursing reports are modified and enhanced, respectively.

LIMITATION:

The cross-sectional data collected makes it impossible to determine if the links they observed are causal. Omitted variable bias may result from ignoring nurses' mental health, which has been connected to both the study's key explanatory variables and their patients' treatment reports. The effects of morning, day, and night shifts and shifts of different lengths were not examined. Despite accounting for random hospital and country effects, the findings may not apply to other nations. Their inquiry was limited. Even using a random approach to enroll patients, sample size might introduce bias. Most of their female and self-reported-healthy patients were satisfied. They may have excluded persons who would have reported discontent. They also couldn't collect data on patients' contacts with other hospital departments or clinical data, which may affect their entire experience. Despite these caveats, their research was one of the few that attempts to determine whether organizational, nursing unit, or patient factors affect patient satisfaction. Their study emphasizes the importance of nursing care and symptom management in patient satisfaction.

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