# Assessing the Hospital Nurse Managers' Competencies in Saudi Arabia

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**AIM:** The purpose of this research is to assess the competencies of the nurse managers from different hospital units in a university tertiary hospital in Saudi Arabia.

**BACKGROUND:** Nurses are among the largest and most critical constituents in the health systems. It is essential that they manage and are managed to guarantee sustainable and efficient delivery of health care. Recent literatures showed that nurses appear to be significantly more dissatisfied with their work and their managers raises questions about a potential gap in nursing leadership and management.

**METHODS:** The study utilized cross-sectional approach to determine the competencies of nurse managers using Chase Nurse Manager Competency Instrument. Sixty-five nurses in managerial positions were conveniently selected. Aside from managerial positions, the respondents are licensed nurses and have at least 1-year clinical experience in their recent assigned units. Data analysis was performed using Statistical Package for Social Science version 23.0.

**RESULTS:** The respondents as considered 52 out of 53 knowledge competencies as contributing significantly to effectiveness for nurse manager competence. Only Financial resource procurement registered a value of 2.95. As for the ability to implement and use competencies, only three competencies: cost benefit analysis (2.97), operational and capital budget forecasting and generation (2.85), and financial resource procurement (2.85) registered values less than 3. The other fifty competencies are considered by the respondents to contribute significantly to an effective nurse manager.

**CONCLUSION:** To be effective nurse mangers, they should be knowledgeable and equipped with following skills: collaboration, communication, staffing, decision-making, and delegation. However, financial resource procurement demonstrates a moderate contribution to effective nurse manager unlike the other competencies which demonstrates high contribution for effectiveness of nursing manager competency. Implications for nursing management: healthcare organizations can use the study results to ensure that all nursing mangers have the necessary skills for effective nurse manger to achieve healthy working environment and deliver safe and high quality care for their patients.

*Key Words: Nurse Managers; Competencies; Hospital; Saudi Arabia*

## INTRODUCTION

The government of Saudi Arabia has given high priority to the development of health care services at all levels: primary, secondary and tertiary. As a consequence, the health of the Saudi population has greatly improved in recent decades. However, a number of issues pose challenges to the health care system, such a shortage of Saudi health professionals, the health ministry's multiple roles, limited financial resources, changing patterns of disease, high demand resulting from free services, an absence of a national crisis management policy, poor accessibility to some health care facilities, lack of a national health information system, and the underutilization of the potential of electronic health strategies [1-3].

The nursing profession in Saudi Arabia is also diverse. Staff nurses in KSA are used to toil in a multi-cultural working environment that required them to be culturally aware, sensitive and knowledgeable. Even with the current percent of the national nurses 52%, based on MOH (2015), so still the shortage of nurses in Saudi lead to recruiting nurses from different parts of the world. The recruitment has become a traditional which continues to make the kingdom diverse.

"The changes in health and social environment during the past two decades have led to the increased importance of management in the healthcare sector, regardless of whether it is predominantly tax, social insurance, or market based" [4]. Nurse Managers provide the vital link between the administrative strategic plan and the point of care. The nurse manager is responsible for creating safe, healthy environments that support the work of the health care team and contribute to patient engagement. The role is influential in creating a professional environment and fostering a culture where interdisciplinary team members are able to contribute to optimal patient outcomes and grow professionally [5]. To have a good quality for medical services, the healthcare organizations should recruit and develop competent managers [6]. "Head nurses' performance plays an important role in the successful operation of hospitals. Identification and prioritization of managerial competencies required for these supervisors and evaluation of their performance on this basis are necessary" [7]. All managers, irrespective of where or what they manage, need to develop several competencies that will enable them to effectively perform the 4 generic functions of planning, organizing, leading and controlling [8-10]. The field of health care management however, poses unique challenges as managers are expected to integrate modern business management practices with clinical and healthcare knowledge. "Competent manager facilitates the implementation of health care reforms, through ensuring staff participation and managing complex change" [11].

Professional nursing managers can positively influence the quality of care for patients and the peace of mind for staff members. By applying effective management concepts, nurses can play a role in ensuing health care is safe, effective, equitable, efficient, patient-focused and timely. To be an effective nurse manager, nurses must master business skills, in addition to their clinical abilities, that include effective communication, negotiation and conflict resolution, resource management and team-building [12-14].

Nurse manager workplace demands include increasing numbers of direct reports, decreased resources, decreased clinical involvement, increased staff diversity, increased coordination across differing nursing units, issues with assistive personnel, changing regulatory requirements, and the need for new management skills coupled with the increasing complexity of hospitalized patients. The time consuming demands of staffing, however, have been reported to be the manager's greatest challenge, precluding ability to be visible, build relationships with staff, and allow time to engage in those activities directly related to constructing a committed, retained staff [15].

Nurses are among the largest population in the health systems, thus it is essential that they manage and are managed to maintain quality delivery of health care. Recently, nurses appear to be significantly more dissatisfied with their work and their managers raises questions about a potential gap in their capacity to manage the system. The issue aggravates as cultural diversity affects communication, behaviour and policy implementation among. Saudi Arabia, with diverse health care workers, needs assessment studies among foreign nurses which will be useful where national health systems are attempting to bridge the gap between the diversity of culture in the health care system. Hence, this new research aims to assess the nurse manager competencies among nurse managers in the government hospitals of Saudi Arabia. The findings will serve as basis in enhancing efficiency and effectiveness in the delivery of health care, by assessing management proficiency as part of an overall management development process among nurses especially with the expatiates [16-18].

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## AIMS

The purpose of this present study was to determine the competency of the nurse managers in KSA. Specifically, the study aims to:

1. Assess the nurse managers' competencies on technical, human, conceptual, leadership, and financial management skills.

2. Determine the demographic profile, educational background and professional experiences as nurse manager.

## METHODS

### Research design

The study followed the cross sectional descriptive approach.

### Sampling and setting

The study carried out convenience sampling using G power analysis for the determination of the sample size. Different units in the selected hospital served as the research settings of the study.

### Data collection

A survey approach was used in this study. Accessing different units/ wards in the selected hospital in Riyadh KSA where nurse managers were working was performed by the researchers. The respondents were oriented with their right to withdraw from the study. Also they were requested to voluntarily complete the questionnaires. Recruitment was done with the approval from the nursing director's office.

### Criteria

The respondents must hold a managerial position as either nurse manager or head nurse, licensed to practice nursing and with clinical experience not less than a year in their assigned units. The nurse manager was defined as a unit-based nursing leader who is responsible for day-to-day operations of at least one inpatient area. This population was chosen because of the importance of eliciting information and perceptions from individuals who are currently active in their managerial role. The nurse managers were viewed as a reliable source self-perceptions regarding competencies necessary to effective managerial role.

### Instruments

The Chase (1994) Nurse Manager Competency Instrument includes two parts. The first part consists of a competency rating scale developed by the investigator. (Appendix E) The methodology of the questionnaire development included an extensive literature review to identify and create competency statements. Instructions for the instrument direct respondents to select the corresponding rating based on their opinion to the importance rating of each competency statement. A Likert scale indicates the level of competency rating on a 1-4 scale for both knowledge and ability importance levels, 4=essential for first-line nurse manager, 3=contributes significantly, 2=contributes moderately, 1=contributes minimally. The second part of the instrument is composed of demographic questions. These questions are an important part of the questionnaire because they are the method of collecting data regarding the extraneous variables (covariates) that may impact the ratings. Organizational variables included hospital size, Magnet status and span of control. Individual variables consist of gender, age, education, years of RN practice, tenure in management and tenure in current position.

### Statistical analysis

Statistical Package for Social Science (SPSS) ver. 21 was utilized for data analysis.

### Ethical considerations

Ethical clearance was obtained from the Institutional Review Board (IRB). The respondents were requested to sign the informed consent which indicates their voluntary will to participate.

## RESULTS

There were 65 respondents who signed up for this study (Table 1). Of this number of respondents, 43.1% belonged to the 35 to 44 age cohort. The remaining 46.2% were from the 45 and above age group. Majority of these had experiences handling management positions for 1 to 2 years (63.0%). All of them said they had been into management position for sometimes. In terms of educational attainment, 72.3% of the respondents have earned their master's degree. About seventeen percent of them are graduates of diploma

courses. Majority (89.2%) are females who have accreditation on CIBAHI, JCI, and Canadian. These nurses are working mostly in three units, namely Medicine (24.6%), Out-patient Department (18.5%), Surgery (16.9%), and Maternal or Paediatric Units (16.9%). In terms of work experience, 73.8% of them have been with the health care industry for more than 10 years. Twenty-five percent of them have worked only for 1 to 4 years. Forty-four percent have supervisory control over 25 to 49 Full Time Employees (FTEs). Twenty-four percent have supervisory control of less than 24 FTEs.

There were a total of 106 competencies evaluated in this study. Of these, the respondents as considered 52 out of 53 knowledge competencies as contributing significantly to effectiveness for nurse manager competence. These are competencies that garnered mean ratings greater than or equal to 3.0. Only Financial resource procurement registered a value of 2.95, which is considered as contributing moderately to effectiveness for nurse manager competence. As for the ability to implement and use competencies, only

**TABLE 1**
**Demographic information (n=65).**

| Demographic Variables | Response | n | % |
|---|---|---|---|
| | >25 yrs | 0 | 0 |
| | 25-34 | 7 | 10.8 |
| Age | 35-44 | 28 | 43.1 |
| | 45-54 | 15 | 23.1 |
| | 55 or more | 15 | 23.1 |
| | 1 to 2 | 41 | 63 |
| Duration of Management Position | 3 to 4 | 11 | 16.9 |
| | 5 to 9 | 3 | 4.6 |
| | 10 or more | 10 | 15.4 |
| | Associate | 0 | 0 |
| | Diploma | 11 | 16.9 |
| Educational Attainment | BS | 7 | 10.8 |
| | Masters | 47 | 72.3 |
| | Doctorate | 0 | 0 |
| Gender | Male | 7 | 10.8 |
| | Female | 58 | 89.2 |
| | CIBAHI | 65 | 100 |
| | JCI | 65 | 100 |
| Accreditation | CANADIAN | 65 | 100 |
| | MAGNET | 0 | 0 |
| | Others | 0 | 0 |
| | Surgery | 11 | 16.9 |
| | Medicine | 16 | 24.6 |
| | OPD | 12 | 18.5 |
| | Emergency | 4 | 6.2 |
| Unit | ICU | 4 | 6.2 |
| | OR/PACU | 4 | 6.2 |
| | Onco | 0 | 0 |
| | Maternal/Pedia | 11 | 16.9 |
| | Psychiatry | 3 | 4.6 |
| | > 1 yrs. | 0 | 0 |
| | 1 to 2 | 8 | 12.3 |
| Years of Experience as nurse | 3 to 4 | 8 | 12.3 |
| | 5to 9 | 1 | 1.5 |
| | 10 or more | 48 | 73.8 |
| | > 24hrs | 16 | 24.6 |
| | 25-49 | 29 | 44.6 |
| FTE | 50-74 | 6 | 9.2 |
| | 75-99 | 0 | 0 |
| | 100 or more | 14 | 21.5 |

three competencies, namely, cost benefit analysis (2.97), operational and capital budget forecasting and generation (2.85), and financial resource procurement (2.85) registered values less than 3. This means that the other fifty competencies are considered by the respondents to contribute significantly to an effective nurse manager (Tables 2 and 3).

Almost all of the competencies in both knowledge and ability to implement

and use aspects garnered frequency of "4" ratings above 40, especially on the technical and human side of it. The category that registered the lowest number of "4" ratings were attributed to the financial management competencies (Tables 4 and 5).

When evaluated based on which categories competencies with higher ratings come from, it was shown that the top 10 belong to the leadership, technical

**TABLE 2**
**Competency statement ratings.**

| S. No. | | Knowledge and Understanding of | | | | | Ability to Implement and/or Use | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | Range | Mean | SD | Rank | N | Range | Mean | SD | Rank |
| | **Technical** | | | | | | | | | | |
| 1 | Nursing practice standards | 65 | 2 | 3.78 | 0.45 | 12 | 65 | 1 | 3.85 | 0.36 | 18 |
| 2 | Nursing care delivery systems | 65 | 2 | 3.82 | 0.46 | 9 | 65 | 3 | 3.86 | 0.46 | 10 |
| 3 | Nursing care planning | 65 | 1 | 3.83 | 0.38 | 8 | 65 | 3 | 3.75 | 0.53 | 39 |
| 4 | Clinical skills | 65 | 2 | 3.86 | 0.39 | 5 | 65 | 3 | 3.88 | 0.45 | 7 |
| 5 | Patient acuity systems | 65 | 3 | 3.91 | 0.42 | 2 | 65 | 3 | 3.92 | 0.41 | 3 |
| 6 | Infection control practices | 65 | 5 | 3.82 | 0.68 | 10 | 65 | 1 | 3.85 | 0.36 | 17 |
| 7 | Research and evidence-based practice | 65 | 3 | 3.57 | 0.59 | 40 | 65 | 1 | 3.80 | 0.40 | 30 |
| 8 | New technology | 65 | 3 | 3.62 | 0.63 | 33 | 65 | 2 | 3.78 | 0.52 | 33 |
| 9 | Case management | 65 | 3 | 3.58 | 0.68 | 38 | 65 | 1 | 3.80 | 0.40 | 29 |
| 10 | Information Systems and Computers | 65 | 3 | 3.60 | 0.58 | 35 | 65 | 1 | 3.78 | 0.41 | 34 |
| 11 | Regulatory Agency Standards | 65 | 3 | 3.65 | 0.65 | 26 | 65 | 1 | 3.77 | 0.43 | 37 |
| | **Human** | | | | | | | | | | |
| 12 | Effective communication | 65 | 3 | 3.91 | 0.42 | 3 | 65 | 1 | 3.97 | 0.17 | 1 |
| 13 | Effective staffing strategies | 65 | 3 | 3.89 | 0.44 | 4 | 65 | 1 | 3.86 | 0.35 | 9 |
| 14 | Recruitment strategies | 65 | 3 | 3.49 | 0.75 | 45 | 65 | 2 | 3.62 | 0.63 | 46 |
| 15 | Retention strategies | 65 | 3 | 3.54 | 0.66 | 42 | 65 | 2 | 3.82 | 0.43 | 25 |
| 16 | Effective discipline | 65 | 3 | 3.80 | 0.57 | 11 | 65 | 1 | 3.86 | 0.35 | 11 |
| 17 | Effective counseling strategies | 65 | 3 | 3.78 | 0.57 | 13 | 65 | 1 | 3.86 | 0.35 | 12 |
| 18 | Constructive performance evaluation | 65 | 3 | 3.86 | 0.50 | 6 | 65 | 1 | 3.85 | 0.36 | 16 |
| 19 | Staff development strategies | 65 | 3 | 3.85 | 0.48 | 7 | 65 | 2 | 3.83 | 0.42 | 21 |
| 20 | Group Process | 65 | 3 | 3.65 | 0.57 | 27 | 64 | 1 | 3.81 | 0.39 | 26 |
| 21 | Interviewing techniques | 65 | 3 | 3.52 | 0.62 | 43 | 65 | 1 | 3.77 | 0.43 | 38 |
| 22 | Team-building strategies | 65 | 3 | 3.69 | 0.56 | 21 | 65 | 1 | 3.83 | 0.38 | 22 |
| 23 | Humor | 65 | 3 | 3.62 | 0.63 | 34 | 65 | 2 | 3.69 | 0.58 | 44 |
| 24 | Optimism | 65 | 3 | 3.68 | 0.56 | 23 | 65 | 1 | 3.78 | 0.41 | 31 |
| | **Conceptual** | | | | | | | | | | |
| 25 | Nursing theories | 65 | 3 | 3.72 | 0.63 | 14 | 65 | 3 | 3.77 | 0.52 | 36 |
| 26 | Administrative/ organizational theories | 65 | 3 | 3.71 | 0.63 | 18 | 65 | 2 | 3.80 | 0.44 | 27 |
| 27 | Strategic planning/ Goal development | 65 | 3 | 3.60 | 0.66 | 36 | 65 | 1 | 3.86 | 0.35 | 15 |
| 28 | Ethical Principles | 65 | 3 | 3.71 | 0.55 | 19 | 65 | 3 | 3.72 | 0.57 | 41 |
| 29 | Teaching and learning theories | 65 | 3 | 3.63 | 0.60 | 30 | 65 | 3 | 3.74 | 0.54 | 40 |
| 30 | Political process and advocacy | 65 | 3 | 3.48 | 0.66 | 46 | 65 | 3 | 3.65 | 0.62 | 45 |
| 31 | Quality/process improvement | 65 | 3 | 3.63 | 0.58 | 31 | 65 | 3 | 3.80 | 0.59 | 28 |
| 32 | Legal issues | 65 | 3 | 3.52 | 0.71 | 44 | 65 | 3 | 3.71 | 0.58 | 43 |
| | **Leadership** | | | | | | | | | | |
| 33 | Decision making | 65 | 4 | 3.98 | 0.63 | 1 | 65 | 1 | 3.89 | 0.31 | 4 |
| 34 | Power and empowerment | 65 | 3 | 3.65 | 0.60 | 28 | 65 | 1 | 3.78 | 0.41 | 32 |
| 35 | Delegation | 65 | 3 | 3.72 | 0.55 | 15 | 65 | 1 | 3.88 | 0.33 | 8 |

| 36 | Change process | 65 | 3 | 3.66 | 0.57 | 25 | 65 | 1 | 3.82 | 0.39 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | Conflict resolution | 65 | 3 | 3.71 | 0.55 | 20 | 65 | 1 | 3.86 | 0.35 | 14 |
| 38 | Problem-solving | 65 | 3 | 3.72 | 0.55 | 16 | 65 | 1 | 3.86 | 0.35 | 13 |
| 39 | Stress management | 65 | 3 | 3.69 | 0.58 | 22 | 65 | 1 | 3.82 | 0.39 | 23 |
| 40 | Research process | 65 | 3 | 3.60 | 0.66 | 37 | 65 | 2 | 3.71 | 0.49 | 42 |
| 41 | Motivational strategies | 65 | 3 | 3.57 | 0.59 | 41 | 65 | 1 | 3.78 | 0.41 | 35 |
| 42 | Organization of unit of work and workflow process | 65 | 3 | 3.63 | 0.58 | 32 | 65 | 1 | 3.85 | 0.36 | 19 |
| 43 | Policies and procedures | 65 | 3 | 3.68 | 0.56 | 24 | 65 | 1 | 3.95 | 0.21 | 2 |
| 44 | Staff education | 65 | 3 | 3.65 | 0.57 | 29 | 65 | 1 | 3.89 | 0.31 | 6 |
| 45 | Time management | 65 | 3 | 3.72 | 0.55 | 17 | 65 | 1 | 3.89 | 0.31 | 5 |
| 46 | Interdisciplinary care coordination | 65 | 3 | 3.58 | 0.58 | 39 | 65 | 2 | 3.85 | 0.40 | 20 |
| | **Financial Management** | | | | | | | | | | |
| 47 | Cost containment and cost avoidance practices | 65 | 3 | 3.42 | 0.77 | 48 | 65 | 3 | 3.22 | 0.76 | 48 |
| 48 | Productivity measurements | 65 | 4 | 3.43 | 0.71 | 47 | 65 | 3 | 3.37 | 0.72 | 47 |
| 49 | Operational and capital budget forecasting and generation | 65 | 3 | 3.11 | 0.90 | 51 | 65 | 3 | 2.85 | 0.99 | 51 |
| 50 | Cost benefit analysis | 65 | 3 | 3.15 | 0.94 | 50 | 65 | 3 | 2.97 | 0.95 | 50 |
| 51 | Unit budget control measures | 65 | 3 | 3.23 | 0.98 | 49 | 65 | 3 | 3.02 | 0.98 | 49 |
| 52 | Financial resource procurement | 65 | 3 | 2.95 | 1.04 | 52 | 65 | 3 | 2.85 | 1.00 | 52 |

**TABLE 3**

Frequency of competency statement "4" ratings.

| S. No | | Knowledge and Understanding of | | Ability to Implement and/or Use | |
|---|---|---|---|---|---|
| | | N | Frequency of 4 Ratings | N | Frequency of 4 Ratings |
| | **Technical** | | | | |
| 1 | Nursing practice standards | 65 | 52 | 65 | 55 |
| 2 | Nursing care delivery systems | 65 | 55 | 65 | 58 |
| 3 | Nursing care planning | 65 | 54 | 65 | 51 |
| 4 | Clinical skills | 65 | 57 | 65 | 59 |
| 5 | Patient acuity systems | 65 | 61 | 65 | 62 |
| 6 | Infection control practices | 65 | 53 | 65 | 55 |
| 7 | Research and evidence-based practice | 65 | 39 | 65 | 52 |
| 8 | New technology | 65 | 44 | 65 | 54 |
| 9 | Case management | 65 | 43 | 65 | 52 |
| 10 | Information Systems and Computers | 65 | 41 | 65 | 51 |
| 11 | Regulatory Agency Standards | 65 | 46 | 65 | 50 |
| | **Human** | | | | |
| 12 | Effective communication | 65 | 61 | 65 | 63 |
| 13 | Effective staffing strategies | 65 | 60 | 65 | 56 |
| 14 | Recruitment strategies | 65 | 40 | 65 | 45 |
| 15 | Retention strategies | 65 | 40 | 65 | 54 |
| 16 | Effective discipline | 65 | 56 | 65 | 56 |
| 17 | Effective counseling strategies | 65 | 55 | 65 | 56 |
| 18 | Constructive performance evaluation | 65 | 59 | 65 | 55 |
| 19 | Staff development strategies | 65 | 57 | 65 | 55 |
| 20 | Group Process | 65 | 44 | 64 | 52 |
| 21 | Interviewing techniques | 65 | 37 | 65 | 50 |
| 22 | Team-building strategies | 65 | 47 | 65 | 54 |
| 23 | Humor | 65 | 44 | 65 | 49 |
| 24 | Optimism | 65 | 46 | 65 | 49 |
| | **Conceptual** | | | | |
| 25 | Nursing theories | 65 | 51 | 65 | 52 |

| 26 | Administrative/ organizational theories | 65 | 50 | 65 | 53 |
|---|---|---|---|---|---|
| 27 | Strategic planning/ Goal development | 65 | 43 | 65 | 0 |
| 28 | Ethical Principles | 65 | 48 | 65 | 50 |
| 29 | Teaching and learning theories | 65 | 44 | 65 | 50 |
| 30 | Political process and advocacy | 65 | 36 | 65 | 46 |
| 31 | Quality/process improvement | 65 | 43 | 65 | 56 |
| 32 | Legal issues | 65 | 40 | 65 | 49 |
| | **Leadership** | | | | |
| 33 | Decision making | 65 | 48 | 65 | 58 |
| 34 | Power and empowerment | 65 | 45 | 65 | 51 |
| 35 | Delegation | 65 | 49 | 65 | 57 |
| 36 | Change process | 65 | 45 | 65 | 53 |
| 37 | Conflict resolution | 65 | 48 | 65 | 56 |
| 38 | Problem-solving | 65 | 49 | 65 | 56 |
| 39 | Stress management | 65 | 48 | 65 | 53 |
| 40 | Research process | 65 | 44 | 65 | 47 |
| 41 | Motivational strategies | 65 | 39 | 65 | 51 |
| 42 | Organization of unit of work and workflow process | 65 | 43 | 65 | 55 |
| 43 | Policies and procedures | 65 | 46 | 65 | 62 |
| 44 | Staff education | 65 | 44 | 65 | 58 |
| 45 | Time management | 65 | 49 | 65 | 58 |
| 46 | Interdisciplinary care coordination | 65 | 40 | 65 | 56 |
| | **Financial Management** | | | | |
| 47 | Cost containment and cost avoidance practices | 65 | 36 | 65 | 25 |
| 48 | Productivity measurements | 65 | 32 | 65 | 31 |
| 49 | Operational and capital budget forecasting and generation | 65 | 24 | 65 | 17 |
| 50 | Cost benefit analysis | 65 | 28 | 65 | 20 |
| 51 | Unit budget control measures | 65 | 33 | 65 | 23 |
| 52 | Financial resource procurement | 65 | 24 | 65 | 17 |
| 53 | Financial resource monitoring | 65 | 21 | 64 | 16 |

**TABLE 4**

**Highest knowledge and understanding competency ratings.**

| Category | Competency Item | Mean | SD | Rank | # of "4" Ratings |
|---|---|---|---|---|---|
| Leadership | Decision making | 3.98 | 0.63 | 1 | 48 |
| Technical | Patient acuity systems | 3.91 | 0.42 | 2 | 61 |
| Human | Effective communication | 3.91 | 0.42 | 3 | 61 |
| Human | Effective staffing strategies | 3.89 | 0.44 | 4 | 60 |
| Technical | Clinical skills | 3.86 | 0.39 | 5 | 57 |
| Human | Constructive performance evaluation | 3.86 | 0.50 | 6 | 59 |
| Human | Staff development strategies | 3.85 | 0.48 | 7 | 57 |
| Technical | Nursing care planning | 3.83 | 0.38 | 8 | 54 |
| Technical | Nursing care delivery systems | 3.82 | 0.46 | 9 | 55 |

and human categories. The highest competency that garnered the highest score is decision making (3.98), which received a total of 48 number "4" Likert score rating. This is followed by patient acuity systems (mean – 3.91; frequency of "4" ratings at 61) and effective communication (mean at 3.91; frequency of "4" ratings at 61) (Table 6).

For the knowledge aspect, the lowest ratings were attributed to some of the financial management competencies such as financial resource monitoring (2.83); financial resource procurement (2.95), and operation and capital budget forecasting and generation (3.11). These competencies received frequency of "4" ratings ranging from 21 to 24 (Table 7).

For the ability to implement and use, the competencies that received the lowest ratings were registered to financial management items. Top three among the lowest ranking competencies include financial resource monitoring (2.81), financial resource procurement (2.85), and operational and capital budget forecasting and generation (2.85). These competencies received "4" ratings only within the narrow range of 16 to 17 (Tables 3-7).

**DISCUSSION**

In nursing, the quality of care will be positively affected by nursing managers. Effective nurse managers should promote their clinical skills and abilities including collaboration and communication [12]. This study aims to firstly assess the nurse managers' competencies on technical, human, conceptual, leadership, and financial management skills. Secondly, to determine the demographic profile, educational background and professional experiences as nurse manager. This study revealed that the participants considered 52 out

TABLE 5

Highest ability to implement and use competency ratings.

| Category | Competency Item | Mean | SD | Rank | # of "4" Ratings |
|---|---|---|---|---|---|
| Human | Effective communication | 3.97 | 0.17 | 1 | 63 |
| Leadership | Policies and procedures | 3.95 | 0.21 | 2 | 62 |
| Technical | Patient acuity systems | 3.92 | 0.41 | 3 | 62 |
| Leadership | Decision making | 3.89 | 0.31 | 4 | 58 |
| Leadership | Time management | 3.89 | 0.31 | 5 | 58 |
| Leadership | Staff education | 3.89 | 0.31 | 6 | 58 |
| Technical | Clinical skills | 3.88 | 0.45 | 7 | 59 |
| Leadership | Delegation | 3.88 | 0.33 | 8 | 57 |
| Human | Effective staffing strategies | 3.86 | 0.35 | 9 | 56 |
| Technical | Nursing care delivery systems | 3.86 | 0.46 | 10 | 58 |

TABLE 6

Lowest knowledge and understanding competency ratings.

| Category | Competency Item | Mean | SD | Rank | # of "4" Ratings |
|---|---|---|---|---|---|
| Financial Management | Financial resource monitoring | 2.83 | 1.07 | 53 | 21 |
| Financial Management | Financial resource procurement | 2.95 | 1.04 | 52 | 24 |
| Financial Management | Operational and capital budget forecasting and generation | 3.11 | 0.90 | 51 | 24 |
| Financial Management | Cost benefit analysis | 3.15 | 0.94 | 50 | 28 |
| Financial Management | Unit budget control measures | 3.23 | 0.98 | 49 | 33 |
| Financial Management | Cost containment and cost avoidance practices | 3.42 | 0.77 | 48 | 36 |
| Financial Management | Productivity measurements | 3.43 | 0.71 | 47 | 32 |
| Conceptual | Political process and advocacy | 3.48 | 0.66 | 46 | 36 |
| Human | Recruitment strategies | 3.49 | 0.75 | 45 | 40 |

TABLE 7

Lowest ability to implement and use competency ratings.

| Category | Competency Item | Mean | SD | Rank | # of "4" Ratings |
|---|---|---|---|---|---|
| Financial Management | Financial resource monitoring | 2.81 | 1.01 | 53 | 16 |
| Financial Management | Financial resource procurement | 2.85 | 1.00 | 52 | 17 |
| Financial Management | Operational and capital budget forecasting and generation | 2.85 | 0.99 | 51 | 17 |
| Financial Management | Cost benefit analysis | 2.97 | 0.95 | 50 | 20 |
| Financial Management | Unit budget control measures | 3.02 | 0.98 | 49 | 23 |
| Financial Management | Cost containment and cost avoidance practices | 3.22 | 0.76 | 48 | 25 |
| Financial Management | Productivity measurements | 3.37 | 0.72 | 47 | 31 |
| Human | Recruitment strategies | 3.62 | 0.63 | 46 | 45 |
| Conceptual | Political process and advocacy | 3.65 | 0.62 | 45 | 46 |
| Human | Humor | 3.69 | 0.58 | 44 | 49 |

of 53 knowledge competencies as contributing significantly to effectiveness for nurse manager competence. The findings of this study are similar to a study that was performed by Al-Maqbali [6], who revealed that knowledge competency received high score (17.43) as an important competency for an effective manager. Moreover, this study revealed high scores similar to those competencies in this study as the following: relationship and collaboration (16.57), staffing (21.43), communication (20.99), technical excellence (20.44), and evidence based practice (19.33) [6].

On the other hand, this study revealed that only financial resource procurement registered a value of 2.95 which means a moderate contribution to effectiveness of nursing manager competency. Those findings are slightly similar to another study that was done by Erjavec and Starc [4] to identify the competencies among nurse managers in Slovenia. The study revealed that managers with a higher management position were significantly more competent in financial management than managers with a lower management position (p=0.002). This demonstrates that financial management including financial resource procurement has a contribution to an effective nursing

manager competency. Moreover, Karathanasi et al. [19] added that nursing managers have roles that are related to the financial management that need more training to be an effective nurse manger.

This study reports high score in decision making competency as (3.98). Other competencies represent high scores as the following: planning (3.83), staff education (3.89), problem solving (3.72), communication (3.91), and team building (3.83). A study was performed by Moghaddam et al. [7] to assess the competencies of head nurses in nursing departments at hospitals. This study revealed that nurse managers had a positive attitude among change, communication, negotiation, planning, time management, staffing, staff education, and other competency factors. They all agreed that these competencies are essential factors to be effective nurse manager within the healthcare organizations to achieve the healthcare goals.

Regarding the ability to implement the competencies, only three competencies: Cost benefit analysis (2.97), operational and capital budget forecasting and generation (2.85), and financial resource procurement

(2.85) had values less than 3. A study was done by Munyewende et al. [11] to evaluate the competencies among nurse managers in primary health care at South Africa. They focused on six domains which are communication, leadership, and staff management, problem-solving, planning, and financial management. The study revealed that financial management had the lowest score in scale which was 6.56 [11].

This study has shown that the other fifty competencies are considered by the participants that they are contributing significantly to an effective nurse manager. Similar results have been found in an evaluation of the competencies of primary health care clinic nursing managers in two South African provinces [11]. High scores are represented for the following competencies communication (8.6), leadership (8.67), problem-solving (8.83), planning (8.6), and staff management (8.75). These competencies contributed to be an effective nurse manager [11]. In addition, Tongmuangtunyatep et al. [20] performed a scale to assess the competencies among the head nurses. They included five important factors which considered essential to be an effective nurse manger. These factors are management, policy implementation, leadership, professional ethics, and healthcare environment management [20].

## CONCLUSION

Nursing managers directs and coordinates nursing faculty within the clinical settings. Nurse Managers collaborates with other medical staff to deliver high quality care. Nurse Managers should have several competencies such as technical and human to promote safe and good quality nursing care to the patients. To be effective nurse mangers, they should be knowledgeable and equipped with following skills: collaboration, communication, staffing, decision-making, and delegation. However, financial resource procurement demonstrates a moderate contribution to effective nurse manager unlike the other competencies which demonstrates high contribution for effectiveness of nursing manager competency. It is recommended to offer training programs within the healthcare organization to ensure that all nursing mangers have the necessary skills for effective nurse manger. Implications for nursing management: healthcare organizations can use the study results to ensure that all nursing mangers have the necessary skills for effective nurse manger to achieve healthy working environment and deliver safe and high quality care for their patients.

## REFERENCES

1. Al-Malki M. Health care system in Saudi Arabia: An overview. 2017.

2. Finkler S, Jones C, Kovner C. Financial management for nurse managers and executives. 2013.

3. Fennimore L, Wolf G. Nurse manager leadership development: Leveraging the evidence and system-level support. The Journal of Nursing Administration. 2011; 41: 204- 210.

4. Erjavec K, Starc J. Competencies of nurse managers in Slovenia: a qualitative and quantitative study. Central European Journal of Nursing and Midwifery. 2017; 8(2): 632-640.

5. American Organization of Nurse Executives. AONE Nurse Manager Competencies. 2015.

6. Al-Maqbali M. Transdisciplinarity: What competencies do future healthcare managers need to succeed. 2018.

7. Moghaddam NM, Jame SZB, Rafiei S, et al. Managerial competencies of head nurses: a model and assessment tool. British Journal of Nursing. 2019; 28(1): 30-37.

8. Lussier RN. Management fundamentals: Concepts, applications, skills development. Thomson South-Western: United States of America. 2006.

9. Hellriegel D, Jackson ES, Slocum J, et al. "Management". Oxford University Press: South Africa; 2004.

10. Garner C. Nurse Managers: Leading the Way. 2013.

11. Munyewende PO, Levin J, Rispel LC. An evaluation of the competencies of primary health care clinic nursing managers in two South African provinces. Global Health Action. 2016; 9(1): 32486.

12. Ray L. Concepts in Nursing Management. 2017.

13. Dever K. The skills, competencies, expertise, and embedded knowledge of nurse managers, as leaders, in long term care. Education Doctoral, 2010.

14. Benner P. From novice to expert: Excellence and power in clinical nursing practice. 1984.

15. Zastocki D. Retaining nurse managers. 2017.

16. Auerbach D, Buerhaus P, Staiger D. Registered nurses supply grows faster than projected amid surge in new entrants ages. 2011; 23-26.

17. Anderson R. Assessing Nurse Manager Competencies in a Military Hospital. 2016.

18. Anderson CP, Smith D, Stinson K, et al. Selling your dream: Business planning for the nurse leader. Nurse Leader. 2014; 12: 62-65.

19. Karathanasi K, Prezerakos P, Maria M, et al. Operating room nurse manager competencies in Greek hospitals. Clinical Nursing Studies. 2014; 2(2): 16-29.

20. Tongmuangtunyatep K, Kunaviktikul W, Nantsupawat R, et al. Development of a competency in community hospitals. Pacific Rim International Journal of Nursing Research. 2015; 19(2): 122-134.