



Designing and Validating a Head Nurse Managerial Skills Guidelines at Mansoura University Hospital

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Abstract: Background: Managerial skills guidelines improve head nurses' knowledge and practice regarding care, as well as organization performance increase. **Aim:** Design and validate head nurse managerial skills guidelines at Main Mansoura University Hospital. **Methods:** A methodological research design was used in the conduction of the present study with sample of 98 head nurses at main Mansoura University. Data was collected by utilizing managerial skills questionnaire **Results:** Near half of head nurses agreed that proposed guideline are importance, the first rank was about team work skills while the conflict management skills were ranked as the last skills as well as that more than half of head nurses agreed that proposed guideline were usually applicable Also, the present study indicated that the proposed guideline agreed upon its face and content validity via majority of jury experts. **Conclusion:** A managerial skills guideline is reliable and valid that provides some skills needed by head nurses as team work, risk taking, analytical and problem solving, decision making, communication delegation and conflict skills. **Recommendations:** Head nurses should be taught using real-world scenarios to develop their skills, Regulate development programs depending on key elements of managerial guideline. Design formal feedback system on head nurses progress and performance for increasing feeling of need of developing skills.

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1. Introduction

The characteristics of the workplace provide numerous obstacles. They must establish objectives, create and carry out long-term plans, and hone certain abilities in these demanding settings (Kalinowski, 2022). A head nurse who is well qualified in managerial skills will be able to provide standards and policies related to patient care to direct the staff nurses, orient and update them of the standard of patient care those standards and policies based on guidelines (Menem, Farouk, Eid, & El-Shahat, 2019).

In ever-changing health care organizations, head nurses' roles are becoming increasingly significant. As their authority, accountability, and responsibility regarding patients, staff development, and unit management increase, as head nurse their responsibilities extend beyond the bedside to include solely administrative tasks. The personnel has increased, and the organizations have expanded. These changes have led to many challenges and more responsibilities to attain organization's goal (Vasset, Fagerström, & Frilund, 2023).

The majority of newly graduated head nurses are not prepared to take on their actual responsibilities. To identify their strengths and develop their abilities, they need chances for

introspection, critical thinking, and selfdiscovery. Developing skills is accomplished through on-the-job training and coaching, as well as assistance from peers and superiors who are capable managers (Roussel, Harris, James & Thomas, 2020).

Those skills include ability to work in team, analytical and problem solving, decision making, risk taking, communication skills, delegation and managing conflict skills. The traits and competencies that enable team members to collaborate well with others during discussions, meetings, or other activities are known as team work skills. Developing team work skills can help in both career and when seeking new opportunities (Chinoy, et al, 2022).

Problem solving skill is a person's ability to engage in cognitive processes when understanding and solving problems when the method of solving is not readily available it can be acquired throughout one's lifetime. Experience is a component of problem-solving abilities. (Zascerinska, Scheepers, & Kühn, (2024). Decision making skills are those skills that aid in the ability to choose solutions to challenges. With these skills, head nurses can make informed decisions once collecting all the relevant information and data and considering numerous viewpoints (Herrity, 2023).

In addition to having the courage to take chances, effective head nurses must be able to create an environment in the workplace that encourages risk taking. They encourage nurses to share and discuss new and innovative ideas (**Albuqami, Taie & Abdullah, 2020**). This occurs through collection of basic abilities for introducing, inquiring, listening, facilitating, and concluding with the ultimate goal of patient care make up the art of communication. (**Salm et al, 2022**). The ability to delegate is a high-level skill that is crucial for the head nurse and gets better with practice. They become more influential and powerful inside and beyond the company as they develop the maturity and self-assurance necessary to delegate effectively. (**Indeed Editorial Team, 2021**).
Significance of the Study

The truth is that educational institutions do not adequately prepare their students for the skills that head nurses require in society, and there is a disconnect between what they learn in school and what they actually need because school knowledge is not often sufficient to cover all necessary skills. So developing guideline of skills of what really found in work place is most important (**Arifin, Sukarmin & Sarwanto, 2022**). Developing efficient guidelines aids teams in completing work more quickly. Following a few more rules can improve one's capacity to accelerate the transfer of knowledge from a documentation culture, optimize one's own knowledge management, add to institutional knowledge, and promote operational excellence (**Cohen, 2023**).

Managers need to be able to clearly identify whether various abilities are necessary for their managing function in order to be effective. Additionally, managers need to comprehend one other's perspectives on the abilities and duties required for their roles. In short, guiding and understanding whether certain managerial skills are important to a manager's job is essential (**Suliman, 2021**).

Aim of the study :-

This study aimed to design and validate a head nurse managerial skills guideline at Main Mansoura University Hospital

Research questions: -

RQ: What are managerial skills needed by head nurses at Main Mansoura University Hospital?

2. Methods

Study design:

The study was conducted using a methodological research design.

Study setting:

Mansoura University Hospital, a tertiary care teaching hospital associated with Mansoura University, hosted the trial in all Main Mansoura University departments. This hospital, which is situated in Mansoura City, is significant since it serves as the main teaching facility for medical education programs.

Study subjects:

All accessible head nurses (n=98) assigned to work at main Mansoura university hospital, throughout the data collection period with a minimum of one year's experience to be familiar with the working environment.

Data collection tools:

Tool of data collection: -

Managerial skills questionnaire contain to two parts:

Part 1: Included personal characteristics about head nurses such as age, educational level and years of experience.

Part 2: An questionnaire of managerial skills was developed by researcher based on literature review (Shuayto, 2001; Welch, 2009; Askew, 2011; Garneau, 2012; Southern cross questionnaire university, 2013; Mitchum, 2014; Briones, 2015; Martinez, 2015; Kwabi, 2017) to assess the importance and applicability of managerial skills as perceived by head nurses ,categorized under (7) dimensions that includes (ability to work in team (22), analytical and problem solving (10), decision making (15), risk taking (10), communication skills (20), delegation (27) and conflict management skills (30) items. Responses of the subject was measured with uses a 4-points Likert scale ranged (4 greatly important, 3 important, 2 uncertain important to 1 not important).

Tool II: An Opinionnaire sheet for jury 25 expertise aims to assess if preliminary guideline reliable and valid that include two parts:

First part: Include demo graphic characteristics of 25 jury name of expert, Age, Years of experience, Job title, Specialty and Work place.

Second part: the expert responses for items of face and content validity

Pilot study:

It was conducted on data collection tools before performing the main research on ten percent of the head nurses (108). They were chosen at random and not allowed to participate in the study. The pilot study's objectives were to assess the questions' clarity and viability, find potential roadblocks and issues during data collection, gauge the language's clarity, and gauge how long it would take to complete the questions.

Ethical consideration:

The Mansoura University Faculty of Nursing's Research Ethical Committee provided ethical approval. The study was officially approved to move on by the hospital's competent administrator. Head nurses who agreed to participate in the study after being informed of its purpose and nature gave their informed permission. Every participant is free to leave the study at any moment. Every participant received assurances regarding the privacy of the study sample and the confidentiality of the data obtained.

Validity and reliability

The tools were developed and tested for content validity by presenting them to five nursing administration experts, with a 90% success rate. The Cronbach alpha test in (SPSS) version 21 was used to evaluate the managerial skills questionnaire's reliability. It was computed and found (0.802).

Data collection:

Creating the tools and evaluating their content validity by showing them to five nursing administration specialists. Depending on the work environment, the managerial skills questionnaire took 15 to 30 minutes to complete and was given to the head nurses under study. Data collection took place over the course of three months; from the start of June 2023 to the end of August 2023. From the start of September 2024 to the end of December 2024, the developed guideline was given to the 25 jury members in their workplace to test its face and content validity. Ten nursing managers from various hospitals and fifteen academic staff members from various faculties and specialties make up the juries. Statistical analysis was done to obtain the guideline face and content validity of.

Statistical analysis:

Using SPSS version 25 (IBM Corporation, Armonk, NY, USA), the data were coded, entered, organized, and examined. Quantitative data, the range, mean, and standard deviation were calculated. The Chi-square test (2) was used to compare two groups and more in relation to qualitative data, which express a set of categorical data as a percentage, proportion, or frequency for each category (Dawson & Trapp, 2001).

3. Results

Table (1) Illustrates the personal characteristic of head nurses (n=98). Rendering to, this table showed that characteristics of personal. It revealed that the equal percent 50% for age year 28-60 with Mean±SD 39.79±7.60, more half studied head nurses 53.1% had experience of years ranged from 10 - 20 years with mean±SD 17.37±7.87, the most of them 99.0% had bachelor degree.

Table (2): It revealed that regarding to importance of managerial skills, ability to work in team ability to work in team was graded first then the ability to take risks, think critically and solve problems, make decisions, communicate, and delegate. On the other hand conflict management skills were ranked as the last skill.

Table (3): This table showed ranks of agreement mean percentage about applicability of proposed managerial skills guidelines. It revealed that communication skills was ranked first by head nurses followed by decision making skills, delegation skills, ability to work in team and risk taking skills. On the other hand conflict management skills were ranked as the last skill.

Table (4): this table showed total agreement score of importance and applicability of the proposed managerial skills guidelines of the studied head nurses in relation to personnel data. It revealed that there was significant correlation between experience years of head nurses and total agreement score of the proposed managerial skills guidelines importance (p. 0.002*) and applicability (p. 0.0001*) respectively.

Table (5): Shown that 91% of jury experts concur that the suggested rule is valid on its face, while 9% disagree.

Table (6): This table revealed that 91% of jury experts concur that the proposed guideline is face-valid, while 9% disagree.

Table (1): Personal characteristics of the studied head nurses (n=98)

Demographic data	The studied head nurses (n=98)	
	n	%
Age years:		
28-<40	49	50.0
40-60	49	50.0
Range	28-60	
Mean±SD	39.79±7.60	
Experience years:		
4-<10	19	19.4
10-20	52	53.1
>20-37	27	27.6
Range	4-37	
Mean±SD	17.37±7.87	
Education level:		
Bachelor	97	99.0
Master degree	1	1.0

Table (2): Ranks of agreement of head nurses about importance of proposed

Proposed managerial skills guidelines (Each item is scored 1-4)	No. of questions Score	Ranks of agreement (n=98)	
		Agreement scores about importance of the skills	
		Range Mean±SD/ No. of questions	Rank
A-Ability to work in team	22 (22-88)	2-4 3.45±0.31	1
B-Analytical and problem solving skills	10 (10-40)	3-4 3.41±0.32	3
C-Decision making skills	15 (15-60)	3-4 3.39±0.35	4
D-Risk taking skills	10 (10-40)	2-4 3.43±0.46	2
E-Communication skills	20 (20-80)	3-4 3.20±0.17	5
F-Delegation skills	27 (27-108)	3-4 3.08±0.24	6
G-Conflict management skills	30 (30-120)	2-4 2.50±0.37	7
Total agreement score of proposed managerial skills guidelines	134 (134-536)	3-4 3.12±0.25	

managerial skills guidelines

Table (3): Ranks of agreement mean percentage about applicability of proposed managerial skills guidelines

Proposed managerial skills guidelines (Each item is scored 1-4)	No. of questions Score	Ranks of agreement (n=98)	
		Agreement scores about applicability of the skills	
		Range Mean±SD/No. of questions	Rank
A-Ability to work in team	22 (22-88)	3-4 3.00±0.26	4
B-Analytical and problem solving skills	10 (10-40)	2-4 2.94±0.30	6
C-Decision making skills	15 (15-60)	2-4 3.12±0.36	2
D-Risk taking skills	10 (10-40)	2-4 2.96±0.46	5
E-Communication skills	20 (20-80)	3-4 3.21±0.17	1
F-Delegation skills	27 (27-108)	3-4 3.08±0.24	3
G-Conflict management skills	30 (30-120)	2-3 2.32±0.29	7
Total agreement score of proposed managerial skills guidelines	134 (134-536)	2-4 2.79±0.27	

Table (4): Total agreement score of importance and applicability of the proposed managerial skills guidelines in relation to personnel data

personnel data	No.	Total agreement score of the proposed managerial skills guidelines importance (n=98)			Total agreement score of the proposed managerial skills guidelines applicability (n=98)		
		Mean±SD	Z value or χ^2 value	P value	Mean±SD	Z value or χ^2 value	P value
Age years:			1.064		369.28±37.76	1.131	0.261
28-<40	49	414.08±34.95		0.290	377.71±35.96		
40-60	49	421.28±32.00					
Experience years:			12.190	0.002*	383.16±42.43	16.778	0.0001*
4-<10	19	427.42±47.39			360.58±33.40		
10-20	52	408.63±29.38			391.59±30.16		
>20-37	27	428.26±24.44					
Education level:			0.667	0.506	373.35±37.09	0.393	0.695
Bachelor	97	417.45±33.63			388.00		
Master degree	1	440.00					

Table (5): Agreement percent of (25 jury experts) related face validity of the proposed managerial skills guidelines

Face validity items about the suggested managerial skills guideline for head nurses	Agreement percent (%) of the study experts (n=25)	Average agreement %
	Range Mean±SD	
The preliminary guideline expressions like a guideline for managerial skills	30-100 89.68±17.76	89.68
The preliminary guideline is clear	60-100 94.28±11.44	94.28
The preliminary guideline is correct	60-100 94.68±11.27	94.68
The preliminary guideline is scientific	70-100 95.28±8.72	95.28
The preliminary guideline is understandable	70-100 94.68±9.13	94.68
The preliminary guideline is realistic	60-100 92.88±12.44	92.88
The guideline covers all aspects of managerial skills for head nurses		
-Team work	30-100 88.92±17.11	88.92
-Analytical thinking and problem solving	30-100 88.00±17.20	88.00
-Decision making skills	20-100 88.12±18.43	88.12
-Risk taking skills	20-100 87.92±18.23	87.92
-Communication skills	30-100 88.52±16.96	88.52
-Delegation skills	30-100 87.88±18.31	87.88
-Conflict management skills	30-100 88.08±16.84	88.08
The guideline entails the acceptable managerial role	60-100 93.28±11.03	93.28
The guideline is in logical sequence	60-100 93.00±11.11	93.00
Total face validity		91.01%

Table (6): Agreement percent of (jury 25 experts) around content validity of the proposed managerial skills guidelines

Content validity items about the proposed managerial skills guideline for head nurses	Agreement percent (%) of the study experts (n=25)	Average agreement %
	Range Mean±SD	
The overall objectives of the guideline are specifically described.	50-100 92.28±13.28	92.28
The guideline target group was specified	60-100 94.08±10.25	94.08
Relevant of the included recommendations in place of the interest context	50-100 89.88±15.70	89.88
The included recommendation related for the specific target group of interest	50-100 90.08±15.12	90.08
The recommendations are specific and unambiguous	50-100 90.00±15.14	90.00
Total content validity		91.26%

4. Discussion: -

Head nurses hold an important position to initiate and act as a guide for compliance by additional health care professionals to achieve better patient outcomes (Kalsoom, Victor, Virtanen & Sultana, 2023). Using instructional guidelines considerably improved head nurses' knowledge and practices regarding the care, the impact of instructional guidelines on performance concerning the care is increased (Asiri, et al, 2024).

The current study demonstrated that head nurses believed that the managerial skills of the suggested guideline were important. Which could be attributed to the daily need of head nurses in Mansoura University Hospital to practice those skills in work environment, they believe that those skills enable them to relate and deal with their followers, which make easy flow of activities in the organization. In addition to the strain of growing workloads, they deal with a number of difficulties in their managerial role.

Head nurses see that managerial skills are necessity for the success in performing their role and awareness that those skills play a crucial role in driving the achievement of all work to enable them from achieving their managerial role.

Chow, Ahmat, Leung & Chan, (2023) corroborated the findings of this study as they found that intervention need focused especially on improving managerial. Work outcomes are impacted by abilities including leadership, communication, situational awareness, teamwork, decision-making, and task management.

Head nurses at studied hospital agreed that **importance of the ability to work in team** skill was ranked first followed by risk taking skills, analytical and problem solving skills, decision making skills, communication skills, delegation skills and conflict management skills. This result may be due to the fact that studied head nurses experienced well that team work facilitate communications and understanding between people with different points of view, inspire individual's excellence and behavior, anticipating problems and opportunities. Also, they being over loaded with duties and to facilitate and enrich work achievement they must use a team. They firmly believe that team interventions can increase healthcare teams' efficacy. that reflected on patient safety and efficiency.

These findings were supported with Barbee, (2020) who mentioned that teamwork was the top-ranked skill needed by head nurses. Also, It was emerged as the four most important skills believed needed to obtain a job after graduation that's exactly reflect what we need in our nursing hospital environment. Also, Dlamini & Park, (2024) who revealed importance of team work skills as teamwork significantly influence the provision of patient care as well as patient satisfaction and provision of patient care.

In contrast this result interfered with the study of Preston, (2018). The study showed that in team work eight out of ten head nurses did not value the importance of team work skills neglecting motivation their teams need. Those head nurses struggled with nurses' engagement and so were not

connecting with their teams that which evoke the need for guidelines.

Studied head nurses **ranked risk taking skill** as the second important skill needed, this may be owing to the performance of nursing practices with lower control over the environment greater exposure to risk each time dealing with patient and the danger of health working environment itself and the affluences of risk with some decisions and situations.

In the same sequence, the study conducted by **Al Harthi, Al Thobaity, Al Ahmari & Almalki, (2020)** revealed that lack of proper risk management creates ineffective response to situations and making effective care measures. They insist that all healthcare providers must follow these processes.

As well as, **Galehdar, Toulabi, Kamran & Heydari (2021)** revealed the same issue as they conducted the importance of risk taking skills as to continue offering healthcare services in the face of risk, nurses require the head nurses' unwavering support and the development of appropriate justification techniques. The patient's life may be at danger due to certain nursing mistakes. As a result, it is imperative to identify the core causes of nursing errors in these crucial circumstances and implement preventative measures.

Conflict management skills ranked as the least important skills, this may be related to head nurses empathize, with open door, listen to others, are able to control anger, give importance for problem solving skill to treat problem before being source of conflict among staff, being near from them as possible and adapt the social environment more easily and adopt a more democratic manner in problem solving, leave choice for them in different tasks as time schedule, vacation rotation also, they value communication especially in informal relations and depend on it in minimizing any conflict.

This result was in parallel with the study conducted by **Binyamin (2018)** that demonstrated how businesses start to see disagreement as a constructive or neutral discourse, information, and perspectives and as a part of daily nursing work practice environment. In contrast, this result interfered with the study conducted by **Fierke, Lepp & Jones, (2023)** who detected that experience through situation could have a direct impact on one's degree of confidence when practicing new skills.

The usefulness of those skills for a particular task is the applicability, when something is applicable; it is suited to useful for a task. In the present study, **communication skills applicability** had the first rank by head nurses then decision making skills and delegation skills, On the other hand conflict most skills were ranked as the was ranked as the last skill.

Communication skills were the most applicable skill ranked by studied head nurses. Head nurses communicate with clients, colleagues, superiors, and subordinates. They understand well that good communication is the key for all working process. Moreover team work skill that was ranked as the most important managerial skill by studied head nurses at study setting was dependent on head nurse's ability to communicate well.

In consistent with this finding the finding of **Kurtz, Draper & Silverman, (2017)** in the study about teaching in addition to communication skills learning in medical field), They noted that Effective communication skills with coworkers, patients, and others are essential for clinical practice and are the cornerstone of the best possible healthcare. Moreover, this finding was reinforced by the study of **Nia, et al (2022)** who showed that ineffective applicability of communication skills in health care can lead to diminish health outcomes. In contrast, this consequence interfered with the study steered done by **Norful et al, (2018)** who observed that nurses noted applicability of communication skills declined with increased workload.

Decision making skills applicability was ranked by studied head nurses as the second applicable skill. From researcher perspective this result may be due to that all times they are provided with the opportunities to express their ideas and viewpoints and to choose among alternatives and select best solutions through their different roles and responsibilities.

This result was in the same line with the result of **Abdulmohdi & McVicar, (2024)** study that examined decision making skills for clinical practice. They noted the high applicability of decision making skills is crucial in nursing to look into how head nurses learn to make decisions and then use those skills in their practice as they work to become certified nurses.

Delegation skills applicability was ranked by studied head nurses as third skill, this may indicate the essentiality that delegation is not considered in isolation to these foundation skills. It is therefore vital that nursing education, as well as training, incorporate the development of this essential skill. Head nurse have many tasks to do, it's easy to make delegation to have time besides they value team work.

This result was confirmed by **Etway & Elewa, (2020)** who revealed lack of delegation will lead to letdown, weakens ability to resolve, confuses the other persons, and fails to fulfill the task or goal itself. On the other hand **Wahyuningsih & Anita Yusiana, (2016)** study revealed that perception of the delegation of tasks functionally was ranked not good.

Studied head nurses ranked that conflict management skills applicability as the last applicable managerial skills. In the researcher point of view widespread elimination of workplace conflict is un realistic, clinical environment requires effective collaboration through working as team, communication, using problem solving, decision thinking make abilities to handle disagreement early before being a conflict and this appear obviously in the most used conflict styles.

This result this result was supported by the study of **Fierke, Lepp & Jones, (2023)** who showed that changes in beliefs regarding the value of conflict management, as well as their confidence in and ability to engage in a crucial conversation, were statistically significant in the study of teaching conflict management. In contrast, this result not matched with the study result conducted by **Agyemang, (2023)** who detected that this applicability of conflict resolution needs all time.

The study revealed that there was **significant correlation between** experience years of head nurses and total agreement score of the proposed managerial skills guidelines importance and applicability respectively. This may be related to that with increase experience through situations, feeling of importance and practicing different skills appear. Also, need for learning about skills increased. This was in the same line with **Santos, (2021)** who concluded that with age and professional experience, managerial experience lead to skills increases in the study of new needed quality management skills for quality manager.

According to the current survey, the majority of jury experts believed that the suggested guidelines were valid both on their face and in their content. **The Australian Skills Quality Authority (2019)** emphasized the need of validation in order to comprehend the capabilities of the guidelines utilized and modify them to satisfy their needs. This attests to trust in the caliber of treatment and performance. Additionally, it guarantees that all guidelines' instructions are trustworthy, legitimate, equitable, and adaptable.

Galvin, (2024) stated that in organization, managing resources effectively, making the need for skilled managers more vital, these affected the quality of care. Through this guideline that mentioned certain managerial skills we hope that head nurses' requisite to be supported via a guideline to smooth their managerial work.

This is in supported with **Moghaddam etal (2019)** who revealed that the effectiveness of head nurses is crucial to hospitals' smooth running. The managerial abilities needed by head nurses must be

identified, prioritized, and their performance evaluated accordingly.

Conclusion:

A managerial skills guideline is reliable and valid that provides some skills needed by head nurses as team work, risk taking, analytical and problem solving, decision making, communication delegation and conflict skills.

Recommendations:

- Inclusion in organizational processes as head nurses should actively include in all aspects of the organization to practice and hone these essential skills in real-world settings.
- Monitoring compliance as appropriate systems and processes are established to monitor adherence to the guideline effectively.
- Regulate development programs depending on key elements of managerial guideline.
- In services training program for head nurses about managerial skills to increase awareness.
- Continuous evaluation and adaptation of conflict management practice.

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