

Research Article

Decision Making Performance Process among Head Nurses

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ABSTRACT

Background: Decisions play important roles as they determine both organizational and managerial activities. It is the key part of head nurses' activities. Decisions are made at every level of nursing management to ensure that the nursing department goals are achieved.

Objectives: The study aimed to assess the decision making performance process among head nurses.

Methods: The study was conducted at El-Menshawi and El-Mahala General Hospitals which are affiliated to the Ministry of Health and Population. Study subject included all (95) head nurses working at the assigned hospitals. Decision Making Analysis of Areas and Activities Questionnaire and Decision Making Rating Scale for head nurses were used as tools for data collection.

Results: More than one third of head nurses propose the budget of nursing department imposed on them and make decision in concerning the needed qualifications of nursing personnel on each unit in conjunction with the chief. Seventy percentages of head nurses at El-Mahala General Hospital had high levels in the decision making process. More than half at El-Mahala hospital had moderate levels in the strategy of decision making performance process.

Conclusion: head nurses fulfilled the areas and activities of decision making process but a lot of decisions making is done with the chief either with or without subordinating opinions. Establishing training programs is recommended to help head nurses and subordinate staff in making effective decision, developing the budget of nursing unit and improving standard of care activities.

Key words: Decision making, head nurse, performance, decision making process

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INTRODUCTION

ead nurse is a professional nurse who is responsible for one hospital unit where nursing care is provided and is a link between top, middle management levels and, staff nurses. (1,2) Head nurses are internal stakeholders who play essential roles in managing changes, cultural integration, retention and direction of staff attitude towards changing health structure. (3) Successful head nurses must exert authority and assume accountability in implementing the managerial functions (planning, organizing, delegating, leading and controlling). (4) Head nurses are also responsible for the implementation of health care programs and standards of patient care. They supervise and evaluate the quality of patient care provided by the staff, motivate the nursing staff to provide the quality of nursing care, promote and utilize the quality assurance of the program standards. Besides that, head nurses make stream decision, communicate those decisions to other organizational members and believed that participative management and other methods of decision making lead to an increased satisfaction in the employees. (1) Decision making is a complex, cognitive process which is defined as choosing a particular course of action. (5) It is a scientific problem solving process and an essential element in handling change, working with conflict, managing resources and evaluating care and performance. (6) Decision making process is a systematic sequential process of choosing among alternatives and putting the choice into action. (7) It depends upon the right information available to the right people at the right times. Also, it involves defining the problems, identifying limiting factors, developing potential alternatives, analyzing the alternatives, selecting the best alternative, implementing the decision and establishing a control and evaluation system. (8) Barriers of decision making focus on a variety of factors such as dysfunction, poor communication, lack of staff participation, changing organization ownership, inadequate budget, inadequate staffing levels, policies, procedures and poor relationships with the staff. (9)

Other barriers include lack of information, bad ideas, too much information, noise, intolerance of uncertainty, fear of failure, not enough support, lack of feedback, action, reaction and unhelpful theory. (10)

Head nurses don't make decisions in a vacuum. Organizational culture, top managerial support and even adequate staffing can affect decision making. Time constraints encourage head nurses to make decisions very quickly. (11) The quality of the decisions that head nurses make is the factor that often weighs most heavily in their success or failure. (12) The aim of the study is to assess the decision- making performance process among the studied head nurses. Research Question: Are head nurses fulfilling the areas and activities of decision making process?

METHODS

Study Setting & Design: A descriptive study was conducted at El-Mahala and El-Menshawi General Hospitals. Both hospitals are affiliated to Ministry of Health and Population, Gharbia Governorate.

Subjects: A convenient sample comprising all available head nurses (95 in total) working in previous setting.

Data Collection Tools: To fulfill the purpose of the study, two tools were used. The first (tool I) consisted of Decision Making Analysis of Areas and Activities for Head Nurses. It covered the sociodemographic data of the enrolled sample and Decision Making Analysis of Areas and Activities, that was modified by the researchers based on Sufian (2010). The later included 19 items to assess the decision making performance process among head nurses and covered five areas as follows: planning, organizing, assembling resources, directing, and controlling. Five points was used for responses as follows: 5= participation of the chief and subordinates, 4= with subordinates, 3= in conjunction with the chief, 2= alone and 1= imposed on. The second (tool II) comprised the Decision Making Rating Scale for Head Nurses that was modified by the researchers based on Silbaugh (2000) and Winchester (2006). (15) It included 44 items to assess the decision-making performance process among head nurses and covered four main domains; strategy of decision, environment, process of decision making and implementation of making decision. Three points Likert scale was used for responses, ranging from (1-3) as follows: score (3) refers to always, score (2) refers to sometimes and score (1) refers to rarely. Scoring Level of Decision Making Rating Scale for Head Nurses was: High performance >75%, moderate performance 60% -75%, and low performance < 60%.

Study Procedure: The content validity index for decision making areas and activities tool (I) was 99% and the content validity index for head nurses rating for

their decision making process tool (II) was 98%. A pilot study was carried out on a sample of 5 head nurses to ascertain the clarity, applicability and relevance of the questions. To assess reliability, test retest was used. Internal consistency reliability for decision making areas and activities = 0.686, and head nurses rating for their decision making process = 0.813.

Statistics Analysis: Statistical presentation and analysis of the present study was conducted, using the mean, standard deviation, Chi-square and Linear Correlation coefficient by SPSS Version17.

Ethical considerations

The study was approved by the institutional review board and the ethics committee of the nursing faculty, Tanta University. An official permission to conduct the study was obtained from the responsible authorities. The purpose of the study was explained and made clear to the directors of El-Menshawi and El-Mahala General Hospital. Head nurses' official consent to participate in the study was obtained after explaining the aims and concerns of the study. Head nurses were assured about the confidentiality of their information, and their right to withdraw from the study.

RESULTS

Table (1) showed that 18.95%, 44.21% and 36.84% of the participants were in age groups <30, 30-35 and >35 years respectively with a mean age of 33.23±4.86 years. About 40.0% of them were at >10 years of working experience. The total mean experience (7.57 ± 5.037) years. High percentage (91.58%) of the subjects had nursing baccalaureate education, while the lowest percentage (8.42%) had nursing diploma education. Also, the highest percentage (84.21%) of the subjects was married. The highest percentage (73.68%) of head nurses had attended conferences or training courses after obtaining the nursing qualification, while, the lowest (26.32%) had not attends conferences or training courses. In El-Mahala General Hospital, 50% of head nurses' decision on proposing the budget of nursing department imposed on them, while, 46 %, 38%, and 36% of them make decisions with the chief in specifying hospital policies and procedures for the nursing staff, deciding on the philosophy of nursing department and deciding on nursing standards, policies and procedures regarding patients care to guide the subordinates, respectively. The lowest percentage (4%) of head nurses make decisions with subordinates in deciding on the objectives of nursing department. The table also shows statistical significant differences (p= 0.021) among both general hospitals regarding decision making in deciding on the objectives of nursing department (table 2).

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Table 1: Head nurses' demographic characteristic (n=95)

Variable		Ienshawi n=45)		Mehala n=50)	Total (n=95)		
		No	%	No	%	No	%
	<30	11	24.44	7	14.00	18	18.95
Age							
S	30-35	25	55.56	17	34.00	42	44.21
	>35	9	20.00	26	52.00	35	36.84
	Range	26	-51	25-	-46	25	5-51
	Mean ±SD	30.1	1 ± 4.5	34.24	±4.99	33.2	±4.89
Years of experience as head nurse	<5	16	35.56	17	34.00	33	34.74
	5-10	14	31.11	10	20.00	24	25.26
	>10	15	33.33	23	46.00	38	40.00
	Range	1-	26	1-	20	1	-26
	Mean ±SD	7.4±	5.04	8.08	±5.06	7.57	±5.037
	Single	3	6.67	10	20.00	13	13.68
	Married	40	88.89	40	80.00	80	84.21
Marital status	Divorced	1	2.22	_	-	1	1.05
	Widow	1	2.22	-	-	1	1.05
Attends of conferences or training courses after	Yes	28	62.22	42	84.00	70	73.68
obtaining a nursing qualification	No	17	37.78	8	16.00	25	26.32
Academic qualification	B.S.C in nursing	41	91.11	46	92.00	87	91.58
•	Nursing Diploma	4	8.89	4	8.00	8	8.42

Table 2: Comparison among head nurses' decision making for activities of planning area at El-Menshawi with El-Mahala hospital

		El-	Menshaw	i (n=45)								
Head Nurses Decision Making Planning activities	Imposed on	Alone	Conjunction with the chi	With subordinates	Participation of chief & subordinates	Imposed on	Alone	Conjunction with the chief	With subordinate	Participation of chief & subordinates	Chi-s	quare
	%	%	%	%	%	%	%	%	%	%	X^2	p- value
Deciding on the objectives of nursing department.	11.11	6.67	22.22	13.33	46.67	30.00	0.00	32.00	4.00	34.00	11.575	0.021*
Deciding on the philosophy of nursing department.	17.78	4.44	31.11	11.11	35.56	32.00	2.00	38.00	12.00	16.00	6.269	0.180
Proposing the budget of nursing department.	44.4	0.00	31.11	4.44	20.00	50.00	0.00	32.00	6.00	12.00	1.229	0.746
Specifying hospital policies and procedures for the nursing staff	17.78	4.44	44.44	13.33	20.00	28.00	2.00	46.00	12.00	12.00	2.523	0.641
Deciding on nursing care programs of patient care Deciding on nursing	6.67	15.56	31.11	8.89	37.78	12.00	16.00	28.00	10.00	34.00	0.917	0.922
standards, policies and procedures regarding patients care to guide the subordinates.	11.11	4.44	31.11	15.56	37.78	18.00	6.00	36.00	16.00	24.00	2.515	0.642

Significant (p<0.05)*

Table 3 reports that in organizing area, equal percentage of head nurses at El-Mahala and El-Menshawi

Hospitals (40%) makes decisions in conjunction with the chief in deciding on the number and qualifications needed to serve on the hospital and nursing committees to solve the nursing problems. In addition about one third of the subjects at El-Mahala and El-Menshawi hospitals make decisions imposed on them in deciding on the job description for each category of nursing, while 30% and 28.89% make the decision with chief and subordinates participate in deciding on channels of communication with other departments in the hospitals respectively. Regarding directing area, half of head nurses of El-Mahala hospital make decisions in conjunction with the chief in deciding on the mechanisms used for evaluation of nursing personnel, while,

24% of the subject's decision was imposed on them in

deciding on the rewards or punishment for nursing staff. 40% of head nurses at El-Menshawi hospital make decision with chief in deciding on the rewards or punishment for nursing staff, while, one third of them make decision imposed on them in deciding on the rewards or punishment for nursing staff. In controlling area, 37.78% of head nurses at El-Menshawi hospital make decision with the chief and subordinates in deciding on the way to manage the activities of nursing plan based on the nursing care. 33.33% of them make decision with the chief in deciding on the mechanisms needed for quality control of nursing service. El-Mahala hospital head nurses (32%) make decision in conjunction with chief in deciding on the mechanisms needed for quality control of nursing service.

Table 3: Comparison between head nurses' decision making for activities of areas of organizing, directing and controlling at El-Menshawi with El-Mehala hospitals

		El-Mahala (n=50)										
Head Nurses Decision Making Organizing, directing and controlling activities	Imposed on	Alone	Conjunction with the chief	With subordinates	Participation of chief & subordinates	Imposed on	Alone	Conjunction with the chief	With subordinate	Participation of chief & subordinates	Chi-s	quare
	%	%	%	%	%	%	%	%	%	%	\mathbf{X}^2	p- value
Organizing Deciding on the job description for each category of nursing.	31.11	31.11	26.67	11.11	20.00	34.00	6.00	24.00	10.00	26.00	.258 1	0.868
Deciding on of channels communication with other department in the hospital	13.33	13.33	28.89	15.56	28.89	14.00	6.00	34.00	16.00	30.00	1.561	0.816
Deciding on the number and qualifications needed to serve on hospital and nursing committees to solve the nursing problems	15.56	15.56	40.00	11.11	31.11	26.00	6.00	40.00	10.00	18.00	3.739	0.442
Directing Deciding on the mechanisms used	26.67	35.56	22.22	4.44	11.11	16.00	20.00	50.00	4.00	10.00	8.373	0.079
for evaluation of nursing personnel Deciding on the rewards or punishment for nursing staff.	33.33	15.56	40.00	4.44	6.67	24.00	16.00	42.00	8.00	10.00	1.539	0.820
Controlling Deciding on the mechanisms needed for quality control of nursing service	15.56	11.11	33.33	13.33	26.67	18.00	8.00	32.00	18.00	24.00	0.732	0.947
Deciding on the way to manage the activities of nursing plan based on the nursing care	11.11	13.33	17.78	20.00	37.78	10.00	12.00	30.00	20.00	28.00	2.216	0.696

Table 4 illustrates that more than half (51.11%) of head nurses at El-Menshawi hospital make decision in conjunction with chief in deciding on the needed jobs and ideal organizational structure, while 46.67% make decisions in conjunction with chief in deciding on number and right qualifications of nursing personnel needed in nursing department. But, 46% of head nurses at El-Mehala hospital

make decision with the chief in deciding on the needed qualifications of nursing personnel on each unit. Only 10% of head nurses make the chief and subordinates participate in deciding on the format and content of nursing record utilized on the patient care unit. The table also shows statistical significant differences (p=0.037) among the two general hospitals regarding decision making in deciding on

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the format and content of nursing record utilized on the patient care unit.

Table 4: Comparison between head nurses' decision making for activities of area of assembling resources at El-Menshawi with El-Mahala Hospitals

т 1 11 11		El-Me	(n=45)		El-Mahala (n=50)							
Head nurses' decision making Assembling resources activities	Imposed on	Alone	Conjunction with the chief	With subordinates	Participation of chief & subordinates	Imposed on	Alone	Conjunction with the chief	With subordinate	Participation of chief & subordinates	Chi-s	quare
_	%	%	%	%	%	%	%	%	%	%	\mathbf{X}^2	p- value
Deciding the number and right qualifications of nursing personnel needed in nursing department	28.89	0.00	46.67	4.44	20.00	32.00	4.00	36.00	10.00	18.00	3.574	0.467
Deciding on the needed qualifications of nursing personnel on each unit.	11.11	24.44	40.00	13.33	11.11	16.00	10.00	46.00	10.00	18.00	4.535	0.338
Deciding on the needed jobs and the ideal organizational Structure	17.78	6.67	51.11	8.89	15.56	32.00	4.00	32.00	8.00	24.00	5.190	0.268
Deciding on the needed number and type of supplies and equipments	15.56	24.44	20.00	8.89	31.11	16.00	8.00	22.00	24.00	30.00	7.325	0.120
Deciding on the format and content of nursing record utilized on the patient care unite	31.11	4.44	35.56	4.44	24.44	24.00	16.00	32.00	18.00	10.00	10.224	0.037*
Deciding on the format and content of office records	31.11	6.67	35.56	6.67	20.00	26.00	20.00	26.00	18.00	10.00	8.019	0.091

Significant (p<0.05)

Table 5: A comparison among level of head nurses' decision making performance process at El-Menshawi with El-Mahala hospitals

Items of decision	El-Menshawi (n=45)					El-Mahala (n=50)								
making	Low		Moderate		High		Low		Moderate		High		Chi-Square	
performance process	No	%	No	%	No	%	No	%	No	%	No	%	X^2	P- value
Strategy	7	15.56	15	33.33	23	51.11	3	6.00	27	54.00	20	40.00	4.989	0.083
Environment	19	42.22	13	28.89	13	28.89	7	14.00	26	52.00	17	34.00	10.170	0.006*
Process	1	2.22	15	33.33	29	64.44	5	10.00	10	20.00	35	70.00	3.977	0.137
Implementation	1	2.22	20	44.44	24	53.33	1	2.00	24	48.00	25	50.00	0.121	0.941
Total	2	4.44	18	40.00	25	55.56	4	8.00	18	36.00	28	56.00	0.575	0.750

^{*}Significant (p<0.05)

Table 5 illustrates more than half (56%) of head nurses at El-Mahala General Hospital had high level of total items of decision making performance process. Seventy percent of them had high level of decision performance process on the

process of decision making. Half of them had high level of decision making performance process on implementation of decision. Only 8% of head nurses had low percentage on total items of decision making performance process. At El-Menshawi General Hospital, more than half (55.56%) of

head nurses had high level of total items of decision making performance process. High percentage (64.444%) had high level of decision making performance process on the process of decision making. More than half (53.33% and 51.11%) of head nurses had high level of decision making performance process on implementation and strategy of decision making performance process respectively. The table also shows statistical significant differences (p=0.006) among both the two general hospitals regarding the environment of decision making.

Table 6 Correlation between areas and performance of total head nurses' decision making (N=95)

Process	Strategy		Envir	onment	Pr	ocess	Implementation		
Areas of activity	r	P-value	r	P-value	r	P-value	r	P-value	
Planning	0.199	0.053	0.182	0.077	0.161	0.119	0.166	0.107	
Organizing decisions	0.233	0.023*	0.240	0.019*	0.118	0.256	0.219	0.033*	
Assembling resources Decisions	0.293	0.004*	0.349	0.001*	0.185	0.073	0.302	0.003*	
Directing decisions	0.192	0.063	0.353	0.000*	0.016	0.876	0.162	0.116	
Controlling decisions	0.099	0.340	-0.023	0.822	0.017	0.872	-0.005	0.963	

^{*}Significant (p<0.05)

A significant positive correlation was found between strategy with organizing and assembling resources decisions (r= 0.233, p<0.023) and (r= 0.293, p<0.004). There are significant positive correlations between environment with organizing and assembling decision resources (r= 0.240, p>0.019) and (r= 0.349, p<0.001). A highly significant positive correlation was found between environment and directing decision (r= 0.353, p<0.000). Also, the table illustrate a significant positive correlation between implementation with organizing and assembling resources decisions(r= 0.219, p< 0.033) and (r= 0.302, p<0.003) (Table 6).

DISCUSSION

Decision-making is the backbone of administrative functions and is a critical part of being an effective head nurse. Good and effective decisions can only be made when right information is made available at the right time to the right recipient. (16) The present study illustrated that less than half of head nurses make their decisions with their chief when they decide on the philosophy of nursing department and when they specify hospital policies and procedures for nursing staff. This is that head nurses must involve their chief in some aspects of planning process because head nurses are required to set direction and they chair in determine needs with their chief before its accomplishment. Yet, the chief is also responsible for reviewing with head nurse how to select goals, choose actions to attain such goals, allocate responsibility for implementing actions to specific individuals or units, then measure the success of actions by comparing actual results against the goals, another study supported the present study and stated that planning is the primary function of management and occupies the first position in the management process as well as performed by managers at all levels. (17) Also, other researcher reported that the majority of head nurses make decision with the manager in the area of planning activities. (18)

The present study revealed that proposing the budget of nursing department was imposed on head nurse. Most probably, this may be due to that young and novice head nurses had little or no financial education; especially, in proposing the budget of nursing department. So those head nurses need at first to be equipped with financial education and receive training. One study supported the present results and recommended that head nurses and managers should be given greater budgetary responsibility in relation to the utilization of resources at units of service delivery and receives training in analyzing, constructing and monitoring budgets. (19) Another study found that the majority of head nurses felt that responsibility on a budget should be a team approach. (20) The present study revealed that high percent of head nurses in El-Menshawi General Hospital participate with the chief and subordinates in deciding on the objectives of nursing department. This is that involving a greater number of managers and nurses will result in better plans and more widespread acceptance of objectives. Setting objectives of nursing department is a very important starting point of managerial actions. Contrary to Australia Nursing Federation, reported that head nurses are ones who are the responsible for developing and implementing nursing department objectives, policies and procedures to maintain quality nursing care in the nursing service department ⁽²¹⁾. The present study illustrated that the area of organizing activities included deciding on the job description for each category of nursing, deciding on channels of communication with other departments in the hospital and, deciding on the number and qualifications needed to serve on the hospital and nursing committees to solve the nursing

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problem, which were either imposed on head nurses or were mad in conjunction with the chief. Also, the manager at all levels has the responsibility for organizing and operating the cooperation in a way that it gets optimal benefits members desire and controlling subordinates. (22)

The present study revealed that the decision on the number, right qualifications of nursing personnel, needed qualifications of nursing personnel, needed jobs and the ideal organizational structure decision of head nurses either made in conjunction with the chief or imposed on them. Really, those head nurses had a major responsibility for allocating resources to achieve nursing unit objectives, but they need to involve nurse subordinates in that decision to properly identify resources and allocate problems facing them and then to report it consistently for chief and administrative authorities and should not be imposed on them. Other study reported that nurses have a major responsibility in making decision about allocating nursing resources (23). Results of the present study revealed that head nurses with conjunction of chief sometimes involve subordinates in making decisions for area of controlling activities as deciding on the mechanisms needed for the quality control of nursing service and deciding on the way to manage the activities of nursing plan based on the nursing care. Actually, controlling function is performed by managers at all levels and in all types of concerns. It helps them monitor performance and take action to ensure desired results. Another study concluded that controlling is the essential part of managers' job, that helps them evaluate how well organization is achieving its goal and taking actions to maintain or improve performance. (24) More than half of head nurses at El-Mahala Hospital in the present study had a moderate level in strategy decision making performance process. Really, decisions at a strategic level are hard to make. They require large amounts of resources and commitments which may be irreversible. Also, they involve long term consequences that are hard to predict and require considering multiple, often conflicting and strategic objectives which are difficult to balance particularly in the presence of risk and uncertainty. One study conducted that all head nurses make key decisions every day about how they do their jobs, and those decisions can affect organization's strategic plan–for the good or for the ill. (25) In contrast, the results of another study noted that nurse managers mostly make decisions and choices based on their own values. (26) Two thirds of head nurses in present study at El-Menshawi General Hospital always monitor the implementation of action plan, with a statistical significant difference than head nurses at El-Mehala Hospital. Nothing new can happen according to plan unless action is taken. After making the decision, head nurses and manager need the ability and willingness to

implement the decision and put it into action. Also, they should communicate the decision with subordinates and persuade them to accept it. In other words, strategy is the use of organization's resources to accomplish its objectives. So if we want to be strategic, we must spend our time and energy on the skillful, creative and disciplined use of our association's resources to accomplish goals and fulfill mission. (27)

A highly significant positive correlation was found between environment and assembling resources decisions in the present study. Really, that resource allocation process is influenced by the antecedent events of environment shifts and strategic leadership assessment. The organization recognizes environmental shifts, technology advances, interest-rate changes, and competitor moves the organization's dominant coalition. This organization is faced with the need to assess how to allocate resources to maintain or enhance organizational competitiveness. In the same line, another study found that environment has a significant positive direct impact on resources allocation. (28) Maneuver, another study found that, resources are the backbone of every organization and they are important in environmental policy rather than in many other policy areas. Also, the study stated that resource allocation process should be able to develop strategic flexibility to respond to changing environmental conditions. (29)

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the present study it can be concluded that head nurses make their decisions in conjunction with the chief either with or without subordinate opinions, like decision on the number and right qualifications of nursing personnel needed in nursing department and channel of communication with other departments. Head nurses at El-Mehala hospital had moderate level in strategy decision- making performance process and high level in the process of decision making. At El-Menshawi hospital head nurses had high level in the process of decision- making and moderate level in the implementation of decisionmaking process. Head nurses in both hospitals need to involve subordinates with them in making decisions and consider presence of many styles during the process of making decisions.

Taken together, the present study recommend i) Periodical orientation program are thus recommended for the chief nurses on their responsibilities toward reviewing of head nurses' planning decisions. ii) Establishing training program are necessary on the process of making an effective decision for head nurses and nurses. iii) Actually involving head nurses and their staff in developing budget of nursing unit and standards for nursing care procedures. iv) Hospital administrators

should supervise and give attention to the actual involvement of the head nurse to make strategic decisions. v) Putting written criteria for the selection of head nurses (personality and qualifications) to make effective decision.

CONFLICT OF INTEREST

All authors declare no conflict of interest.

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