Head Nurses' Emotional Intelligence Contribution to Staff Nurses' Work Engagement

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Abstract:

Background: Emotional Intelligence provides an essential assistance and become one of necessary head nurses' competencies. The head nurses use of control over emotions benefit staff nurse by creating a convenient and healthy environment for their work engagement. Aim: Assess head nurses' emotional intelligence contribution to staff nurses' work engagement. Subjects and Method: A descriptive correlation research study design was used in this study. It was conducted in all departments at El-Menshawy General Hospital affiliated to the Ministry of Health and Population. Subject: Two groups of subjects' (a) All (n=60) head nurses (b) Stratified random sampling (n=400) of staff nurses **Tools:** two tools were used for collecting data (1) Head nurses' emotional intelligence assessment scale (2) Staff nurses engagement questionnaire. Results: Head nurses 76% had high level of overall emotional intelligence. Head nurses 85%, 83%, 81.7% and 80% respectively had high level in emotional self-control, emotional management of others, emotional self-management and emotional awareness of others. Staff nurses 84.8% had high level of overall work engagement. Staff nurses range (75.5%- 77.3%) had high level of emotional, physical, cognitive and behavioral engagement respectively. There was a statistically significant positive correlation between head nurses overall emotional intelligence and staff nurses overall work engagement. Conclusion: there was contribution of head nurses' emotional intelligence to staff nurses' work engagement. **Recommendation**: Periodical training programs needed for head nurses and staff nurses about emotional intelligence and work engagement. Add emotional intelligence's competencies and work engagement in undergraduate and postgraduate nursing educational programs.

Keywords: Emotional Intelligence, Head nurse, Staff nurses and Work engagement

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Introduction

required **Hospitals** offering safe. dependable, and high-quality patient care to the communities they serve. Despite the environmental challenges which include declining reimbursements, rising expenditures, and regulatory requirements. (1,2) These challenges are complex and require emotionally intelligent leaders who are seen as reliable and aware of behavioral and social norms. (3) There is evidence that emotionally intelligent head nurses can help their hospitals create a competitive advantage through improving top talent retention, intraprofessional team-work, time resources management, as well as increase motivation, innovation, and establish trust among staff nurses. (4)

Head nurses with high emotional intelligence can recognize professional and personal well-being of staff nurses and showing appreciation for their contributions. can They also cultivate healthy environment that promote learning, sharing, information and decision making. (5) Beside they motivate staff accomplish nurses to their tasks efficiently and increase their job engagement⁽⁶⁾. Emotionally intelligence head nurses have the ability to manage impulses to delay gratification, regulate their emotions, stay motivated and empathize with staff nurses when faced with frustrating situations. (7)

The components of emotional intelligent emotional selfawareness, emotional expression, emotional awareness of others, emotional reasoning, emotional selfmanagement, emotional management of staff nurses, and social skill. (8) The head emotional self-awareness nurses represents that they are aware about effect of their emotions on their thoughts and behaviors at work. Emotional expression measures the head nurses frequency of express their emotion in an appropriate way at work. (9) Emotional awareness of others focuses on being aware of staff nurses emotional expressions both verbal and nonverbal. Head nurses emotional reasoning represent the frequency to integrates information that emotionally relevant when making decisions and solving problems at work. Emotional self-management refers to the head nurses relative frequency to successfully control their emotions at work. The emotional management of others represents the ability to skillfully control the emotions of staff nurses, this involves creating a positive working environment for them. The emotional self-control describes the capacity of head nurse to handle powerful emotions at work. (10) Social skills represent effectively managing feelings with relationships; respect staff nurse capable of interpreting social cues; and able to engage in social interactions to influence, convince, negotiate, guide staff nurses. (11)

The contribution of head nurses emotional intelligence and the issues related to nurses engagement, retention, and satisfaction considered to be important for staff nurses in many diverse health care organizations. While staff nurses engagement in health care has emerged as a critical strategy for improving the health care quality due to its positive impact on job

performance, its negative relationship with turnover and its focus on the energy that staff nurses bring to their job. (13) Work engagement refers to a 'positive, fulfilling, work-related state of mind, positively associated with work place resources, useful achieving work goals and promote personal growth, learning and development. (14) Basically staff nurses employ and express themselves physically, cognitively, emotionally, and behaviorally through role performances as a result of engagement. The physical engagement occurs when the staff nurse is willing to exert extra efforts achieve hospital goals. Cognitive engagement represent staff nurse's involvement and dedication performing assigned responsibilities. Emotional engagement is kind of pride and enthusiasm to work for the nurses. (15) Behavioral engagement refer to staff nurses extra role behavior of performing tasks. Thus, staff nurses with positive attitude are quickly involved in their work, and adjust to changes in the work environment showing behavioral engagement. (16)

Significant of the study

The vision 2030 in Egypt focuses on supporting enabling and nursing profession to progress greatly in terms of education and clinical practice. Head nurses with great emotional intelligence will build positive relationships with staff nurses and manage their emotions. While staff nurses need to perceive their head nurses are concerned to their staffing needs, value their advancement and invest enough in their training. As well as play vital role in their overall performance and engagement (17). Also the administrative body is mainly concerned with ensuring that nursing professionals work in a conducive environment. From this perspective, engagement is essential as it helps to provide effective care and maintain a vibrant nurse-patient relationship. The result of this study could help staff nurses, researchers and those who concerned about hospital environment understanding the strength relationship between head nurses emotional intelligence and staff nurses work engagement.

Aim of the Study

Assess head nurses' emotional intelligence contribution to staff nurses' work engagement.

Research Questions:

What is the contribution of head nurses' emotional intelligence and the staff nurses' work engagement at El-Menshawy General Hospital?

Subjects and Method

Study design:

Descriptive correlation research design was utilized in this study.

Study setting:

The study was conducted in all departments at El-Menshawy General Hospital affiliated to the Ministry of Health and Population.

Subjects:

Subjects' of present study included two groups as follows:

- A. All head nurses (n=60) from the above mentioned setting, included all hospital departments.
- B. Random sample of staff nurses (n=400) included from total number of staff nurses (n=799). Taken from all hospital departments.

Tools

To achieve the aim of study, the following tools were used.

Tool I: Head nurses' Emotional Intelligence Assessment Scale

This tool was developed by the researcher guided by ⁽¹⁸⁾ and related literatures ⁽¹⁹⁾, it includes two parts:

Part 1: Characteristics of head nurses such age, years of experience, department, marital status, residency and qualification.

Part 2: Emotional intelligence scale to assess levels of head nurses' emotional intelligence. It consisted of 37 items classified into eight subscales as follows:

Emotional Self-Awareness

Emotional Expression

Emotional Awareness of Others

Emotional Reasoning

Emotional Self-Management

Emotional Management of Others

Emotional Self-Control

Social skill

Scoring system:

Head nurses' responses were measured on a five points Likert scale 1= almost never, 2= seldom, 3= sometimes, 4= usually, 5= almost always. which concluded as follows:

- Always= almost always + usually
- Sometimes
- Never = almost never + seldom.

Levels of head nurses emotional intelligence:

High > 75% Moderate 75-65% Low <65%

Tool 2: Staff Nurses Engagement

Ouestionnaire

This tool was developed by the researcher guided by (20) and (21) to

measure staff nurses work engagement. It includes two parts:

Part one: Characteristics of staff nurses such age, years of experience, department, marital status and qualification.

Part 2: Work engagement questionnaire to measure staff nurses work engagement. It classified into four subscales:

Physical Engagement

Cognitive Engagement

Emotional engagement

Behavioral Engagement

Scoring System

Staff nurses' responses were measured on five points Likert scale ranging from strongly agree (5), agree (4), neither disagree nor agree (3), disagree (2) and strongly disagree (1), which concluded as follows:

- Agree= strongly agree + agree,
- Little agree
- Disagree=strongly disagree +disagree.

Levels of staff nurses work engagement

High work engagement > 75% Moderate work engagement 75-60% Low work engagement < 60%

Results:

Table (1): Shows head nurses personal characteristics. Head nurses 66.7% aged between 40-50 years old while 15% are aged \geq 50 years with mean age 44.03 \pm 5.09. All head nurses are female and 90% of them were married. Head nurses 46.7% had bachelor degree and 56.7% had 20-30 years of experience with mean 22.07 \pm 5.09. Equal (16.7%) of head nurses working at department of medical committees and ICUs, while 11.7% were nurses supervisors.

Also equal (6.7%) working at general operation and at surgical, and equal 5% working at each of reception and emergency, hemodialysis, general medicine and isolation. While 3.3% working at each of obstetrics, urology, neurology, orthopedic and pediatric medical & surgery units.

Table (2): Shows staff nurses personal characteristics. Staff nurses 49.5% aged <30 years old and 5.3% aged ≥40 years with mean age 29.98 ± 5.48 . Majority (81%) of staff nurses were females, 56.8% unmarried and 44% had bachelor degree. Staff nurses 52.8% had <10 year of experience with mean 9.270 ± 6.08 . Staff nurses 35% working at ICUs and 12.5% at reception and emergency. Equal 7.5% at each of general operation, hemodialysis, neurology and orthopedic. Equal (5%) of staff nurses working at each of surgical, general medicine, urology and obstetrics. While 2.5% at isolation.

Figure (1): The figure shows levels of overall head nurses emotional intelligence. Majority of head nurses had high level of overall emotional intelligence while, minority had low level cognitive engagement and behavior engement respectively.

Table (3): The table show levels of head nurses' total of each subscale of emotional intelligence. Majority (85%, 83.3%, 81.7% and 80 %) of head nurses had high level in emotional selfcontrol, emotional management others, emotional self-management and emotional awareness of others respectively. Head nurses 78.3% and 76.7% showed high level of emotional and emotional reasoning expression respectively. Equally (75.0%) of head nurses showed high level of emotional self-awareness and social skill.

Figure (2): Shows levels of staff nurses overall work engagement. The majority of staff nurses had high level of work engagement as total and no one of staff nurses had low level.

Table (4): Shows levels of staff nurses subscales of total work engagement. The table showed that staff nurses 77.3%, 77%, 76.8% and 75.5% had high level in behavioral engagement, cognitive engagement, physical engagement and emotional engagement respectively. While 24.3%, 23%. 22.8%, 22.5% of staff nurses had moderate level emotional in engagement, physical engagement,

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Table (5): Relation between head nurses' characteristics and their overall levels of emotional intelligence. The table show that there was statistically significant relation between head nurses emotional intelligence levels and their age, qualification and years of experiences at $(p \le 0.05^*)$.

Table (6): Relation between staff nurses' characteristics and their overall levels of work engagement, there was

statistically significant relation between staff nurses work engagement levels and their qualification and years of experiences at $(p \le 0.05^*)$.

Figure (3): Correlation between head nurses' emotional intelligence and staff nurses work engagement. The table show that there was highly significant positive correlation of head nurses total emotional intelligence and staff nurses total work engagement(p=0.01)

Table (1):Head nurses' personal characteristics (n=60)

Classic desiration		
Characteristics	No.	%
Age (years)		
<40	11	18.3
40-<50	40	66.7
≥50	9	15.0
Min. – Max.	35.0	0 - 55.0
Mean \pm SD.	44.03	3 ± 5.09
Sex		
Female	60	100.0
Marital status		
Married	54	90.0
Un married	6	10.0
Unit		
Reception and Emergency	3	5.0
Hemodialysis	3	5.0
General medicine	3	5.0
Isolation	3	5.0
Obstetrics	2	3.3
Urology	2	3.3
Neurology	2	3.3
Orthopedic	2	3.3
Pediatric medical and Surgery	2	3.3
Surgical	4	6.7
General Operations	4	6.7
ICUs	10	16.7
Medical committees	10	16.7
Nurses supervisor	7	11.7
Others	3	5.0
Education		
-Bachelor	28	46.7
- Diploma	20	33.3
- Master	8	13.3
-Doctorate	4	6.7
Years of experience		
<20	21	35.0
20-<30	34	56.7
≥30	5	8.3
Min. – Max.	13.0	0 - 33.0

Mean \pm SD.	2	22.07 ± 5.09			
Residency					
Urban	36	60.0			
Rural	24	40.0			

Table (2): Staff nurses' personal characteristics (n=400)

Characteristics	No.	%	
Age(years)			
<30	198	49.5	
30-<40	181	45.3	
=>40	21	5.3	
MinMax.	22.0-	-52.0	
Mean \pm SD.	29.98	±5.48	
Marital status			
Married	173	43.3	
Unmarried	227	56.8	
Gender			
Male	76	19.0	
Female	324	81.0	
Residency			
Rural	240	60.0	
Urban	160	40.0	
Qualification			
-Diploma degree	59	14.8	
-Associate degree	139	34.8	
-Bachelor degree	176	44.0	
-Other	26	6.5	
Years of experience			
<10	211	52.8	
10-<15	136	34.0	
15-<20	17	4.3	
≥20	36	9.0	
Min.–Max.	1.0–34.0		
Mean \pm SD.	9.27	±6.08	
Department			
Reception and Emergency	50	12.5	
Hemodialysis	30	7.5	
ICUs	140	35.0	
General medicine	20	5.0	
Obstetrics	20	5.0	
Surgical	20	5.0	
Urology	20	5.0	
General Operations	30	7.5	
Neurology	30	7.5	
Orthopedic	30	7.5	
Isolation	10	2.5	

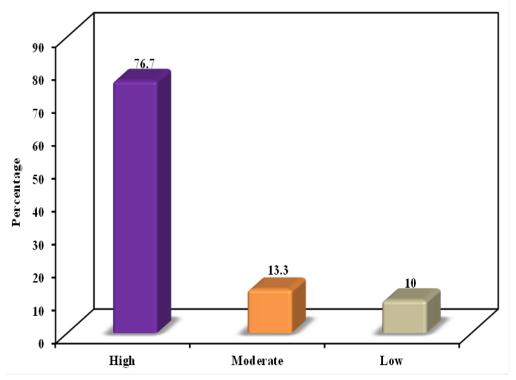


Figure (1): Levels of head nurses overall emotional intelligence (n=60)

Table (3): Levels of head nurses total of each emotional intelligence subscales (n=60)

Emotional intelligence subscale	High		Moderate		Low	
	No.	%	No.	%	No.	%
Emotional self-awareness	45	75.0	4	6.7	11	18.3
Emotional expression	47	78.3	8	13.3	5	8.3
Emotional awareness of others	48	80.0	3	5.0	9	15.0
Emotional reasoning	46	76.7	5	8.3	9	15.0
Emotional self-management	49	81.7	2	3.3	9	15.0
Emotional management of others	50	83.3	2	3.3	8	13.3
Emotional self-control	51	85.0	4	6.7	5	8.3
Social skill	45	75.0	5	8.3	10	16.7

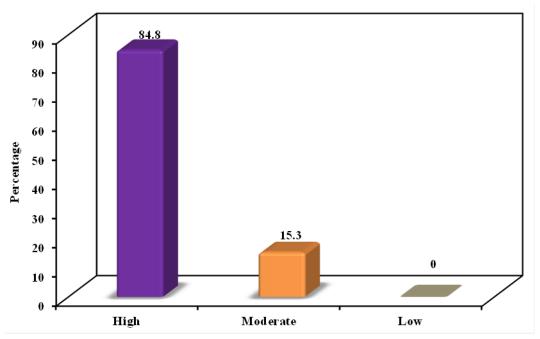


Figure (2): Levels of staff nurses overall work engagement (n=400)

Table (4): Levels of staff nurses total of each work engagement subscales (n=400)

Work engagement	High		Moderate		Low	
Subscales	No.	%	No.	%	No.	%
Physical engagement	307	76.8	92	23.0	1	.3
Cognitive engagement	308	77.0	91	22.8	1	.3
Emotional engagement	302	75.5	97	24.3	1	.3
Behavioral engagement	309	77.3	90	22.5	1	.3

Table (5): Relation between head nurses' characteristics and their overall levels of emotional intelligence

	Emotional intelligence										
	I	Low		Moderate High						1 ,	MC
Demographic data	(n	= 6)		= 8)		46)	χ^2	мср			
	No	%	No	%	No	%					
Age											
<40	2	33.3	3	37.5	6	13.0	12.139*	0.008*			
40-<50	4	66.7	5	62.5	31	67.4					
≥50	0	0.0	0	0.0	9	19.6					
Gender											
Female	6	100.0	8	100.0	46	100.0	_	_			
Marital status											
Married	4	66.7	7	87.5	43	93.5	4.162	0.083			
Un married	2	33.3	1	12.5	3	6.5					
Residency											
Rural	5	83.3	4	50.0	27	58.7	1.630	0.483			
Urban	1	16.7	4	50.0	19	41.3					
Qualification											
-Bachelor	4	66.7	3	37.5	21	45.7	12.544*	0.022*			
- Diploma	2	33.3	5	62.5	13	28.3					
- Master	0	0.0	0	0.0	8	17.4					
-Doctorate	0	0.0	0	0.0	4	8.7					
Years of experience											
<20	4	66.7	2	25.0	15	32.6	12.896*	0.005*			
20-<30	2	33.3	5	62.5	27	58.7					
≥30	0	0.0	1	12.5	4	8.7					
Department											
Reception and Emergency	0	0.0	2	25.0	1	2.2	29.214	0.110			
Hemodialysis	1	16.7	0	0.0	2	4.3					
ICUs	0	0.0	1	12.5	9	19.6					
Pediatric medical and	0	0.0	0	0.0	2	4.3					
Surgery											
internal medicine	1	16.7	0	0.0	2	4.3					
Obstetrics	0	0.0	1	12.5	1	2.2					
Surgical	1	16.7	0	0.0	3	6.5					
Urology	1	16.7	0	0.0	1	2.2					
General Operations	0	0.0	1	12.5	3	6.5					
Neurology	0	0.0	0	0.0	2	4.3					
Orthopedic	2	33.3	0	0.0	0	0.0					
Isolation	0	0.0	0	0.0	3	6.5					
Medical committees	0	0.0	2	25.0	8	17.4					
Nurses supervisor	0	0.0	0	0.0	7	15.2					
Others	0	0.0	1	12.5	2	4.3					

Table (6): Relation between staff nurses' characteristics and their overall work engagement levels

engagement revers	W	Vork eng	\mathbf{X}^2	- D		
D 11.14	Moderate				High	
Demographic data	(n = 61)		(n=339)		A	P
	No	%	No	%		
Age						
<30	36	59.0	162	47.8		
30-<40	25	41.0	156	46.0	5.385	0.068
≥40	0	0.0	21	6.2		
Gender						
Male	13	21.3	63	18.6	0.250	0.617
Female	48	78.7	276	81.4	0.230	0.017
Marital status						
Married	24	39.3	149	44.0	0.447	0.504
Un married	37	60.7	190	56.0	0.447	0.304
Residency						
Rural	41	67.2	199	58.7	1.560	0.212
Urban	20	32.8	140	41.3		0.212
Qualification						
Diploma degree	15	24.6	44	13.0		
Associate degree	21	34.4	118	34.8	8.662*	0.034*
Bachelor degree	19	31.1	157	46.3	8.002	0.034
Other	6	9.8	20	5.9		
Years of experience						
<10	38	62.3	173	51.0		
10-<15	19	31.1	117	34.5	8.795	0.032^{*}
15-<20	4	6.6	13	3.8	0.193	0.032
≥20	0	0.0	36	10.6		
Department						
Reception and Emergency	9	14.8	41	12.1		
Hemodialysis	4	6.6	26	7.7		
ICUs	19	31.1	121	35.7		
Internal medicine	6	9.8	14	4.1		
Obstetrics	4	6.6	16	4.7		
Surgical	3	4.9	17	5.0	8.039	0.616
Urology	3	4.9	17	5.0		
General Operations	2	3.3	28	8.3		
Neurology	4	6.6	26	7.7		
Orthopedic	4	6.6	26	7.7		
Isolation	3	4.9	7	2.1		

χ²: Chi square test

^{*:} Statistically significant at $p \le 0.05$

p: p value for comparing between Relation between staff nurses' characteristics and their work engagement

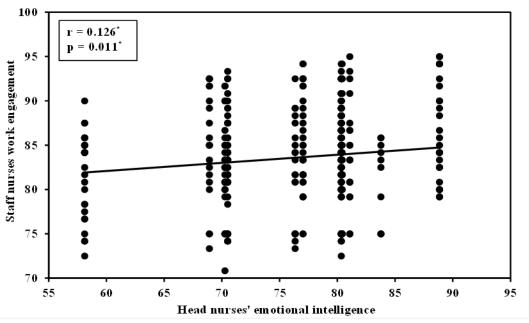


Figure (3): Correlation between head nurses' emotional intelligence and staff nurses work engagement

Discussion

Head nurses' emotional intelligence is amongst of work demands, which may possibly engage staff nurses in their work ⁽²²⁾. It also has influences on well-being, workplace stress of nurses and on considering factors relevant to organizational efficiency. So, the present study was aimed to assess head nurses emotional intelligence effect on staff nurses work engagement at El-Menshawy General Hospital.

Finding of current study showed that majority of head nurses had high level of overall emotional intelligence significantly positively related with their age, qualification and years of experience. Actually their personal characteristics as highly educated married females around middle age and have been head nurses since twenty years give them Specially they have years of leadership and relation management

which enhanced them to act in their own interests. Really those head nurses personal characteristics helped them to have high level of social awareness and communication skill to exercise their rights without anxiety and to maintain balance of their behaviors with staff nurses.

Also majority of those head nurses had high overall levels and mean scores for each emotional intelligence subscale self-awareness, including emotional expression, awareness of others, reasoning, self-management, management of others, self-control and social skills. Most probably those head nurses get opportunities for training and development, supportive work environment and empowerment from their hospital administrations. Beside the nursing profession itself requires good relation with their staff nurses without conflict interaction with patient and their family and with other health care personnel.

This result is supported by (23) study between correlation emotional intelligence and leadership style among nurse mangers. They found that nurse managers are associated with high level of emotional intelligence and good leadership competencies. On contrary (24) study the relationship between selfesteem and emotional intelligence among nursing managers Sohag and at Damanhour University Hospitals. They didn't support this result and found that the highest percentages of the study sample were low emotional intelligence.

Present study staff nurses showed high level of overall work engagement. Really this result due to their high level of cognitive, emotional physical, behavioral engagement. As well related to their head nurses emotional intelligence. Those staff nurses had high level of physical engagement may be due to their experiencing full concentration at work, feeling happy and engrossed in work so that time seems to pass quickly. Those staff nurses reported experiencing a sense of significance, enthusiasm, pride and challenge. Actually they can stay for long hours until the task are done without any stress. Also they exert lot of efforts and work too hard to perform their job with enthusiasm. They said that they always have great deal of stamina and lot of energy for their work. Beside the nursing of patients and its mercy gave them feeling of satisfaction.

Result of present study confirmed by ⁽²⁵⁾ study about the effect of inclusive leadership on nurses' work engagement. They found the highest percentage of

nurses had a high work engagement level. Also, ⁽²⁶⁾ study the relationship between nurses' job crafting behaviors and their work engagement among hospital nurses in Saudi Arabia. They found the participating nurses had high levels of work engagement

Head nurses had high level of emotional intelligence positively highly correlated with staff nurses work engagement. Staff nurses in present study had high level of work engagement, which highly correlated to head nurses high level of emotional intelligence. Really head nurses understanding one's own and their staff nurses emotions. The use and control over emotions benefit staff nurse and creating a healthy and convenient environment for work engagement. Yet head nurses' high emotional intelligence increased the personal resources of staff nurses to increase their work engagement. While staff nurses tend to engage in their work because their head nurses allow them the opportunity to deal with their feelings that may include loss, grief, and anxiety. Also head nurses allow them to express their feelings without judgment, pressure or guilt. So head nurses manage impulses to delay gratification, regulate their emotions, stay motivated and empathize with staff nurses when faced with frustrating situations.

Conclusion

Personal characteristics including age, years of experience, marital status and qualification significantly affected both overall head nurses emotional intelligence and staff nurses work engagement. Also head nurses' emotional intelligence significantly contributed to staff nurses' work engagement. As majority of head

nurses had high level of overall emotional intelligence and majority of staff nurses had high level of overall work engagement.

Recommendations

In the light of the present findings, the following recommendations are suggested that:

Hospital management

- Apply recruitment and selection of the right of head nurses with special competencies to fulfill its strategic and operational goals
- Provide periodical training and development programs for head nurses about emotional intelligence as a crucial competence for manager's success in work.
- Provide periodical training programs for staff nurses and head nurses about work engagement.
- Involve emotional intelligence competencies in head nurses' performance appraisal.
- Create suitable organization climate for staff nurses empowerment and for optimal use their potentials and capabilities.
- Redesign the hospital policies and regulations to be adapted with new vision 2030 in Egypt.

Head nurses

- Head nurses required for periodically have nursing group meeting to verbalized, vitalize and support peer and social interaction
- Head nurses required to develop a supportive working conditions and encourage trust, empathy and mutual regard.
 - -Head nurses required to create more open and comprehensive environments for staff

nurses, offer help and support to improve their vitality, contribution and concentration in working, in order to enhance their work engagement.

Nursing education programs required to

- Add competencies for emotional intelligence and work engagement both in under and postgraduate educational programs.

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