

Magnetic Characteristics of Work Environment and Its Relation to Engagement of Nursing Staff

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Abstract: Work engagement is a reflection of effective use of nurses' skills and knowledge with proper support, resources, feedback, and training. Improving nursing work environment is a central point and challenge for healthcare organizations. Therefore, the way for reaching to magnet working environment becomes a roadmap to deal with nursing shortage, attract and retain nurses in many hospitals. **The study aimed to** assess magnetic characteristics of work environment and its relation to engagement of nursing staff. **Subjects and method:** Descriptive correlational design was used. The study was conducted at Menoufia University Hospitals. Representative simple random sample of 313 nursing staff was selected from previous mention setting. Two tools were utilized for data collection. Magnet characteristics of work environment questionnaire and short version of Utrecht work engagement scale. **Results:** high percent (61.2%-75.1%) of nursing staff disagree that they have magnet work environment characteristics regarding all items except 40.7% of them agree that they have magnet work environment characteristics regarding nurse participation in hospital affairs item. About fifty percent (50.7%) of nursing staff reported that they never have work engagement while the other half reported that they have work engagement every day. There were statistical significant correlation between total magnet work environment characteristic and total nursing staff work engagement. **Conclusion:** There were statistical significant correlation between total magnet work environment characteristic and total nursing staff work engagement. **Recommendation:** Nurse managers should assess their nursing staff work environment, recognize weaknesses and non-favorable aspects and center their efforts on its improvement. Support nursing staff and supplement them with adequate human and material resources and encouraging them to participate in hospital affairs.

Key words: Magnetic Characteristics of Work Environment, Engagement and Nursing Staff

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I. Introduction

Magnet working environment in health care organization can be viewed as the gold standards for nursing and the manner that patients find benchmarks for care^(1,2). Magnet recognition is vital because it recognizes the hospital's obligation to quality and safety, innovations, markets the hospital to patients and attracts nursing staff and other employees who want to work in hospital^(3,4). Nursing work environment is the total of several basics that directly or indirectly affect the patient care structure⁽⁵⁾. The rapidly changing environment, technology, greater workload, nursing shortage, expanding role of nurses and increased demands overwhelm healthcare organization and call for creating a magnet working environment so that clinical nurses can engage in work process, achieve professional nursing and high performance⁽⁶⁾.

Magnetic characteristics of work environment are known as "forces of magnetism"⁽⁷⁾. These forces are vital for recognition, providing optimal care and improved outcomes^(4,8). These characteristics consist of collegial nurse - physician relations, nurse manager ability and support of the nursing staff, staffing and adequate resources, nurse participation in hospital affairs, and nursing foundation for quality care⁽³⁾. Collegial nurse - physician relations is a central component and critical for supportive professional nursing practice environment⁽⁹⁾. In clinical practice, nurse and physician work together and independently share responsibility for solving problems, decision making, communication, and coordination to improve unit outcomes⁽¹⁰⁾. Nurse manager ability and support is essential in creating conducive, and positive work environment for attracting and retaining nursing staff that able to provide quality care⁽¹¹⁾. This element centers on how nurse manager actively support and promote a professional practice model that encourages staff nurses' participation in the development of clinical practice. It achieved through receiving recognition, fair work assignment, encouraging autonomy in nursing practice, providing guidance and supports them emotionally⁽¹²⁾.

Nurse participation in hospital affair refers to nurses' awareness of their involved roles in organization and nursing department affairs as well as their impact on whole hospital administration⁽¹³⁾. Nurse participation in hospital affair such as policies decisions and internal governance of the hospital allow the nurses to engage in processes and dealings essential to safe and quality patient outcomes⁽¹⁴⁾. Nurses' participation in decision making progress of their own affairs can influence their effectiveness by encourage them to direct, control and regulate many goal oriented efforts of their professional nursing practice that influence organization^(15,16). Staffing and adequate resources is the character of magnet working environment that means having enough professional staff, supplies and equipment and time that necessary to get things done and meet patient's needs⁽³⁾.

Nursing foundation for quality care means that the nurses view the hospital supports a nursing model for a high quality of patient care⁽¹³⁾. It assists to direct the organization's focus on how care is carried and attained predictable outcomes. Quality of care serves as a founding force for this component⁽¹⁷⁾. Quality care foundation established by providing the care according to nursing care standards, a clear philosophy of nursing, and existence of quality assurance program for preventing mistakes and avoiding problems when delivering nursing services to patients⁽¹⁸⁾. Magnetic characteristics of work environment have to be used to guide a transformation of the nursing organization to build healthy nurse practice environment conducive to nurse professionalism, retention, productivity, satisfaction, and work engagement^(19,20).

Work engagement in professional nursing practice is critically to consider when addressing key challenges of health systems⁽²¹⁾. It is a positive, gratifying, state of mind about work that is characterized by vigor, dedication and absorption⁽²²⁾. Vigor is defined as high levels of energy and mental resilience at work. Dedication is described as strong participation in one's work and being devoted to one's job accompanied by feelings of enthusiasm and significance. Absorption refers to truly getting into the work, forgetting about time and having difficulties shedding oneself from it⁽²³⁾. The outcomes of nurses' work engagement are higher levels of personal creativity that are contagious, greater satisfaction with their environment; more independence within their practice; better obligation to their job and their patients, a stronger patient safety culture and significantly higher monetary viability of organizations⁽²⁴⁾.

Significant of the study

Work engagement is potentially a reflection of effective use of nurses' skills and knowledge with proper support, resources, feedback, and training facility^(25,26). Improving nursing work environment is a vital point and challenge for healthcare organizations and nursing administrators. Therefore, the way for reaching to magnet working environment becomes a roadmap for achieving the criteria to deal with nursing shortage and attract and retain nurses in many hospitals⁽²⁷⁾. So the study aimed to assess magnetic characteristics of work environment and its relation to work engagement of nursing staff.

1.1 . The aim of the Study

This study aimed to assess magnetic characteristics of work environment and its relation to engagement of nursing staff.

1.2. Research question

What are magnetic characteristics of work environment and its relation to work engagement of nursing staff?

II. Subjects and Method

Subjects

2.1 Study design: A descriptive correlational design was used by researcher.

2.2 Setting: The study was conducted at Menoufyia university hospitals which composed of three hospitals (main university hospital, specialty hospital, and emergency hospital) and oncology institute.

2.3 Subject: A representative simple random sample of 313 nursing staff were selected from total number of nursing staff (896) at Menoufyia university hospitals.

2.4 Tools of the study: For data collection, two tools were utilized by researcher.

Tool (1): Magnet characteristics of work environment questionnaire: this tool was developed by researcher based on Lake (2002)⁽²⁸⁾ and Blake (2012)⁽²⁹⁾ and recent related literature^(30,31). It was used to assess magnetic characteristics of work environment from nurse perception. It consisted of two parts:

Part I: Included questions about nursing staff personal characteristics such as work unit, age, nursing qualification, and years of experience.

Part II: was utilized to assess magnetic characteristics of work environment. It composed 36 items divided as follow: collegial nurse - physician relations (3 items), nurse manager ability and support of the nursing staff (15 items), staffing and adequate resources (4 items), nurse participation in hospital affairs (4 items) and nursing foundation for quality care (10 items).

Scoring system: nursing staff response was measured using four points Likert scale ranging from (1-4) where 1= strongly disagree, 2= disagree, 3= agree and 4 =strongly agree. Nursing staff response corresponded with scores 3,4 indicate presence of magnetic work characteristics while response corresponded with scores 1, 2 indicate absence of magnetic work characteristics.

Tool II: Short Version of Utrecht Work Engagement Scale (UWES)

This tool was developed by Schaufeli (2006)⁽³²⁾ to assess nursing staff work engagement. It consisted of nine items in three dimensions; vigor, dedication, and absorption, three items on each dimension.

Scores system: Nursing staff response was measured on four points Likert scale ranging from (1-4) where score 1 = never and score 4 = every day.

Method

Ethical consideration:

- Official permission to carry out the study was obtained from responsible authority at Meoufia university hospitals.
- The purpose of the study was explained and made clear for nursing staff to gain their cooperation.
- Verbal consent to participate in the study was obtained from nursing staff. They were secured that their data will be kept confidential, and they had the right to withdraw from the study at any time.

Reliability and validity

- Tool I and II was judged by five experts in the area of specialty (nursing administration - Faculty of Nursing - Tanta University) to check the content validity of the tool.
- A pilot study was carried out on 10 % of the nursing staff who excluded from the study sample; to ascertain the clarity and applicability of the tools, identify any obstacles that may occur at the data collection, and to estimate the needed time to complete the questionnaire.
- The tool was modified based on the comments of jury and pilot study. Reliability of the tools was tested using Cronbach’s alpha coefficient test. Its value was 0.85 and 0.89 respectively.

Data collection phase

- All tools were distributed by the researcher to collect data from nursing staff during their different shifts. Nursing staff taken 20-30 minute to complete all questionnaires.
- Data collection was done at three months from March to May 2018.

Statistical analysis: Collected data was organized, tabulated and statistically analyzed using statistical package for social sciences (SPSS/version 20) software. Quantitative data was described by mean and standard deviation. While qualitative data were expressed by number, percentage and chi-square test was used to determine if there is any significant differences between variable. Spearman’s coefficient was used to determine correlation between variables.

III. Results

Table (1): Socio-demographic characteristics of nursing staff at Menoufia university hospitals (N= 313).

Item	Staff nurses n= 313	
	No	Percent %
Hospital		
• Main university hospital	96	30.7%
• Specialty hospital	152	48.6%
• Emergency hospital	46	14.7%
• Oncology institute	19	6.1%
Education		
• Technical nursing institute.	149	47.6%
• Bachelor degree	164	52.4%
Experience		
• 1 - < 10 years	61	19.5%
• 10- < 15 years.	44	14.05%
• ≥ 15 years.	208	66.45%
Mean ± SD	11.21± 5.68	
Age		
• 20- < 25 years	5	1.59%
• 25 - < 35 years	231	73.80%
• ≥ 35 years	77	24.61%
Mean ± SD	31.7± 5.37	

Table (1) shows socio demographic characteristics of nursing staff at Menoufia university hospitals. The name of hospital, educational level, years of experience as well as age were included. Nursing staff 48.6%, 30.7%, 14.7% and 6.1% were working at specialty hospital, main university hospital, emergency hospital and oncology institute respectively. More than fifty percent (52.4%) of nursing staff have bachelor degree. Over sixty percent (66.4%) of them have more than 15 years of experience. Their mean years of experience were **11.21± 5.68**. The age of nursing staff were ranged from 20-35 years, with mean age **31.7± 5.37**. High percent (73.8%) of them were in the age group 25 - < 35 years while the minority (1.59%) was in age group 20- < 25 years.

Table 2: Nursing staff response regarding magnet work environment characteristics at Menoufia university hospitals (N= 313).

Magnet work environment characteristics main items	Staff nurses response								t	p
	Strongly disagree		Disagree		Agree		Strongly agree			
	No.	%	No.	%	No.	%	No.	%		
Collegial nurse - physician relations	83	26.5	109	34.7	89	28.5	32	10.2	3.60	0.014*
Nurse manager ability and support of the nursing staff	88	28.2	118	37.6	84	26.9	23	7.2	5.34	0.003*
Staffing and adequate resources	121	38.6	114	36.5	65	20.8	13	4.2	7.39	0.001*
Nurse participation in hospital affairs	78	24.8	108	34.5	91	29.1	36	11.6	3.91	0.039*
Nursing foundation for quality care	98	31.3	106	33.9	80	25.6	29	9.2	4.71	0.004*

Strongly agree +agree=agree

Strongly disagree + disagree= disagree

Table (2) shows nursing staff response regarding magnet work environment characteristics at Menoufia university hospitals. Statistical significant difference found between all items of magnet work environment characteristics at (p<0.05). High percent (75.1%) of nursing staff disagree that they have magnet work environment characteristics regarding item of staffing and adequate resources. About two third (65.2%, 62.8%, and 61.2%) of them disagree that they have magnet work environment characteristics regarding items of nursing foundation for quality care, nurse manager ability and support of the nursing staff, and collegial nurse - physician relations respectively. While, 40.7% of nursing staff agree that they have magnet work environment characteristics regarding item of nurse participation in hospital affairs.

Table 3: Nursing staff response regarding work engagement items at Menoufia university hospitals (N= 313).

Work Engagement items	Staff nurses' response				X ²	P
	Never		Everyday			
	No.	%	No.	%		
Vigor						
At my work, I feel bursting with energy	183	58.5	130	41.5	9.287	0.002*
At my job, I feel strong and vigorous	95	30.4	218	69.6	48.968	0.000**
When I get up in the morning, I feel like going to work	192	61.3	121	38.7	15.605	0.000**
Dedications						
I am enthusiastic about my job	129	41.2	184	58.8	9.987	0.002*
My job inspires me	133	42.5	180	57.5	7.338	0.007*
I am proud on the work that I do	196	62.6	117	37.4	19.376	0.000**
Absorption						
I feel happy when I am working intensely	222	70.9	91	29.1	55.490	0.000**
I am immersed in my work	110	35.1	203	64.9	28.140	0.000**
I get carried away when I am working	129	41.2	184	58.8	9.287	0.002*

Table (3) shows nursing staff response regarding work engagement items at Menoufia university hospitals. Statistical significant difference was found between all items of staff nurses' work engagement (p<0.05). Regarding vigor item more than fifty percent (61.3% , 58.5%) of nursing staff reported that they never feel like going to work when they get up in the morning nor feel bursting with energy at work respectively. While about two third of them feel strong and vigorous every day. Regarding dedications item more than fifty percent (58.8%, 57.5%) of them reported that they are enthusiastic about their job and their job inspires them every day respectively. While two third of nursing staff reported that they are never proud on the work they do. Regarding absorption item high percent (70.9%) of nursing staff reported that they never feel happy when they are working

intensely while (64.9%, 58.8%) of them are immersed in work and get carried away when they are working respectively.

Table 4: Nursing staff work engagement main items at Menoufia university hospitals (N=3013).

Work Engagement main items	Nursing staff response				X ²	P
	Never		Everyday			
	No.	%	No.	%		
Vigor	157	50.1	156	49.9	0.753	0.932
Dedication	153	48.8	160	51.2	1.012	0.672
Absorption	154	49.1	159	50.9	0.832	0.211
Total	154	49.3	159	50.7	0.773	0.384

Table 4 shows nursing staff work engagement main items at Menoufia university hospitals. No statistical significant difference was found between total nursing staff work engagement main items. About fifty percent (50.7%) of nursing staff reported that never have work engagement while the other half of nursing staff reported that they have work engagement every day.

Table 5: Comparison between Menoufia university hospitals regarding magnet work environment characteristics items (N=313).

Magnet work environment items	Staff nurses' response	Hospitals								p-value
		Main university (n=96)		Specialty (n=152)		Emergency (n=46)		Oncology (n=19)		
		No.	%	No.	%	No.	%	No.	%	
Collegial nurse - physician relations	S. Dis Agree	5	5.15	9	5.92	1	2.17	1	5.26	0.075
	Disagree	70	72.16	101	66.45	30	65.22	13	68.42	< 0.001**
	Agree	22	22.68	39	25.66	13	28.26	5	26.32	0.042*
	S. Agree	0	0.00	3	1.97	2	4.35	0	0.00	0.681
Nurse manager ability and support of the nursing staff	S. Dis Agree	2	2.06	0	0.00	0	0.00	0	0.00	0.830
	Disagree	87	89.69	146	96.05	38	82.61	18	94.74	< 0.001**
	Agree	8	8.25	6	3.95	8	17.39	1	5.26	0.059
	S. Agree	0	0.00	0	0.00	0	0.00	0	0.00	1.00
Staffing and adequate resources	S. Dis Agree	18	18.56	18	11.84	2	4.35	2	10.53	0.752
	Disagree	64	65.98	113	74.34	39	84.78	15	78.95	< 0.001**
	Agree	13	13.40	21	13.82	5	10.87	1	5.26	0.048*
	S. Agree	2	2.06	0	0.00	0	0.00	1	5.26	0.913
Nurse participation in hospital affairs	S. Dis Agree	16	16.49	0	0.00	0	0.00	0	0.00	0.037*
	Disagree	58	59.79	71	46.71	31	67.39	11	57.89	0.041*
	Agree	19	19.59	81	53.29	15	32.61	8	42.11	< 0.001**
	S. Agree	4	4.12	0	0.00	0	0.00	0	0.00	0.065
Nursing foundation for quality care	S. Dis Agree	18	18.56	3	1.97	1	2.17	1	5.26	0.048*
	Disagree	69	71.13	134	88.16	40	89.13	18	94.74	0.003*
	Agree	10	10.31	15	9.87	5	10.86	0	0.00	0.027*
	S. Agree	0	0.00	0	0.00	0	0.00	0	0.00	1.000

Strongly agree + agree = agree
 Strongly disagree + disagree = disagree

Table (5) shows comparison between Menoufia university hospitals regarding magnet work environment characteristics items. More than fifty percent (53.2%) of nursing staff in specialty hospital agree that they have magnet work environment characteristics regarding nurse participation in hospital affairs item compared to (23.71%, 32.61%, and 42.11%) at main hospital, emergency, and oncology hospital respectively. Also, all nursing staff (100%) in oncology hospital disagree that they have magnet work environment characteristics regarding item of nursing foundation for quality care compared to (91.3%, 90.13%, and 89.69%) at emergency hospital, specialty, and main hospital respectively.

Table 6: Spearman correlation between magnet work environment characteristics and nursing staff work engagement at Menoufia university hospitals (N=313).

Items	Work Engagement							
	Vigor		Dedication		Absorption		Total	
	r	P value	r	P value	r	P value	R	P value
Collegial nurse - physician relations	.290	0.557	-.058	0.913	.145	0.784	.230	.473
Nurse manager ability and support of the nursing staff	.314	.044*	-.086	.872	.029	.957	-.221	.377
Staffing and adequate resources	-.143	.787	-.143	.787	.257	.623	.013	.013
Nurse participation in hospital affairs	.314	.044*	-.200	.704	-.371	.046*	.359	.050*
Nursing foundation for quality care	.943	.005**	.600	.020*	.371	.046*	.637	.004*
Total Magnet work environment characteristics	.290	.577	-.058	.913	.145	.784	.480	.037*

Table (6) shows correlation between magnet work environment characteristics and nursing staff work engagement at Menoufia university hospitals. Statistical significant correlation was found between total magnet work environment characteristic and total nursing staff work engagement at ($p < 0.05$). The table shows also statistical significant correlation between vigor item of nurses' work engagement and items of magnet work environment characteristics regarding nurse participation in hospital affairs, nurse manager ability and support of the nursing staff and nursing foundation for quality care ($p < 0.05$). There was statistical significant correlation between dedication item of nursing staff work engagement and item of magnet work environment characteristics regarding nursing foundation for quality care. Moreover, shows statistical significant correlation between absorption item of nurses' work engagement and items of magnet work environment characteristics regarding nursing foundation for quality care and .

IV. Discussion

Magnet hospitals are related to the idea of good quality care, continuing education, professional independence, flat structures, effective staff deployment, and high levels of job satisfaction⁽³³⁾. But result of the present study revealed that more than seventy percent of nursing staff disagree that they have magnet work environment characteristics regarding item of staffing and adequate resources.

Nursing shortage continues to challenge health policy makers and nursing managers at hospitals. Staffing in health care organizations must depend on acuity, complexity, and skill mix and not just on volume. Additionally, it must be well communicated so that nursing staff understand the complexity and reality of fiscal and regulatory demands. Availability of resources affects nurses' freedom to make patient care decisions and quality of care. So, material resources that essential for care must be accessible and be in good working manner. Frequently searching for equipment or utilizing equipment that is not fully functional is ineffective, risky, and unsatisfying^(34,35). Hospital environment with sufficient nursing staff and support can decrease stress levels among nurses and enable them to effectively manage their stress and actively engage in self-care behaviors⁽³⁶⁾. So, hospitals have to work hard, validate a deep commitment to nursing, and undergo major organizational change to achieve the magnet requirements. Organizational support for sufficient human resources and materials, teamwork among nurses and physicians are required.

Result of the present study revealed that more than sixty percent of nursing staff disagree that they have magnet work environment characteristics regarding nurse manager ability, support of the nursing staff, and collegial nurse - physician relations. Lack of nurse-physician collaboration leading to nurses' angry as self-worth diminished, frustrated and discouraged and have been linked to high workload and nursing shortage which negatively impacts nurses' health behaviors^(37, 38).

American association of critical care nurses (2016)⁽³⁹⁾ mentioned that skilled communication and true collaboration are standard for creating and supporting healthy professional work environment. Regarding to nurse manager support Cho (2018)⁽⁴⁰⁾ found that nurses working in units with nurse managers who were characterized by better ability and by quality leadership, and who provided more support to nurses exhibited greater health responsibility and physical activity. Managerial support builds the trust in clinical setting and encourages innovative practice. While, lack of managerial support develops anger and hostility and decreases nurses' self-confidence, productivity, job satisfaction, decrease commitment to organizations⁽⁴¹⁾.

The study findings agree with result of Al-Sayed (2015)⁽⁴²⁾ who revealed that high percent of staff nurses had low level of perception regarding nursing practice environment. Majority of staff nurse perceived

staffing and resources adequacy as being lower perception level. Conversely Ibrahim and Aly (2018)⁽³⁰⁾ found that nurses agreed that total qualities of work environment were available and considered as an area of their strength at 57357 hospital. This finding could be attributed to that nursing staff at hospital receive respect, appreciation, empowerment, and recognition for the noble mission they are entrusted to carry out.

Comparison between university hospitals

Nurses are considered to be one of powerful sections of health care system. Development and improvement of health system are the crucial role of nurses working in its environment. Their participation in decision making progress of their own affairs and omission of unnecessary roles can influence their efficiency⁽¹⁵⁾. Result of the study shows that about forty percent of nursing staff agree that they have magnet work environment characteristics regarding item of nurse participation in hospital affairs. More than fifty percent of them in specialty hospital while low percent at main hospital, emergency, and oncology hospital. Hospitals need to facilitate participative management with decentralization of control and non-hierarchical structures and allowing nursing staff to be involved in decision-making that affect their practice and environment. Their participation increases nurses' accountability and responsibility that, in turn, can motivate sense of image and professionalism.

This study agreed with Liu (2012)⁽⁴³⁾ who revealed that nurses were not satisfied with their level of participation in hospital affairs, while Al- Maaitah et al (2018)⁽⁴⁴⁾ revealed that nurse participate in hospital affairs and have more opportunities to serve on hospital and nursing committees.

Also, all staff nurses in oncology hospital disagree that they have magnet work environment characteristics regarding item of nursing foundation for quality care and near to ninety percent at emergency hospital, specialty, and main hospital. This in fact may be due to unhealthy and unsupportive work environment. This environment is considered one of the core problems that threaten the quality of nursing care. Van Bogaert (2018)⁽⁴⁵⁾ mentioned that work environment are now recognized as a key predictor of nurse experience and the quality of care they carried. This result is supported by Gikopoulou et al (2014)⁽⁴⁶⁾ who found that nurses had low mean score in relation to nursing foundation for quality care and their work environment was non favorable for them .

Dimensions of work engagement

Engagement can be described through energy, involvement and positive interaction in the workplace⁽⁴⁷⁾. In clinical practice environment quality of care delivered and organizational performance effectiveness are influenced by nurses' engagement⁽⁴⁸⁾. Result of this study revealed that about fifty percent of nursing staff reported that they never have work engagement while the other half of staff nurses reported that they have work engagement every day. This in fact due to nursing staff never feel like going to work when they get up in the morning nor feel bursting with energy while about two third of them feel strong and vigorous every day.

Regarding dedications more than fifty percent of staff nurses reported that they are enthusiastic about their job and their job inspires them every day. This percent of nurses may be those who have more years of experience and participate in their hospital affairs. They feel that their job treats them as professionals and gives them the power and sense of professional identity. So, they become motivated to take an active role in organization and nursing department when delivering their nursing care, leading and managing their units. While two third of them reported that they are never proud on the work they do. This may be due to the fact of having inadequate staffing and resources that have an effect on their performance while providing patient care and in turns the sense of default in work arises. Regarding absorption high percent of staff nurses reported that they never feel happy when they are working intensely while more than fifty of them are immersed in work and get carried away when they are working.

Nursing staff with high dedication and low vigor had strong intent to turn-over, especially when they also had heavy workload. Havens (2013) et al⁽⁴⁹⁾ agreed with this result and found that the sample scored highest on dedication and lowest on vigor and recommended that nurse managers must be alert to prevent compassion fatigue. While Fasoli (2010)⁽⁵⁰⁾ revealed that nurses report low levels of work engagement. Also Wan et al (2018)⁽⁴⁸⁾ revealed that work engagement of RN in China was relatively low, especially in terms of the vigor dimension.

Relationship

Results of present study revealed that there were statistical positive correlation between total work engagement and total magnetic work characteristics. This result was in agreement with Bargagliotti (2012)⁽⁵¹⁾ and Abdelhadi and Drach-Zahavy (2012)⁽⁵²⁾ who concluded that forming practice environs that completely engage nurses in their practice is a central point for nursing profession. Improving work conditions is a main challenge confronts nurse executives today. To meet this challenge, nurse leaders have to implement the right

structures and best leadership practices so that nursing staff can be engaged in work processes and relationships that are linked to quality of patient outcomes⁽⁵³⁾.

Also this result was in agreement with Wan et al (2018)⁽⁴⁸⁾ who revealed that practice environment was the important key for nurse engagement. Bishop (2013)⁽⁵⁴⁾ concluded that work engagement can be improved through creating positive work environments that is characterized with sense of belonging and teamwork. Staff are allowed time to decompress as well as build positive work relationships.

VII. Conclusion

High percent of staff nurses disagree that they have magnet work environment characteristics regarding item of staffing and adequate resources. About two third of them disagree that they have magnet work environment characteristics regarding items of nursing foundation for quality care, nurse manager ability and support of the nursing staff, and collegial nurse - physician relations respectively.

About forty percent of nursing staff agree that they have magnet work environment characteristics regarding item of nurse participation in hospital affairs. Fifty percent of staff nurses reported that they never have work engagement while the other half of staff nurses reported that they have work engagement every day. There was positive statistical correlation between total work engagement and total magnetic work characteristics.

VIII. Recommendation

In the light of the finding of the present study, the following recommendations are suggested:

For hospital administrator

- 1- Supplement and empower nursing staff with adequate human and material resources necessary for care given to stimulate the feeling of ability to have control over nursing practice.
- 2- Encourage shared governance and participative management to enhance nursing staff to participate in hospital affairs.
- 3- Improve team working relationships and collaborate of nurse and physician by gently sharing their knowledge, thought, abilities and active participation in patient related decisions.
- 4- Conducting educational program about the importance of magnetic work characteristics in healthcare organization periodically.

For nurse manager

- 5- Assess nurses' work environment, recognize weaknesses and non-favorable aspects and center their efforts on its improvement.
- 6- Provide learning environment for nurses that support their formal and informal continuing education programs for new knowledge and practice.
- 7- Facilitate team communication, handle conflict effectively and shared decision making.
- 8- Training activities for nursing supervisors to promote their clinical, decisional, and emotional support to nurses that enhance their work engagement.

For further research

Study influence of magnetic characteristics of work environment on nurse's outcome.

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