

Head Nurses' Leadership Effectiveness, Communication Skills and Mindfulness: It's' Relation to Staff Nurses' Innovative Work Behavior

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Abstract

Background: In today's quickly evolving environment of healthcare, increase need for effective nurse leader in order to achieve qualified care results, an equally compatible leadership standard in teamwork is fundamental. Mindfulness, with inherent focus on being present and non-judgmental, seems particularly suitable for enhancing leadership qualities and promoting the quality of communication skills, and enhance attractive and supportive work environment that is critical to innovation for staff. **The study aimed to:** Assess the head nurses' leadership effectiveness, communication skills and mindfulness and assessing its relation to innovative work behaviors among staff nurses. **Design:** A descriptive correlational design was utilized to conduct this study. **Setting:** the study was conducted in all units at Benha University Hospitals. **Subjects:** Consisted of *head nurses group*: 150 head nurses and their assistance and *staff nurses group*: A convenient sample of 300 staff nurses. **Tools:** Four tools were used for data collection; first: Leadership Effectiveness Questionnaire, second: Communication Skills Questionnaire third: Mindfulness Questionnaire, and the fourth tool: Innovative Work Behavior Questionnaire. **Results:** Showed that the highest percentage (61.5%) of head nurses had good communication skills, also more than half (54.9% & 52.6%) of them had high perception levels toward leadership effectiveness and mindfulness respectively. in addition to about two thirty (72%) of staff nurses had high perceptions level toward innovative work behaviors. Additionally the highest mean percentages (83.81%, 83.33%, and 80.08%) of head nurses were related to relational leadership effectiveness, creating a clear, well-crafted message of communication skills, the acceptance of mindfulness respectively, and the highest mean percentages (84.67% & 82%) of staff nurses were related to idea championing and idea implementation/starting activities of innovative work behaviors respectively. **Conclusions:** The study concluded that there were highly statistically significant positive correlation among head Nurses' leadership effectiveness, communication skills, mindfulness, and staff Nurses' innovative work behavior. **Recommendations:** Selection of head nurses to be effective leaders must be based upon combination of many factors such as level of education and management skills not only upon the years of experience, and creating innovation as a job requirement.

Keywords: Communication skills, Head Nurses, Innovative Work Behaviors, Leadership Effectiveness, Mindfulness, and Staff Nurses.

Introduction

Staff nurses are recognized as leaders in patient care. Nursing includes the implementation of goal-based interventions which focused on improving patients' conditions or comfort, as well as, coordinate and inspire care teams to assist patients' well-being. Proficient innovative nurses, with teamwork, and leadership abilities are now required because of

initiating new technologies in nursing practice (Obiora and Okpu, 2015; Leka et al., 2017).

The effective leaders encourage the development of a shared vision by engaging in open communication and involving nurses in the planning and goal setting process, as well as by enacting and encouraging the development of common values in the nursing team, the

development and nurturing of communication skills is a core part of effective nursing leadership, and strong communication skills that enable head nurse to interact more effectively with both colleagues and patients, good communication is essential for achieving successful health care outcomes, skills such as writing, public speaking, presenting and listening are important for a successful leader and help win trust from patients, colleagues and staff **(Ostveen et al., 2015; and Elier, 2019)**.

The mindfulness is the psychological process of bringing one's attention to experiences occurring in the present moment, which one can develop through the practice of meditation and through other training, mindfulness means maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surroundings environment, through a gentle, nurturing lens, involve feeling without judging, acceptance, pay attention to our thoughts **(Gotink, et al., 2015; and Niemiec, 2017)**.

Mindfulness in communication consists of three facets: first an open, non-judging attitude, secondly being present and paying attention in conversations, finally a calm, non-impulsive manner, these features inherently reflect interpersonal attunement, **(Reb et al., 2014; Uysl, 2017; and Sibiya, 2018)**. The mindfulness practice provides head nurses with the capacity to notice thoughts and intuitions with some perspective and as such have more freedom to choose informed responses over automatic reactions, also mindfulness improved staff performance and engagement. **(Parker et al., 2015; Luken, and Sammouns, 2016; Paul, 2017; and Fouts, 2018)**.

Nurses play an important role in the healthcare system and in achieving high quality, patient outcomes that have been

recognized worldwide. Nowadays nurses spend a lot of time in contact and communicating with patients. Nurses carry out procedures, collaborate with doctors and other team members, assess patients and solve their problems. In doing such effectively, nurses need to have competency regarding innovation **(Monteiro et al., 2016; Tung and Yu, 2016)**.

Innovation is to an oversized extent considered a social and communicative method, and input from people probably improves the creation of novel and precious ideas additionally within the in the early period of idea production and development **(Afanasyeva, 2014; Kang et al., 2016)**. Innovative work behaviors is defined as an individual's behavior to achieve the initiation and intentional introduction (within a work role, group or organization) of new and useful ideas, processes, products or procedures **(Chatchawan et al., 2017)**. Also innovative work behavior defined as all individual actions directed at the generation, processing and application/implementation of new ideas regarding ways of doing things, including new product ideas, technologies, procedures or work processes with the goal of increasing the effectiveness and success of the organization **(Leong, and Rasli, 2014; and Nijenhuis, 2015)**.

Innovation oriented organizations should always consider their nurses an important asset as they are the source of providing innovative/creative ideas for the endurance of the organization. Nurses can and should contribute innovative ideas. The challenge is to enable every nurse to also make a contribution toward improving operational processes **(Leong and Rasli, 2014; Ahmed et al., 2018)**.

Significance of the study

The critical role of head nurses can improve the ability of an organization members to innovate, additionally, possession of positive characteristics provides the organization with the necessary ingredients to solve problem with creativity, so having a great mindfulness awareness for all head nurses make them become more positive, optimistic, take right decision, fully attended mind, help in enjoying life on both sides personal and work life, enhance communication skill as to be mindful means communicating well with others, allow for open channel, clear, concise communication with others (Garland, 2016; Beard, 2017; Niemiec, 2017; Heathfield, 2018; Nordquist, 2019). So head nurses can learn and influence positively all members around, and allow to reach big goal which is to succeed in reaching organizational goals (Wang et al., 2010; American Association of Critical Care Nurses "AACN" 2015; Taylor, et al., 2015). In addition to nurses' innovative work behavior has become an extremely significant basis for the development of nursing performance and organizational achievement. The innovative behaviors is important for increasing nursing care quality, improving nursing practices conditions, and help in attracting new groups to health care (Brysiewicz, et al., 2015; Chatchawan et al., 2017). So the present study was conducted to assist in understanding about the Head Nurses' Leadership Effectiveness, Communication Skills and Mindfulness and Its' Relation to Staff Nurses' Innovative Work Behavior.

Aim of study

This study aimed to assess the head nurses' leadership effectiveness, communication skills and mindfulness: Its'

relation to staff nurses' innovative work behavior at Benha University Hospitals.

Research Questions:

- 1- What are the levels of head nurses' perception regarding leadership effectiveness?
- 2- What are the levels of head nurses' perception regarding communication skills?
- 3- What are the levels of perceived mindfulness from the head nurses' perspective?
- 4- What are the levels of perceived innovative work behaviors from the staff nurses' perspectives?
- 5- Is there relation among head nurses' leadership effectiveness, communication skills, mindfulness and staff nurses' innovative work behaviors?

Subjects and method

Research design

Descriptive correlational design was utilized to conduct this study.

Setting:

The study was conducted in all (50) units at Benha University Hospitals. The total number of hospital beds in all units were (642 beds). The hospitals consisted of three separated buildings providing multi services; the first; Medical building consists of 14 departments (36 units) and its bed capacity (459 beds), secondly; Surgical building consists of (11) department (12 units) and its bed capacity (173 beds) and finally, Ophthalmology building includes (2 units) its bed capacity (10 beds).

Subjects:

The subject in this study included two groups namely; head nurses group and staff nurses group

1- Head nurses group:

All the available head nurses and their assistants (150) who are working in the above mentioned study settings, who are available during the time of data collection.

2- Staff nurses group:

Convenient sample of staff nurses who are working in the above mentioned study settings and available during the time of data collection. A sample of (300) staff nurses out of (1200) staff nurses. Having at least three years of job experiences and working full time and they were responsible for providing direct nursing care activities to the patients.

Tools of data collection:

Four tools were used to collect the data for this study as the following:

1) The Head Nurses' Leadership Effectiveness Questionnaire:

A structured questionnaire was developed by the researchers through review of recent related literature (Avolio and Bass, 2004; Avolio et al., 2007; Farahnak et al., 2014). It was used to identify head nurses' perception level toward leadership effectiveness. It was consisted of two main parts:

- **The First Part:** Included head nurses' personal data as (age, gender, marital status, educational qualification, years of experience, department and attending training course about leadership effectiveness, communication skills or mindfulness)

- **The Second Part:** Consisted of 89 items categorized under nine main dimensions namely: Relational Leadership (16 items), Impartial Leadership (16

items), Technical Leadership (9 items), Creative Leadership (11 items), Directive Leadership (8 items), Tenacious Leadership (9 items), Empowering Leadership (8 items), Influential Leadership (6 items) and Strategic Leadership (6 items).

Scoring system:

Subjects responses were scored on a 3-point of Likert Scale as follow: (3) high, (2) average and (1) low,. Each head nurse chooses only one best answer. The total scores are summed up and graded according to the following scores.

- High level $\geq 75\%$ (201-267 Scores).

- Moderate level from 60-<75% (161-200 Scores).

- Low level <60% (89-160 Scores). (Nour El-Din, 2019).

2) The Head Nurses' Communication Skills Questionnaire

A structured questionnaire was developed by the researchers through review of the recent related literature (Barkman and Machtmes, 2002; Younis et al., 2015; Campbell and Atasaridmir, 2016; Campbell and Aredes, 2019). And used to assess head nurses' perception level regarding communication skills, it was consisted of (34) items classified under four main categories namely: Planning for design message (10 items), creating a clear, well-crafted message (10 items), choosing the right channel (6 items), receiving and interpreting a message (8 items).

Scoring System:

Subjects responses were scored on a 3- point of Likert Scale as follow: (3) always, (2) sometimes and (1) rarely. Each head nurse choose only one answer. The

total scores are summed up and graded according to the following scores:

- Good Communication Skills \geq 75% (77-102 Scores)
- Moderate Communication Skills from 60-<75% (62-76 Scores).
- Poor Communication Skills <60% (34-61 Scores). (Fathy, 2015).

3) The Head Nurses' Mindfulness Questionnaire

A structured questionnaire that was developed by the researchers through review of recent related literature (Brawn and Rayan, 2003; Kumar, et al., 2007; Cardaciotto, et al., 2008). It was used to identify head nurses' perception level toward mindfulness. It consists of (25) items categorized under four main dimensions namely Attention (7 items), Present Focus (6 items), Awareness (8 items) and Acceptance (4 items).

Scoring System:

Subject responses were scored on a 3-point of Likert Scale as follow: (3) all times/often, (2) sometimes and (1) rarely,. Each head nurse choose only one answer, The total scores are summed up and graded according to the following scores:

- High mindfulness level \geq 75% (57-75 Scores).
- Moderate mindfulness level from 60-<75% (45-56 Scores).
- Low mindfulness level <60% (25-44 Scores). (Kumar, et al., 2007).

4) The Staff Nurses' Innovative Work Behaviors Questionnaire

A structured questionnaire developed by the researchers through review of the recent related literatures (De Jong, 2007; Mahgoub et al., 2019). It was used to assess innovative work behaviors

levels from staff nurses perspectives. It was consisted of two main parts:

▪ **The First Part:** It was included staff nurses' personal data as (age, gender, material status, educational level, years of experience, department, and attending training course about innovative working behaviors).

▪ **The Second Part:** It consisted of (25 items) categorized under eight main elements namely; Idea Search/Exploration (3 items), Idea Generation (3 items), Idea Communication/Sharing (4 items), Idea Implementation/Starting Activities (3 items), Idea Championing (2 items), Involving Others (3 items), Overcoming Obstacles (4 items), and Innovation Outputs (3 items).

Scoring System:

Subjects responses were scored on a 3- point of Likert Scale, (3) always, (2) sometimes, and (1) rarely/never each staff nurse choose only one answer. The total scores are summed up and graded according to the following scores:

- High Innovative Work Behavior \geq 75% (57-75 Scores)
- Moderate Innovative Work Behavior from 60-<75% (45-56 Scores)
- Low Innovative Work Behavior <60% (25-44 Scores). (Kamel, and Aref, 2017).

The Validity of the Study Tools:

The four tools were tested for face and content validity by Jury of five experts from nursing administration department including (3) Professors from Ain Shams University and (2) Professors from Cairo university. All of their comments were taken into consideration; necessary modifications were done according to Jury comments modification were related to

grammatical language and rephrasing of some sentences.

Reliability of the study tools:

The Reliability of the study tools were conducted to determine the internal consistency and homogeneity of the used questionnaires by Cronbach's Alpha test as follow:

Questionnaire name	Reliability result
1- Leadership effectiveness questionnaire	0.89
2- Communication skills questionnaire	0.92
3- Mindfulness questionnaire	0.98
4- Innovative work behavior questionnaire	0.91

Data collection methods

- A review of national and international recent related literature using journals, periodicals, textbooks, internet, and theoretical knowledge of the various aspects concerning the topic of the study.
- Preparation of data collection tools was carried out over a period of three months from beginning of May 2020 to end of July 2020.
- The researchers prepared the tools and translated them into Arabic format for better understanding to become ready for use.
- The final tools tested for face and content validity by jury experts. Also the reliability of the tools were conducted at July 2020.

The Pilot Study:

- A pilot study was conducted on August 2020, it was carried out in order to ascertain the clarity and

applicability of the study tools. The study was tested on 10% of total sample (15) head nurses and (30) staff nurses. The time needed for filling the tools ranged from 20-30 minutes for head nurses tools and 10-15 minutes for staff nurses. The tool was finalized based on the result of the pilot study. The pilot study were included in the main study sample because no modification was done in the tools.

The Field Work:

- Data collection took approximately two months (from the beginning of September to the end of October 2020).
- Data was collected through individual interview with each head nurse and staff nurse during work hours, after meeting their supervisors to gain their acceptance and participation according to workload and units' needs and activities to ensure patient care is provided.
- The researchers met head nurses and staff nurses separately and explained the aim and the nature of the study and method of filling questionnaire.
- The researchers distributed the study questionnaires to the participated head nurses and staff nurses separately to fill it according to work load of each unit.
- The average number of collected questionnaires per 2-3 days/weeks ranged from 4-5 sheets from head nurses and 6-7 sheets from staff nurses.

Ethical considerations:

- During the interview of researchers with head nurses and staff nurses to collect data they informed about the

purpose and the nature of the study, the researchers took oral consent from them, and they were informed that their participation is voluntary on that they have the right to share or refuse to participate in the study at any time without giving any reason. In addition, confidentiality and anonymity of the subjects' data were assured through coding of all data.

Administrative design:

- Formal approval was obtained through official letters obtained from the Dean of Faculty of Nursing that sent to the Directors of the Benha University Hospitals for taking their permission to conduct the study and seek their support and also permission had obtained from hospital nursing director. Then the researchers started by introducing themselves to each nurse and gave explanations about the purpose of the study and getting agreement of nurses to participate in the study. Then an individual oral consent was obtained from nurse after explaining the purpose and nature of the study.

Statistical design:

After the data collected it was revised, coded and fed to statistical software SPSS version (20). The given graphs were constructed using Microsoft Excel Software. Descriptive statistics were applied in the form of mean and standard deviation for quantitative variable. Descriptive statistics were applied in the form of frequency and percentages for qualitative variables. Pearson correlation coefficient was calculated between variables. Statistical significance level value was considered when $p\text{-value} \geq 0.05$ and a highly significant level was considered when $p\text{-value} \geq 0.001$.

Results

Table (1): Describes frequency and percentage distribution of the head nurses' personal characteristics. less than half (47.3 %) of head nurses' age ranged between 30 to <35 years old with mean \pm S.D. (38.61 \pm 7.34). The highest percentage (94% & 78.7%) of them were female and married respectively. Regarding educational qualification, more than two thirds (72.7%) of them had Bachelor Degree of Nursing. Also more than half (52% & 50.7%) of the head nurses had 10 to <15 years of job experience and working in critical department. Besides, most of them (86.7%) had no previous training courses about leadership effectiveness, communication skills, or mindfulness.

Table (2): Clarifies frequency and percentage distribution of the staff nurses' personal characteristics. Nearly to three quarters (74.3%) of staff nurses' age ranged between 30 to <35 years old with mean \pm S.D. (28.14 \pm 2.28). Most of them (90.7% & 81.7%) were female and married respectively. More than half (57% & 53.7%) of the staff nurses had Technical Institute of Nursing and working in medical department respectively. Concerning the years of experience less than half (42.3%) of the staff nurses had 9- <12 years of experience. Besides, most of them (89%) not attending training courses about innovative work behaviors.

Figure (1): Indicates that more than half (54.9%) of head nurses had high perceptions' level regarding the leadership effectiveness.

Table (3): Indicates that the highest mean percentage (83.81%) of head nurses' perception toward the leadership effectiveness was related to relational leadership with mean scores (22.63 \pm 2.424). While the lowest mean

percentage (80.18%) was related to the creative leadership with mean scores (26.46±3.163).

Figure (2): Shows that more than half (61.5%) of head nurses had high perception level regarding communication skills.

Table (4): Illustrates that the highest mean percentage (83.33%) of head nurses' perception toward communication skills was related to creating a clear, well-crafted message with mean scores (25±2.526). While the lowest mean percentage (80.38%) was related to receiving and interpreting a message with mean scores (19.94 ±2.296).

Figure (3): Clarifies that more than half (52.6%) of head nurses had a high perception level regarding total mindfulness.

Table (5): Exhibits that the highest mean percentage (80.08%) of head nurses' perception toward mindfulness was related to the acceptance with mean scores (9.61±1.402). While the lowest mean percentage (75.11%) of them was related to the present focus with mean scores (13.52±2.155).

Figure (4): Illustrates that nearly three quarters (72%) of staff nurses had high perception level regarding innovative work behaviors.

Table (6): Reveals that the highest mean percentage (84.67% & 82%) of staff nurses' perception toward the innovative work behaviors was related to idea championing and idea implementation/starting activities with mean scores (5.08±1.91 & 7.38±2.76) respectively. While the lowest mean percentage (75.78%) was related idea search/exploration with mean scores (6.82±2.20).

Table (7): Shows that there were highly statistically significant positive correlation among head nurses' leadership effectiveness, communication skills, and mindfulness with staff nurses' innovative work behaviors. This means when head nurses' leadership effectiveness, communication skills, and mindfulness were improved the staff nurses' innovative work behaviors was increased.

Table (8): Demonstrates that there were highly statistically significant positive correlations among head nurses' leadership effectiveness, communication skills, mindfulness with staff nurses' innovative work behaviors.

Table (1): Frequency and percentage distribution of the head nurses' personal characteristics (N=150)

Head Nurses' Personal Characteristics	Total Number of Head Nurses =150	
	No	%
Age in years		
25-<30	30	20 %
30-<35	71	47.3 %
35-<40	34	22.7%
40->45	15	10 %
Mean ±SD	38.61 ±7.34	
Gender		
Male	9	6%
Female	141	94%
Marital status		
Single	12	8%
Married	118	78.7%
Divorced	5	3.3%
Widow	15	10%
Educational Qualification		
Nursing Diploma	8	5.3%
Bachelor of Nursing	109	72.7%
Associated degree in nursing	20	13.3%
Post graduate nursing education	13	8.7%
Years of experience		
Less than 5 years	16	10.6%
5-<10 years	22	14.6%
10-<15 years	78	52%
15->20 years	34	22.6%
Mean ±SD	15.63 ± 6.02	
Department/Unit		
Medical department	32	21.3%
Surgical department	42	28%
Critical department	76	50.7%
Attending training courses about leadership effectiveness, communication skills or mindfulness.		
Yes	20	13.3%
No	130	86.7%

Table (2): Frequency and percentage distribution of the staff nurses' personal characteristics (N=300)

Staff Nurses' Personal Characteristics	Total Number of Staff Nurses =300	
	No	%
Age in years		
20-<25	11	3.7%
25-<30	37	12.3 %
30-<35	223	74.3%
35-<40	29	9.7%
Mean \pm SD	28.14 \pm 2.28	
Gender		
Male	28	9.3%
Female	272	90.7%
Marital status		
Married	245	81.7%
Single	55	18.3%
Educational Level		
Bachelor of Nursing	43	14.3%
Technical Institute	171	57%
Nursing School diploma	86	28.7%
Department/Unit		
Medical department	161	53.7%
Surgical department	139	46.3%
Years of experience		
<3-6 years	54	18%
6-<9 years	96	32%
9-<12 years	127	42.3%
12->15 years	23	7.7%
Attending training courses about innovative work behaviors		
Yes	33	11%
No	267	89%

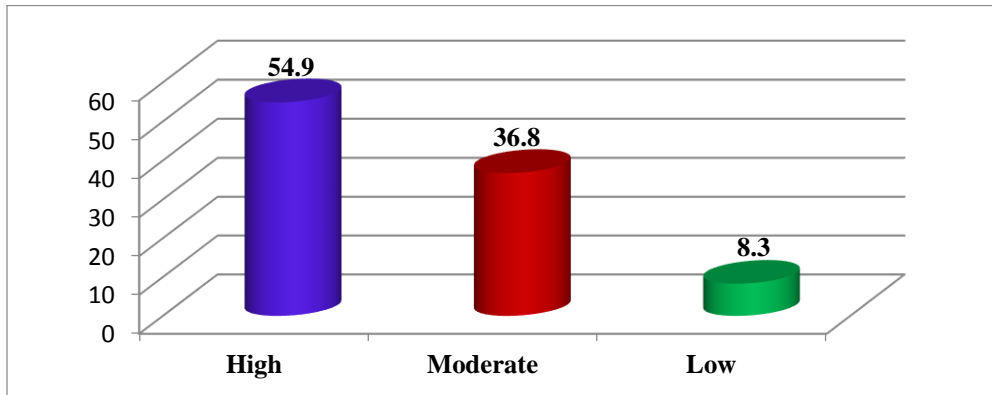


Figure (1): Total Levels of head nurses' perception regarding the leadership effectiveness.(n=150)

Table (3): Mean scores of head nurses' perception toward leadership effectiveness (N=150).

Dimensions of Leadership Effectiveness	Minimum scores	Maximum scores	Mean \pm S.D.	Mean %	Mean rank	Ranking
Relational Leadership	16	48	22.63 \pm 2.424	83.81%	5.54	4
Impartial Leadership	16	48	38.86 \pm 3.700	80.96%	8.42	2
Technical Leadership	9	27	21.94 \pm 2.305	81.26%	5.14	5
Creative Leadership	11	33	26.46 \pm 3.163	80.18%	6.79	3
Directive Leadership	8	24	19.66 \pm 2.250	81.91%	3.76	6
Tenacious Leadership	9	27	39.47 \pm 3.433	82.23%	8.58	1
Empowering Leadership	8	24	19.51 \pm 2.477	81.29%	3.67	7
Influential Leadership	6	18	14.93 \pm 1.756	82.94%	1.55	8
Strategic Leadership	6	18	14.84 \pm 2.108	82.44%	1.54	9
Total	89	267	218.33 \pm17.6931	81.77%		

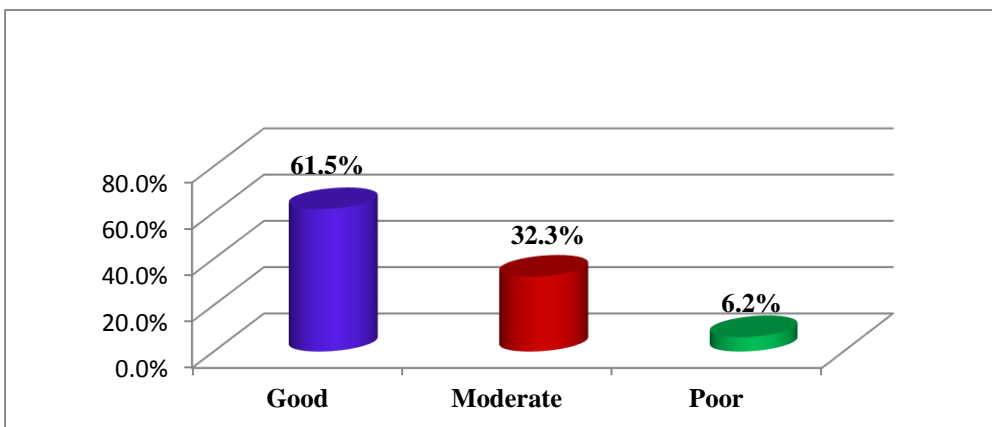


Figure (2): Total levels of head nurses' perception regarding the communication skills. .(n=150)

Table (4): Mean scores of head nurses' perception toward communication skills (N=150).

Categories of Communication Skills	Minimum scores	Maximum scores	Mean \pm S.D.	Mean %	Mean rank	Ranking
Planning for design message	10	30	24.78 \pm 2.283	82.60%	3.45	2
Creating a clear, well-crafted message	10	30	25 \pm 2.526	83.33%	3.50	1
Choosing the right channel	6	18	14.89 \pm 1.667	82.72%	1.02	4
Receiving and interpreting a message	8	24	19.94 \pm 2.296	80.38%	2.03	3
Total	34	102	84.61 \pm 7.132	82.96%		

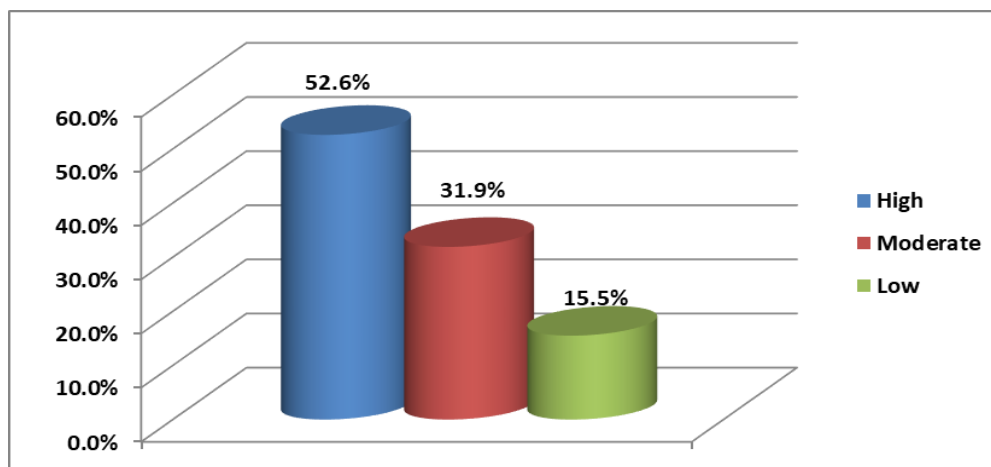


Figure (3): Total levels of head nurses' perception regarding the mindfulness. (n=150)

Table (5): Mean scores of head nurses' perception toward mindfulness: (N=150).

Dimensions of mindfulness	Minimum scores	Maximum scores	Mean \pm S.D.	Mean %	Mean rank	Ranking
The attention	7	21	16.14 \pm 2.755	76.86%	3.04	1
The present focus	6	18	13.52 \pm 2.155	75.11%	2.11	3
The awareness	8	24	18.49 \pm 2.385	77.04%	3.78	2
The acceptance	4	12	9.61 \pm 1.402	80.08%	1.07	4
Total	25	75	57.74 \pm 6.357	77.02%		

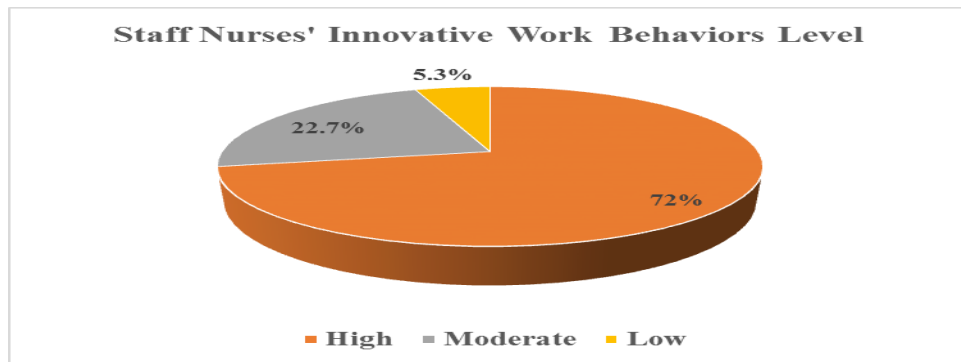


Figure (4): Total levels of staff nurses' perception regarding the innovative work behaviors. .(n=300)

Table (6): Mean scores of staff nurses' perception toward innovative work behaviors (N=300)

Dimensions of Staff Nurses' Innovative Work Behaviors	Minimum scores	Maximum scores	Mean \pm S.D.	Mean %	Mean rank	Ranking
Idea Search/Exploration	3	9	6.82 \pm 2.20	75.78%	3.35	2
Idea Generation	3	9	7.2 \pm 2.64	80%	3.62	6
Idea Communication/Sharing	4	12	9.38 \pm 2.35	78.17%	3.15	1
Idea Implementation/Starting Activities	3	9	7.38 \pm 2.76	82%	1.71	4
Idea Championing	2	6	5.08 \pm 1.91	84.67%	1.54	8
Involving others	3	9	6.85 \pm 2.15	76.11%	2.11	3
Overcoming obstacles	4	12	9.73 \pm 1.52	81.08%	5.14	5
Innovation outputs	3	9	7.27 \pm 2.42	80.78%	3.72	7
Total	25	75	59.71 \pm 5.65	80.24%		

Table (7): Correlation among head nurses' leadership effectiveness, communication skills and mindfulness, and staff nurses' innovative work behavior.

Category	Head Nurses' Leadership Effectiveness		Head Nurses' Communication Skills		Head Nurses' Mindfulness	
	r	p-value	r	p-value	r	p-value
Staff Nurses' Innovative Work Behavior	0.17	0.01*	0.44	0.000**	0.35	0.000**

**Statistically significant at ($p \geq 0.05$) **highly statistically significant at ($p \geq 0.001$)*

Table (8): Correlation matrix of head nurses' leadership effectiveness, communication skills and mindfulness with innovative work behavior of staff nurses.

Item	Head Nurses' Mindfulness	Head Nurses' Leadership Effectiveness	Head Nurses' Communication Skills	Staff Nurses' Innovative Work Behaviors
The Head Nurses' Mindfulness		0.601**	0.703**	0.370**
		0.000	0.000	0.000
The Head Nurses' Leadership Effectiveness	0.601**		0.656**	0.419**
	0.000		0.000	0.000
The Head Nurses' Communication Skills	0.703**	0.656**		0.320*
	0.000	0.000		0.03
The Staff Nurses' Innovative Work Behaviors	0.370**	0.419**	0.320*	
	0.000	0.000	0.03	

*Statistically significant at ($p \geq 0.05$) **highly statistically significant at ($p \geq 0.001$)

Discussion

The findings of the present study indicates that more than half of head nurses had high perception level regarding the leadership effectiveness. Also , the results revealed that the highest mean percentage of head nurses perception toward leadership effectiveness were related to relational leadership While the lowest mean percentage was related to the creative leadership. This finding may be related to effective leaders encourage good relation with other health team members by openness in sharing information needed to make decisions while accepting input from those who follow.

The current study findings were agreed with **Carol, (2014)**, who revealed on his study about " Authentic leadership, performance, and job satisfaction: the mediating role of empowerment" at The University of Western Ontario, as the

study result agree with the highest level of leadership effectiveness regarding relational leadership, The authentic leader builds trust and healthier work environments through relational transparency which allow good relation with others. On other hand these findings were disagreed with **Abou, (2017)**, who conducted the study at Alexandria University about relationship between leadership effectiveness self-efficacy and leadership effectiveness of first line nurse managers and reported that the highest level for leadership effectiveness was for impartial leadership.

Concerning head nurses' perception of communication skills, the findings of the current study revealed that more than half of head nurses had high perception level of communication skills, and highest mean percentage of communication skills was related to creating a clear, well-crafted message, while the lowest mean

percentage was related to receiving and interpreting a message. This may be due to head nurses awareness regarding importance of nonverbal communication and how it affects degree of clearance of their message, and the way of transferring the message is very important to make harmony with verbal and nonverbal communication.

Additionally this finding might be due to head nurses act as the facilitators and mediators to professional communications, hence, communication in nursing is so much important that it is considered as a primary component in care and a central task of nurses, head nurses participate in and manage the designing and implementing systems that support effective team work, also head nurses are the key members of the healthcare team and play a pivotal role in helping the team achieve its aims.

The current results are confirmed by **Ghiyasvandian et al., (2015)**, who conducted their study regarding "Nurse as a Facilitator to Professional Communication: A Qualitative Study" at six teaching hospitals affiliated to Tehran University of Medical Sciences, Tehran, Iran and mentioned that the highest percentage of head nurse's communication skills were regarding creating a clear, well-crafted message. Also **Feritas et al., (2014)**, their result about nursing faculty's opinion on effectiveness of non-verbal communication in the classroom and stated that most of participated head nurses have high communication skills regarding creating a clear, well-crafted message.

On the contrary, **Tay et al., (2014)**, who carried out their study regarding "Factors affecting effective communication between registered nurses and adult cancer patients in an inpatient setting" at National University Hospital, Singapore, and found that most of participating head nurses have

fewer level of communication skill regarding creating clear message.

Regarding to head nurses' perception of mindfulness, The findings of the current study exhibits that that more half of head nurses had a high perceptions' levels of mindfulness. And the highest mean scores of mindfulness was related to acceptance. Thus may be due to head nurses possessing mindfulness on the present can increase the reliability of a process's performance, and focusing attention is pivotal for performing effectively. Main concept of being mindfully head nurse to have more acceptance and attention focusing in performing everyday tasks.

The result of the current study is consistent with **Penque, (2019)**, who study mindfulness to promote nurses' well-being, also **Choi and Koh, (2015)**, who conducted their study about relations of job stress, burnout, mindfulness and job satisfaction of clinical nurses and reported that study subjects had high level of positive disposition toward mindfulness with highest percentage of mindfulness characteristics related to acceptance. While the previous findings were in inconsistent with **Gunther, (2014)**, who conducted his study about nurses mindfulness and preventing patient harm and stated that head nurses level of mindfulness more aware to each situation they face rather than focusing acceptance on just reaching their goal.

Regarding staff nurses' perception toward innovative work behavior, the finding of the present study indicates that nearly three quarters of staff nurses had high perception level regarding innovative work behaviors. And the highest mean percentage of staff nurses perception toward innovative work behaviors were related to idea championing and idea implementation/ starting activities. From

researchers' point of view this could be referred to the organization and managers support and gives staff a space of freedom for innovation and help them to implement innovative ideas.

The present study result was supported by **AACN (2015)**, who pointed that staff nurses work in critical areas are creative, support lifelong learning, search for information anywhere, and long run become more innovative. Also, it consistent with **Stoffers et al., (2015)**, who conducted study about "organizational culture and innovative work behavior: a case study of a manufacturer of packaging machines". They reported that the employees valued innovative work behavior higher in the preferred status than in the current status. In the same line with **Kamel and Aref, (2017)**, who conducted their study at Benha University Hospital and found that idea championing and idea implementation was the highest mean score between innovative behavior dimensions, also more than half of staff nurses always generate attempts to convince supervisors to support an innovative idea.

On the other hand the Current study contradicted with **Mahgoub, (2019)**, who indicates that the highest dimension of innovative behavior perceived by staff nurses was Innovation outputs dimension, and implementation starting activities dimension came last in ranking between innovative work behavior dimensions. Also most employees can give great innovative ideas but had no plans for implementation of this ideas and don't take the appropriate measures to put this ideas in action. Also **Jung and Yoon, (2018)**, whose study was conducted at Republic of Korea revealed that participants showed a moderate level of innovative behavior.

In relation to the correlation between head nurses' leadership effectiveness, communication skills and mindfulness with staff nurses' innovative work behaviors, the present findings study showed that there were highly statistically significant positive correlation among head nurses' leadership effectiveness, communication skills, and mindfulness with staff nurses' innovative work behaviors.

From researchers point of view this could be due to importance of presence of effective leader for health care organization, where many organizations rely on leadership to endorse their values and goals and to effectively direct and motivate others health team member within the work environment, thus head nurses falls on them heavy duty to lead staff under their supervision in a way to reach patient expectation of good satisfactory health care, from here need for good leader is pivotal so head nurses that are mindfully and with good communication skills can succeed in their work to motivate staff innovative work behaviors and to make good link between their staff needs potential and organization expectations.

In this respect **Stoffers et al., (2015)**, who revealed that there was a significant correlation between market culture and innovative work behavior. Also **Kamel and Aref, (2017)**, who showed a significant correlation between staff nurses perception to their organizational culture and their innovative work behavior. In the same line **Rana and Han, (2015)**, who conducted study about "effect of organizational culture on nurses' turnover intention: the mediating effect of workplace bullying and work burnout". They emphasized that organization which support learning and prioritized it as a main objective, help its employees to develop challenging, creativity, and

innovative behavior. In the same context **Wang et al., (2010)**, who conducted study about "the critical role of culture when you really want to innovate". They reported that the culture has a profound impact on the innovation of an organization. Also, they revealed a strong positive relationship between customer focus, participative management practices, coordination inter and intra departments and innovative culture in organization.

The finding of the present study was consistent with **Wasyliw et al., (2015)**, who conducted their study about "The impact of mindfulness on leadership effectiveness in a health care setting: a pilot study" at Mount Allison University, Sackville, New Brunswick, Canada, and demonstrated that there was positive relation between mindfulness and leadership effectiveness. In the same context with **Cate et al., (2014)**, who carried out their study about "The Impact of an Innovative Mindfulness-Based Stress Reduction Program on the Health and Well-Being of Nurses Employed in a Corporate Setting, and stated that there were positive and significant relationship between studied sample mindfulness and leadership effectiveness. In addition to **Arendt et al., (2019)**, who stated in their study regarding "Mindfulness and Leadership: Communication as a Behavioral Correlate of Leader Mindfulness and Its Effect on Follower Satisfaction" at Ludwig-Maximalists-University München, Munich, Germany, and reported that there were positive and significant relationship between studied sample mindfulness, leadership effectiveness and communication skills.

Conclusion

Based on the current study findings. It was concluded that the highest percentage of head nurses have high perceptions levels toward leadership

effectiveness, good communication skills and mindfulness. Also the staff nurses had a high perceptions level toward innovative work behaviors. Additionally the highest mean scores of head nurses were related to relational leadership effectiveness, creating a clear, well-crafted message of communication skills, and the acceptance of mindfulness. While the lowest mean scores were related to creative of leadership effectiveness, receiving and interpreting a message of communication skills, the present focus of mindfulness. In addition to the highest mean scores of staff nurses were related to idea championing and idea implementation/starting activities of innovative work behaviors. While the lowest mean scores were related to idea search/ exploration of innovative work behaviors. Moreover there were highly statistically significance positive correlations among head nurses' leadership effectiveness, communication skills, and mindfulness with staff nurses' innovative work behaviors.

Recommendations

- Selection of head nurses to be effective leaders must be based upon combination of many factors such as level of education and management skills not only upon the years of experience, and creating innovation as a job requirement.
- Provision of training courses, conferences and practical training for head nurses on management skills that allow maximizing leadership effectiveness and innovative work behaviors.
- Frequent looking for recent challenges and universal standard that determines better work environment for all staff and ways to motivate innovation at the work setting.
- The head nurse should integrate her role with support of top management

to be open communicator and listen to suggestions of nurses, give nurses the responsibility to solve problems by themselves, and improve the relationship between the nurses and their supervisors.

- The head nurse should react positively to the innovative efforts of nurses by providing nurses with the time and resources to carry out innovative efforts.

- The head nurse should foster innovation and advanced problem solving among staff member through frequent training and communication skills.

- The head nurse should teach how mindfulness affects and improves communication skills as listening and speaking with greater attention through attending mindfulness courses to reach maximum level of the work outcome.

- Assess the factors that enhance innovative work behavior at health care setting.

- Study the effect of mindfulness on performance of head nurses and its effect on staff nurses performance.

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