The Influence of Work Environment on Head Nurses' Managerial Innovation and Organizational Citizenship Behaviour

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Research Article

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ABSTRACT

Objective: In the rapid changes and competitiveness of health care organizations around the world, organizations need to recruit as well as retain talented and innovative nurses who behave like citizens, It is not easy to achieve it without suitable work environment. Work environment is the natural surroundings of the physical and emotional characteristics of a working place that the nurses devote greatest of their working times. The current study aims to investigate the role of work environment on managerial innovation and organizational citizenship behaviour at Mansoura University Hospital (MUH) and Elmahala Chest Hospital (ECH).

Materials and methods: The study was conducted at Main Mansoura University Hospital (MMUH) and Elmahala Chest Hospital (ECH). The total sample was 140 nursing staff. Three tools were employed in this study, Managerial Innovation Questionnaire, Work Environment Questionnaire and Organizational Citizenship Behaviour Questionnaire.

Results: Total work environment at main university hospital was higher (37.1%) than Elmahala Chest Hospital (31.4%) Also Agreement of managerial innovation was higher at main university hospital than at Elmahala Chest Hospital (21.0%, 14.3%) respectively The total organizational citizenship behaviour highest agreement in Elmahala Chest Hospital (48.6%) rather than Main University hospital (44.8%). Finally There is a strong positive significance relation between total work environment and both total of managerial innovation and citizenship behaviour in both setting (**p<0.01)

Conclusion: There is a possibility of improving managerial innovation and organizational citizenship behaviours through improving their working environment.

Recommendations: Efforts must be made to foster a healthcare environment that nurtures innovation and organizational citizenship behaviour. Also involving nurses in setting goals and

decisions of organizations to develop the organizational citizenship behaviour.

INTRODUCTION

The association of work in new decades has suffered several alterations, which changed the methods of existence and performing of nurses in the work environment. Work environments have numerous properties, constituents or elements that influence both physical and mental comfort of nurses. An attractive and supportive work environment is one of the most crucial factors that assist employees to accomplish usual responsibilities more successfully, creating finest utilization of their knowledge, skills and capabilities, encourage creativity and innovation and improve citizenship behaviours of nurses[1].

Work environment is the natural surroundings of the physical and emotional features of a working place in which the nurses devote greatest of their working times[2]. In addition to it is consider, as "those circumstantial characteristics that affect innovative actions as features of the job, work location, and relations with colleagues and superiors"[3].

Work environment can be collected to three systems. These are physical work environment: that treaties with the physical or tangibles at the location where job is achieved. It contains facilities similar equipment, office design, heat, ventilation as well as lighting. It as well comprises noise rate and space of movement[4]. Psychological work environment: the group of those features that impact how the employee senses, including stress and workload, harassment, working demands, collaboration and conflict, etc. And social work environment: It treats with relations at job locations. It consists of communication styles, association among supervisors and subordinates. It also comprises relation between colleagues, the willingness of others to help and team work[5].

A good work environment is a safe and healthy practice setting containing proper and adequate facilities: which wholly the basic wants that an employee may want in a work place, this consists of rest rooms, toilets, cafeteria, ventilated offices and a widespread space for movement[3]. Management support: It is essential for workers to finish the job. Superiors' interactive role is significant to inspire positive relationships and rise self-confidence of the worker. Skilled and appreciated individuals are accessible to workers to assist them to do well in their present role and to help them improve more into a future role. Time and physical resources should be accessible to workers, allowing them to accomplish to the finest of their capability[6].

Teamwork: Such as social beings, we normally search for support from our colleagues and look for belonging to a team. The group should arise together to deal with whatsoever difficulties are accessible there. A feeling of unity is aroused, and nurses currently working towards something higher than themselves, and like a team[7]. Job security and safety: Job security refers to the secure sensations that a worker holds to their job; it consists of the optimistic sensations and the idea that they will not miss their job, if they perform their responsibilities correctly. As for the safety in the work setting, it refers to the fundamentals of a safe environment for employees as fire leakages, good exits and additional standards of protection[8].

Work Stressors: It is a causal factor to organizational incompetence, stress in the work setting is among the most powerful issues that may decline individuals' capability to accomplish well. An association with a healthy work environment should be capable of coping with work stress in a proficient manner to avoid any undesirable impact on workers which may hinder their innovative thinking[9].

Positive work environment is a creative, motivating, pleasurable, and well for managers, staff nurses and patients. It improves patient outcomes, nurses performance and innovation. Innovation is the process of developing novel ideas, methods, technologies and techniques of working. It can apply to tools, technologies and practices, or to the method an association or an employee performs, works or doings[10]. Innovation begins with a good idea, but it is greatly more than that. It also refers to the process of rotating that good idea into something that can be utilized, something that is achievable, attainable and hopefully, will bring around well health promotion, disease prevention and better patient care[11].

There are many factors affecting innovation as a good work environment with an adequate resources including everything that helps the worker in completing his work with adequate time, besides enough expertise, or fiscal capitals. Also, organizational incentive to innovation, that is made up through the worth the association puts on the innovation, organizational support, work team supports, supervisory reinforcement and autonomy or freedom to select how to perform one's work[12]. As well as individual characteristics that play an important role as openness to novel ideas and having a

optimistic attitude to innovation and change, higher use of new information and enthusiasm for more training and education [13].

Innovation in nursing is around motivating nurses to utilize their knowledge and skills to altered the old methods of thinking and performing and to grow novel techniques of working that really enhance nursing practice. Managerial innovation is the introduction of recent management practices, procedures, and structures that are planned to additional organizational goals and represents important alteration in the manner that managerial work is achieved and how managers seek to achieve the objectives of the organization [14]. Managerial innovation, then, relates to alterations in how managers establish instructions, make judgments, organize actions, and stimulate people. It creates a change in the shape, quality, or state over time of the management activities in an association [15].

There are three dimensions of managerial innovation: practices, processes, and structures. Practices; refer to what managers make as portion of their job on a day-to-day base and contain establishing objectives and related procedures, organizing activities and functions, developing talent, and meeting different demands from stakeholders [16] Processes; relate to the habits that govern the work of managers, drawing from abstract thoughts and rotating them into actionable tools, which naturally comprise strategic planning, project management, and performance assessment. Structure; that relates to how institutions organize communication, align and connect effort from their members [17].

Managerial innovation is becoming a significant issue and essential approach for organizational effectiveness and competitiveness. Managers encourage innovation through simplifying novel thinking, new thoughts, and recent way of working among the workers which improve organizational action and enhance its internal and external image [18]. It affects employees' practices, giving them positive emotion and motivation to do their bests, more committed and willing to exert efforts and easily offer their time and energy to succeed at the allocated work and exceed their basic job requirements and behave as a citizen [19].

The word citizenship has historically been utilized to clarify the social, political and legal content, the state of the human being as having rights and responsibilities such as an individual of a society [20]. Recent definitions of citizenship focus that to be considered a citizen, an individual would want to belong to a group, exist suitable standards of behaviour and participate in the well-being of the community or any type of intensively and valued human association. These viewpoints were transferred to the organizational context and connected to the individual actions at work, permeating their relations with others and with the institution [21].

Organizational citizenship behaviour arises in several different forms and shapes and it is a coping activity which emerged as a result of positive emotions. It includes individual performances that are commonly unobserved but which together form organizational orientation [22]. OCB is a multidimensional concept that contains everything positive organizationally related performances of organizational followers containing traditional in-role behaviours, organizationally relevant extra-role actions, and political performances, as complete and accountable organizational participation [23].

OCB is the readiness of members to exert effort beyond the official responsibilities commanded by their positions. It is an individual, unrestricted behaviour, not clearly identified by the official incentive system, which helps to the organizational effective working [24]. These activities may also be considered as a collection of interpersonal and volunteer actions that support the societal and emotional environment in which the job behaviours happens. These activities are frequently internally interested, rising from within and continued by an individual's internal want for a feeling of accomplishment, competence, belonging or affiliation [25].

A great proportion of organizational citizenship rises from informal performance, with positive activities comprising volunteer appointment by workers beyond what is commonly predictable of them to donate to the well-being of their institution. The employee who demonstrate OCB achieves additional than needed and predictable, going beyond obligatory responsibilities recognized officially by the association [26].

Nurses conduct OCB when they receive training and development: that the organization providing them with it, giving them sufficient time and money for it; and giving them a chance to be included in actions that stimulate their professional development. Also, work- life policies: nurses want to feel that their work schedule not in conflict with their personal life; don't overloaded and have too much work to do; and their job not effect on their personal life negatively [27]. Empowerment practices: As involving them in decision making, giving them autonomy in regard to practice management; and consulting them regularly giving them more satisfaction and help them to innovate and behave as citizens [28]. Organizational commitment: As a result for empowerment practices, nurses willing to exert an excessive deal of effort in addition to that ordinarily is anticipated to assist their hospital to be successful; their values become similar with hospital values; and this hospital become the best for them. Interpersonal harmony behaviour: Here, each nurse helps their colleagues; socializes way to help new nurses; attends at work over the norm; adheres to informal rules formulated to sustain order and attends conferences which are not obligatory but considered significant [29].

Significance of study

Work environment is a matter of great concern because most of us spend a huge amount of our lives at work, and work environment is associated with all outcomes for both the nurse and organization. Thus, logically it is significant that we have a good work environment [30].

In the rapid changes and competitiveness of health care systems around the world, organizations need to recruit and retain talented and innovative nurses who behave like citizens, It is not easy to achieve it without suitable work environment. Hence, managers need to assess the work environment, and need to take action to improve it [29]. So, this study aims to investigate the role of work environment on managerial innovation and citizenship behaviour among studied nurses at Main Mansoura University hospital and Elmahala Chest Hospital.

Aim

The study aims to investigate the influence of work environment on head nurses' managerial innovation and citizenship behaviour through:

1) Assess work environment among head nurses at main Mansoura University and Elmahala Chest Hospitals.

2) Assess managerial innovation among head nurses at main Mansoura University and El-|mahala hospitals.

3) Assess citizenship behaviour among head nurses at main Mansoura University and Elmahala Chest Hospitals.

4) Determine the influence of work environment on head nurses managerial innovation and citizenship behaviour at main Mansoura University and Elmahala Chest Hospitals.

Hypothesis

a) There is a significance difference of influence of work environment in developing management innovation among head nurses at Mansoura University and Elmahala Chest Hospitals.

b) There is a significance of influence of work environment in developing citizenship behaviour among head nurses at Mansoura University and Elmahala Chest Hospitals.

RESEARCH METHODOLOGY

Design

It is a descriptive correlational study.

Setting

All in patient departments at Main Mansoura University hospital. Capacity of beds 1800 and the hospital represent Ministry of Higher education and found in Mansoura City followed Dakahelia governorate and provide different health care service and all inpatient department at Elmahala Chest Hospital which represent ministry of health and found in Elmahala city followed.

Sample

All available head nurses at Main Mansoura university and Elmahala Chest Hospitals (n=105, n=35) respectively at the time of data collection in different setting as mentioned.

Tools of study

Tool I: Work Environment Questionnaire: Adopted by Alabduljader, S. (2019) It is consist of two parts:

First part: Personnel Characteristics: It includes gender, age, experience, education and position.

Second part: Work Environment Questionnaire: Aims to assess work environment that influenced among head nurses. The researcher employed variables from a research by Zuniga et al. [30].That involved work environment (Facilities, Management Support, Teamwork, Safety and Security, Work stressor and Recognition and Appreciation). Its measured by a 27- items consisted of six dimension which are facilities contains (4 items), management support contains (4 items), teamwork contains (5 items), Safety and security contains (4 items), work stressor contains (5 items) and finally recognition and appreciation contains (5 items). A self-administered questionnaire was established to gather data from the participants of the study. Answers were measured on a five-point rating scale ranged from strongly disagree, disagree, neither agree nor disagree, agree, strongly agree were scored correspondingly as 1,2,3,4 and 5.

Tool II: Managerial Innovation Questionnaire: Adopted by Alabduljader [8]. It aims to assess managerial innovation among head nurses. It contains eight statements as I always look for new ways to manage my team, I do not manage in a conventional way, New ideas and ways are always good and are welcomed and etc,. A self-administered questionnaire was established to gather data from the participants of the study. Answers were measured on a five-point rating scale ranged from strongly disagree, disagree, neither agree nor disagree, agree, strongly agree were scored correspondingly as 1,2,3,4 and 5.

Tool III: Organizational Citizenship Behaviour Questionnaire: This tool was developed by Fox & Paul [31]. It is used to assess the head nurses Organizational Citizenship Behaviour the questionnaire includes 39 items, divided into 5 dimensions. 1st training and development (6 statements), 2nd work life policies (4 statements), 3rd empowerment practices (9 statements), 4th Organizational Commitment (8 statements), 5th interpersonal harmony (12 statement). Answers were measured on a three-point rating scale ranged from 1=disagree, 2=uncertainly and 3=agree. Scoring system [32] was used: <50% low level, 50% - 75% moderate and >75% high level.

Methods

Ethical approval was attained from the Research ethical Committee of Faculty of Nursing, Mansoura University, contribution in the research was volunteer, and privacy of the gathered data was sustained. Confidentiality of the research participants was secured, and the findings were utilized as a constituent of necessary research, in addition to future publications and education.

The rationale of this study was explain to the administrative personnel, the written authorization was attained from the faculty of nursing, Mansoura University to the hospital administrators, heads of surgical and medical units and the directors of nursing service department to carry out this study.

The tools were translated by the researchers into Arabic, and tested for its content validity and applicability by five experts in nursing administration from faculties of nursing, and accordingly the essential alteration was done. The reliability for the tools were done using cronbach's alpha test. It was (0.92) for managerial innovation and work environmental scale, (0.87) for citizenship behaviour.

A pilot study was conduct on (11) of staff nurses from main Mansoura university hospital and Elmahala Hospital units that randomly selected. The actual field work started from Mayto September2019. The questionnaire sheets of managerial innovation and work environmental and citizenship behaviour were distributed to participants separately in their work places, and the time required to complete the sheets ranged from 25-30 minutes.

Statistical design

The collected data were prepared tabularized and statistically analyzed utilizing SPSS software (Statistical Package for the Social Sciences, version 13, SPSS Inc. Chicago, IL, USA).

For quantitative data, the range, mean and standard deviation were calculated. For qualitative data, comparison between two groups and more was done using Chi-square test (2). For comparison between means of two groups of parametric data of independent samples, student t-test was utilized.

For similarity between means of two groups of non-parametric data of independent samples, Z value of Mann-Whitney test was utilized. Relationship among variables was estimated utilizing Pearson's correlation coefficient (r). Significance was adopted at p<0.05 for explanation of findings of tests of significance.

RESULTS

Table 1 illustrated personnel characteristics among nurses in different setting. Mean age at Mansoura University hospital was higher than that of Elmahala Chest Hospital (36.29 ± 6.07, 33.85 ± 0.07) respectively. Regarding year of experience mean year of experience at main university hospital was higher than that of Elmahala Chest Hospital (14.28 ± 6.11, 11.71 ± 6.02) respectively. Finally percent of supervisor at main university hospital was (9.5%) higher than Elmahala Chest Hospital (8.5%) while head nurse at Elmahala Chest Hospital was (91.5%) higher than at main university hospital (90.5%).

Table 1. Personal data of the studied nurses (n=140).

| Variables | The study nursing students (n=140) | | | | | |
| | MMUH (n=105) | | ECH (n=35) | | Total (n=140) | |
	n	%	n	%	n	%

Age						
25-35	54	51.4	24	68.6	78	55.7
>35	51	48.6	11	31.4	62	44.3
Mean ± SD	36.29 ± 6.07		33.85 ± 6.07		35.68 ± 6.14	
Years of Experience						
5-Jan	5	4.8	5	14.3	10	7.1
10-Jun	27	25.7	12	34.3	39	27.9
>10	73	69.5	18	51.4	91	65
Mean ± SD	14.28 ± 6.11		11.71 ± 6.02		13.64 ± 6.17	
Position						
Nursing supervisor	10	9.5	3	8.6	13	9.3
Head nurse	95	90.5	32	91.4	127	90.7
MMUH: Main Mansoura University Hospital; ECH: Elmahala Chest Hospital						

Table 2 illustrated agreement of the studied nurses regarding role of work environment. Agreement to total work environment at main university hospital was higher (37.1%) than Elmahala Chest Hospital (31.4%). In relation to work environment sub items, the highest percentage was (45.7%) related to team work at Elmahala Chest Hospital, and the lowest was facilities at two hospitals. There is no significance differences between total work environment and its sub items as shown above table.

Table 2. Agreement of role of work environment as perceived by the studied nurses (n=140).

Variables	MMUH (105)	Strongly disagree		Disagree		In between		Agree		Strongly agree		x^2	P
	ECH (35)	n	%	n	%	N	%	n	%	n	%		
A) Facilities	MMUH	4	3.8	36	34.3	27	25.7	22	21	16	15.2	12.01	0.52
	ECH	2	5.7	8	22.9	11	31.4	9	25.7	5	14.3		
B) Management Support	MMUH	2	1.9	9	8.6	32	30.5	47	44.7	15	14.3	11.94	0.45
	ECH	1	2.9	6	17.1	12	34.3	11	31.4	5	14.3		
C) Teamwork	MMUH	5	4.8	9	8.6	28	26.6	46	43.8	17	16.2	16.14	0.3
	ECH	1	2.9	4	11.4	8	22.9	16	45.7	6	17.1		
D) Safety and Security	MMUH	2	1.9	14	13.3	38	36.2	37	35.2	14	13.3	15.55	0.34
	ECH	2	5.7	5	14.3	11	31.4	12	34.3	5	14.3		
E) Work Stressors	MMUH	3	2.9	9	8.6	31	29.5	41	39	21	20	27.95	0.06
	ECH	2	5.7	5	14.3	10	28.6	10	28.6	8	22.8		

												x^2	P
F) Recognition and Appreciation	MMUH	4	3.8	8	7.6	33	31.4	42	40	18	17.1	19.66	0.23
	ECH	3	8.6	5	14.3	11	31.4	9	25.7	7	20		
Total work environment	MMUH	3	2.9	15	14.3	31	29.5	39	37.1	17	16.2	58.68	0.3
	ECH	2	5.7	6	17.1	10	28.6	11	31.4	6	17.1		
MMUH: Main Mansoura university hospital; ECH: Elmahala Chest Hospital; *p< 0.05, ** p <0.01													

Table 3 showed managerial innovation as perceived by the studied nurses at both setting. Agreement of managerial innovation was higher at main university hospital than at Elmahala Chest Hospital (21.0%, 14.3%) respectively. There was highly statistics significance difference related to item of I always look for new ways to manage my team at Elmhala chest hospital than at main university hospital (** p ≤0.01). Also related to item of new ideas and ways are always good and are welcomed and managing innovatively creates long lasting advantages for the organization at Main University hospital than at Elmahla chest hospital (** p ≤0.01). Also there significance difference to managing innovatively creates long lasting advantages for the organization at main university hospital than at Elmahla chest hospital (*p< 0.05).

Table 3. Agreement of managerial innovation as perceived by the studied nurses (n=140).

Statements	MMUH (105) ECH (35)	Strongly disagree		Disagree		In between		Agree		Strongly agree		x^2	P
		n	%	n	%	n	%	n	%	n	%		
I always look for new ways to manage my team	MMUH	2	1.9	13	12.4	32	30.5	37	35.2	21	20	12.71	0.01**
	ECH	5	14.3	1	2.9	6	17.1	14	40	9	25.7		
I do not manage in a conventional way	MMUH	2	1.9	17	16.2	27	25.7	40	38.1	19	18.1	1.99	0.74
	ECH	0	0	4	11.4	9	25.7	17	48.6	5	14.3		
New ideas and ways are always good and are welcomed.	MMUH	1	1	13	12.4	20	19	46	43.8	25	23.8	15.34	0.01**
	ECH	3	8.6	9	25.7	9	25.7	13	37.1	1	2.9		
Managing innovatively creates long lasting advantages for the organization	MMUH	0	0	10	9.5	21	20	53	50.5	21	20	11.46	0.02*
	ECH	1	2.9	9	25.7	9	25.7	13	37.1	3	8.6		
When I manage my team innovatively I avoid the difficulties of traditional management	MMUH	1	1	17	16.2	26	24.8	40	38.1	21	20	6.67	0.15
	ECH	3	8.6	5	14.3	8	22.9	15	42.9	4	11.4		
Innovation is based on a novel principle that challenges management ' s orthodoxy	MMUH	0	0	15	14.3	33	31.4	41	39	16	15.2	5.33	0.25
	ECH	1	2.9	6	17.1	15	42.7	9	25.7	4	11.6		
An innovative manager promote skills and talents of workers	MMUH	0	0	8	7.6	25	23.8	48	45.7	24	22.9	5.39	0.24
	ECH	1	2.9	4	11.4	10	28.6	16	45.7	4	11.4		

Managing innovatively can impact ethical features of management	MMUH	1	1	12	11.4	30	28.6	36	34.3	26	24.8	4.37	0.35
	ECH	0	0	8	22.9	7	20	14	40	6	17.1		
Total	MMUH	1	0.9	13	12.4	27	25.7	42	40	22	21	28.01	0.13
	ECH	2	5.7	6	17.1	8	22.9	14	40	5	14.3		
MMUH: Main Mansoura university hospital; ECH: Elmahala Chest Hospital; *p< 0.05, ** p <0.01													

Table 4 illustrated attitude of the studied nurses towards main sub items of organizational citizenship behaviour's. The total highest agreement in Elmahala Chest Hospital (48.6%) rather than Main University hospital (44.8%). As regard to sub items of citizenship behaviour, the highest agreement related to training and development at Elmahala Chest Hospital (51.4%). While the lowest was related to work life policies (40.9%) at main university hospital. There are significance differences between total and sub items of citizenship behaviour as shown above table (*p< 0.05).

Table 4. Agreement of Citizenship behaviour studies as perceived by the nurses (n=140).

Citizenship Behavior domains	MMUH (105)	Disagree		Uncertainly		Agree		x^2	P
	ECH (35)	n	%	n	%	n	%		
Training and development	MMUH	15	14.3	40	38.1	50	47.6	19.16	0.03*
	ECH	5	14.3	12	34.3	18	51.4		
Work life policies	MMUH	17	16.2	45	42.9	43	40.9	21.91	0.005**
	ECH	5	14.3	13	37.1	17	48.6		
Empowerment practices	MMUH	13	12.4	46	43.8	46	43.8	32	0.001**
	ECH	9	25.7	11	31.4	15	42.9		
Organizational commitment	MMUH	17	16.2	41	39	47	44.8	12.8	0.46
	ECH	7	20	11	31.4	17	48.6		
Interpersonal harmony behaviour	MMUH	14	13.3	41	39	50	47.7	8.2	0.87
	ECH	5	14.3	13	37.1	1	48.6		
Total Citizenship behavior	MMUH	15	14.3	43	40.9	47	44.8	64.28	0.03*
	ECH	6	17.1	12	34.3	17	48.6		
MMUH: Main Mansoura university hospital; ECH: Elmahala Chest Hospital; *p< 0.05, ** p <0.01									

Table 5 showed levels of role of work environment, managerial innovation and citizenship behaviour. Regarding level role of work environment was highly moderate (71.4%) at main Mansoura University rather than Elmahala Chest Hospital (65.7%). Regarding level of managerial innovation was highly at main university hospital (41.0%) than Elmahala Chest Hospital (25.7%). Finally level of citizenship behaviour was highly (59.0%) than at Elmahala Chest Hospital (37.1%). There is significance difference related level of citizenship behaviour at main university hospital higher than at Emahala chest hospital (*p< 0.05).

Table 5. Levels of role of work environment, managerial innovation and citizenship behaviour among the studied nurses.

Variables	Low (<50%)		Moderate (50%-75%)		High (>75%)		x^2	P*
	n	%	n	%	n	%		

Role of work environment	MMUH (n=105)	3	2.9	75	71.4	27	25.7	0.43	0.85
	ECH (n=35)	1	2.9	23	65.7	11	31.4		
Managerial innovation	MMUH (n=105)	1	1	61	58.1	43	41	4.89	0.06
	ECH (n=35)	2	5.7	24	68.6	9	25.7		
Citizenship behaviour	MMUH (n=105)	2	1.9	41	39	62	59	6.32	0.04*
	ECH (n=35)	0	0	22	62.9	13	37.1		
MMUH: Main Mansoura university hospital; ECH: Elmahala Chest Hospital; *p< 0.05									

This **Figure 1** illustrated relation between total work environment and managerial innovation as perceived by studied nurses, there is significance relation between total work environment and managerial innovation (** p <0.01).
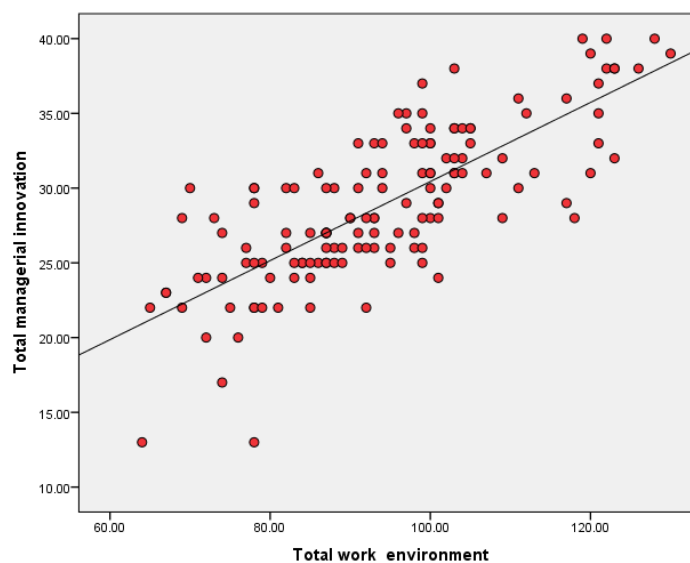
Figure 1. Relationship between work environment and managerial innovation as perceived by the studied nurses (n =140).

This **Figure 2** illustrated relation between total work environment and citizenship behaviour as perceived by studied nurses, there is significance relation between total work environment and citizenship behaviour (** p <0.01).
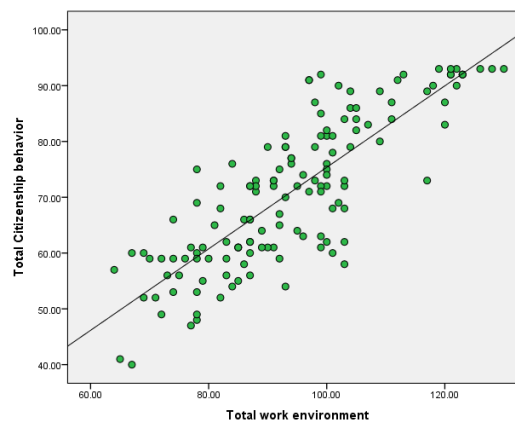

Figure 2. Relationship between work environment and citizenship behaviour as perceived by the studied nurses (n =140).

Table 6 illustrated relation between total work environment and both total of managerial innovation and citizenship behaviour as perceived by studied nurses in both setting. There is a strong positive significance relation between total work environment and both total of managerial innovation and citizenship behaviour in both setting (** p <0.01) as shown in above table.

Table 6. Relation between total role of work environment, managerial innovation and citizenship behaviour as perceived by the studied nurses.

Variables	Totalrole of work environment score					
	MMUH (n= 105)		ECH (n =35)		Total (n=140)	
	r	p	r	p	R	p
Total managerial innovation	0.8	0.000**	0.7	0.000**	0.77	0.000**
Total citizenship behaviour	0.8	0.000**	0.87	0.000**	0.82	0.000**
MMUH: Main Mansoura university hospital; ECH: Elmahala Chest Hospital; *p< 0.05/** p <0.01						

DISCUSSION

The health care organization works in an environment of continuous alteration and challenge, and attractive and supportive work environment is essential to improve managerial innovation and organizational citizenship behaviour.

Results related to work environment

The result of the current study indicated that agreement to total work environment at main university hospital was higher than Elmahala Chest Hospital. This may due to that agreement of respondents to management support and recognition and appreciation at main university hospital was higher than Elmahala Chest Hospital. Nurses at main university hospital always find what they need in the department, and the department is well prepared, The organization enjoys a good level of infrastructure and higher management recognizes their efforts.

The finding of the existing study indicated that more than two thirds of nursing staff showed highly moderate level of working environment. This may due to working as a team, availability of management support that provides guidance and assistance when needed and recognition and appreciation for nurses. In agreement of the present study, Chandrasekar [7] stated that the majority of the respondents reported that their work environment was good, and they were satisfied with the overall environment of their working area. This was in the same line with Jain & Kaur [9] who reported that nurses are feeling positive about their working environment and many of them were comfortable with their working environment, mostly because of the people that they work with them and support that they receiving made them sense good being at work and sensed positive with their working environment.

Furthermore, Massoudi & Hamdi [1] mentioned that most of the study sample were satisfied with the overall working environment, and are happy to be a part of the organization. This was confirmed by Sutanto et al. [33] who stated that employees feel that the work environment is comfortable and added that a comfortable work environment will make workers to sense at home in their work place, and assist personnel be more emphasized on their job. On the contrast, Sinnappan [34] found that nurses rated their working condition as bad.

As regard to team work, the finding of the current study indicated that it was the highest sub item of work environment at Elmahala Chest Hospital. This may due to that nurses manage and lead such as one family in the unit, work as a team gives them the space to be innovative and they have the required rate of understanding with their team. This was confirmed by Agbozo et al. [6] who found that nurses reported team work as the highest domain and mentioned that work environment is related to teamwork as they must to perform along with their co-workers or depend on them to achieve their daily activities.

This was in the same line with Rasmussen & Jeppesen [35] who reported that nursing staff rated the teamwork as highest element and reported that a supportive work environment would contain a work-team that supports its followers in their efforts to balance work and family. This was consistent with Addalmanu [36] who stated that teamwork actually plays a huge role in improving work environment, to decrease costs for superiors, encourage staff commitment and ease creativeness and innovation.

On the other hand, the current study shown that facilities was the lowest sub item of work environment at two hospitals. This may due to that nurses always not find what they need in the department and the department that they manage is not well prepared. This was in the same line with Blanchard et al. [37] who stated that nurses gave facilities the lowest score. This was in agreement with Alabduljader [8] who founded that managers scored facilities in bad level confirming that it plays very important role in their work environment and help them to complete tasks within the timeline. Additionally, Beardsmore & McSherry [38] stated that having sufficient facilities help healthcare workers to carry out their roles efficiently and effectively, and has a important influence on their ability to bring high quality care.

Results related to managerial innovation

The result of the existing study showed that managerial innovation was higher at main university hospital than at Elmahala Chest Hospital. This may due to that agreement of nurses to novel thoughts and methods are continuously good and are welcomed, managing innovatively generates permanent benefits for the organization and an innovative manager improves skills and talents of workers at main university hospital was higher than Elmahala Chest Hospital.

The result of the current study indicated that nearly two thirds of nursing staff at main university hospital and more than two thirds of them at Elmahala Chest Hospital showed moderate level of managerial innovation. This finding supported by Damanpour & Aravind [39] who reported that managerial innovation was good and founded that managers in places of power, with strong professional networks, and with arrival to organizational resources are more active innovators. This was in the same line with Hamidi & Benabdeljlil [11] who mentioned that managerial innovation increased in organization through the development of novel answers in management.

Additionally, Mcsherry & Douglass [40] stated that innovative ideas and services performed by nurses is becoming increasingly common today, confirming that managers who participate new thoughts with similar-minded co-worker's may be capable of construct novel knowledge, organize activities, and at last be more likely to carry out innovative performs within and through organizations. On the contrast, Damanpour & Schneider [41] reported that managerial innovation is relatively poor and managers need to endure in mind the significance and necessity of innovation.

Regarding managerial innovation sub items, The finding of the present study indicated that managing innovatively generates permanent benefits for the association was the highest mean of innovation sub items at main university hospital. This was supported by Alabduljader [8] who reported that managers have a positive attitudes toward the statement and rated it as the highest and good. In the same line Asurakkody & Shin [13] stated that innovative manager easing novel thinking, novel thoughts, and novel manner of working amongst the personnel which promote their knowledge and practice to improve performance. Additionally, Kaya et al. [18] who mentioned that managerial innovation is an important factor and critical method for organizational efficiency and competitiveness, it gives them positive emotion and motivation to do their bests and exceed their basic job requirements.

On the other hand, the current study exposed that innovation is established on a new principle that challenges management's orthodoxy had the lowest innovation sub items at Elmahala Chest Hospital. In agreement of the present study, Khan et al. [19] stated that over half of managers strongly agreed that they frequently search for novel thoughts to utilize in their work, and make use of these new ideas. Over a third of them reported that they take an innovative method to their work. On the contrast, Brysiewicz et al. [14] found that most managers using traditional ways in their management and reject the change in their practice and avoid the new ideas and ways.

Results related to organizational citizenship behaviours

The finding of the present study indicated that agreement to total organizational citizenship behaviours at Elmahala Chest Hospital was higher than at main university hospital. This may due to that agreement of respondents to training and development, Work life policies and organizational commitment at Elmahala Chest Hospital was higher than at main university hospital.

The result of the existing study indicated that nearly two thirds of nursing staff showed high level of organizational citizenship behaviours at main university hospital and more than two thirds of them showed moderate level of citizenship behaviours at Elmahala Chest Hospital. In congruent with the present study, Shanker & Tamb [42] reported that OCB and its dimensions were at a desired level amongst the studied staff. In the same line, Hossein & Somayeh [25] concluded that the level of OCB among the staff was at a higher-than-average rate.

Further more, Taghinezhad et al. [24] reported that OCB was above the acceptable level. As well as, Andrade et al. [20] stated that nurses demonstrate good level of OCB and its dimensions. On the contrast, Abed & Elewa [43] stated that the rate of OCB was found to be lesser than average amongst the nurses of teaching hospitals that is not constant with the results of present study. Also, this finding disagreed with Ngugi [44] who stated the level of OCB agreement was less in the staff of Singapore.

Regarding organizational citizenship behaviours sub items, The result of the existing study showed that the highest agreement related to training and development at Elmahala Chest Hospital. This may due to that hospital is providing nurse with job specific training, enough time is assigned for training, they have chance to be included in actions that encourage their professional development and they can apply training in their hospital. This was in congruent with Pickford & Joy [28] who stated that more than two-thirds of nurses agree that they receive training concerning their work. Confirming that most hospitals follows the programs of quality and training and development is one of quality programs steps for developing health services.

Furthermore, Khan & Rashid [22] training and development higher nurse's abilities and enhance the possible efficiency of all participants of the workgroup to achieve well. The most excellent places to work are places where nurses are provided with education and opportunities to grow. Improving professional practice and increasing nurses' clinical skill throughout continuing training keeping them up-to-date and raise their happiness with their working environment.

On the other hand, the current study shown that the lowest agreement of organizational citizenship behaviours sub items was related to work life policies at main university hospital. This may due to that nurses job affects negatively on their personal life, on their role as a spouse/or apparent, their work schedule is frequently in conflict with their personal life and they often sense that there is too much work to do. This was in congruent with Abd Elmohsen [32] who stated that work life policies was the lowest and last sub item, confirmed that inflexible work schedule and high work load and stressors cause a conflict between personal life and work.

In the same line, Downes & Koekemoer [45] found that the acceptance of flexible working practices, decreased functioning hours, access to appropriate childcare and suitable leave is commonly connected with positive work life outcomes. This was supported by Al-Omari & Okasheh [10] who stated that work life policies is one of the top worker concerns and organizations and staffs are becoming increasingly alert of the possible advantages of work-life balance and related work–life balance policies.

Results related to the relationship between work environment and managerial innovation

Regarding relationship between work environment and managerial innovation among nursing staff, the results of the existing study indicated that there was a statistical significant relation between work environment and + - managerial innovation. This may due to that good work environment enhance thinking and foster new ideas and practice while bad work environment inhibit them. This finding supported by Horth & Buchner [46] who founded that innovation must be correlated with a healthy work environment that help managers to think, create and innovate. Accordingly, Volberda et al. [16] who stated thatwork environment was the main and real driver of managerial innovation.

Furthermore, Ombaka et al. [47] reported that healthy work environment has the capability to encourage innovation and creativity amongst personnel in the association. Additionally, Manuylenko et al. [48] mentioned that the greatest barriers for innovation was the work environment confirming that positive work environment motivate the employees to innovate.

Results related to the relationship between work environment and citizenship behaviour

Regarding relationship between work environment and citizenship behaviour among nursing staff, the results of the existing study indicated that there was a statistical significant relation between work environment and +- citizenship behaviour. This may due to that good work environment encourage head nurses to do their best and empowered them to behave like citizens. This was in the same line with Taghinezhad et al. [24] who reported that adequate facilities and management support play an important role to employees provide them with continuous encouragement, guidance and right information that increase employee's self-confidence and motivate them to behave like citizenships.

This was in congruent with Abed & Elewa [43] who stated that the perceived work environment is closely associated with OCB. Additionally, Ngugi [44] mentioned that healthy work environment offers a favourable environment for work, arranges health and safety, manages stress, facilitates employees relations and work life balance causing employees satisfaction and convincing them to behave like citizens.

CONCLUSION

More than two thirds of nursing staff showed highly moderate level of working environment at two hospitals. Nearly two thirds of them at main university hospital and more than two thirds of them at Elmahala Chest Hospital showed moderate level of managerial innovation. Nearly two thirds of nursing staff showed high level of organizational citizenship behaviours at main university hospital and more than two thirds of them showed moderate level of citizenship behaviours at Elmahala Chest Hospital. There was statistical significant positive relation between working environment and both managerial innovation and citizenship behaviours. So, from the above we can conclude that there is a possibility of improving managerial innovation and organizational citizenship behaviours through improving their working environment.

RECOMMENDATIONS

Efforts must be made to foster a healthcare environment that nurtures innovation and organizational citizenship behaviour, remembering that they need a supportive environment.

Authorities want to buying recent and novel equipment, and quick maintenances and repairs of equipment is vital and try to provide possible facilities.

Implement innovative strategies to support the development of professional knowledge, skills and competences of nursing staff.

Administrators should provide flexibility of scheduling and balance between nurses' family life and the requirement of their work.

Involving nurses in setting goals and decisions of organizations to develop the organizational citizenship behaviour.

Holding meetings with the staff to clarify the positive and expected results connected with managerial innovation and ensuring that it has been routinized into the daily organizational actions.

Design a new appraisal form includes assessing for extra-role behaviours.

Additional research must be conducted about managerial innovation and its impact on organizations.

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