Relationship between nurses' organizational commitment and their organizational citizenship behavior

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Abstract: **Organizational commitment has great effect on efficiency, growth and development in health care organizations, and positively influences their behavior especially organizational citizenship behavior Aim: to examine the relationship between nurses' organizational commitment and their organizational citizenship behavior at Kafr El-Dawar General hospital. Methods: A descriptive, correlational research design was utilized in all inpatient (medical and surgical) units and intensive care units at Kafr El-Dawar General hospital that is affiliated to Ministry of Health and Population, for all staff nurses (N=270). Tools: two tools were used: Tool I: Three-Component Model of Organizational Commitment Questionnaire that consisted of two parts: 1) demographic characteristics data sheet; 2) Three-Component Model of Organizational Commitment Questionnaire, Tool II: Organizational Citizenship Behavior Scale. Results: staff nurses perceived high mean percent score of total organizational commitment, continuance and normative dimensions and moderate mean percent score for total organizational citizenship behavior and its all dimensions. There was positive highly significant relationship between total organizational commitment and total organizational citizenship behavior, where (P=0.000). The explained variance of organizational citizenship behavior is related to organizational commitment dimensions (83.5%), where the model is highly significant (F = 457.822, P = 0.000). Conclusion: There was positive highly significant relationship between nurses' organizational commitment and their organizational citizenship behavior at Kafr El-Dawar General hospital. Recommendations Build autonomy in nursing staff by providing them with more authorities and responsibilities to encourage them to make what is needed to accomplish their work and become role model.**

Keywords: **Organizational Commitment, Organizational Citizenship Behavior, Staff nurses.**

1. INTRODUCTION

Health care organizations nowadays face multiple problems. One of these problems is the shortage of health care providers; especially shortage of nursing staff due to lack of their organizational commitment. [1] Organizational commitment is defined by Meyer and Allen [2] as: "a psychological state that characterizes the nurse's relationship with the organization, and has implications for the decision to continue membership in the organization". Organizational commitment opens channels for communication especially for nurses with other health care providers to promote patients health care service. [3] Organizational commitment also affects positively on nurses` job satisfaction and decreases their turnover, which in turn maintain stability of nursing staff that promotes job performance and achieves positive patients outcomes, which helps hospital to achieve its vision.[4-6] Three-Component Model of Organizational Commitment is

developed by Meyer and Allen [7] and it includes three dimensions: (1) affective commitment: is based on the emotional attachment that a nurse has with the hospital. (2) continuance commitment: based on the cost associated if the nurses leave the organization and the corresponding benefits or compensation and finally, (3) normative commitment: is based on obligation that felt by nurses to stay in hospital and these obligations based on outside social norms. Organizational commitment is considered a significant mediator of organizational citizenship behavior because it allows the nurses to think and process their experience before reacting; thus, affecting the success of organization [8]. Organizational Citizenship Behavior (OCB) is defined by Brenner [9] as: "positive, pro-social, and extra-role workplace behavior that promotes the effective functioning of the organization". Bachrach et al. [10] emphasized that OCB helps in improving communication, information sharing and cooperation that emerge in groups to influence the frequency of behaviors that contribute to an individual success. Nurses perform better and exert high level of effort when they perceive that they are supported by organizations, which encourages them to engage in OCB. [11] Organizational citizenship behavior enables nurses to tolerate different patient and coworker behaviors. [12] It is emphasized that team and organizational effectiveness, and job satisfaction typically depends on the levels of OCB. [13] Lepine [14] classified it into five dimensions, as follows: (1) *altruism*: meaning that nurse helps other members of the organization in performing task or solving problems; (2) *generalized compliance*: referring to a more impersonal conscientiousness that means nurse's behavior go well beyond the minimum requirement, doing things right and proper for the sake of the organization rather than for any specific person; (3) *civic virtue*: denoting that nurse has constructive involvement in issues of governance and provides a favorable image of organization to outside; (4) *courtesy*: including behaviors, which focus on the prevention of problems and taking the necessary step to decrease the effects of the problem in the future; and lastly, (5) *sportsmanship*: indicating the willingness of the nurse to tolerate less than ideal circumstances without complaining.

Significance of the study

Nursing manpower is one of the most important resources for health care organizations that represent a critical element in their success. When there is turnover intention, the quality of care provided to the patients will be at risk. Global Health Workforce [15] indicated that the number of nurses, in Egypt, is approximately 128.445 nurses, revealing that nurses' density is 1.4/1000 population; compared to Australia, which has nurses' density 12.5/1000 population. Some problem facing Egypt, recently, is the quitting of nurses the profession or changing their career that aggravates nursing shortage. [16] Therefore, healthcare leaders must be encouraged to advocate for serious and creative solutions to bolster the nation's supply of nurses, through applying strategies to attract nurses, such as improving nurses' commitment to their organizations; taking call for another nurse; working over-time to alleviate stress on peers; or just offering a shoulder or a listening ear. These can make all the difference at the end of a long day, and affect decision of nurses to leave or continue in their organization. [17]

Aim of the study:

Examine the relationship between nurses' organizational commitment and their organizational citizenship behavior at Kafr El-Dawar General hospital.

Research Question:

What is the relationship between nurses' organizational commitment and their organizational citizenship behavior?

2. SUBJECTS AND METHODS

Study design

A descriptive, correlational research design was used to conduct this study.

Setting

This study was conducted in all inpatient (medical and surgical) units and Intensive Care Units (ICUs) at Kafr El-Dawar General hospital (n=22). This hospital is the second largest hospital at El-Beheira Governorate, with bed capacity (N=278), affiliated to the Ministry of Health and Population (MOHP)- Egypt. It is classified as: *(1) medical units* (n=7): medical, coronary, pediatrics, hematemesis, obstetrics and gynecology, burn and urology units; *(2) surgical units* (n=6): general surgery (A and B), orthopedics, ear, nose and throat, neuro-surgery and vascular units; *(3) ICUs* (n=9): general ICU, pediatrics, neonate, neuro-surgery, coronary care unit, dialysis, toxicology, eclampsia and burn ICUs.

Tools of the study

Two tools were used in this study:

Tool (I): Three-component Model of Organizational Commitment Questionnaire:

It consisted of two parts:

Part (1): Demographic characteristics data sheet

This part was developed by the researcher. It included demographic characteristics of staff nurses, namely: working unit, gender, age, educational qualification, years of nursing experience, years of unit experience and marital status.

Part (2): Three-component Model of Organizational Commitment Questionnaire:

It was developed by Meyer and Allen (2004) [7] and was adopted by the researcher to measure nurses' organizational commitment. It included 18 items grouped into three main dimensions: (1) affective (6-item); (2) continuance (6-item); and (3) normative (6-item). Responses were measured on a 6-point Likert rating scale ranging from (1) disagree very much to (6) agree very much. The highest score indicates higher nurses' organizational commitment. Reverse score was applied for negative worded statement. The total scores ranged from 18-108, where low score (18-48); moderate score (49-78); and high score (79-108).

Tool (II): Organizational Citizenship Behavior Scale:

This scale was developed by Lepine et al. (2002) [14] to measure nurses' organizational citizenship behavior. It included 24 questions covering five dimensions, namely: (1) altruism (5-item); (2) generalized compliance (5-item); (3) civic virtue (4-item); (4) courtesy (5-item); and sportsmanship (5-item). Responses were measured on 5-point Likert rating scale ranging from (1) rarely to (5) usually. The highest score indicated higher nurses' organizational citizenship behavior. Reverse score was applied for negative worded statement. The overall scores ranged from 24-120, where low score (24-56); moderate score (57-88); and high score (89-120).

METHODS

1. An official permission was obtained from the Dean of Faculty of Nursing, Damanhour University and the responsible authorities of the study settings at Kafr El-Dawar General hospital, to collect study data after explanation of the purpose of the study.

2. The two tools were translated into Arabic language, and were tested for its content validity and translation by five experts in the field of the study; and accordingly some modifications were done.

3. Reliability of the tools was tested statistically using Cronbach's alpha coefficient test to measure internal consistency of the items composing each dimension of the tools. The result of Cronbach's alpha coefficient test was found as follows: Three-component Model of Organizational Commitment Questionnaire (α=0.901); and Organizational Citizenship Behavior Scale (α=0.815); which indicating excellent and good reliability, respectively.

4. A pilot study was carried out on (10%) of total sample size; staff nurses (n=27), who were not included in the study sample, to ascertain the relevance of the tool, to test the wording of the questions, clarity and applicability of the tools; to estimate the average time needed to collect the necessary data and to identify the different obstacles and problems that might be encountered during data collection. Based on the findings of the pilot study, no modifications were done.

5. Data collection was conducted by the researcher through hand-delivered questionnaire to staff nurses, after individualized interview with each nurse for about (5) minutes to explain the aim of the study and the needed instructions were given before the distribution of the questionnaire in their settings. Every staff nurse took from 15 to 20 minutes to fill out the two tools. Data collection took three months from the beginning of November 2019 to the end of January 2020.

Ethical Considerations

• The research approval was obtained from the ethical committee at the Faculty of Nursing - Damanhour University, prior to the start of the study.

• An informed written consent was obtained from the study subjects after explanation of the aim of the study.

- Privacy and right to refuse to participate or withdraw from the study were assured during the study.

- Confidentiality and anonymity regarding data collected were maintained.

Statistical analysis

The collected data was revised, categorized, coded, computerized, tabulated and analyzed using Statistical Package for Social Sciences (SPSS) version 25.0. It was divided as: (1) Descriptive statistics: frequency, percent and mean with standard deviation. (2) Analytic statistics: Chi-square test, Pearson correlation coefficient test, Multiple Linear regression analysis and ANOVA. P value ≤ 0.05 was significant, and P value ≤ 0.01 was highly significant.

3. RESULTS

Table (1) reveals that above one third of staff nurses (37.04%) were working in surgical units; compared to one third of them, who were working in medical units (33.33%); whereas the minority of them were working in ICU (29.63%). Pertaining to age, the highest percentage of staff nurses (38.52%) had from 20 to less than 30 years old. Regarding gender, the majority of nurses (90%) were females. Concerning nurses' educational qualification, above half of staff nurses (59.63%) got Bachelor degree of Sciences in Nursing. In relation to years of nursing and unit experiences, the highest percentage of staff nurses had from 1 to less than 5 years of nursing and unit experiences (45.19%, 55.19%), respectively. Concerning marital status, more than two thirds of nurses (69.26%) were married.

Table (2) reveals that staff nurses perceived high mean percent score of total organizational commitment, continuance and normative dimensions (72.72%, 78.80%,74.02%), respectively; as well as moderate mean percent score of affective dimension (65.33%).

Table (3) shows that staff nurses perceived moderate mean percent score of total organizational citizenship behavior, sportsmanship, courtesy, generalized compliance, altruism and civic virtue dimensions (60.29%, 61.92%, 61.44%,60.80%, 60.40%, 59.95%), respectively.

Table (4) states that there are positive highly significant relationships between total organizational commitment and its dimensions and total organizational citizenship behavior and its dimensions, where (P=0.000).

Table (5) presents the results of multiple regression analysis between organizational commitment dimensions as independent variables and organizational citizenship behavior as dependent variable where adjusted R^2=0.835. This means that 83.5% of the explained variance of organizational citizenship behavior is related to organizational commitment dimensions, where the model is highly significant (F = 457.822, P = 0.000). However, coefficients table of regression analysis has displayed that the variables of affective and continuance dimensions are highly significant predictors of organizational citizenship behavior, where P= (0.000, 0.008), respectively; and also normative dimension is significant predictor of organizational citizenship behavior, where P= (0.022).

Table (1): Demographic characteristics of staff nurses working at Kafr El-Dawar General hospital.

Demographic characteristics	Staff nurses (N=270)	
	No.	**%**
Working Unit		
Medical	90	33.33
Surgical	100	37.04
ICUs	80	29.63
Age (years)		
< 20	55	20.37
20 -	104	38.52
30 -	59	21.85
40 +	52	19.26
Min-Max 18 – 59	Mean ±SD 31.73±11.018	

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Gender		
Male	27	10.0
Female	243	90.0
Educational qualification		
Diploma of Secondary Technical Nursing School	20	7.41
Diploma of Technical Health Institute	77	28.52
Bachelor of Sciences in Nursing	161	59.63
Post Graduate Degree	12	4.44
Years of nursing experience		
1-	122	45.19
5-	86	31.85
10 +	62	22.96
Min-Max 1 – 32 Mean ±SD 8.11±7.901		
Years of unit experience		
1-	149	55.19
5-	81	30.0
10 +	40	14.81
Min-Max 1 – 25 Mean ±SD 6.129±5.564		
Marital status		
Single	57	21.11
Married	187	69.26
Divorced	11	4.07
Widow	15	5.56

Table (2): Mean percent score of staff nurses' perceptions of organizational commitment, working at Kafr El-Dawar General Hospital. (N=270)

Organizational Commitment dimensions	Min	Max.	Mean	SD	Mean % Score.
Affective	8	36	23.52	7.238	65.33
Continuance	14	36	28.37	4.997	78.80
Normative	12	36	26.65	5.014	74.02
Total organizational commitment	**34**	**106**	**78.54**	**15.336**	**72.72**

Low mean percent score: 0-<33.3%; Moderate mean percent score: 33.3 %-< 66.6%; High mean percent score: 66.6%-100%

Table (3): Mean percent score of staff nurses' perceptions of organizational citizenship behavior, working at Kafr El-Dawar General Hospital. (N=270)

Organizational Citizenship Behavior dimensions	Min	Max.	Mean	SD	Mean % Score.
Altruism	**6**	**24**	**15.10**	**3.560**	**60.40**
Generalized Compliance	**8**	**24**	**15.20**	**3.559**	**60.80**
Civic Virtue	**7**	**19**	**11.99**	**2.762**	**59.95**
Courtesy	**10**	**24**	**15.36**	**3.506**	**61.44**
Sportsmanship	**5**	**24**	**15.48**	**3.638**	**61.92**
Total organizational citizenship behavior	**38**	**115**	**73.11**	**16.517**	**60.29**

Low mean percent score: 0-<33.3%; Moderate mean percent score: 33.3 %-< 66.6%; High mean percent score: 66.6%-100%

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Table (4): Correlation matrix between staff nurses' perceptions of organizational commitment and their organizational citizenship behavior. (N=270)

Organizational commitment / Organizational citizenship behavior		organizational commitment dimensions				organizational citizenship behavior dimensions					
		Affective	Continuance	Normative	Total organizational commitment	Altruism	Generalized Compliance	Civic Virtue	Courtesy	Sportsman ship	Total organizational citizenship behavior
Affective	r	1	0.572	0.580	0.848	0.927	0.867	0.956	0.857	0.835	0.912
	P (2-tailed)		0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**
Continuance	r		1	0.982	0.917	0.483	0.444	0.551	0.423	0.454	0.482
	P (2-tailed)			0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**
Normative	r			1	0.921	0.501	0.463	0.570	0.444	0.472	0.501
	P (2-tailed)				0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**
Total organizational commitment	r				1	0.759	0.705	0.817	0.688	0.696	0.751
	P (2-tailed)					0.000**	0.000**	0.000**	0.000**	0.000**	0.000**
Altruism	r					1	0.930	0.963	0.904	0.899	0.967
	P (2-tailed)						0.000**	0.000**	0.000**	0.000**	0.000**
Generalized Compliance	r						1	0.902	0.979	0.961	0.986
	P (2-tailed)							0.000**	0.000**	0.000**	0.000**
Civic Virtue	r							1	0.886	0.866	0.948
	P (2-tailed)								0.000**	0.000**	0.000**
Courtesy	r								1	0.957	0.977
	P (2-tailed)									0.000**	0.000**
Sportsmanship	r									1	0.969
	P (2-tailed)										0.000**
Total organizational citizenship behavior	r										1
	P (2-tailed)										

* significant P $\leq$ 0.05 ** Highly significant P $\leq$ 0.01   Interpretation of r: Weak (0.1-0.24) Intermediate (0.25-0.7) Strong (0.75-0.99) Perfect (1)

Table (5): Multivariate regression analysis of organizational citizenship behavior among staff nurses, working at Kafr El-Dawar General Hospital. (N=270)

Dimensions	Unstandardized Coefficients	Standardized Coefficients	T	P
	B	β		
(Constant)	29.180		12.060	0.000**
Affective	2.139	0.938	30.919	0.000**
Continuance	1.167	0.353	2.688	0.008**
Normative	1.002	0.304	2.299	0.022*
ANOVA^a				
Model	R^2	df	F	p
Regression	0.835	3	457.822	0.000**b

a: Dependent Variable: Organizational citizenship behavior. b: predictors: (Constant), Normative, Affective, and Continuance. *P value (significant) $\leq$ 0.05 **P value (highly- significant) $\leq$ 0.01 df= degree of freedom F= One Way Anova T=Independent samples t- test R^2= Coefficient of multiple determination.

4. DISCUSSION

The findings of the present study revealed that total organizational commitment, continuance and normative dimensions got high mean percent score. Additionally, affective dimension got moderate mean percent score. This may be related to supervisors' support, flexibility of working hours and nurses are seeking to have a stable work life. Moreover, nurses consider working in hospital is of great chance for them, rather than searching other working opportunities which may be less in their payment; and also getting their compensation after retirement is of great value. Furthermore, head nurses provide frequent in-service education program for staff nurses, to give them a chance for better performance, and consequently, value their contributions at work, leaving them with increase sense of commitment to their organization.

This result is congruent with Sobhi (2020), [18] who found that nurses mean percent scores of organizational commitment and its dimensions, were high due to nurses manager's support and plenty of training programs that are offered to staff nurses to link them with their hospital policies and goals . The current finding was also supported by Khosravani et al. (2020) [19], Cao et al. (2019) [20], Aharon, Madjar and Kagan (2019) [21] and Eskandari et al. (2017), [22] who identified that the majority of staff nurses reported high level of total organizational commitment. Furthermore, Arbabisarjou (2016), [23] Omar (2014), [24] Hassan (2012), [25] and Mabrouk (2004) [26] claimed that total organizational commitment and its three dimensions got high mean percent score.

However, this result is partially in the same line with Al-Haroon and Al-Qahtani (2020), [27] Elzohairy, Elsayed and Ghandour (2019), [28] Gholami, Saki and Hossein (2019) [29] and Johnson et al. (2016), [30] who showed that nearly two thirds of nurses and professional nurses got moderate level of organizational commitment. On the other hand, this finding was contradicted with Israel et al. (2017), [31] Al-Hawajreh (2011) [32] and Liou and Cheng (2010), [33] who found that more than half of nurses reported low organizational commitment. Also, Abdulkadir, Isiaka and Adedoyin (2012) [34] showed that the level of organizational commitment among study subjects was low.

The findings of the present study revealed that total organizational citizenship behavior, sportsmanship, courtesy, generalized compliance, altruism and civic virtue dimensions got moderate mean percent scores. This may be related to nurses' awareness about their role, hospital policies and rules, rights of other health care workers. Additionally, some nurses feel satisfied about their job and have a feeling of loyalty towards their hospital. Moreover, nurses try to focus on positive work-related issues and avoid complaining from problems. Experienced nurses share any information during initial orientation with new nurses and try to help any member to achieve their duties. Furthermore, head nurses and nurses provide favorable image about their hospital and try to be liaison for their changes in their hospital.

This result is in accordance with Altuntaş et al. (2021), [35] Mahmoud (2017), [36] and Jeon and Koh (2014), [37] who claimed that nurses' perceptions of OCB were moderate. Additionally, Jafarpanah and Rezaei (2020) [38] demonstrated that the majority of nurses explored intermediate level of OCB. Moreover, Mohamed, Morsi and Mahmoud (2020) [39] reported that more than half of nurses reported moderate level of OCB. Furthermore Nourani et al. (2016) [40] indicated that mean scores of OCB and its dimensions among midwifes were slightly higher than average.

However, the current findings are partially in the same line with Elnahas, Osman and Elsayed (2020), [41] Hassani and Aghlmand (2017), [42] Mahmoud and Ibrahim (2016) [43] and Tofighi et al. (2015), [44] who found that, above half of nurses demonstrated high level of OCB. On the other hand, this finding is contradicted with Aprilani et al. (2021) [45] and Mohamed et al. (2018) [46], who indicated that nearly two thirds of nurses had a low level of OCB.

The findings of study revealed that there were positive highly significant relationships between total organizational commitment and its dimensions and total OCB and its dimensions. This correlation may be due to the positive effect of nurses' organizational commitment on their behavior; they dramatic accept and believe in the hospital values, make efforts to serve it, show staff spiritual vitality, link with and express the hospital sublime goals and enjoy being a member of it. Also, they will be engaged into citizenship behavior to maintain their bounding with the hospital.

This result is supported by Aprilani et al. (2021) [45], Adnans (2021) [47] and Lin and Chang (2015), [48] who demonstrated that, there were a positive statistically significant relationship between nurses organizational commitment and their organizational citizenship behavior. Addtionally, Grego-Planer (2019), [49] Khaleh and Naji (2016) [50] and Azizi et al. (2014) [209] showed that highly committed nurses stays in the hospital, accepts its goals and value and takes a great effort and even sacrifices to achieve these goals that push them to go beyond the contractual obligations, and ready to contribute to their workplace in a constructive manner and there were also a positive statistically significant relationship between nurses organizational commitment and their OCB.

5. CONCLUSION

There was highly positive statistically significant relationship between total organizational commitment and total organizational citizenship behavior at Kafr El-Dawar General hospital. Also, the majority of nurses had high level of total organizational commitment and more than half of nurses had moderate level of total organizational citizenship behavior.

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6. RECOMMENDATION

In the light of the study findings, it is recommended that:

The hospital administrators should:

- Increase nurses satisfaction through competitive salaries, regular scheduling incentives encourage team spirit and establish regular meeting to discuss their problems.

- Apply program to monitor level of organizational commitment of staff and put executive plan to enhance their organizational commitment by developing strategies to recruit, attract, and retain committed nurses.

- Communicate clear goals and expectation to nurses, through sharing new ideas, which make them motivated and have a sense of ownership that maintain their organizational commitment.

- Foster a positive work culture for staff nurses to participate in decision making process and problem solving in order to promote healthy working environment.

- Build autonomy in nursing staff by providing them with more authorities and responsibilities through applying delegation system, to encourage them to act in constructive and flexible manner and become role model for them.

- Disseminate hospital policies, rules, rewards system and any process to promote their OCB.

Head Nurses should:

- Conduct regular meetings with staff nurses to discuss ways of improvement of quality of work life, fairness of rewards and encourage them to report any deviant behaviors.

- Provide effective strategies to enhance their OCB through giving their staff nurses: constructive feedback, knowledge sharing and management, emotional incentive and support …etc.

- Encourage teambuilding and teamwork to improve workflow, which positively will impact their OCB.

Staff Nurses should:

- Communicate openly with their manager to discuss their problems and any negative acts.

- Attend training programs to become aware of organizational policies, rules and regulations, to improve their abilities and skills to work effectively; thus, increase their commitment and citizenship behavior.

- Foster positive work environment through applying strategies, such as: team building and teamwork; interprofessional communication and collaboration; delegation; decision making and problem solving …etc.

Further researched to be conducted

- Factor affecting nurses' organizational commitment and their OCB.

- Relationship between organizational commitment and patient's outcomes.

- The impact of leadership style on nurses' OCB.

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