The Relationship between Structural Empowerment and Quality of Nursing Work Life

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Abstract: **Background: In recent decades, many nurses tend to change or leave nursing career because they are dissatisfied with their working conditions. Thus, it has become a priority to keep and attract qualified nurses to overcome the problem of nursing shortage. Nurses need a positive empowering work environment to work effectively. Aim of this study is to investigate the relationship between structural empowerment and quality of nursing work life. Research design: a descriptive, correlational research design. Settings: This study was carried out at all intensive and inpatient (medical and surgical) units at Kafr El Dawar general hospital. Subjects: this study was carried out on All staff nurses, who are working at the above-mentioned settings and who will be available at the time of data collection, will be included in the study (n=280). Data collection tools: data were collected using two tools: Tool (I): Conditions for work effectiveness questionnaire (CWEQ)-II. Tool (II): The Quality of Nursing Work Life Scale (QNWLS). Results: the majority of nurses (80.7%) had moderate level of total structural empowerment. Also the majority of nurses (87.1%) had moderate level of total quality of nursing work life. There was highly statistically significant relation between structural empowerment and quality of nursing work life. Conclusion: the study concluded that, the structural empowerment (SE) and quality of nursing work life (QNWL) are positively strongly correlated with each other. Recommendations: Create a motivating work environment, keep open lines of communication through periodical staff meeting, seek opinion and treat them with respect.**

Keywords: **structural empowerment, quality of nursing work life, work environment.**

1. INTRODUCTION

In recent decades, many nurses tend to change or leave nursing career because they are dissatisfied with their working conditions[1]. This dissatisfaction could be due to factors such as work overload, limited creating and maintaining suitable working conditions that empower excellent nurses' performance. Nurses need a positive empowering work environment to work effectively[2]. Empowerment is an indicator of positive work behaviors and better work environment. So, nurses need to be empowered[3]. Empowerment is a management practice of sharing information, rewards and power with health care professionals especially nurses so that, they can take initiative and make decisions to solve problems and improve service and performance[4]. Nursing empowerment means the ability to effectively motivate and mobilize self and others to accomplish positive outcomes in nursing practice and work environment[5]. A work environment is a work setting in which policies, procedures and systems redesigned to enable employees to meet organizational objectives and achieve personal satisfaction in their work[6].

Kanter(1993)[7] classified workplace empowerment into four organizational structures that comprise overall empowerment as follows: access to opportunities to learn and grow, access to information, access to support, and access to resources necessary to do the job. Access to opportunity refers to the availability of challenges, rewards, and

professional development opportunities within the workplace to increase knowledge and skills, Access to information complies knowledge of organizational values, goals and policies, and refers to possession of knowledge and expertise required to work effectively [7-8]. Access to support means the availability of feedback and guidance from supervisors, peers and subordinates (e.g., helpful advice from colleagues). Access to resources refers to access to funds, supplies, and physical time required to accomplish organizational goal[7, 8]. Nursing staff can be empowered by providing them with the necessary working conditions otherwise defined as the quality of Nursing work life (QNWL)[9].

QNWL is described as "the interaction of nurses' work life with their home life, this is along with the design and context of work, the relationship with the work world, and how these facets interact to affect healthcare productivity measures such as cost, quality, and patient outcomes"[10]. It means keeping a good balance between work and personal life. Under these conditions nurses feel satisfied, have the opportunity for learning, self-growth and to be fulfilled by their work[11, 12]. Brooks and Anderson(2005)[13] clarified Quality of Nursing Work Life (QNWL) survey which consists of four subscales which are: work life/home life, work design, work context and work world. The work life-home life dimension describes the interface between the nurses' work and home life. Since nurses are primarily female, this dimension reflects the role of mother (child care), daughter (elderly parent care), and spouse (family needs, available energy). The work design dimension is the composition of nursing work, and describes the actual work nurses perform. The work context dimension includes the practice settings in which nurses work and explore the impact of the work environment on both nurse and patient. Finally, the work world dimension is defined as the effect of broad social influences and change on the nursing practice.

Aims of the Study

This study aims to investigate the relationship the relationship between structural empowerment and quality of nursing work life at kafr El Dawar general hospital.

2. MATERIALS AND METHOD

Materials

Design: A descriptive correlational research design was used to conduct this study. **Settings:** This study was conducted at all intensive care units and inpatient (medical and surgical) units at Kafr El Dawar general hospital (N=24). The hospital is the second largest hospital at El-Beheira Governorate, with bed capacity (278). It is classified as follows: (1) Intensive and critical care units (N=7), namely: general intensive care unit (ICU); emergency room (ER); NICU; pediatrics ICU; coronary ICU; Neurosurgery ICU; and burn ICU. (2) Medical units (N=12), namely: hematemesis; dialysis unit 1 and 2; obstetric; pediatrics; eclampsia; vascular; internal medicine; cardiology; neurology; burn; and toxicology. (3) Surgical units (N=5), namely: general surgery 1 and 2; ENT; orthopedics; and urology.

Subjects: All staff nurses, who are working at the above mentioned settings and who were available at the time of data collection, were included in the study (n=280)

Tools: Two tools were used in the study:

Tool (I): Conditions for work effectiveness questionnaire (CWEQ)-II

This tool was developed by Laschinger and Wilk [14] and was adapted by the researcher, to measure staff nurses' perceptions of job-related empowerment. It consists of 19 items classified into six dimensions namely: access to opportunity (3- items), access to information (3- items), access to support (3- items), access to resources (3- items), formal power (3 - items) and in formal power (4 - items). Responses will be measured on 5-point likert scale ranging from 1 "none" to 5 "a lot". The reversed score will be applied for negative statements. The overall score level range from: (19 to 95). The highest score will indicate higher structural empowerment.

Tool (II): The Quality of Nursing Work Life Scale (QNWLS)

This tool was developed by Brooks [13] and was adopted by the researcher, to measure quality of nursing work life. It consists of 42 items classified into four dimensions, namely: home life or work life (7 - items) ; work organization or design (10 - items) ; work conditions or contention (20 - items);finally, work world (5 - items) .Responses will be measured on a 5 point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree". The overall score level range from: (42 to 210). Lower level ranging from (42-97), moderate level ranging from (98-154), high level ranging from (155-210).

In addition to that, a demographic characteristics data sheet was developed by the researcher to collect data related to staff nurses and will include : age, gender, working units, educational qualification, marital status, years of nursing experience and years of unit experience.

Method

1. An official permission was obtained from the Dean of Faculty of Nursing, Damanhour Univeristy and the responsible authorities of the study settings at Kafr El-Dawar General hospital, 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 from the field of the study. Accordingly, some modifications were done.

3. The two tools were tested for its reliability, using Cronbach`s Alpha Coefficient test.

4. A pilot study was carried out on (10%) of total sample size (n= 28), who were not be included in the study sample; in order to check and to ensure the clarity and feasibility of the tools and to identify obstacles and problems that might be encountered during data collection. Based on the findings of the pilot study, no modifications were done.

5. Data was collected from the identified subjects by the researcher through hand delivered questionnaire to staff nurses at their work settings , after individualized interview with each one 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 subject took from15 to 20 minutes to fill the two tools. Data collection took a period of three months from the beginning of January 2020 to the end of March 2020.

6. Data obtained was analyzed using the appropriate statistical tests.

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 were organized, coded and analyzed by using the Statistical Package for Social Science (SPSS), version 22. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, mean, range, standard deviation for the quantitative variables. The reliability tests were confirmed by using the Chronbach Alpha Coefficient tests. Deferential analysis was done for quantitative variables using chi square test in cases of two independent variables with pharma metric data. While correlation for numerical parametric data, the level of significance was taken at (p-Value < 0.05). The best linear regression model was used to examine the significance of the total challenges scores. Students't-test is used when two independent groups are compared, while the ANOVA extends the t-test to more than two groups.

3. RESULTS

Table 1 Show Distribution of nurses working at Kafr El Dawar General Hospital according to their demographic characteristics. Approximately half of the nurses (45%) had from 30 to less than 40 years old, compared to approximately one quarter of them (22.1%), who had more than 40 years old. According to gender of studied nurses, the majority of them were females (99.3%). According to marital status of studied nurses, the majority of them were married (90.7%).

Table 2 indicated that, total mean score of SE was 55.25±9.87 .As regard the SE dimensions; the highest dimension was informal power (12.43±2.61). However, the lowest SE dimensions were access to information and formal power (7.11±2.36, 7.27±2.10), respectively.

Table 3 demonstrated that, total nurses' mean score of QNWL was 122.70±19.30 .As regard to QNW dimensions, the first dimension was work conditions or contention (58.37±10.48) ; followed by work organization or design dimension (31.33±5.03). However, the last dimension was work world (13.20±3.31).

Table 4 indicates that, there are highly statistically significant relationships between nurses' total Structural Empowerment (SE) and their years of nursing experience and years of unit experience (P=.002,.008),respectively. Moreover, there are statistically significant relationships between nurses' total SE and their age and educational qualifications (P= .011, .023). However, there are no statistically significant relationships between total SE and gender, marital status and working unit at (P= .081, .054, .052).

Table **(5)** indicates that, there were statistically insignificant relationships between nurses' total Quality of Nursing Work Life (QNWL) and their demographic characteristics as age, working units, Educational qualifications, gender, years of nursing experience, years of unit experience and marital status at (P= .926, .058, .137, .862, .630, .356, .985) , respectively.

4. DISCUSSION

Health care organizations in many countries are facing some difficulties like shortage of health experts, and increase the turnover rate, especially amongst nurses[15] .They require power to affect patients, physicians and other health care practitioners [10] and to face the grand expectations from the profession and professional nurses[16]. Nurses face challenges that generate a high level of stress which adversely affects the quality of nursing work life (QNWL)[17]

The finding of the present study revealed that the majority of nurses had moderate level of total structural empowerment (SE). This finding may be related to the assumption that nurses had reasonable years of experience in management, gaining access to vital information, support and resources necessary to accomplish required work

The finding of the present study revealed that there was a statistically significant relationship between nurses' age and their total strutural empowerment. Nurses who had from 30 to less than 40 years old have moderate level of total SE. It might be due to that nurses become more knowledgeable, skillful and have coping skills to solve problems. Also, they can adapt to their working conditions as they work for a long time. Nurses who had been working in a hospital for a long time might still work as a unit nurse and do the same work without any significant changes.

The results of this study revealed that there was no statistically significant relationship between the type of units and nurses' perception of their structural empowerment.

Almost nurses were working in medical care units had moderate level of total SE. Regarding to gender, the results of this study revealed that there was no statistically significant relationship between the gender and nurses' perception of their structural empowerment.

In this study, female nurses perceived higher SE than male nurses. There was a highly statistically significant relationship between nurses' total SE and their years of nursing experience. Almost the studied nurses who had years of experience ranging from 10 to less than 20 years had moderate level of total SE

Moreover, the result of the present study concluded that there was a highly statistically significant relationship between nurses' total SE and their years of unit experience. Approximately almost nurses who had less than 5 years of unit experience had moderate level of total SE.

According to marital status, there is no statistically relationship between total SE and marital status. The majority of nurses who had moderate level of total SE were married.

The result of this study also, revealed that the highest dimension of SE was related to informal power, the lowest dimension of SE was related to access to information. Lacking information about organizational policies and decision-making

The finding of the present study showed that majority of the studied nurses had moderate level of total quality of nursing work life (QNWL).

The finding of the present study showed that there was a statistically insignificant relation between total QNWL of the studied nurses and their age, Nurses who have more than 40 years old had moderate level of total QNWL. Also, The

results of this study revealed that there was no statistically significant relationship between the type of units and nurses' perception of their QNWL.

The finding of the present study revealed that there was statistically insignificant relation between total QNWL of the studied nurses and their educational level. Nurses who had diploma of technical secondary nursing school had moderate level of total QNWL than others.

The result of this study revealed that, there was no statistically significant relationship between nurses' total QNWL and gender, female nurses had higher QNWL than male nurses.

there was no statistically significant relationship between nurses' total QNWL and their years of nursing experience, Almost the studied nurses who had years of experience less than 10 years had moderate level of total QNWL.

There was no statistically significant relationship between nurses' total QNWL and their years of unit experience, approximately almost nurses who had less than 5 years of unit experience had moderate level of total QNWL.

The finding of the present study revealed that there was no significant relationship between marital status and QNWL, the majority of nurses who had moderate level of total QNWL were married.

Moreover, the result of this study showed that the highest dimension was related to work conditions and the lowest dimension of QNWL was related to work world.

5. CONCLUSION

In the light of the present study findings, it can be concluded that the structural empowerment (SE) and quality of nursing work life (QNWL) are positively strongly correlated with each other. Results of this study showed that the majority of nurses (80.7%) had moderate level of total SE. The majority of nurses (87.1%) had moderate level of total QNWL.

6. RECOMMENDATIONS

In line with the findings of the study, the following recommendations are made:

Nurse Managers should:

- Create a motivating work environment, keep open lines of communication through periodical staff meeting, seek opinion and treat them with respect.

- Implement QWL training program as it is associated with improving job satisfaction, organizational commitment, organizational effectiveness, productivity, quality of life and reducing turnover intention.

- Facilitate seminars and continuous education about SE and QNWL and encourage nurses to participate.

- Implement continuous communication and information sharing among the nurse unit manager, team leaders and nurses to optimize the supervision activities and nursing care coordination.

- Provide role models and implement supervision process properly through effective rewards and punishment system.

- Improve the management and information system that are integrated into hospital management and patient care electronic documentation system.

- Redirect routine non-nursing activities to reduce nurse fatigue and stress through considering principles of nursing assignment.

Nursing staff should:

- Be committed to hospital policies, rules and regulations.

- Attend training program to reinforce the concept of multidisciplinary team work.

- Report errors immediately for studying its causes and providing solutions for preventing its occurrence.

- Participate in decision making and offering solutions for any problem.

- Know more about their top management plans and policy.

Table (1): Distribution of nurses working at Kafr El Dawar General Hospital according to their demographic characteristics.

Demographic characteristics	Nurses (N=280)	
	No.	%
Age (years)		
20-<30	92	32.9
30-<40	126	45.0
≥ 40	62	22.1
Mean ± SD	33.13±7.90	
Working unit		
Intensive and critical care units	120	42.86
Medical units	117	41.79
Surgical units	43	15.35
Educational qualifications		
Bachelor of Nursing Sciences	93	33.2
Diploma of Technical Institute of Nursing	86	30.7
Diploma of Technical Secondary Nursing School	57	20.4
Others	44	15.7
Gender		
Male	2	0.7
Female	278	99.3
Years of nursing experience		
<10	115	41.1
10-<20	101	36.1
≥ 20	64	22.8
Mean ± SD	12.44±7.80	
Years of unit experience		
<5	129	46.1
5-<10	69	24.6
≥ 10	82	29.3
Mean ± SD	6.86±6.48	
Marital status		
Single	20	7.143
Married	254	90.714
Divorced	2	0.714
Widow	4	1.429

Table (2): Mean scores of nurses working at Kafr El Dawar general hospital according to their Structural Empowerment (SE) (n=280).

Structural Empowerment (SE) Dimensions	Min	Max	Mean ± SD
Access to opportunity	3	15	9.79±2.03
Access to information	3	15	7.11±2.36
Access to support	3	15	9.58±2.10
Access to resources	3	15	9.04±2.29
Formal power	3	15	7.27±2.10
Informal power	4	20	12.43±2.61
Total SE	**23**	**95**	**55.25±9.87**

Table (3): Mean scores of nurses working at Kafr El Dawar general hospital according to their quality of nursing work life (QNWL) (n=280).

QNWL Dimensions	Min	Max	Mean ± SD
Home life or work life	7	35	19.78±3.91
Work organization or design	17	50	31.33±5.03
Work conditions or contention	32	100	58.37±10.48
Work world	5	25	13.20±3.31
Total QNWL	**68**	**210**	122.70±19.30

Table (4): Relationship between demographic characteristics of nurses working at Kafr El Dawar General Hospital and their total structural empowerment (n=280).

Demographic characteristics		Total structural empowerment						x^2	P-Value
		High (n=22)		Moderate (n=226)		Low (n=32)			
		No.	%	No.	%	No.	%		
Age (year)	20-<30	13	14.1	72	78.3	7	7.6	12.96	.011*
	30-<40	8	6.3	105	83.4	13	10.3		
	≥ 40	1	1.6	49	79	12	19.4		
Working unit	Intensive	9	7.5	97	80.8	14	11.7	2.301	.052
	Medical	8	6.8	97	82.9	12	10.3		
	Surgical	5	11.6	32	74.4	6	14		
Educational qualifications	Bachelor of Nursing Sciences	11	11.8	76	81.7	6	6.5	14.66	.023*
	Diploma of Technical Institute of Nursing	9	10.5	68	79.1	9	10.4		
	Diploma of Technical Secondary Nursing School	2	3.5	48	84.2	7	12.3		
Gender	Male	1	50	1	50	0	0	5.091	.081
	Female	21	7.6	225	80.9	32	11.5		
Years of nursing experience	<10	16	13.9	88	76.5	11	9.6	17.35	.002**
	10-<20	6	5.9	87	86.2	8	7.9		
	≥ 20	0	0	51	79.7	13	20.3		
Years of unit experience	<5	15	11.6	106	82.2	8	6.2	13.70	.008**
	5-<10	6	8.7	54	78.3	9	13		
	≥ 10	1	1.2	66	80.5	15	18.3		
Marital status	Single	5	25	11	55	4	20	12.39	.054
	Married	17	6.7	209	82.3	28	11		
	Divorced	0	0	2	100	0	0		
	Widow	0	0	4	100	0	0		

*significant at p ‹ 0.05. **highly significant at p ‹ 0.01.

Table (5): Relationship between demographic characteristics of nurses working at Kafr El Dawar General Hospital and their quality of nursing work life (n=280).

Demographic	characteristics	Total quality of nursing work life						χ^2	P-Value
		High (n=14)		Moderate (n=244)		Low (n=22)			
		N	%	N	%	N	%		
Age (year)	20-<30	5	5.5	81	88	6	6.5	.893	.926
	30-<40	7	5.6	108	85.7	11	8.7		
	≥ 40	2	3.2	55	88.7	5	8.1		
Working unit	Intensive	6	5	105	87.5	9	7.5	1.102	.058
	Medical	5	4.3	104	88.9	8	6.8		
	Surgical	3	6.9	35	81.4	5	11.7		
Educational qualifications	Bachelor of Nursing Sciences	7	7.5	76	81.7	10	10.8	9.71	.137
	Diploma of Technical Institute of Nursing	5	5.8	77	89.5	4	4.7		
	Diploma of Technical Secondary Nursing School	2	3.5	53	93	2	3.5		
	Others	0	0	38	86.4	6	13.6		
Gender	Male	0	0	2	100	0	0	.297	.862
	Female	14	5	242	87.1	22	7.9		
Years of nursing experience	<10	5	4.3	103	89.6	7	6.1	2.584	.630
	10-<20	7	6.9	84	83.2	10	10.9		
	≥ 20	2	3.1	57	89.1	5	7.8		
Years of unit experience	<5	4	3.1	118	91.5	7	5.4	4.391	.356
	5-<10	5	7.2	58	84.1	6	8.7		
	≥ 10	5	6.1	68	82.9	9	11		
Marital status	Single	1	5	17	85	2	10	1.020	.985
	Married	13	5.1	221	87	20	7.9		
	Divorced	0	0	2	100	0	0		
	Widow	0	0	4	100	0	0		

Table (6): covariance analysis between total structural empowerment among the studied nurses and their total quality of nursing work life at Kafr El Dawar General Hospital

	Unstandardized Coefficients	standardized Coefficients	T	P. value
	B	β		
Age	.069	.116	1.201	.231
Gender	.428	.082	1.437	.152
Marital status	.019	.016	.274	.784
Years of experience	.001	.002	.023	.982
Years of experience in the unit	.056	.109	1.497	.135
Educational level	.056	.136	2.196	.029*
Total quality of nursing work life	.222	.182	3.186	.002**
Model	**df.**	**F**	**P. value**	
Regression	7	5.344	.000**	

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Table (7): covariance analysis between total quality of nursing work life among the studied nurses and their total structural empowerment at Kafr El Dawar General Hospital.

	Unstandardized Coefficients	standardized Coefficients	T	P. value
	B	β		
Age	.012	.026	.254	.799
Gender	.062	.015	.244	.808
Marital status	.022	.023	.371	.711
Years of experience	.013	.029	.260	.795
Years of experience in the unit	.008	.018	.239	.811
Educational level	.012	.037	.568	.570
Total structural empowerment	.162	.198	3.186	.002**
Model	df.	F	P. value	
Regression	7	1.700	.109	

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