

The Relationship Between the Role of Nurses as A Health Educator and Both of Work Environment and Nursing Empowerment

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Abstract

Background: Health education considers the heart of a nurse's role, It is an essential tool to empower patients to be autonomous concerning their health management which leads to strengthening their physical, mental, and social skills to reach self-management of diseases and self-health determination **Objective:** To determine the relationship between the role of nurses as health educators and both of work environment and nursing empowerment. **Setting:** The study was conducted at Salah El-awadi hospital in the -Agami western district of Alexandria governorate. **Subjects:** The Study sample comprised 123 nurses, who represent all nurses' staff who worked at Salah El-Awadi hospital in all departments **Tools:** three tools were used. Tool one: Work Environment Satisfaction Assessment questionnaire, Tool two: Nursing Empowerment Assessment Questionnaire, and Tool three: Nurses' perceptiveness toward their health education Role Questionnaire. **Results:** the study result showed that there were statistically significant positive correlations between nurse perceptiveness of health educator role, work environment, and nursing empowerment as $p < (0.001)$ **Conclusion:** Health education is the cornerstone of nursing practice and a nurse's crucial responsibility, Role of a nurse as health educator can be affected by the nurse work environment, level of nursing empowerment. **Recommendations:** different workshops must be conducted for nurses as; workshop about the patient-teaching role of the nurse as a part of their duties. workshop about health education's importance, strategies, barriers, and how to overcome these barriers. And workshop about communication skills

Keywords: Work environment, nursing, nursing empowerment, health educators.

Introduction

Health education is at the heart of the nursing practice and a nurse's vital role, which refers to the provision of precise and genuine information so that people are aware of their situations and can make informed decisions. It considers a method of encouraging people to take greater responsibility for their own health and

possible ill-health, therefore reducing the pressure on the nursing profession. (Jamaati .,2014 ,Wittink., 2018)

A nurse educator is responsible for the education of patients, families, staff, and students. The primary responsibility of an educator is not to impart knowledge, but to foster learning and create environments that support it. (Bastable.,2019).

Several causes can hinder nurses' performance in their role as health educators: lack of educator communication skills, low self-confidence, low self-esteem, and lack of knowledge about the health education process. Also lack of knowledge about preparing and using audiovisual aid, lack of time, and lack of ability to motivate patients to participate in learning, unwillingness to learn, and cultural barriers. Furthermore; physical environmental barriers such as noise, distraction, and visit time, unavailability of a specific place for conducting an educational activity. (Ayoub., 2016 & Mirzaii Najmabadi., 2019)

Nurses must have a healthy work environment that is safe, and empower them to perform their health educator role. It is considered a crucial setting for forming a person's behavior. Also, it is mirroring the characteristics of a place or an organization that are affected by managerial support, nurse participation in hospital affairs, staffing and resource adequacy, and mutual respect of doctor–nurse relationship. (Nantsupawat.,2017, Mitra., 2019, lake.,2020)

There are four work environment contexts: task, social, physical, and organizational structure. Task context includes a job description, supervision, and workload, while social context refers to the human dimension of an organization including employees' expectations, and how employees interact with each other. while, the physical context includes all of the material objects as buildings, furnishings, equipment, and ambient conditions such as lighting and air quality) Finally, organization structure refers to a framework for the relationships between tasks, systems, operational processes, people, and groups working to achieve the objectives which shape human interactions and relationships, as well as employee behavior. (Ahmady,2016; Li.,2022)

A nurse needs to be empowered to overcome work environment stressors,

nursing empowerment refers to conditions in which the nurse takes control of his/her own practice, successfully fulfilling the responsibilities within an organization, which is obtained by greater nurse participation in decision-making and actions based on the mobilization of power throughout the organization. (Breau.2014, Guo.,2016)

Nursing empowerment has three types; structure, psychological and group empowerment. Structural empowerment refers to having access to empowering conditions such as access to information, support, resources, and opportunities for growth and development. While psychological empowerment includes a single individual's perception of means the value of a work goal/purpose in relation to an individual's own ideals/standards, competence, and to which an individual can influence strategic, administrative, and outcomes at work. Furthermore, group empowerment means presenting team members' perceptions on four dimensions which include potency, meaningfulness autonomy, and impact (Goedhart., 2017, Falatah et al., 2022)

Aims of the Study

This study aimed to determine the relationship between the role of nurses as health educators and both work environment and nursing empowerment

Research question

Is there a relationship between the role of nurses as health educators and both work environment and nursing empowerment?

Materials and Method

Materials

Design: A descriptive correlation research design was used for conducting this study

Settings: The study was conducted at Salah El-awadi hospital in the -Agami western district of Alexandria governorate, which is affiliated to the Ministry of health. The hospital specialty is pediatric and obstetric. It consisted of Four departments, which are

outpatient clinics (pediatric clinic, follow-up pregnancy clinic, and family planning clinic, ultrasound clinic, obstetrics and gynecology clinic), operation room, neonate intensive care unit, and inpatient wards with a total capacity (17) bed and (10) incubators

Subjects: The subjects of this study comprised 123 nurses, who represent all nurses' staff who worked at Salah El-Awadi hospital in all the previously mentioned departments with different qualifications and years of experience.

Tools: In order to collect the necessary data for the study three tools were used:

Tool one: Work Environment Satisfaction Assessment questionnaire

It was developed by National Institute of Occupational Safety and Health (NIOSH) (2002). The tool was adapted by the researcher to assess hospital work environment satisfaction level. It consisted of 5 categories with 45 statements; physical environment (8 items), psychological environment which included conflict of work (2items), job satisfaction (3 items), social environment (3 items), administrative environment which included job requirement (9 items), rules and policy (6 items, and finally environmental stressors which included work issue (9 items), work load (5items). It is a five point Likert scale ranged from 1) "strongly disagree", (2) "disagree". (3) "neutral" , (4) "agree" to (5) "strongly agree" The total score ranged from 45 to 225, as from $45 < 105$ low work environment satisfaction level, from $105 < 165$ moderate work environment satisfaction level , and from $165 \leq 255$ high work environment satisfaction level . The tool's reliability was calculated using Cronbach's Alpha test, it was reliable and the test coefficient value was 0.816

Tool two: Nursing Empowerment Assessment Questionnaire. It was developed by Laschinger, (2004). The tool was adapted by the researcher to assess the staff nurses' empowerment levels. It consisted of 8 categories with 42 statements; Nurse Perceptions toward themselves (9

items), general empowerment (8 items), psychological empowerment (7 items), physical empowerment (7 items), social empowerment (2 items), spiritual empowerment (3 items), vocational empowerment (1 item) and group empowerment (5 items).

It is a five-point Likert scale ranging from (1) "strongly disagree", (2) "disagree". (3) "neutral", (4) "agree" to (5) "strongly agree". The total score ranged from 42- 210, the total score ranged from 42- 210, which is interpreted as $42 < 98$ indicating a low empowerment level, from $98 < 154$ indicating a moderate empowerment level and from $154 \leq 210$ indicating a high empowerment level. The tool's reliability was calculated using Cronbach's Alpha test, it was reliable and the test coefficient value was 0.933

Tool three: Nurses' perceptiveness toward their health education Role Questionnaire.

It was developed by the researcher after a thorough review of related literature (Park, 2005, Haigh, 2015 Şenyuva, 2020) to assess staff nurses' perceptiveness toward their actual health education role. It consisted of 5 categories with 39 statements; Perceived Nurses' Responsibility (2items), Assessment which includes; patient assessment (5 items), environment assessment (3 items), health educator's assessment (9 items) and content (2items). Planning (7 items), Implementation (9 items) and Evaluation (2 items).

It is a five-point Likert scale ranging from (1) "not very important" (2) "not important". (3) "Natural", (4) "important" to (5) "very important" The total score ranged from 39-195 which is interpreted as from $39 < 91$ representing low perceptiveness level, from $91 < 142$ representing moderate perceptiveness level, and from 143 to 195 representing high perceptiveness level. The tool's reliability was calculated using Cronbach's Alpha test, it was reliable and the test coefficient value was 0.921

Method

- An approval from the Research Ethics Committee, Faculty of Nursing Alexandria University was obtained.
- Official permission to conduct the study was obtained from the Dean of the Faculty of Nursing and the manager of Salah EL- Awadi hospital to collect the necessary data.
- Written informed consent was obtained from every nurse after explanation of the study's aim.
- All study tools were translated into Arabic by the researcher.
- Tools' content validity was tested by a jury of five experts in the related field, where the researcher seeking their review and opinion for relevance, clarity, accuracy and translation language issues.
- The tools' reliability was tested using Cronbach's Alpha. All study tools were reliable.
- A pilot study was carried out on (12 nurse) 10% of the sample size to ascertain the clarity and applicability of the tools and identify difficulties that may face the researcher during data collection.
- The results of this study revealed that; all the tools were clear, applicable and no modifications were made and the pilot study was included in the study sample.
- Data were collected over a period of one month from 30-4-2022 till 30-5-2022.
- Study tools were distributed to nurses hand by hand and asked to fill them out and return it back to the researcher and the researcher responded to the nurse's questions.

Ethical considerations:

Written informed consent were obtained from nurses after explaining the aim of the study and the right to refuse to participate in the study and/ or withdraw at any time. Data confidentiality was secured. Anonymity of nurses was maintained

Statistical Analysis

Data were fed to the computer and analyzed using IBM SPSS software package version 20.0. (Armonk, NY: IBM Corp) Qualitative data were described using numbers and percent. The Kolmogorov-Smirnov test was used to verify the normality of distribution Quantitative data were described using range (minimum and maximum), mean, standard deviation, median and. Significance of the obtained results was judged at the 5% level.

Results

Table 1. Shows the distribution of nursing staff according to their socio-demographic and occupational data. It was found that near to half the percentage of nurses (44.7%) had from 25<35 years old, all nurses (100%) were female, and more than fifty percent of them (54.4%) were married. Also, more than one-third percentage of the nurses had 15<20 years of experience, had associate degrees, and work in Neonate Intensive Care (35.85%,38.2%,34.1%) respectively. More than fifty percent of nurses (54.5%) participated in training programs on patient education. The results also revealed, that more than one nurse and a maximum of two nurses are working in each shift at the previously mentioned departments (95.1%,92.3%) respectively.

Table2: Shows distribution of nursing staff according to work environment. The administrative environment was the highest perceived environment among the study subjects, followed by the social environment, (44.44 ± 18.33 , 40.72 ± 20.45) respectively. while psychological environment and physical environment were perceived as the lowest level by the study subjects (30.91 ± 16.40 , 26.22 ± 16.86) respectively.

Table3: shows the distribution of nursing staff according to empowerment level Psychological empowerment, nurse perception toward herself, and Empowerment assessment were ranked as the highest dimensions of the nursing

empowerment assessment scale with a percent score of (55.49 ± 19.13 , 46.14 ± 14.64 , 36.59 ± 20.90) respectively. On the other hand, Group Empowerment, Physical empowerment, and Vocational Empowerment were ranked as the lowest dimensions of the nursing empowerment assessment scale with a percent score of (28.86 ± 17.59 , 20.53 ± 18.78 , and 11.59 ± 18.47) respectively

Table 4 : shows distribution of nursing staff according to the perceptiveness of the health educator's role. It revealed that the dimension of "Perceived Nurses' Responsibility" was ranked as the highest and the first one regarding their perception of health education role with mean score percent and SD (55.79 ± 23.54), followed by the dimensions of "Implementation", "Patient assessment" and "Health educator's assessment" with mean score percent and SD (44.94 ± 18.62 , 44.92 ± 20.69 , 43.18 ± 17.53) respectively. On the other hand, table (4) revealed that the dimension of "Environment assessment" was ranked as the lowest one regarding nurses' perception of health education role with a mean score percent and SD of (26.02 ± 30.68).

Table 5: shows a correlation between work environment, nursing empowerment, and perceptiveness of the health educator role. All study variables perceived moderate levels among the study sample, that there were statistically significant positive correlations between nurse perceptiveness of health educator role, work environment, and nursing empowerment as $p < (0.001)$.

Discussion

Health education considers a key component of a nurse's job. It is considered one of the most influential healthcare interventions aiming to enhance knowledge and abilities, as well as affect attitudes and behavior, to enhance or maintain health. It is a crucial tool for enabling patients to manage their health, which strengthens their physical, mental, and social skills and enables them to control their illnesses.

The main findings of the current study revealed that; there were statistically significant differences related to all items of physical, psychological, social, administrative environment, and environmental stressors. The overall Work environment was perceived moderately by the study subjects. This result could be attributed to the presence of an unhealthy and poor physical environment (no suitable lockers, no bathroom, no room for staff rest at night), also, increased workload, a number of working hours, insufficient resources, and low salary. This result came in unity with the study of Lambrou (2014) who found that; nurses perceived their professional working environment as stressful, and this is due to common attributes favoring professional nursing practice environment. In the same line, Panunto (2013), Kassem (2015) and El-Sayed (2017) found that; all work environment items were significant and the majority of study participants had moderate work environment satisfaction. Furthermore, Shahnavaizi (2021) found that; more than half of the nurses believed that their workplace environment was favorable. Also, Salahat (2022) found that moderate level of quality in the work environment, and more than two third of nurses were dissatisfied with the vocational policy, break rooms and poor physical work conditions, and public image of nursing. The current study's findings revealed a statistically significant difference in all items of the nursing empowerment scale and overall empowerment assessment was perceived moderately by the study subjects. These results could be due to the fact that; there weren't flexibility, motivation to work, and reward for staff nurses' creativity and the unavailability of resources, and budget. Also, they did not participate in decision-making and had insufficient support from the nursing administration. These results come in congruence with Hussein (2013), Bish (2014), Shaheen (2021) found that more than fifty percent of the nursing staff had moderate empowerment levels at their work and found that all empowerment items were significant. Furthermore, Laschinger (2016),

Numminen (2016) found that; there was significance between all dimensions of the empowerment scale, and found that the nursing manager has a positive effect on staff nurse empowerment by providing a positive work environment and helping to solve work environment problems. Also, Perry (2018) found that; more than fifty percent of staff nurses do not maintain a healthy diet, and more than two-thirds percentage of them do not maintain a healthy weight.

the current study's findings revealed that the study subjects had moderate perceptiveness levels about their health education role. There were statistically significant differences related to all items of the nursing perceptiveness of the health educational role scale. This results may be attributed to the majority of nurses not considering the health educator's role as a part of nursing responsibility. Also, they are unaware of the health education process and do not communicate effectively with the patient. the results of the current study are consistent with studies of, Kelo (2013), Seyedin (2015), who concluded that; the majority of nurses know that health education is a process consisting of Four steps assessment, planning, implementation, evaluation, and documentation but they didn't apply this process effectively.

Also, Kristina (2018) found that; there were significant relations in all items of health education role and the majority of study participants had poor knowledge levels regarding effective communication, characteristics of nurses as a health educators as methods and materials, and principles of teaching, self-confident and critical thinking

There were statistically significant positive correlations between nurse perceptiveness of the health educator role, work environment, and nursing empowerment. ($p = <0.001$). There was a relation between the nurse educator role and their work environment satisfaction, and empowerment. lack of motivation and reward system, inappropriate resources, and poor work environment stated

as barriers to performing the nurse educator role.

This result is in congruence with the study Aghakhan(2012) ,Farahani (2013) , Sultani, (2013) found that; there was a positive relationship between work environment, nursing empowerment, and health educator role. nurse educators face several problems related work environment as workload, nursing shortage, conflict and lack of coherence among staff, poor supervision and lack of motivation and reward system. Also workload, job dissatisfaction, and lack of educational space, also barriers related to nursing empowerment were a conflict between staff personnel, inadequate budget, and facilities, lack of managerial support, and information deficiency of healthcare workers. Moreover, Harrabi (2016) found that there was a relationship between health education role and work environment in terms of job dissatisfaction, salary insufficient, workload, and lack of educational tools and space for educational activities. Moreover, Abo Elfotoh (2021) found that there was a positive statistically significant relationship between staff nurses' work climate and job empowerment

Conclusion

The result of the study found that there were statistically significant differences related to all items of the environmental work, nursing empowerment, and perceptiveness of health educational role. there is a positive correlation between nurses' role as health educators and both work environments and nursing empowerment.

Recommendations

According to the findings of the study, the following recommendations are made:

- Provide a supportive workplace environment that practically facilitates health education activities in terms of staffing, educational resources.
- Apply a rewarding system for doing innovative, creative work, giving them employment flexibility.

- Enhance nurses’ knowledge and skills through conducting workshops about Health education strategies, importance and barriers, and Communication skills.

Table 1: Distribution of the nursing staff according to socio demographic and occupational data. (n=123)

Socio demographic data	No.	%
Age (years)		
<25	19	15.4
25 – <35	55	44.7
35 – <45	37	30.1
45 – 55	12	9.8
Sex		
Male	0	0.0
Female	123	100.0
Marital status		
single	48	39.0
Married	67	54.5
Divorced	4	3.3
Widow	4	3.3
Years of experience		
1 – <5	26	21.1
5 – <10	38	30.9
10 – <15	15	12.2
15 – 20	44	35.8
Level of education		
Bachelor	41	33.3
Associate degree	47	38.2
Diploma	32	26.0
Post graduate	3	2.4
Department		
OR	22	17.9
Outpatient clinic	31	25.2
NICU	42	34.1
Word	28	22.8
Participation in training program on health education		
Yes	67	54.5
No	56	45.5
Number of nurses in shift		
One nurse	6	4.9
More than one nurse	117	95.1
	108	92.3
2	6	5.1
3	3	2.6
4		

Table 2: Distribution of nursing staff according to work environment

Work environment assessment scale	Total Score	Percent Score	Rank
(A) Physical environment			5
Min. – Max.	8.0 – 33.0	0.0 – 78.13	
Mean ± SD.	16.39 ± 5.40	26.22 ± 16.86	
Median	16.0	25.0	
(B) Psychological environment			4
Min. – Max.	13.0 – 53.0	0.0 – 76.92	
Mean ± SD.	29.07 ± 8.53	30.91 ± 16.40	
Median	28.0	28.85	
(C) Social environment			2
Min. – Max.	3.0 – 12.0	0.0 – 75.0	
Mean ± SD.	7.89 ± 2.45	40.72 ± 20.45	
Median	8.0	41.67	
(D) Administrative environment			1
Min. – Max.	18.0 – 75.0	5.0 – 100.0	
Mean ± SD.	41.67 ± 11.0	44.44 ± 18.33	
Median	41.0	43.33	
(E) Environment stressors			3
Min. – Max.	14.0 – 52.0	0.0 – 67.86	
Mean ± SD.	31.46 ± 9.09	31.17 ± 16.23	
Median	30.0	28.57	
Overall Work environment			
Min. – Max.	64.0 – 171.0	10.56 – 70.0	
Mean ± SD.	110.08 ± 23.45	36.16 ± 13.03	
Median	111.0	36.67	

Table 3: : Distribution of the nursing staff according to nursing Empowerment assessment scale.

Nursing Empowerment assessment scale	Total Score	Percent Score	Rank
Assess nurse perception toward her self Min. – Max. Mean ± SD. Median	11.0 – 37.0 25.61 ± 5.27 26.0	5.56 – 77.78 46.14 ± 14.64 47.22	2
Empowerment assessment Min. – Max. Mean ± SD. Median	8.0 – 34.0 19.71 ± 6.69 20.0	0.0 – 81.25 36.59 ± 20.90 37.50	3
Physical empowerment Min. – Max. Mean ± SD. Median	7.0 – 27.0 12.75 ± 5.26 12.0	0.0 – 71.43 20.53 ± 18.78 17.86	7
Psychological empowerment Min. – Max. Mean ± SD. Median	7.0 – 35.0 22.54 ± 5.36 24.0	0.0 – 100.0 55.49 ± 19.13 60.71	1
Social empowerment Min. – Max. Mean ± SD. Median	2.0 – 9.0 4.77 ± 2.0 5.0	0.0 – 87.50 34.65 ± 25.04 37.50	4
Spiritual empowerment Min. – Max. Mean ± SD. Median	3.0 – 13.0 6.55 ± 3.04 7.0	0.0 – 83.33 29.61 ± 25.34 33.33	5
Vocational Empowerment Min. – Max. Mean ± SD. Median	1.0 – 5.0 1.46 ± 0.74 1.0	0.0 – 100.0 11.59 ± 18.47 0.0	8
Group Empowerment Min. – Max. Mean ± SD. Median	5.0 – 21.0 10.77 ± 3.52 11.0	0.0 – 80.0 28.86 ± 17.59 30.0	6
Overall Nursing Empowerment assessment Min. – Max. Mean ± SD. Median	54.0 – 161.0 104.16 ± 24.47 110.0	7.14 – 70.83 37.0 ± 14.57 40.48	

Table 4: Distribution of the nursing staff according to perceptiveness of health education role Scale (n= 123)

Nurses' perceptiveness toward their health education Role Scale	Total Score	Percent Score	Rank
Perceived Nurses' Responsibility Min. – Max. Mean ± SD. Median	2.0 – 10.0 6.46 ± 1.88 7.0	0.0 – 100.0 55.79 ± 23.54 62.50	1
Patient assessment Min. – Max. Mean ± SD. Median	5.0 – 25.0 13.98 ± 4.14 14.0	0.0 – 100.0 44.92 ± 20.69 45.0	3
Environment assessment Min. – Max. Mean ± SD. Median	3.0 – 15.0 6.12 ± 3.68 5.0	0.0 – 100.0 26.02 ± 30.68 16.67	8
Health educator's assessment Min. – Max. Mean ± SD. Median	12.0 – 43.0 24.54 ± 6.31 24.0	8.33 – 94.44 43.18 ± 17.53 41.67	4
Content Min. – Max. Mean ± SD. Median	2.0 – 10.0 4.83 ± 2.25 5.0	0.0 – 100.0 35.37 ± 28.17 37.50	6
Planning Min. – Max. Mean ± SD. Median	7.0 – 33.0 16.44 ± 5.86 16.0	0.0 – 92.86 33.71 ± 20.94 32.14	7
Implementation Min. – Max. Mean ± SD. Median	9.0 – 44.0 25.18 ± 6.70 26.0	0.0 – 97.22 44.94 ± 18.62 47.22	2
Evaluation Min. – Max. Mean ± SD. Median	2.0 – 10.0 5.01 ± 1.87 5.0	0.0 – 100.0 37.60 ± 23.39 37.50	5
Overall Nurses' perceptiveness Min. – Max. Mean ± SD. Median	46.0 – 188.0 102.57 ± 26.19 103.0	4.49 – 95.51 40.75 ± 16.79 41.03	

Table5: Correlation between work environment, nursing empowerment and perceptiveness of health educator role. (n=123)

	Nurses' perceptiveness toward their health education Role Scale	
	r	p
Work environment assessment scale	0.566*	<0.001*
Nursing Empowerment assessment scale	0.473*	<0.001*

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