Relation between Head Nurses' Resilience Level
Skill and Their Empowering Behavior

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Abstract

Background: Head nurses in specialty areas as the intensive care unit are susceptible to work-place stress due to facing many challenges, that make head nurses have to create work place that is optimal for the provision of nursing care by motivating, resilience and empowering their nurses. Therefore, it is important for head nurse to be resilient and able to show the leader behaviors that empowers their staff nurses. **Aim:** This study aimed to assess the relation between head nurses' resilience level skill and their empowering behavior. **Subject and method:** Descriptive correlational research design used in the study. The study was conducted at Tanta University Hospitals at different Intensive Care Units. **The study subject**: Consisted of 40 head nurses and 250 staff nurses working in the same setting. **Tools**: Two tools were used to collect the data. **Tool I**: Head Nurses' Resilience Levels Skills Structured Questionnaire. **Tool II**: Staff Nurses' Perception Regarding Head Nurses' Empowering Behavior Questionnaire. **Results:** Around two thirds of head nurses had high level of overall resilience skills and the staff nurses reported that near to half of their head nurses had high level of overall empowering behavior. **Conclusion:** There were statistically positive correlations between overall head nurses' resilience skills and staff nurses' perception regarding head nurses' empowering behavior. **Recommendations:** Nursing organization reinforce head nurses' resilience skills and keep the progress of empowering behavior, through emphasize on using coaching empowering behavior as an effective approach to support head nurses in a variety of positions. Also, building resilience skills and in head nurses through attending workshops and in-service training which improve head nurses' self-efficacy and improve patient care outcomes.So, it is important to introduce resilience training in the nursing curricula to empower nurses and equip them to handle the adverse working conditions they will experience in the nursing profession.

Keywords: Empowering behavior, Head nurses, Intensive care units, Resilience.

Introduction

Intensive care units' providers at all levels have to face much of pressures and difficult situations when provide daily care for critically ill patients [1]. Head nurses in their position deal with adversities in their critical working environment when practice management in planning, organization, staffing and leading that make them feeling demotivated, angry and dissatisfied that lead to select to leave job and hinder them to perform effectively [2].

Head nurses facing hardships, such as a deficiency of appreciation, poor reward, an insecure environment, a deficit in credit, work overload, role conflicts, lack of self-care, poor job-related interpersonal relationships and spread of new technology can be negative for them that need to be resilient[3]. Resilience enables head nurses to cope with their work environment challenges, maintain healthy and stable psychological functioning. Therefore resilience as coping mechanisms is considered energetic for managing a work-life balance, especially for head nurses [4].

Resilience refers to having achieved desirable consequences or qualities in the face of adversity or under adverse conditions;it is the capacity of dealing with the difficulties of life and leadership with enthusiasm, it including the ability to positively handle adversity[5].Furthermore resilience gives head nurses the strength to quickly recover and deal with difficulties and to resist them with flexibility and strength. It can be identified as rising above to overcome adversity; adaptation and adjustment; and the ability to bounce back [6.7].

Resilience skills consist of five dimensions including purposeful life, perseverance, self-reliance, existential aloneness and equanimity. Purposeful life or meaningfulness means that head nurses has realization that their life has a purpose and appreciation to live and have a reason that motivates and empower their nurses at work [8]. Perseverance or the act of perseverance even though adversity gets an enthusiasm to continue the struggle to reconstruct head nurses' life and remain involved in the intermediate of adversity. It designates the head nurse's ability to keep working despite obstacles[9].

Moreover self-reliance it is a belief in oneself and in one's capabilities. Head nurses who are self-reliant believe in themselves they spot and depend on their special strengths and abilities to support and guide their actions and staff. Existential aloneness is the realization that each head nurse is unique and can share some experiences to others also they can face that while some experiences alone

because they are autonomous, have a unique perspective in life, and place great value on their personal freedom[10].

Finally, equanimity is the balanced perception of life and experiences of head nurses and might be viewed as sitting free and regulating the exciting responses to adversity. It described as capability to "bend with the wind," to be flexible and accepting of the unalterable which controls responses to adversity. Head nurses with equanimity are able to see the humorous side of every situation[11,9].

Constructive head nurses' qualities and strong facilitative leadership behavior are meaningfully important to producing an environment that increases job satisfaction and nurses' committed to stay. Therefore, the head nurse necessity develops resilience and empowering behavior to achieve productive goals. Head nurses' empowering behavior can be a powerful tool in this concern and increase efficiency and effectiveness of nurses' work[12].

Empowering behavior is process which head nurse share power to improve their nurses' motivation and involvement in their work by creating the environment that makes possible to share the power with nurses through drawing the importance of their role[13].Empowering behavior gives head nurses the opportunity to decision-making autonomy, showing trust in nurses

potential and gives them freedom to action and perform according to the current situation[14].

Head nurses' empowering behavior include five dimensions were leading by example, coaching, showing concern, informing and participative decision making. Leading by example refers to a set of behaviors that show the head nurse's commitment to her own work as well as the work of her team members. Coaching refers to a set of behaviors that head nurses educate their team members and help them to become self-reliant [15,12].

Showing concern refers to a set of behaviors that promote and encouraging high performance by showing a regard, support and appreciates their team members. Informing refers to the head nurse's dissemination of organization information such as vision, mission and philosophy as well as other important information. Also, participative decision making refers to a head nurse use team membersng high performance by showing a rebution in making decisions[16.17].

Significance of study:

Head nurses work in a context of high level of pressure, uncertainty and rapid changes accompanied by the challenges in intensive care units .So, head nurses need to be resilient to cope. Resilience is an essential element for practice in a chaotic practice

world, and that new skills on emerging challenges are needed to solve problems[9]. They further state that resilienthead nurses are those who can transform a disastrous day into a growth experience and then move forward in practice, rather than seek a new career.Moreover, given highly pressure, uncertainty, rapid change and face unprecedented challenges on daily basis[18].The empowering leader behavior of the head nurse forms the vehicle through which management strategies, management practice, tools and techniques, personality attributes and style come together to produce effective outcomes in the organization. Nurses' attitudes and work performance are affected by the leader behavior of head nurses. Head nurses must develop empowering skills, resilience, healthy relationships and conflict management skills while achieving productive goals. Where, resilient leaders empower staff members by engaging them in considering potential obstacles for moving toward the new reality [12,13].

Aim of the study

Assess the relation between head nurses' resilience level skill and their empowering behavior.

Research questions

What are the levels of head nurses' resilience levels skills?

1. What are the levels of head nurses' empowering behavior as perceived bystaff nurses?

2. What is the relation between head nurses' resilience skills and their empowering behavior?

Subject and method

Study design

A Descriptive Correlational research study design was used in present study. It is a scientific method which involves describing the behavior of the subjects without influencing it at any way [113].

Setting

The present study was conducted at intensive care units at Tanta University Hospitals including, Tanta Main University and Emergency Hospitals. The setting is a specialized section where comprehensive and continuous care is provided for critical ill patients who can benefit from treatment [19].where included Emergency Anesthesia Care Unit ,Emergency Medical Care Unit, Neonates Care Unit, Pediatric Care Unit, Neurological Care Unit, Cardiac Care Unit, Ophthalmology Anesthesia Care Unit , Chest Care Unit and General Medical Care Unit.

Subjects

The study subjects was consisted of all head nurses (N=40) and representative

sample of staff nurses (N= 250) was working in the same settingand available at time of data collection.

Tools

The data of the study collected using two tools:

Tool 1: Head Nurses' Resilience Levels Skills Structured Questionnaire. This tool was developed by Wagnild (2009) [20]and modified by the researcher and guided by recent related literature [9,10] to assess levels of resiliency skills for head nurse. It consisted of two parts:

Part one: Characteristics of head nurses such as age, years of experience, unites marital status and number of children.

Part two: Head Nurses' Resilience Levels Skills; it consisted of (27) items classified into five dimensions;

1. Purposeful life included 4 items.
2. Perseverance included 5 items.
3. Self-reliance included5 items.
4. Existential aloneness included 8 items.
5. Equanimity included 5 items.

Scoring system:

Head nurses' responses were measured on three points Likert Scale ranged from 3-1 where (3) always done to (1) not done. The levels of head nurses' resilience skills score was statistically calculated by summing scores of all dimensions based on cut of point as following:

- High Level of resilience skills >75% .

- Moderate level of resilience skills 60% - 75% .
- Low level of resilience skills <60%.

Tool II: Staff Nurses' Perception Regarding Head Nurses' Empowering Behavior Questionnaire.

This tool was developed by Arnold et al. (2000) [21]and modified by the researcher and other recent related literature [13-15, 22]to assess the empowering behavior of head nurses as perceived by staff nurses. It consisted of two parts as follow

Part one: Characteristics of staff nurses such as age, years of experience, unites marital status and qualifications.

Part two: Empowering Behavior of Head Nurses; this part consisted of 38 items classified into five dimensions:

1. Leading by example included 5 items
2. Coaching included 11 items.
3. Showing concern and interacting with the team included 10 items.
4. Informing included 6 items.
5. Participative decision-making included 6 items.

Scoring system:

Staff nurses' responses were measured on a five points Likert Scale ranging from 5-1 where (5) always to (1) never response scale. This concluded to three points:Always = always +usually & Never =rarely + never. The level of staff nurses' perception regarding head nurses' empowering behavior were statistically

calculated by summing of all dimensionsbased oncut of point as following:.

- High level of empowering behavior >75%.
- Moderate level of empowering behavior 60% - 75% .
- Low level of empowering behavior <60%.

Method

1. Official permission to conduct the study was obtained from administrator of Tanta University Main Hospital and was submitted to the responsible authorities of the selected setting.

2. Ethical consideration:

a) Approval of ethical committee was obtained of Faculty of Nursing

b) Nature of the study was not causing any harm or pain to the nursing staff.

c) Nurses consent to participate in the study was obtained after informed them about the privacy of information, nature of the study, their right to withdraw and confidentiality of their data.

d) Confidentiality and privacy were taken in to construction regarding data collection.

3. Tools I and II were translated into Arabic and presented to a jury of five experts in the area of specialty to check their content validity and clarity of questionnaire. The experts were; two Assistant Professors and one Lecturer of Nursing Services Administration and two Assistant Professors of Psychiatric Mental Health Nursing from Faculty of Nursing , Tanta University.

-The face validity value of tool (I) part 2: Head nurses' resilience levels skills was 98.89%, tool (II) part 2: Empowering behavior of head nurses was 99.7%.

4. A pilot study was carried out on a sample (10%) of the subject (n=29) nurses, and they excluded from the main study sample during the actual collection of data. The pilot study was done to test clarity, sequence of items, applicability, and relevance of the questions and to determine the needed time to complete the questionnaire. The estimated time needed to complete the questionnaire items from head nurses and their staff nurses was 15-20 minutes.

5. Reliability of tools was tested using Cronbach Alpha Coefficient test. Reliability of tool (I) part (2) head nurses' resilience levels skills = 0.766 and reliability of tool (II) part (2) Empowering behavior of head nurses =0.987.

Data collection phase

The data were collected from head nurses and their staff nurses by the researcher. The researcher met the respondents' staff nurses in different areas under study during working hours to distribute the

questionnaire. The subjects recorded the answer in the presence of the researcher to ascertain that all questions were answered. The data was collected over period of two months started from March 2020 until June 2020 .

Statistical analysis

The collected data were fed to the computer, organized, tabulated and statistically analyzed using IBM SPSS software package version 20.0. (Armonk, NY: IBM Corp) Qualitative data were described using number and percent. Quantitative data were described using range (minimum and maximum), mean and standard deviation. Significance of the obtained results was judged at the 5% level. The correlation between two variables was calculated using Pearson's correlation coefficient. The level of significant was adopted at p<0.05.

Results

Table (1): Shows percentage distribution of head nurses' characteristics. It was observed in this table that all head nurses ware female (100.0%). The age of head nurses were ranged between 30 to 44 years old and more than one third (37.5%) had age (35-<40) with mean (36.67± 4.07). Head nurses' years of experience ranged between 6.0 – 20.0 year, which represent more than one third (42.5%) of head nurses had years of experience more than 15 years

with mean (12.68± 4.07).Additionally, the majority (97.5 %) of head nurses were married, and more than half (52.5%) of them had more than three children and only 2.5% of them did not had children with mean (2.53± 0.85).Regarding their departments, they was distributed in nine departments, 20.0% of them was distributed in Cardiac Care Unit and 15.0% was distributed equally at three departments including Emergency Medical Care Unit, Neurological Care Unit and General Medical Care Unit.

Table (2): Represents percentage distribution of staff nurses' characteristics. It was noticed that the majority (91.6%) of staff nurses ware female, the age of staff nurses were ranged between 22 to 45 years old, where more than forty (44.8%) of staff nurses less than 30 years old with mean age (32.24± 6.28) .More than one third (36.0%) of staff nurses had 5-<10 years of experiences and 28.8% had ≥15 years of experience with mean (10.83 ± 7.06) .

Additionally, high percent (79.2%) of staff nurses were married, and more than sixty (64.8%) of them had Technical Nursing degree, 26.0% of them had Bachelor Nursing degree and only 9.2% of them had Diploma Nursing degree. Regarding their departments the table shows 20.4 % and 20.0% of staff nurses was distributed in Emergency Medical Care Unit and

Neonates Care Unit and 14.0% of them were distributed in Emergency Anesthesia Care Unit.

Figure (1): Demonstrates overall head nurses' resilience levels skills. This figure revealed that around two thirds (62.5%) of head nurses had high level of overall resilience skills, while, minority (12.5%) of them had low level of overall resilience skills.

Table (3): Represents head nurses' resilience levels skills. It was clear that the majority (80.0%) of head nurses had high level about purposeful life dimension. Also, high percent (75.0% and 70.0%) of them had high level about existential aloneness and self-reliance dimensions respectively. Also almost two thirds (65.0%) of head nurses had high level about perseverance dimension and more than half (55.0%) of them had high level about equanimity dimensions.

Figure (2): Demonstrates overall staff nurses' perception regarding level of head nurses' empowering behavior. As evident from figure, near to half (45.2%) of the staff nurses reported that their head nurses had high level of overall empowering behavior. While, more than one fifth (22.8%) of them reported that their head nurses had moderate level of overall empowering behavior as perceived by staff nurses.

Table (4): Displays staff nurses' perception regarding level of head nurses' empowering behavior. This table clears that more than sixty (62.8%) of staff nurses reported that their head nurses had high level of leading by example of empowering behavior. More than half (53.2%) of them perceived that their head nurses had high level of showing concern and interacting with their team of empowering behavior and more than two fifths (46.0%) of staff nurses reported also that their head nurses had high level of participative decision-making of empowering behavior. While, half (50.0%) of staff nurses perceived that their head nurses had moderate level of informing of empowering behavior. Also more than half (50.8%) of staff nurses reported that their head nurses had low level of coaching of empowering behavior.

Table (5): Represents correlation between head nurses' resilience levels skills and staff nurses' perception regarding levels of head nurses' empowering behavior. As noticed from this table that all dimension of head nurses' resilience levels skills had statistically significant correlation with all dimension of head nurses' empowering behavior as perceived by their staff nurses and r ranged between 0.630 and 0.894 at p = (<0.001).

Table (6): Represents correlation between overall head nurses' resilience skills and overall staff nurses' perception regarding head nurses' empowering behavior. The table observed that positive significant statistically correlation was found between overall head nurses' resilience skills and staff nurses' perception regarding head nurses' empowering behavior (r=0.865) at (p<0.001).

Table (1): Head nurses' socio- demographic characteristics (n = 40)

Socio- demographic characteristics	Head nurses	
	No	%
Sex		
Female	40	100.0
Male	0	0%
Age (years)		
<35	13	32.5
35-<40	15	37.5
≥40	12	30.0
Min. – Max.	**30.0 – 44.0**	
Mean ± SD.	**36.67 ± 4.07**	
Years of experience		
<10	10	25.0
10-<15	13	32.5
≥15	17	42.5
Min. – Max.	**6.0 – 20.0**	
Mean ± SD.	**12.68 ± 4.07**	
Marital status		
Single	1	2.5
Married	39	97.5
Number of Children		
0	1	2.5
1	2	5.0
2	16	40.0
3+	21	52.5
Min. – Max.	**0.0 – 4.0**	
Mean ± SD.	**2.53 ± 0.85**	
Department		
Emergency Anesthesia Care Unit	3	7.5
Emergency Medical Care Unit	6	15.0
Neonates Care Unit	3	7.5
Pediatric Care Unit	4	10.0
Neurological Care Unit	6	15.0
Cardiac Care Unit	8	20.0
Ophthalmology Anesthesia Care Unit	2	5.0
Chest Care Unit	2	5.0
General Medical Care Unit	6	15.0

Table (2): staff nurses' socio- demographic characteristics (n = 250)

| Socio- demographic characteristics	Staff nurses	
	No	%
Sex		
Male	21	8.4
Female	229	91.6
Age (years)		
<30	112	44.8
30-40	91	36.4
≥40	47	18.8
Min. – Max.	**22.0 – 45.0**	
Mean ± SD.	**32.24 ± 6.28**	
Years of experience		
<5	50	20.0
5-<10	90	36.0
10-<15	38	15.2
≥15	72	28.8
Min. – Max.	**1.0 – 27.0**	
Mean ± SD.	**10.83 ± 7.06**	
Marital status		
Single	42	16.8
Married	198	79.2
Divorced	5	2.0
Widowed	5	2.0
Qualification		
Bachelor of nursing degree	65	26.0
Technical of nursing degree	162	64.8
Diploma of nursing degree	23	9.2
Department		
Emergency Anesthesia Care Unit	35	14.0
Emergency Medical Care Unit	51	20.4
Neonates Care Unit	50	20.0
Pediatric Care Unit	16	6.4
Neurological Care Unit	23	9.2
Cardiac Care Unit	16	6.4
Ophthalmology Anesthesia Care Unit	29	11.6
Chest Care Unit	9	3.6
General Medical Care Unit	21	8.4
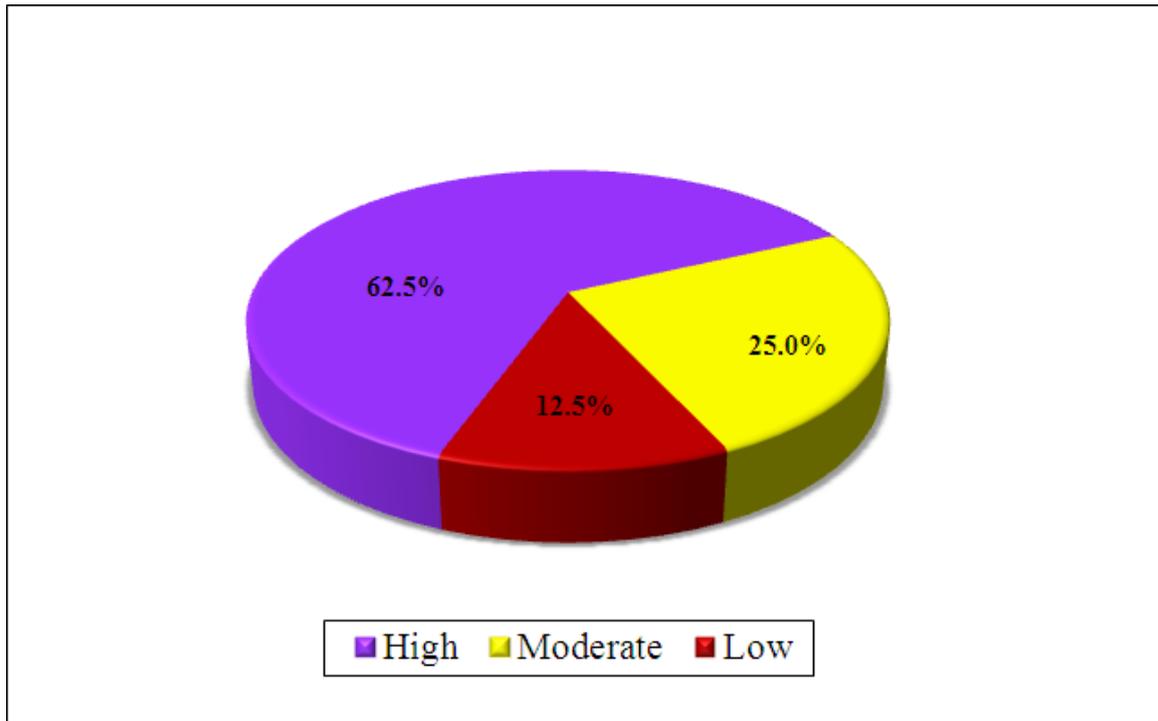
Figure (1): Overall head nurses' resilience levels skills (n= 40).

Table (3):Head nurses' resilience levels skills (n = 40).

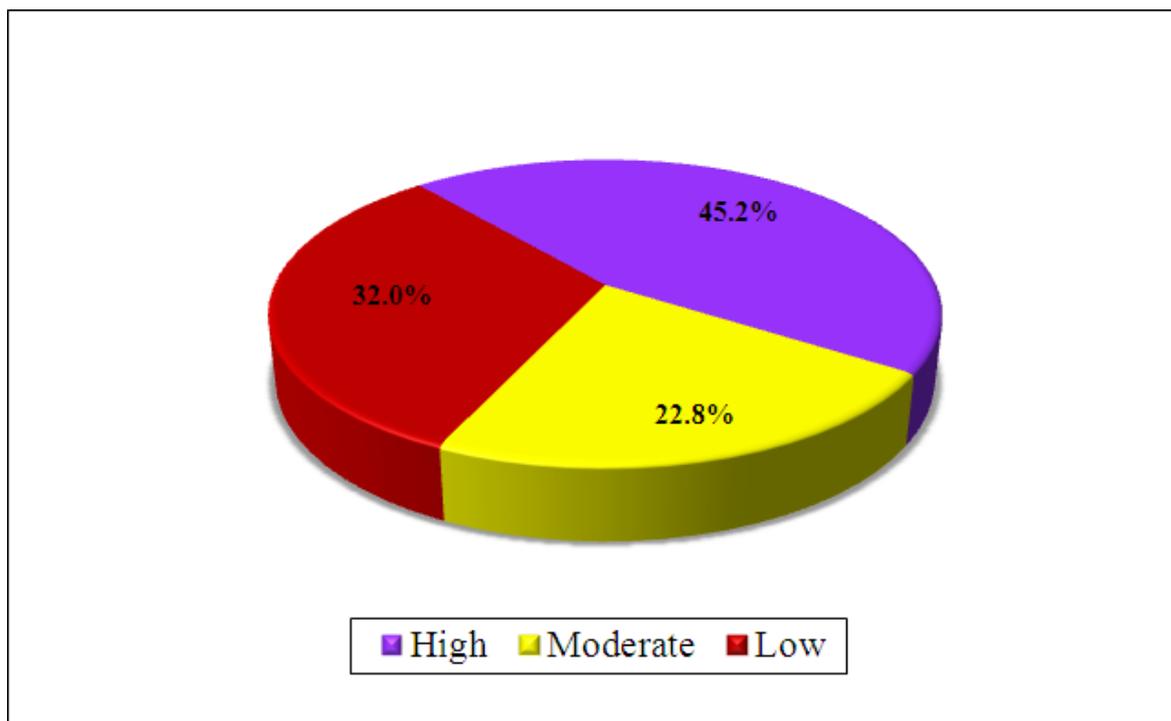| Resilience skills dimensions | Head nurses' response levels | | | | | |
| | High | | Moderate | | Low | |
	No	%	No	%	No	%
Purposeful life	32	80.0	2	5.0	6	15.0
Perseverance	26	65.0	6	15.0	8	20.0
Self-reliance	28	70.0	4	10.0	8	20.0
Existential aloneness	30	75.0	8	20.0	2	5.0
Equanimity	22	55.0	15	37.5	3	7.5
Total	**25**	**62.5**	**10**	**25.0**	**5**	**12.5**

Figure (2): Overall staff nurses' perception regarding level of head nurses' empowering behavior (n = 250).

Table (4): Staff nurses' perception regarding levels of head nurses' empowering behavior (n = 250)

Head nurses' empowering behavior dimensions	Level of empowering behavior					
	High		Moderate		Low	
	No	%	No	%	No	%
Leading by example	157	62.8	74	29.6	19	7.6
Coaching	114	45.6	9	3.6	127	50.8
Showing concern and interacting with their team	133	53.2	37	14.8	80	32.0
Informing	121	48.4	125	50.0	4	1.6
Participative decision-making	115	46.0	55	22.0	80	32.0
Total	**113**	**45.2**	**57**	**22.8**	**80**	**32.0**

Table (5): Correlation between head nurses' resilience levels skills and staff nurses' perception regarding levels of head nurses' empowering behavior

Staff nurses' perception regarding levels of head nurses' empowering behavior		Head nurses' resilience levels skills					
		Purposeful life	Perseverance	Self-reliance	Existential aloneness	Equanimity	Overall Resilience
Leading by example	r	0.817*	0.856*	0.846*	0.851*	0.764*	0.873*
	p	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
Coaching	r	0.703*	0.750*	0.739*	0.760*	0.674*	0.767*
	p	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
Showing concern and interacting with their team	r	0.859*	0.894*	0.885*	0.873*	0.788*	0.907*
	p	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
Informing	r	0.653*	0.701*	0.689*	0.735*	0.630*	0.723*
	p	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
Participative decision-making	r	0.862*	0.889*	0.882*	0.863*	0.768*	0.900*
	p	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
Overall Empowering behavior	r	0.810*	0.850*	0.840*	0.844*	0.752*	0.865*
	p	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*

r: Pearson coefficient

*: Statistically significant at $p \leq 0.05$

Table (6): Correlation between overall head nurses' resilience skills and overall staff nurses' perception regarding head nurses' empowering behavior

	Overall head nurses' resilience skills	
	R	P
Overall staff nurses' perception regarding head nurses' empowering behavior	0.865*	<0.001*

r: Pearson coefficient
*: Statistically significant at $p \leq 0.05$.

Discussion

Head nurses are confronted with workplace adversity including organizational changes, profound technology, staff shortages and restructuring especially in intensive care units. These changes affect the organization design, flexibility improvement of quality and efficiency, as well as, the complexity of work environment [23]. So, head nurse need resilience skills to face these challenges. The resilient head nurses not only have the ability to survive in difficulty and adversity but are able to display behavior that will enhance staff nurses' ability to succeed and born a special type of leader called the empowerment leader behavior which create work environments are associated with positive nurse outcomes and organizational commitment [13].

The present study results revealed that around two thirds of head nurses had high level of overall resilience skills .This study result may interpreted by the most of head nurses had age above 35 years and had years of experience more than 15 years. Additionally, the majority of head nurses were married and had children. Which with older age lead to more knowledge, situations, experience and ability to cope are acquired through interaction with work environment, therefore head nurses' resilience are built and increased.

Along with the present study finding, **Surzykiewicz et al. (2019)**[24] and **Zheng et al. (2017)**[25] who found that head nurses with older age , more years of experience with higher education levels which lead to development of interaction with the environment that produce more resilience and increased job satisfaction of head nurses. Moreover **Ang et al.(2018)**[26] and **Kutluturkan et al.(2016)**[27] added that being married or having been married in the past and having children make better personal accomplishments , prevent burnout and increase coping mechanism with any difficult of life .

On contrary this results has been criticized by **Taylor (2019)**[28], **Foster et al. (2018)**[29], **Virkstis et al.(2018)**[30] and **Traynor (2017)**[31] they stated that resilience is not necessarily dependent on personal characteristics of head nurses as age, experience and education. Rather, resilience appears to be predicted by other attributes as intrapersonal characteristics related to resilience in head nurses included hope, self-efficacy, coping, control, competence, flexibility, adaptability, hardiness, sense of coherence, skill recognition and non-deficiency focusing.

The present study results also shown that the majority of staff nurses perceived that near to half of their head nurses had high level of empowering behavior. This study clarified that staff nurses at age ranged between 22 to 45 years old and had until 15 years and more of experience, which reflect the perception of staff nurses that their head nurses had high level of empowering leader behavior based on long time of working and interaction with them. Also, nurses perceived that their head nurses demonstrated empowering behaviors which encourage and provide frequent opportunities to develop new skills in their staff through keep to be role model for them, provide coaching and training, showing concern and interacting with their staff nurses, informing them about purpose and policies of organization and participate their staff nurses in decision-making related to their work.

Along with the present study **Oducado (2019)**[32], **Bukhari et al. (2018)**[33], and **Mudallal et al.(2017)** [34]who confirmed this results in their studies which staff nurses were perceived their head nurses had high level of empowering behavior and reported their feeling of empowering by their head nurses based on their interaction with them. These results were consistent with the findings of **Cziraki et al. (2015)**[35]who stated that feeling of high

level of empowering behavior based on head nurses' interactions with the patient, physicians, and working with their staff nurses as a team. Despite the several positive benefits of empowerment, but there was studies reveal that head nurses are still not sufficiently empower their staff nurses and had a low level of empowerment among staff nurses as in the Philippines, Canada and United States were not fully empowered also head nurses not displaying the ideal level of empowerment is central[32].

As observed in this study, there was correlation between head nurses' resilience levels skills and staff nurses' perception regarding levels of head nurses' empowering behavior. This study result might be interpreted by, there was statistically significant difference between socio- demographic characteristics of head nurses and their resilience levels skills in their department and there was statistically significant difference between characteristics of staff nurses and empowering leader behaviors also in their department, because of Intensive care unit always had tension charged atmosphere resulting from exposure to end-of-life issues, extra care and traumatic injuries, which resilience enables head nurses to thrive in the face of adversity so, it

considered the important factor to face a traumatic experience.

In addition, resilient head nurses able to create an empowering work environment through their leader behaviors, which provide their staff nurses caring, resources and organizational support, involve them in any decision and provide needed information ,that create empowered Intensive Care Units and also, empowered staff nurses and positive health outcomes.

This showed in the present results that head nurses at Emergency Medical Care Unit had high level of resilience skills. Also, staff nurses at the same department perceived that their head nurses had high level of empowering behavior. While, head nurses at Neonates Care Unit, Neurological Care Unit and Chest Care Unit had low levels of resilience skills and at the same department staff nurses perceived that their head nurses had low level of empowering behavior, this means that head nurses with high resilience predispose to have higher empowering leader behaviors than head nurses with low resilience. Therefore there was positive correlation between the level of resilience and empowering leader behavior of head nurse in the Tanta University Hospitals at different Intensive Care Units.

Along with the present findings, **Suryaningtyas (2019)**[36], Tea **et al.** **(2018)**[9]and **Park et al.(2017)**[37]. They confirmed this results by discovered significant correlations between empowering leader behavior and resilience, which head nurses who had the higher level of empowering leader behaviors, also had higher ability and skill to be resilient and overcome challenges. Likewise **Besuner (2017)**[38] who found statistically significant positive associations among self-efficacy, psychological empowerment, personal resilience, and organizational resilience.

As well as **Zehir** and **Narcıkara (2016)**[39]found that a meaningful relationship between authentic leadership and the resilience which authentic leaders can influence follower performance and empower staff nurses through demonstrate leading by example behaviors and commitment to his or her work. As well as **Westcott (2016)**[40]who exposed linking between coaching empowering behavior and resilience, that described coaching as a means for developing resilience and enhancing coping strategy due to improved support given to head nurses that increased self-confidence and self-efficacy then turn in improved support and motivation can give for their staff nurses .

According to **Cziraki et al. (2020)**[41]who stated that empowering leaders involve staff in decision making, share power,

delegate authority and convey confidence in staff nurses. All thisproduce ability to handle challenging work and adapt with any difficult situations. Furthermore **Regan et al. (2016)**[42]who stated that professional practice environments help head nurses to control over practice, involvement of their staff in decisions and enhance relationships with team members which strengthen the resilience and empowering leader behaviors relationship. Moreover, **Besuner (2017)**[38]found positive associations between empowering leader's attributes including idealized influence, intellectual stimulation, individualized consideration and inspirational motivation with organizational and personal resilience , which head nurses who had empowering leader's attributes able to use intellectual stimulation and individualized consideration to cope and adapt when faced with complex or challenging situations .

From above discussion observed that head nurse suffer from sever difficult and hardship during their working at intensive care units [18]. So, resilience in nursing is vital in enabling head nurses to cope or manage with ICUs stress and pressures during their work and empowering their staff nurses to make positive change and achieve the goals of the hospital that can

influence nurses' ability to practice in a professional manner, ensuring excellent patient care quality and positive organizational outcomes [5,13].

Conclusion

Based on the finding of the present study it was concluded that:

Around two thirds of head nurses had high level of overall resilience skills. The majority of them had high level of purposeful life, existential aloneness, self-reliance, perseverance and equanimity skills. Regarding to head nurses' empowering behavior it was showed that near to half of staff nurses perceived that their head nurses had high level of empowering behavior. While, half of staff nurses perceived that their head nurses had moderate level of informing of empowering behavior. Positive correlation was detected between overall head nurses' resilience skills and staff nurses' perception regarding head nurses' empowering behavior.

Recommendations

Based on the findings of the current study, the following recommendations can be suggested:

For organization:

1. Prime importance for follow up to reinforce head nurses' resilience skills and keep the progress of empowering leader behaviors

2. Reforming hospital's policies to emphasize on using coaching empowering behavior as an effective approach to support head nurses in a variety of positions.

3. Supporting implementation of coaching by enough resource, preparation and time that help in building relationships, training program for head nurses and communicating effectively.

For head nurses:

1. Building resilience skills through attending workshops and in-service training on strengthening resilience to be able to handle adverse working conditions in the intensive care units.

2. Reassuring team attitude that encourage cooperation, empowerment, participative decision making and learning.

3. Facilitating and empowering nursing staff development by providing periodic feedback, resources, informing about rules , expectations, policies or decisions and make note included any changes

For nursing education:

1. Introducing resilience training in the nursing curricula to empower nurses and equip them to handle the adverse working conditions they will experience in the nursing profession.

2. Focusing on stressing the importance of empowering leader behavior and the factors relating to it, especially when educating on models of leadership.

Further research:

1. Identifying the factors that inhibit head nurses from conducting successful performance of coaching empowering behavior within an organizational context.

2. Specify new forms and models of coaching empowering behavior that can effective within the head nurses-nursing staff relationship.

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