Staff Nurses' Performance Obstacles and Quality of Work Life at Benha University Hospital.

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Abstract
Background: *There are many performance obstacles related to work environment, organization, tools and tasks that hinder staff nurses from accomplishing their tasks, these performance obstacles increase their workload, decrease their resting time and reduce their satisfaction that contribute to nursing shortage consequently affect their quality of work life.* ***Aim:*** *The current study aimed to identify staff nurses' performance obstacles and quality of work life at Benha University Hospital.* ***Research Design:*** *A descriptive design was used.* ***Setting****: The study was conducted at Benha University Hospital in critical care units.* ***Sample:*** *Convenience sample included 119 staff nurses who were available in predetermined setting during the time of data collection and agreed to participate in this study.* ***Data collection:*** *Data was collected by using two tools: performance obstacles questionnaire and quality of work life questionnaire.* ***Results:*** *The present study revealed that (63%) of studied staff nurses reported high performance obstacles and (73.1%) of studied staff nurses had low level of quality of work life and there was a high statistical significant correlation between total performance obstacles of studied staff nurses and their quality of work life.* ***Recommendations:*** *Nurses should be able to determine their performance obstacles and inform regularly the hospital administration that should have interventions to overcome performance obstacles especially in critical care units. Improving the quality of work life is important to improve both individual and organizational performance. Further research about the factors that improve quality of work life for nurses should be conducted.*
Keywords: *Performance obstacles, Quality of work life, Staff nurses.*

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I. INTRODUCTION

Role of nurses as care giver for patients in hospitals is vital, especially the staff nurses who work in the critical care units because they take care of patients who considered critically ill and have life risk. Staff nurses deal with difficulties related to the technical complexity of patient care. Critical care nurses have a significant role in recovery of critically ill patient so they must perform procedures efficiently and accurately to help critically ill patients in their recovery [1].Critical care nurses plan, coordinate and implement care with the health care team to meet the physical, psychosocial, cultural and spiritual needs of the patients. The critical care nurse must balance the need for the highly technological environment with the need for safety, privacy, dignity and comfort of the patients [2].

Nurses' performance means the actual conduct of activities to meet responsibilities according to standards. It is an indication of what is done and how well it is done and focusing attention on the total behavior of nurses and the use of specialized knowledge and skills that acquired through training as well as integration of practice [3].The Performance obstacles can be defined as the work factors in the work setting that increase their workload beyond what is expected that negatively affect their quality of work life [4].

Performance obstacles may be related to one or more elements of the work system, such as those related to tasks which include, dealing with many professional issues, and performance obstacles related to tools as unavailability of necessary equipment in a timely manner were considered among the categories of performance obstacles that prevent staff nurses from accomplishing their tasks [5].

Quality of work life (QWL) is a comprehensive, department wide program designated to improve nurses' satisfaction, strengthening workplace learning [6].QWL focuses on the degree to which registered nurses are able to satisfy important personal needs through their experiences in the work organization, while achieving the organization's goals to make meaningful contributions to their organization [7]. Quality of work life provides

nurses with motivation and the opportunity to perform well. High QWL help organizations to achieve better performance and become highly competitive [8].

Aim of the Study:
The current study aimed to identify staff nurses' performance obstacles and quality of work life at Benha University Hospital

Research Objectives:
- Determine staff nurses' performance obstacles.
- Assess quality of work life of staff nurses.
- Investigate the relation between staff nurses' performance obstacles and the quality of work life.

Research Questions:
The research questions are the following:
- What are staff nurses' performance obstacles?
- What is the quality of work life of staff nurses?
- Is there a relation between staff nurses' performance obstacles and the quality of work life?

II.   SUBJECTS &METHODS

Research design: A descriptive design was utilized to fulfill the aim of the study.
Setting: This study was carried out at Benha University Hospital in the following six critical care units; general intensive care unit, emergency care unit, chest and cardiac surgery care unit, cardiac care unit, pediatric care unit and chest care unit.
Sampling type: a convenience sample of 119 staff nurses was recruited in the present study
Subjects: This study included all available staff nurses (119) who are responsible for providing nursing care to patients in predetermined setting during the time of data collection and agreed to participate in this study.
Tools of data collection
Data was collected through using two tools; performance obstacles questionnaire and quality of work life questionnaire
Tool I: Performance obstacles questionnaire
This tool was aimed to determine staff nurses' performance obstacles.   The tool was developed by [9]. This tool included two parts:
Part I: Demographic data: it was used to assess staff nurses' personal characteristics, this included age, gender, marital status, educational qualifications, workplace and years of experience.
Part II: Performance obstacles questionnaire:
It included 34 items categorized into four domains as the following:
- Performance obstacles related to work environment(12 items)
- Performance obstacles related to organization(10 items)
- Performance obstacles related to tools(6 items)
- Performance obstacles related to tasks(6 items)
Scoring system: The response to items was yes or No, Its scores ranged from one for Yes and zero for No. Total score level for staff nurses' performance obstacles was summed and categorized as the following:
-Low performance obstacles (< 60%).
- High performance obstacles (≥60%).
Tool II: Quality of work life questionnaire
This tool aimed at assessing the quality of work life of staff nurses at their workplace. This tool was designed by National Institute for Occupational Safety and Health [10]. This tool included 40 items subdivided into 6 domains as following:
-Psychological work environment (7 items)
- Job characteristics (9 items)
- Salaries and incentives (6 items)
-Team work (6 items)
-Supervisor leadership style (8 items)
-Participation in decision making (4 items)
Scoring system: According to Likart scale the response to items were on 5 point ranging from " strongly disagree" to " strongly agree" these were scored respectively from 1 to 5.Total score of staff nurses' quality of work life was summed and categorized as following;

-High QWL ≥60%
- Low QWL<60 %.
Pilot study:
A pilot study was carried out on 10% of the total number of study subjects (12) staff nurses to determine the applicability of the study, the clarity and feasibility of the questionnaires, as well as to estimate the time needed for data collection. Those staff nurses in the pilot study were included in the main study sample because no modification was done; every questionnaire took 15- 30 minutes to be filled.
Validity: Tools content validity was done by 5 experts in the related field to check the relevancy, clarity, comprehensiveness, and applicability of the tools of data collection.
Reliability: Reliability of tools of data collection was estimated using the Cronbach's Alpha test to measure the internal consistency of the study result as the following:
Cornbrash's Alpha for performance obstacles questionnaire:

Performance obstacles domains	Cronbach's Alpha test
Performance obstacles related to environment	0.78
Performance obstacles related1 to organization	0.89
Performance obstacles related to tools	0.79
Performance obstacles related to tasks	0.91

Cranach's Alpha for QWL questionnaire:

QWL domains	Cronbach's Alpha test
Psychological work environment	0.82
Job characteristics	0.84
Salaries and incentives	0.87
Team work	0.75
Supervision leadership styles	0.83
Participation in decision making	0.93

Statistical analysis: Data entry and statistical analysis were done using the Microsoft Excel and Statistical Package for Social Sciences (SPSS) program version 22. Data were presented in tables and figures using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables. F test was used to test correlation between variables. Statistical significance was considered at p-value ≤ 0.05 and non-significant difference was considered at P > 0.05. Collected data were statistically analyzed, presented and tabulated using appropriate reliable, valid statistical methods & tests.

III.   RESULTS
Table (1) clarifies that more than three fifths (63.9%) of the studied nurses were in age group less than 25 years and the majority of them (93.3%) were females. As regards to marital status of studied staff nurses; near to two thirds (65.5%) were married, as well as more than two thirds (67.2%) of them were graduates of technical institute of nursing . In relation to years of experience more than half (60.5%) of studied staff nurses had less than or equal 5 years of experience.
Table (2) clarifies that twelve items comprising performance obstacles related to work environment, it is clear that, the item "My work place was crowded" was reported by more than two thirds (64.7%) of studied staff nurses. While, third (39.5 %) of studied staff nurses reported the item "I received many phone calls from patients' family members".
Table (3) illustrates that more than half (63.0%) of studied staff nurses reported the item "I spent much time looking for equipment because it was not located where it was supposed to be". While the item" The central stock area contains all equipment" was reported by less than one quarter (24.4%) of them.
Figure (1) reveals that near to two third (63%) of studied staff nurses reported high level of performance obstacles, while slightly more than one third (37%) of them reported low level of performance obstacles.
Table (4) illustrates that near to two thirds (67.2%) of the studied staff nurses agreed that they enjoy cooperating with their peers. While, only 5.0% of the studied staff nurses strongly agreed that they had chance to influence decisions related to their work.
 Figure (2) illustrates that near to three quarter (73.1%) of nurses had low score level of total quality of work life, while more than one quarter (26.9%) of them had high level of total quality of work life.
Table (5) clarified that there was a high statistical significant correlation between total performance obstacles and total quality of work life (r= -.753) (P= .000)

Table (1): Frequency distribution of studied staff nurses according to their general characteristics (No. =119).

General personnel characteristics	No	%
Age in years		
<25	76	63.9
25:30	37	31.1
>30	6	5.0
Mean ±SD	26.58 ±4.76	
Gender		
Male	8	6.7
Female	111	93.3
Marital status		
Married	78	65.5
Single	41	34.5
Divorced	0	0.00
Widowed	0	0.00
Educational qualification		
Nursing school diploma	30	25.2
Technical institute of nursing	80	67.2
Bachelor degree of nursing	9	7.6
Years of experience		
<5	72	60.5
5:10	36	30.3
>10	11	9.2

Table (2): Frequency distribution of performance obstacles related to work environment as reported by studied staff nurses (No. =119).

Performance obstacles related to work environment	No		Yes	
	No.	%	No.	%
1- I had difficulty finding a place to sit down to do my paperwork.	60	50.4	59	49.6
2- I received many phone calls from patients' family members.	72	60.5	47	39.5
3- I had distractions from patients' family members.	46	38.7	73	61.3
4- My patients' beds close to each other.	44	37.0	75	63.0
5- My work place was noisy.	47	39.5	72	60.5
6- My work place was crowded.	42	35.3	77	64.7
7- My work place was hectic.	55	46.2	64	53.8
8- My work place was organized	69	58.0	50	42.0
9- My work place was good ventilated.	70	58.8	49	41.2
10- My work place had a good lightening.	43	36.1	76	63.9
11- My work place was clean.	63	52.9	56	47.1
12- My assigned patients' beds were organized.	61	51.3	58	48.7

Table (3): Frequency distribution of performance obstacles related to tools as reported by the studied staff nurses (No. =119).

| Performance obstacles related to tools	No		Yes	
	No.	%	No.	%
1- I had to use equipment that was in poor condition.	71	59.7	48	40.3
2- I had to wait to use equipment because someone else was using it.	50	42.0	69	58.0
3- I spent much time looking for equipment because it was not located where it was supposed to be.	44	37.0	75	63.0
4-The central stock area contains all equipment.	90	75.6	29	24.4
5- The isolation rooms that I worked in were well-stocked.	84	70.6	35	29.4
6- The non-isolation rooms that I worked in were well-stocked	79	66.4	40	33.6
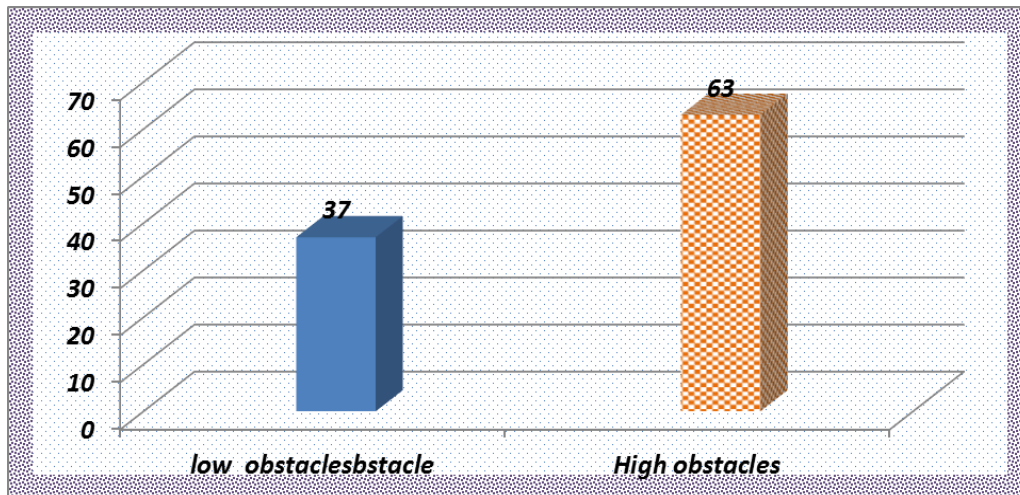
Figure (1): Total score level of performance obstacles domains as reported by the studied staff nurses.

Table (4): QWL related participation in decision making as experienced by studied staff nurses, (No=119).

| Item	Strongly disagree		Disagree		Uncertain		Agree		Strongly agree	
	No	%	No	%	No	%	No	%	No	%
1- I have the chance to influence decisions related to my work.	15	12.6	39	32.8	23	19.3	36	30.3	6	5.0
2- I share in decisions to solve my work problem.	16	13.4	36	30.3	19	16.0	42	35.3	6	5.0
3- I get enough information about my performance at work.	11	9.2	31	26.1	15	12.6	55	46.2	7	5.9
4- I enjoy cooperating with my peers.	7	5.9	14	11.8	4	3.4	80	67.2	14	11.8
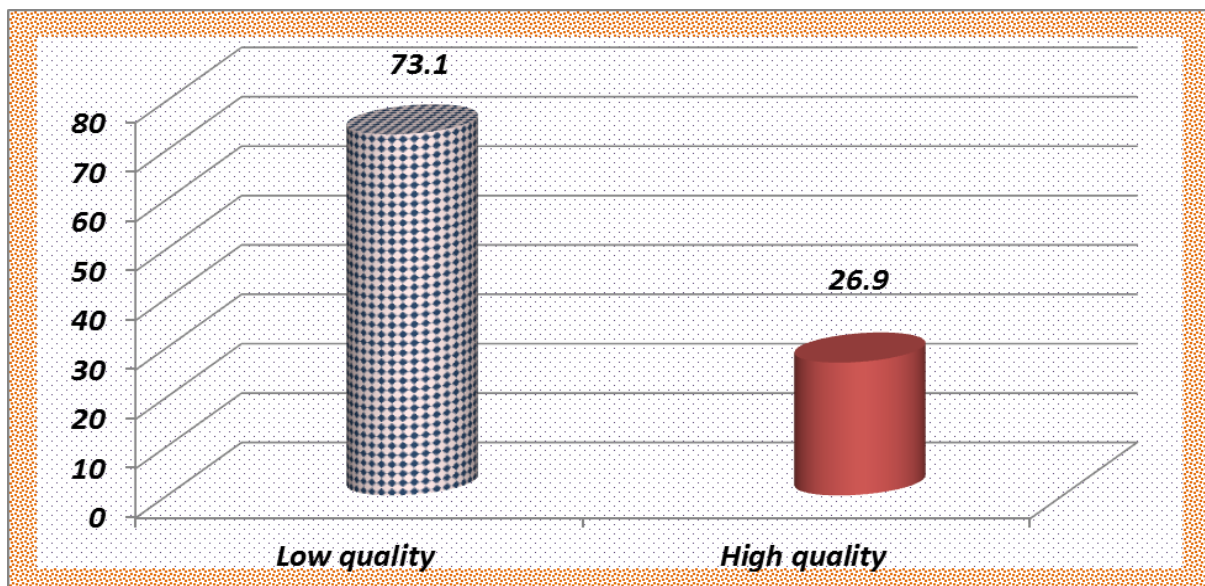
Figure (2): Total score level of studied staff nurses' quality of work life.

Table (5): Correlation between total performance obstacles score and total quality of work life score as reported by the studied staff nurses (No. =119).

Performance obstacles QWL	Test	Psychological work environment	Job characteristics	Salaries and incentives	Team work	Supervisor leadership style	Participation in decision making	Total quality of work life
Performance obstacles related to environment	r	-.283**	-.359**	-.391**	-.418**	-.496**	-.190*	-.577**
	P value	.002	.000	.000	.000	.000	.038	.000
Performance obstacles related to organization	r	-.526**	-.473**	-.283**	-.425**	-.304**	-.273**	-.577**
	P value	.000	.000	.002	.000	.001	.003	.000
Performance obstacles related to tools	r	-.220*	-.242**	-.423**	-.453**	-.471**	-.256**	-.551**
	P value	.016	.008	.000	.000	.000	.005	.000
Performance obstacles related to tasks	r	-.231*	-.165	-.368**	-.236**	-.446**	-.335**	-.468**
	P value	.011	.073	.000	.010	.000	.000	.000
Total performance obstacles	r	-.444**	-.478**	-.483**	-.541**	-.583**	-.322**	-.753**
	P value	.000	.000	.000	.000	.000	.000	.000

P value at (<0.001) ** is considered highly significant level value   **. Correlation is highly significant at the 0.01 level

IV.   DISCUSSION

Critical care nurses as a human resource play a key role in patients' recovery, they must respond continuously and quickly to the health demands of patients, implement procedures accurately and interact with the most severe emotional aspects of life, and they work in demanding and stressful work environments to assist patients in critical conditions [11]. Quality of work life is degree to which nurses are able to satisfy important personal needs through their experiences in the work organization, while achieving the organization's goals, to make meaningful contributions to their organization [12]. Performance obstacles have been shown to increase nursing work load, which in turn negatively influences perceived quality and safety of care and quality of working life [13]. The result of the current study shows that more than half of the studied staff nurses were in age group less than 25 years, it may be due to the newly graduate nurses recruit in critical care units. This finding is discordance with [14] whose study revealed that half of the studied sample age ranged between (26–34) years. Also [15] revealed that more than third of nurses between age group 26-34 years. Concerning nurses' gender, the majority of studied staff nurses were females. This finding is in the same line with [16] whose study revealed that the majority of nurses were female. Also [13] supported this result.   As regards to marital status, near two thirds of studied staff nurses were married, this finding is in the same line with [15] whose finding revealed that more than half of nurses were married. Also [17] supported this result.

This study revealed that near half of studied staff nurses reported that they had difficulty finding a place to sit down to do their paper work. This is in agreement with [18] who mentioned that the most critical performance obstacles affecting workload included difficulty in finding a place to sit down, hectic workplace, and disorganized workplace. Also [19] found that nurses did not find space to sit down and do their paper work. This study reveals three quarter of nurses reported that the isolation rooms that they worked in weren't well-stocked. The result is congruent with [20] who found that performance obstacles related to tools that reported by critical care nurses are the isolation rooms were not well stocked. The result is also confirmed by [1] who reported that the highest percentage of nurses described the item "the central stock area is not well stocked.

This study reveals that near three quarter of studied staff nurses had low score level of total quality of work life, while about one quarter of nurses had high level of total quality of work life. These finding is in congruence with the results reported by [12] who pointed that more than two third of the nurses had low quality of work life. Also [25] cited that the majority of nurses were dissatisfied with their work life. The result of study by [21] showed that the majority of nurses had a moderate level QWL. Nurses were not satisfied with all components of their QWL [22]. Also [23] pointed that nurses in Isfahan hospitals had poor QWL. Also [24] found that the nursing staff was moderately satisfied with their overall quality of life in the workplace.

This study clarifies that there was a high statistical significant correlation between total performance obstacles and total quality of work life (r= -.753) (P= .000). This study is supported by [16] who cited that there

was a high statistical significant negative correlation between quality of work life and performance obstacles (r=0.449) (P=0.000). While [15] reported that there was a statistical significant correlation between Performance obstacles and QWL only in the private sector while no correlation was found between performance obstacles and QWL in the teaching sector.

V.   CONCLUSION

It was concluded from the present study that there was a higher level of performance obstacles related to physical work environment, tools, and nursing tasks than performance obstacles related organization which were reported by studied staff nurses and low level of quality of work life related to supervision leadership style and salaries and incentives than quality of work life related to psychological work environment, job characteristics, participation in decision making and team work. There was a high statistical significant correlation between total performance obstacles which were reported by the studied nurses and their quality of work life.

VI.   RECOMMENDATIONS

- Nurses should be able to determine their performance obstacles and inform their supervisors regularly.
- Hospital administration that should have interventions to overcome performance obstacles especially in critical care units.
- Policy makers must develop strategy, protocol, or system to eliminate performance obstacles related to misplacement of equipment, supplies, and patient charts.
- Improving quality of work life is important to improve both individual and organizational performance.
- Further research about the factors that improve quality of work life for nurses should be conducted.

REFERENCES

[1]. **Eldeeb G., (2016):** Performance Obstacles in ICU and Their Effects on Patients` Safety at Selected Hospitals in Jazan Region, KSA. IOSR Journal of Nursing and Health Science. 5(6): Pp. 26-36.

[2]. **Aitken L., Marshall A., Chaboyer W., (2016):** Critical Care Nursing. Australia. Acccn Co. 3rd ed.:Pp.15-30.

[3]. **Ayed A., Thulth A., & Sayej S., (2016):** Selected Organizational Factors Affecting Performance of Professional Nurses in North West Bank Government Hospital**.** Journal of Education and Practice. 6(27): Pp.50-60.

[4]. **Abdelsalam G. & Eldeeb A., (2016):** Performance Obstacles in ICU and Their Effects on Patients` Safety at Selected Hospitals in Jazan Region, KSA. IOSR Journal of Nursing and Health Science. 5(6): Pp. 26-36.

[5]. **Carayon P., Wetterneck T., Rodriguez J.,Hundt A.,Hoonakker P., Holden R.,& Gurses A.,(2014):** Human Factors Systems Approach to Healthcare Quality and Patient Safety. Appl Ergon J. 45(1):Pp.14–25.

[6]. **Khetavath p., (2015):** An Empirical Analysis of Quality of Work Life of Employees in Indian Private Sector Organizations. International Conference on Trends in Economics, Humanities and Management. 15(1): Pp. 32-36

[7]. **Ulrich, B.T., Lvandero, R., Woods, D., & Early, S. (2014**): Critical Care Nurse work Environment, Journal of healthy work environment.34(4), P(64).

[8]. **Nowrouzi B., Lightfoot N., Carter L., Lariviere M., Rukholm E., Schinke R.,& Gardner D., (2015):**The Relationship between Qualities of Work Life and Location of Cross- Training among Obstetric Nurses in Urban Northeastern Ontario. International Journal of Occupational Medicine and Environmental Health. 28 (3): Pp. 571 – 586.

[9]. **Gurses, P.&Carayon, p., (2007):** Performance obstacles of intensive care. Nurse Research Journal, 56(3): Pp.185-194.

[10]. **National institute for occupational safety and health (NIOSH), (2002):** Quality of work life questionnaire,   available at https://www.cdc.gov/niosh/topics/stress/qwlquest.html.Accessed on (2017).

[11]. **Villanova University., (2014):** Nursing Career. Critical Care Nurse. Available at www.villanova.com/icu . Accessed in 2017.

[12]. **Morsy S., & Sabra H., (2015):** Relation between Quality of Work Life and Nurses Job Satisfaction at   Assiut University Hospitals. Al - Azhar Assiut Medical Journal. 13(1): Pp.163-171.

[13]. **Aletras V. & Kallianidou K., (2014):** Performance obstacles of nurses in Intensive Care Units of Greek National Health System Hospitals. British Association of Critical Care Nurses. 21(3):P. 157.

[14]. **Keshk, L., Qalawa S., &Aly A., (2012):** Performance Obstacles Experiences among Critical Care Nurses in Damanhour Teaching Hospital .Life Science Journal. 9(2). 1044-1054.

[15]. **Seada A. & EL Banan S., (2016):** Performance Obstacles and its Relation to the Perceived Quality of Patient Care and Quality of Working Life among ICU Nurses: A Comparative Study. IOSR Journal of Nursing and Health Science. 5(5): Pp. 53-67.

[16]. **Ibrahim I., (2014):** Association between Performance Obstacles and Quality of Work life among Intensive Care Nurses. Master Thesis. Mansoura University. Faculty of Nursing. Pp. 5-24.

[17]. **Suresh D., (2013):** Quality of Nursing Work Life among Nurses Working in Selected Government and Private Hospitals in Thiruvananthapuram . Published Master Thesis. Thiruvananthapuram, Kerala. Sree Chitra Tirunal Institute for Medical Sciences & Technology.

[18]. **Mohammadi M., Mazloumi A., Kazemi Z., & Zeraati H., (2015):** Evaluation of Mental Workload among ICU Ward's Nurses. Health Promotion Perspectives. 5(4): Pp. 280-287

[19]. **Ragab S., Torky M., & Ghallab S., (2017):** Relationship between performance obstacles and workload among intensive care nurses at Assiut University Hospital. The Malaysian Journal of nursing. 9 (2):Pp.45-51.

[20]. **Janakiraman., Ramkumar.,Parish., Janet Turner., Berry., &Leonard L., (2011):** The Effect of the Work and Physical Environment on Hospital Nurses' Perceptions and Attitudes: Service Quality and Commitment .The Quality Management Journal 18, 4: 36-49.

[21]. **Moradi T., Maghaminejad F., &Fini I., (2014):** Quality of Working Life of Nurses and Its Related Factors. Nurse Midwifery Stud. 3(2): Pp. 1-6.

[22]. **Dargahiet H., Changizi V.,& Jazayeri Gharabagh E.,(2012):**Radiology employees' Quality of Work life. Acta Med Iran J. 50(4):Pp.250–256.

[23]. **Sharhraky Vahed A., Mardani M., Asadi E., Heidari M.,&Hamedi S., (2011):**Assessment of the Items of SCL90 Test with Quality of Work Life among Amiralmomenin Hospital Personnel of Zabol City. Sci Journal Hamdan Univ Med Sci. 18(2):Pp50-55.

[24]. **Zavala M., klinji T., & karillo k., (2016):** Quality of life in the Workplace for Nursing Staff at public Healthcare Institutions. Rev. Latino-Am. Enfermagem.24:e2713.DOI: 10.1590/1518-8345.1149.2713 .

[25]. **Almalki J., FitzGerald G., & Clark M.,(2012):** Quality of work life among Primary Health Care Nurses in the Jazan region, Saudi Arabia: a cross-sectional study. Human Resources for Health. https://doi.org/10.1186/1478-4491-10-30