

Head NURSES' Knowledge And Practice Of Nursing Assignment And Its Relation To Staff Nurses' Job Satisfaction

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Abstract: Appropriate assignment of health providers can minimize potential risk to clients and liability for staff nurses, managers, nurse administrators, other providers and health-care agencies.

The aim of this study was to assess the relationship between head nurses' knowledge and practice of nursing assignment and staff nurses' job satisfaction.

Study Setting: This study was carried out at Zagazig University Hospitals.

Research Design: Descriptive correlational design was used in this study.

The study sample was a purposive sample of 273 staff nurses and a convenient sample of head nurses and their charges (35).

Tools of data collection: Three tools were used: (1) nursing assignment knowledge questionnaire, (2) auditing observational checklist, and (3) nurses' satisfaction questionnaire.

The result: The findings of this study revealed that the majority (70.1%) of the studied head nurses' had a good knowledge level on nursing assignment, (62.4%) from head nurses' had high satisfaction practice level of nursing assignment and more than two thirds (67.8%) of staff nurses' were satisfied regarding their job.

Conclusion: The study concluded that, there was a positive highly statistical significant correlation between head nurses' knowledge and practice of nursing assignment and staff nurses' satisfaction toward their job.

Recommendation: The study main recommendation was conduct training programs on supervision and communication for head nurse, ensure that the policy and procedures measures work safety related to nursing assignment are followed, enhance nurses satisfaction with their nursing assignment and give priority to patients needs and acuity, supervision and communication when making nursing assignment.

Key words: Head nurse, Staff nurses, nursing assignment, knowledge, practice, and job satisfaction.

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I. Introduction

Nurses are the largest human resource group in the healthcare system. They should be managed in a way that leads to job satisfaction and high quality care. Job satisfaction is a global feeling or attitude toward various aspects of a job and is an affective orientation toward work that an employee perceives **UK Essays, (2017)**. The traditional model of job satisfaction emphasizes on all the feelings that people have about their job. However, nurse's satisfaction or dissatisfaction depends on the nature and expectations of that job (**Babaepour-Divshali et al., 2016**).

Head nurses play a key role in coordinating patient care activities and in ensuring safety and quality care in hospital wards. These head nurses /charges are professional nurses are responsible for the management of nursing care to patients, all staff nurses 'within the unit and the resources associated with health care delivery in the unit. Also, they enter into performance management agreements that outline their operational management responsibilities (**Armstrong et al. 2015**).

Assignment is defined as giving someone a task within her/his own practice and based on job description and policies (**National guidelines for nursing delegation, 2015**). Moreover, it is allocation of client care activities among care providers in order to meet client care needs. Assignment occurs when the required care activity falls within the employing agencies policies and within the regulated health care provider's scope of practice (**The nurses association of New Brunswick, 2011**).

Today, assignment of clients care in hospitals is increasingly challenging this is due to a number of factors including; staff shortages, increased demand for services, a need to adjust to changes in acuity, predictability and complexity in health-care, as well as the presence of some staff with limited clinical experience. Appropriate assignment of providers can minimize potential risk to clients and liability for staff nurses, managers, nurse administrators, other providers and health-care agencies (**College and association of registered nurses of Alberta, 2014**). If patient assignments are not fair and equally distributed, nurses feel they

are unable to provide the appropriate level of nursing care and nurses' feel unsatisfied regarding their job (Miller, 2015).

Job satisfaction refers to how well a job provides fulfillment of a need or want, or how well it serves as a source or means of enjoyment. Also, it is the degree to which individuals feel positively or negatively about their jobs (Gautham and Kumarr, 2017). Job satisfaction among nursing staff can be significantly increased by the adoption of a supportive leadership style that incorporates effective communication, psychological rewards, feedback, support, recognition, and mutually defined goals (Kvist et al., 2012 and Asegid, et al., 2014).

There are many factors affecting job satisfaction, as frequently cited in nursing literature as; heavy workload, poor conditions in peer support, organizational climate, autonomy, and salary, in which all may ultimately lead to high staff turnovers. Pay, autonomy, and professional status were among the most important determinants of career satisfaction for all nurses (Teeter, 2014 and Gouzou et al. 2015).

1.1. Significance of the study:

Nursing assignment is one of the most challenging tasks which can not be undertaken by everyone successfully. It requires a greater degree of knowledge and practice from head nurse to follow the principles of making the effective assignment to gain the nurses satisfaction to apply methods of assignment that assigned to them. Head nurses must be concerned about organizational and nurse staff's needs simultaneously to solve the problems that may arise in the hospital wards or units (Babaeipour-Divshali et al., 2016). From the clinical practice, the researchers noted that a number of problems recurrent daily between staff nurses and their head nurses in relation to nursing assignment these problems were in the form of refusal of assignment due to unfair distribution, excessive administrative tasks, high workload, inappropriate distribution of proper nurse to high acuity patient and accountability of assignment. So, this study was carried out to assess the relationship between head nurses' knowledge and practice of nursing assignment and staff nurses' job satisfaction at Zagazig University Hospitals.

1.2. Aim of the study:

This study was aimed to head nurses' knowledge and practice of nursing assignment and its relation to staff nurses' job satisfaction at Zagazig University Hospitals.

1.3. The Research Questions:

To fulfill the aim of the study the following questions were formulated:

1. What is the level of head nurses' knowledge regarding nursing assignment?
2. What is the level of head nurses' practice regarding nursing assignment?
3. What is the level of job satisfaction among nurses?
4. Is there a relation between head nurses' knowledge and practice of nursing assignment and staff nurses' job satisfaction at Zagazig University Hospitals?

II. Subjects and Methods

2.1. Research Design

Descriptive correlational research design was adopted to achieve the aim of the study.

2.2. Setting

This study was carried out at Zagazig University Hospitals which include New Surgery Hospital and General Medicine Hospital. New Surgery Hospital (508 beds) consists of 11 departments of Surgery, Orthopedic, Neurology, Gynecology, Ear, Nose and Throat, Urology, Operation unit, Radiology unit and Surgery intensive care unit. General Medicine Hospital (253 beds) consists of (7) departments of General medicine intensive care unit, Emergency cardio intensive care unit, Hematemesis intensive care unit, Dialysis unit, Internal medicine unit, Hematology unit and Endoscopic medicine unit.

2.3. Subjects

2.3.1. Subject Groups

There were two groups of participants:

Group I: Included (273) nurses' chosen purposively from the pre mentioned setting.

Criteria of choosing staff nurses' are:

- Give direct care to patients.
- Have experience more than one year.
- Agree to participate in the study.

Group II: It included a convenient sample of (35) head nurses and their assistants from the pre mentioned setting.

2.3.2. Subject Size

Calculated using a simplified formula provided by **Yamane (1967)** to calculate sample size for staff nurses', the sample size was estimated at confidence interval 95% and $p=0.5$ are assumed for Equation, the estimated sample size of staff nurse was 273 according to the following formula ($n=N/1+N(e)$). Where n =sample size, N =population and e =margin errors.

2.4. Tools of Data Collection

Three tools were used to collect the data of this study:

2.4.1 Nursing assignment knowledge questionnaire:

It was adapted from College and association of registered nurse of Alberta (**CARNA, 2014, Ellis, et al., 2009 and Schoener, 2000**) to assess the head nurses' knowledge about nursing assignment. It consisted of two parts; **part one**: Included the personal characteristics for head nurses'; age, gender, educational qualification and years of experience. **Part two**: Related to nursing assignment which consisted of (39) items grouped under six domains namely: , assessment (13 items), planning (7 items), supervision (3 items), evaluation (3 items) , documentation of assignment (6 items) and problems of preparing nursing assignment (7 items).

Scoring System:

The scoring system for the questionnaire was a score one for the correct answer and zero for the wrong answer. The knowledge score was considered good knowledge level if the score was more than 75%, average knowledge level if the scores range between 60% to less than 75% and poor knowledge level if the score less than 60%.

2.4.2. Auditing Observation Checklist:

It was developed by the researchers based on related literature (**Tomic K., 2017, (CARNA), 2014, Canadian Nurses Association et al. ,2014**). It consisted of (25 items) to assess head nurses' practice related to nursing assignment by observe and review. Actual nursing assignment done through nursing activities was observed (i.e; Make round to collect data on patient needs)and nursing documents were reviewed (i.e; Write Special duties).

Scoring system:

The scoring system for the auditing checklist consisted of giving a score of one for done and zero for not done. The practice score was considered high satisfaction practice level if the percentage was more than 75%, moderate satisfaction practice level if it range between 60% to less than 75% and low satisfaction practice level if the percentage less than 60%.

2.4.3. Nurses 'job satisfaction questionnaire:

These tools adopted by **Mohamed (2009)** based on **Herzberg theory (1966)** to assess the level of staff nurses' job satisfaction. **The first part** entailed personal characteristics; age, gender, year of experience, education and qualification and marital status. **The second part**; which concerned with nurses 'job satisfaction questionnaire consisted of (61) items categorized under (11) dimensions as follows; Planning of nursing assignment item (8 items), relationship with superior (6 items), work safety (4 items), social relation (6 items), salary and incentives (4 items), work environment (10 items), psychological status (5 items), achievement (4 items), work advancement (5 items), appreciation from others (4 items), responsibilities and work control (5 items).

Scoring System:

Responses were evaluates using a three-point Likert scale ranging from 1 (dissatisfied) to 3 (satisfied). The satisfaction score was considered high satisfaction level if the percentage was more than 75%, moderate satisfaction if it range between 60% to less than 75% , and low satisfaction level if the percentage less than 60%.

2.5. Methods

The field work of this study was executed in five months started from beginning January 2017 and was completed by the end of May 2017. The first phase of the work was the preparatory phase and included reviewing of relevant literature, different studies and theoretical knowledge of various aspect of the research topic using national and international journals and text book, articles and different scientific web sites.

Tools validity and reliability:

The researchers translated the instruments (English format) into Arabic formats, rendered the same English formats by experts. The tools were tested for content validity to ensure clarity, relevance, applicability, comprehensiveness, understanding and ease for implementation by panel of (5) experts in Nursing Administration and Medical Surgical departments at the Faculty of Nursing, Zagazig university and Benha university. They were requested to express their opinions and comments on the tool and provide any suggestion for any addition or omissions on the tools. The little modifications were done.

Reliability of tools were measured by using alpha co-efficient test, the internal consistency of nursing assignment knowledge questionnaire, auditing observational checklist and nurses` job satisfaction questionnaire were (0.86, 0.88 &0.92) respectively.

Approval:

An official permission was obtained from the hospital authorities in the identified setting to collect the necessary data and implement the study after explaining its purpose. A permission to conduct the study was obtained through meeting with each hospital nurse director to explain the aim and nature of the study to have list of nurses of the hospital .Meeting with each unit manager to have a list of nurses of the unit to select randomly the proposed number.

Ethical consideration:

Prior to the initial interview, verbal explanation of the nature and the aim of the study have been explained to the staff nurses included in the study sample, clarification of the nature and purpose of the study was done in the interview with each subject. All subjects were informed that participation in the study is voluntary, and that they have the right to withdraw at any time without giving any reason. They were assured that the information given would be confidential and used for the research purpose only.

Pilot study:

A pilot study was carried out on 10 % of the study sample (27 staff nurses and 3 head nurses) who were selected randomly prior to the initiation to ensure the clarity of the items and to determine the length of time required to complete the questionnaire. After a brief explanation of purpose of the study the tools were distributed to each participant. No modifications were performed in the form. The time required to fill the questionnaires sheet was from 20 to 25 minutes for (nursing assignment knowledge questionnaire), and from 35-45 minutes for (nurses` job satisfaction questionnaire). Subjects who shared in the pilot study were included in the main study sample.

The actual field work was conducted from the beginning of March 2017 to the end of May 2017 the researchers collected data by themselves, through meeting with the study sample in each unit in the morning and afternoon shifts to distribute the questionnaire, the data collected from nurses before and between their work hours according to their availability through 5 days/week. The time required to fill the questionnaires sheet was from 25 to 30 minutes for (nursing assignment knowledge questionnaire), and from 40-50 minutes for (nurses` job satisfaction questionnaire).In relation to auditing checklist researchers observed every head nurse three times and take the mean to ensure their level of practice regarding nursing assignment. The filled forms were collected in time and revised to check their completeness to avoid any missing data.

2.5.7. Statistical analysis:

Data were collected, entered and analyzed by using SPSS (version 20) software computer package (special package for social science). Presented in tabular form, descriptive statistics were applied (e.g., frequency, percentages, mean, and standard deviation). Test of significance correlation coefficient (r) was used. Statistically significant difference was considered at p-value $p \leq 0.05$.

III. Results

Table (1): Distribution of studied head nurses' regarding their personnel characteristics (N=35)

Personnel characteristic	N	%
Age in years		
28< 38	21	60.0
38< 48	11	31.4
≥48	3	8.6
Mean ±SD	38.26±8.64	
Gender		
Female	34	97.1
Male	1	2.9
Educational qualification		

Bachelor's degree	31	88.6
Nursing diploma	4	11.4
Years of experience		
5< 15	22	62.9
15< 25	11	31.4
≥25	2	5.7
Mean ±SD	14.21±8.098	

Table (1): Shows that three fifth of head nurses' (60%) had age from 28 to less than 38 years with mean (38.26±8.64).The majority of them (97.1% &88.6%) were female and had bachelor's degree of nursing respectively. Regarding years of experience, more than three fifth (62.9%) of them had from 5 to less than 15 years of experience with mean of (14.21±8.098).

Table (2): Mean scores of head nurses' knowledge regarding nursing assignment (N=35)

Knowledge Domains	Max.	Mean ±SD
Planning	7	6.00±1.56
Assessment	13	12.20±2.63
Supervision	3	1.00±1.70
Evaluation	3	1.15± 0.44
Documentation	6	4.78± 2.00
Problems	7	3.94±2.21

Table (2): Indicates that the highest mean score of head nurses' knowledge was related to assessment of nursing assignment (12.20±2.63), while the lowest mean score was related to supervision of assignment (1.00±1.70).

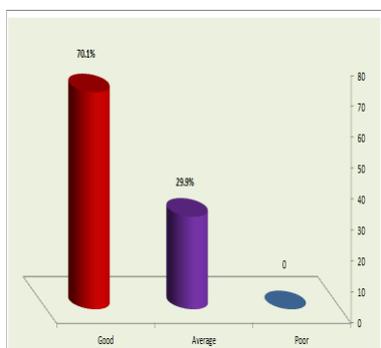


Figure (1): Total knowledge level of the head nurses 'regarding nursing assignment

Figure (1): Reveals that the majority (70.1 %) of study head nurses ' had a good knowledge level regarding nursing assignment, while (29.9%) of them had average knowledge level and there is no poor knowledge level.

Table (3): Percentage distribution of studied head nurses ' practice regarding nursing assignment (N=35).

Practice of nursing assignment items	Not done		Done	
	No	%	No	%
A- Nursing activities on nursing assignment are Observed:				
-Nursing assignment on time.	12	34.3	23	65.7
-Done by head nurse	4	11.4	31	88.6
-Plan after taken report of last shift	3	8.6	32	91.4
-Make round to collect data on patient needs.	20	57.1	15	42.8
-Check patients' condition bed to bed between the staff of both shifts.	22	62.8	13	37.1
-Communicate with the patients on their needs .	10	28.6	25	61.4
-Check patients' documentation for update contents	2	5.7	33	94.3
-Plane assignment in presence and participation of assignee	11	31.4	24	68.6
-Acceptance of assignee for nursing assignment	7	20.0	28	80.0

-Know of assignment by nurses	3	8.6	33	91.4
-Review assignment daily for adjustments for change in patients' needs .	13	37.0	22	63.0
-Keep the original copy of assignment at head nurse office and their assistant	8	22.9	27	77.1
-Keep the copy of the assignment in a place accessible and available	4	11.4	31	88.6
-Supervise staff nurses activities to sure it is applied	16	45.7	19	54.3
-Apply continues supervision to sure it is applied.	18	51.4	17	48.6
-Inform and give nurses continues feedback.	15	42.9	20	57.1
B- Nursing assignment documents are reviewed:				
-Written	6	17.1	29	82.9
-Plan for 3 shifts (24 hrs).	17	48.6	18	51.4
-Include all patients and the anticipated work	9	25.7	26	74.3
-Depend on the staff nurses and patient number	1	2.9	34	97.1
-Write patient's names	19	54.3	16	45.7
-Consider for patient's needs.	17	48.6	18	51.4
-Consider nurse's ability	5	14.3	30	85.7
-Write Special duties	4	11.4	31	88.6
- Write every day	11	31.4	24	68.6

Table (3): Indicates that the majority of head nurses (97.1%,94.3%,91.4% and 91.4%) depended on staff nurses ' and patients numbers , check patients' documentation for update contents, plan after taken report of last shift and know of assignment by nurses when doing nursing assignment ,respectively. On other hand less than fifth of them (48.6%,45.7%,42.8% and 37.1%) apply continues supervision to sure it is applied,write patients' names, make round to collect data on patient needs and check patients' condition bed to bed between the staff of both shifts when doing nursing assignment,respectively.

Figure (2): Total practice level of the head nurses regarding nursing assignment (N=35).

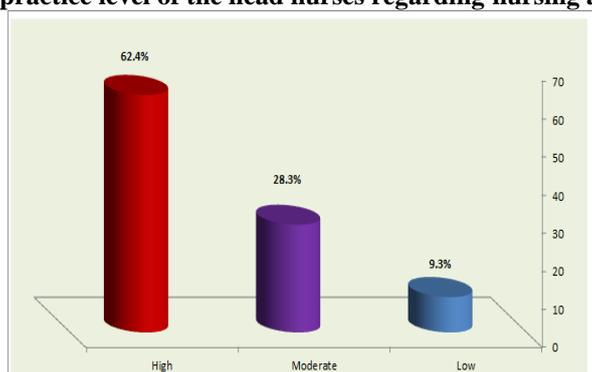


Figure (2): Shows that the highest percentage (62.4%) of studied head nurses ' had a high satisfaction practice level in performing nursing assignment, while the least percentage (9.3%) of them had low satisfaction practice level.

Table (4): Distribution of staff nurses` regarding their personnel characteristics N= (273).

Personnel characteristic	N	%
Age in years		
20< 35	157	57.5
35< 45	68	24.9
≥45	48	17.6
Mean ±SD	34.34± 9.23	
Gender		
Female	246	90.1
Male	27	9.9

Educational Qualification		
Bachelor's degree in nursing	27	9.9
Technical nursing diploma	39	14.3
Nursing diploma	207	75.8
Years of experience		
5< 15	144	52.7
15< 25	75	27.5
≥25	54	19.8
Mean ±SD	15.45 ± 9.18	

Table (4): Reveals that the majority (90.1% & 87.5%) of staff nurses` were female and married. More than half (57.5%) of them had age ranged from 20< 35 years old. Also, three quarters (75.8%) of them had nursing diploma. Regarding nurses` years of experience the highest percentage (52.7 %) of staff nurses` had experience ranged from 5< 15 years old.

Table (5): Mean scores of total staff nurses` job satisfaction level (N=273).

Job Satisfaction Domains	Max.	Mean ±SD
Planning of nursing assignment.	24	15.98±6.65
Relation with supervisors	18	13.01±5.52
Safety at work	12	7.23±4.15
Psychological status.	15	11.23±4.29
Social relation at work.	18	12.20±4.78
Salary and incentives.	12	7.32±3.86
Work environment.	30	25.01±8.64
Achievement.	12	9.01±3.35
Work advancement.	15	10.16±4.52
Responsibility and work control.	15	11.63±4.84
Appreciation from other	12	8.65±3.73

Table (5): Indicates that the highest mean score of staff nurses` job satisfaction was related to work environment (25.01±8.64), while the lowest mean score was related to safety at work (7.23±4.15).

Figure (3): Total job satisfaction level of the studied staff nurses`

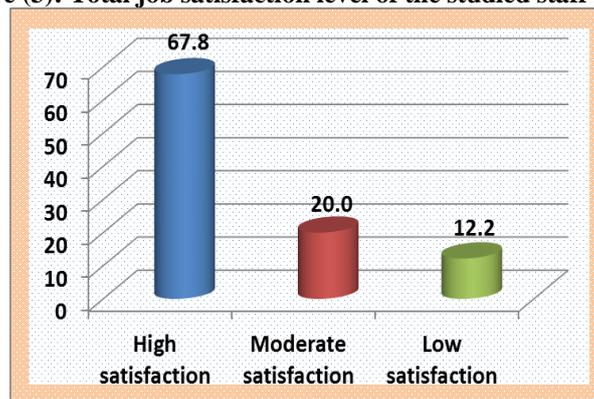


Figure (3): Shows that the highest percentage (67.8%) of studied staff nurses` was high satisfaction level regarding their job, while the least percentage (12.2%) of them was low satisfaction level.

Table (6): Correlations between head nurses` knowledge and practice of nursing assignment and staff nurses` job satisfaction

Variable	Head nurses			
	Knowledge		Practice	
Nurses' job satisfaction	r	P value	r	P value
	0.984	<0.001**	0.970	<0.001**

**A high statistical significant difference (P ≤ 0.001)

Table (6): Clarifies that there was a positive highly statistical significant correlation between head nurses` knowledge and practice of nursing assignment and the staff nurses' job satisfaction.

IV. Discussion

There are challenges in continuing care settings with recruitment and retention of regulated health professionals and an increasing proportion of unregulated health-care providers **Motacki, & Burke, (2016)**. Appropriate assignment of providers can minimize potential risk to clients and liability for staff nurses, managers, nurse administrators, other providers and healthcare agencies. The scope of nurses' knowledge along with their clinical skill and judgment enables them to prudently assign regulated and non-regulated client care. The nurses' in the role of assigning care needs to be supported by management to be successful (**CARNA, 2014**).

Accordingly, the aim of the study was to assess the relationship between head nurses knowledge and practice of nursing assignment and staff nurses job satisfaction at Zagazig University Hospitals.

Regarding personal characteristics of studied head nurses. The results of present study revealed that, the majority of studied head nurses were female and this might be due to male nurses constitute small portion of nursing manpower force. Nursing was perceived as a female profession, which reflects the fact that female nurses in Egypt are predominant and male nurses are new comers to the nursing profession. This result agreed with the study conducted in Assiut University, by **Rashed et al, (2015)** about performance of head nurses' management functions and its effect on nurses' productivity at Assiut University Hospital and found that the majority of the sample was female nurses.

While these results dis-agreed with the study conducted in Iraq by **AL-Jazaery & Khaleel (2016)** to assess the head nurses' performance regarding staff management of the units in Al-Najaf AL-Ashraf City Hospitals and found that their male participants were almost three times more than their enrolled females.

The results of present study revealed that, the majority of studied head nurses had bachelor's degree and this might be due to the availability of baccalaureate graduate at zagazig city because of local faculty of nursing. This result agreed with the study conducted in Jordan by **Al-Hamdan (2009)** to study nurse managers, diversity and conflict management and revealed that all of nurse manager had a bachelor's degree in nursing.

The current study revealed that, more than two third of studied head nurses had a total good knowledge level these results may be due to the majority of head nurses had baccalaureate degree who are professional nurses work in a collaborative and coordinated manner to create an atmosphere of equality with knowledge, communication, cooperation, more supervision and support for the inexperienced nurses. In addition they were studied head nurse role in nursing management course which included patient assignment forms and methods of nursing assignment. These give the rational for these results.

This result agreed with study conducted in Egypt by **El-Sabahy et al, (2015)** they found that head nurses had high level of knowledge regarding scheduling as one element of time management and staff assignment components. While this study result dis-agreed with the study conducted in university of Limpopo by **Jabunkosi (2011)** to explore the effective use of team nursing amongst professional nurses, this study revealed that poor knowledgeable of professional nurse which is suggestive of ineffective use of team nursing assignment methods.

The finding of the current study revealed that the highest mean score of head nurses' knowledge regarding nursing assignment was related to assessment as domain of nursing assignment, It could be considered this finding due to the head nurse had experience in assessment as a basic element of nursing care plan who are prepared by virtue of their education and experience in nursing and ethically committed, direct and individualized patient care. In addition, this may be due to they are nursing practice who acts requiring substantial specialized knowledge, judgment, and nursing skill based upon the principles of psychological, biological, physical, and social sciences in the application of the nursing process **Kentucky Board of Nursing,(2011)**.

This findings agreement with the study conducted in University of Pennsylvania by **Clarke etal, (2008)** who studied nurse staffing and patient care quality and safety and revealed that decisions must be made on the basis of the judgments by frontline staff and their manager.

The findings of the current study reveal that the lowest mean score of head nurses' knowledge was related to supervision of nursing assignment items. This may be due to after an assignment has been created by the head nurses, the system doesn't allow them to make assignment adjustments as they see fit, this is necessary for effective supervision of nursing assignment items.

In addition, this may be due to they were having a lack of experience, education, position in the organization. In addition, they have deficiency in specialized knowledge related to clinical skills, role and responsibilities.

This result agreed with the study conducted in Iran by **Dehghani et al, (2016)** about requirements for nurse supervisor training and found that the necessary for effective supervision in nursing. The pervious study finding disagreed with the study conducted in Purdue University, USA by **Mullinax & Lawley (2002)** about assigning patients to nurses in neonatal intensive care. This study found that after an assignment has been created, the system should allow the charge nurse to make assignment adjustments as she sees fit.

Regarding total practice level of head nurses for making nursing assignment. The current study revealed that two thirds of studied head nurses ' had high satisfaction practice level in performing nursing assignment. This finding might be due to the necessity of each patient care unit should have a master plan that includes the basic distribution of nurses needed to give patient care to cover the unit for each shift regardless the way of distribution nature and principals and the head nurses who participated in the study have worked for ten years and above in their respective units. The number of years worked account of the knowledge and experience in using the nursing assignment for years in the different nursing units.

This result congruent with the study conducted in Mansoura University by **Abd el-mogheth et al, (2014)** about the effect of nursing management process applied by head nurses on quality of patient care and found that two thirds of head nurses applied most activities with acceptable level regarding to staffing. This part of discussion answered the research question; what are head nurses knowledge and practice of nursing assignment used at Zagazig University Hospitals.

The current study revealed that, the majority of the study participants performed nursing assignment depend on the staff nurses and patient numbers. Arrange nurse-to-patient ratio, it is the first principle to make the effective nursing assignment. Nurse-to-patient ratio is the basic law of providing high-quality nursing care to emphasize on health and safety with consideration of patients' severity of need.

This result agreed with the study conducted in the USA by **Duffin (2014)** this study revealed that staffing based on nurse-patient ratios that were adjusted for patient acuity. Also, this finding agreed with the study conducted at the University of Missouri by **Bayram Dundar (2013)** who found that identifying appropriate nurse-patients ratio is another approach to ameliorate nurses' work condition and improving quality of patient safety and care.

The current study revealed that, the majority of head nurses check patients' documentation for update contents. This finding might be due to the head nurses' responsibility within the context of their positions is assuring that nursing care is provided in a safe and effective manner in order to do patient care assignments should be commensurate with the nursing needs of the patient, and the prescribed medical plan of care. This agreed with **Mahlegha et.al (2013)** that one basic and fundamental source of information on health care is the patient record, of which provides written evidence of patient progress.

The current study revealed that, the majority of head nurses plan after taken report of last shift It could be considered this finding due to at the beginning of a shift, where the head nurses are responsible for assigning nurses to patients after get the information related to patients' conditions from previous shift to start giving nursing care. This agreed with **Mustafa, (2015)** a charge nurse is responsible for assigning nurses to patients at the beginning of a shift to obtain the current patient's census and needs.

The current study revealed that, majority of head nurses announced nursing assignment to be known to staff nurses. This may be due to head nurses should share the responsibility and accountability along with their nurses to discuss individual nurses' requirements, explore options in a positive manner and assure recognizing that both have a responsibility to ensure that safe and effective nursing care is provided. This accountability is a legal responsibility and ethical consideration of head nurse.

This result agreed with the study conducted at the University of South Carolina by **Allen, (2012)** who studied the nurse -patient assignment, this study revealed that the steps of nurse-patient assignment process are the actions taken during the process of making the assignment may also be physical in nature, like drawing a grid or writing the assignment on paper and posting for staff to see.

On the other hand, the current study revealed that, less than a fifth of them not done the following activities related to nursing assignment: apply continues supervision to sure nursing assignment is applied , write patients' names, make round to collect data on patient needs, and check patients' condition bed to bed between the staff of both shifts when doing nursing assignment.

This may be due to the head nurses mostly depend on the patient's number in this study and their room number rather than patients' names when distributed patients' nursing care on nurses without considering to patients' needs as an easy way to do assignment without make rounds depend only on check patients' documentation for update contents according to this study all of these may be lead to unsafe nursing health care. This agreed with **CARNA (2014)** appropriate, ongoing communication and supervision are integral to a safe assignment of care. All health care providers should communicate with each other in a collaborative, responsive, respectful and responsible manner.

Regarding personnel characteristics of staff nurses the results of present study revealed that, majority of staff nurses had nursing diploma .This results agreed the study conducted in Sana'a-Yemen by **AL-Bardah et al, (2012)** to assess of nurses' awareness regarding mother and child rights at Al-Sabaen Hospital in Sana'a-Yemen and found that most of the nurses were diploma graduates and work as staff nurses.

The results of the present study revealed that, more than half of staff nurses had age ranged from 20 to less than 35 years old. This result agreed with the study conducted in Cairo University by **El.Sayed et al, (2010)** the study found that more than two thirds of the studied sample was young adults from 20-35 years of age.

Regarding total satisfaction level of staff nurses the finding of the current study revealed that more than two thirds of studied staff nurses` were highly satisfied regarding their job. This may be due to the staff nurses in this study were younger nurses tend to be more confident about their own careers as nurses and the profession in general. Also, two thirds of studied head nurses had high satisfaction practice level in performing nursing assignment.

This finding agreed with the study conducted at the University of Eastern, Finland by **Kvist et .al, (2012)** found that nursing staff are generally satisfied with their jobs, especially in terms of their motivation for work and their welfare at work. Job satisfaction was clearly related to nurses' perception of the quality of care provided by their working unit.

While this finding disagreed with the study conducted at the University of the Witwatersrand by **Selebi, (2007)** about job satisfaction among nurses in a public hospital in Gauteng and found that nurses experiencing a very low level of job satisfaction.

This finding of the current study showed that, the highest mean score of job satisfaction was related to work environment. This may be due to nurses are satisfy to meet working hours, suitable place for nurses ,there are enough supplies and equipment are available, better working relationships and they have a chance to work extra hours with payment.

This finding agreed with study conducted by **Yong-Shian and Violeta, (2016)** found that a negative correlation was found between job satisfaction and a negative correlation between job satisfaction and work environment and each of the domains of the practice environment which are nurse participation in hospital affairs ,quality of care , nurse manager ability ,staffing adequacy ,nurse–physician relationship and nursing information technology.

While the lowest mean score of job satisfaction was related to safety at work and adequacy of salary for their job domains, this may be due to nurses were dis-satisfied about the adequacy of salary for their work, In addition to the nurses view are expose to infection and the injuries from sharp equipment through direct contact with patient and lack of following the policy and procedures measures related to infection control and unavailability of personnel protective devices due to limited financial resources.

This finding was agreed with study conducted in Semnan University, Iran by **Emadi (2015)** who found that significant factors associated with job satisfaction is salary that some studies suggest that salary and benefits have the lowest satisfaction rating in the staff of an organization. Also, this finding was agreed with study conducted by **Chiang et.al,(2017)** who found that there is a positive association was found between job satisfaction and safety climate.

The results of present study revealed that there was a positive highly statistical significant correlation between head nurses` knowledge and practice of nursing assignment and the staff nurses' job satisfaction. This finding might be due to proper nursing assignment performed by knowledgeable and competent head nurses` that satisfied staff nurses requirement and individual needs.

This finding agreed with study conducted in Mansoura university by **El-Sabahy et al., (2015)** they found that high statistically significant relationship between time management knowledge and practice of head nurse and job satisfaction . This part of discussion answered the research question; what is the correlation between head nurses knowledge and practice of nursing assignment and job satisfaction among nurses in Zagazig University Hospitals.

While this finding disagreed with study conducted port said University by **Ibrahim (2002)** who found that no statistically significant differences were observed in all items except for patient' satisfaction and head nurses' knowledge.

V. Conclusions

Based on the findings of the current study, was concluded that: There was a statistical significant positive correlation between head nurses knowledge and practice of nursing assignment and the satisfaction of staff nurses.

VI. Recommendation

In the light of the current study findings, the following recommendations were suggested:

To hospital administration:

1. Conduct training programs on supervision and communication for head nurses.
2. Provide the necessary resources available to enable appropriate nursing assignment
3. Implement proper incentive system for good performance and distributed fairly among the hospital staff nurses.
4. Communicate staffing policies and procedures to all Personnel within Zagazig University Hospitals.
5. Develop electronic nursing assignment for more accurate and quick formation.

6. Ensure that senior nurse managers are accountable to provide suitable nursing assignment for more high practice level.
7. Ensure that the policy and procedures measures related to infection control and patient safety related to nursing assignment are followed.

To head nurses:

1. Enhance nurses satisfaction with their nursing assignment by increasing their awareness with polices and procedure of making nursing assignment.
2. Delegate the duty of making assignment to senior nurses by rotation for training, empowering and satisfaction.
3. Give priority to patients needs, nurses' workload, fatigue and patient acuity when making nursing assignment to assure patients' safety and safety nursing care.
4. Periodic meeting of staff nurses with head nurses must be maintained to discuss and solve problems and set action plans to enhance nurses' job satisfaction.
5. Regular round in hospital units to make sure that assignment is implemented as planned.

Further research is needed to clearly identify and prioritize methods to improve organizational and supervisory support to ensure high levels of nurses' job satisfaction.

References

- [1]. **AatishRaj. (2015):** Reinforcement theory of motivation Linked In Corporation©2017.Retrievedfrom:<https://www.slideshare.net/.../reinforcement-theory-of-motivation-54>.
- [2]. **AL-Bardah,S., Shenouda,M., Magdy,H. (2012):** Assessment of nurses' awareness regarding mother and child rights at Al-Sabaen Hospital in Sana'a-Yemen,Medicaljournalof . Cairo University. Vol. 80, No. 2, June: 201-207, 2012.
- [3]. **Al-Hamdan,Z.(2009):**Nurse managers, diversity and conflict managementdiversity&Equality in Health and Care.Retrievedfrom:<http://diversityhealthcare.imedpub.com/nurse-managers-diversity-and-conflict-management.php?aid=2087>
- [4]. **ALJazaery,A.,H&Khaleel,M.,A.(2016):**Assessment of the Head Nurses' Performance Regarding Staff Management at the Units of Al-Najaf AL-Ashraf City Hospitals,Kufa journal for nursing sciences,Vol. 6 No. 3 Sep. through Dec. 2016.
- [5]. **Allen,S.,B.(2012):**The nurse-patient assignment: purposes, decision factors and steps of the process,University of South Carolina, 2012, 113; 3506483.
- [6]. **Armstrong,S. ,Rispel,L.,&Kekana,L.(2015):**The activities of hospital nursing unit managers and quality of patient care in South African hospitals: a paradox?Glob Health Action. 2015; 8: 10.3402/gha.v8.26243. Published online 2015 May 11. doi: 10.3402/gha.v8.26243.
- [7]. **BabaeipourDivshali,M.,Amrollahimishavan,F.,Vanaki,Z.,Abdollahimohammad,A.,&Firouzskouhi,M.(2016):**Effect of head nurse empowerment program on staff nurses' job satisfaction at two educational hospitals in Rasht, Iran. Iranian journal of nursing and midwifery research, 2016 May-Jun; 21(3): 306–309, Received 2014 Oct 13; Accepted 2015 Nov 4.
- [8]. **Bayram Dundar.(2013):**Identifying relationship between patient acuity indicators and nurse workload ,UniversityofMissouri2013.Retrievedfrom:<https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/43991/research.pdf?sequence=1>
- [9]. **Canadian Nurses Association, Canadian Council for Practical Nurse Regulators, & Registered Psychiatric Nurses of Canada. (2014):** Joint position statement: Staff mix decision-making framework for quality nursing care. Ottawa, ON: Authors.
- [10]. **Chiang HY, Hsiao YC and Lee HF.(2017):**Predictors of Hospital Nurses' Safety Practices: Work Environment, Workload, Job Satisfaction, and Error Reporting. J Nurs Care Qual. 2017 Oct/Dec;32(4):359-368.
- [11]. **Clarke,S., Nancy, E. ,&Donaldson (2008):** Nurse staffing and patient care quality and safety, Chapter 25, Patient Safety and Quality: An Evidence-Based Handbook for Nurses. University of Pennsylvania 2008
- [12]. **College of nurses of Ontario. (2014):** RN and RPN practice: The client, the nurse and the environment. Pub. No. 41062, ISBN 978-1-77116-013-1, Copyright © College of Nurses of Ontario, 2014.
- [13]. **College and Association of Registered Nurses of Alberta (CARNA) (2014):** Assignment of Client Care: Guidelines for Registered Nurses. Edmonton, AB: Author. Website: nurses.ab.ca
- [14]. **Dehghani ,K., Nasiriani ,K., &Salimi ,T.(2016):**Requirements for nurse supervisor training: A qualitative content analysis.Iranjournal nursing midwiferyresearch, 2016Jan-Feb;21(1):63-70. doi: 10.4103/1735-9066.174760.
- [15]. **Duffin C (2014):** Increase in nurse numbers linked to better patient survival rates in ICU. Nurs Stand 28: 10.
- [16]. **Ellis, J. R., & Hartley, C. L. (2009):** Managing and coordinating nursing care (5th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- [17]. **EL.Sayed,Y.,Youssef,W.,Alshekhepy,H.,&Elfeky ,H.(2010):** Nurses' knowledge and Practices regarding detection and management of acute drug poisoning at Cairo University Hospitals,Nurses' Knowledge and practices.
- [18]. **ELSabahy,H.,E.,Sleem.W.,F.,&ELAtroush,H.,G.(2015) :**Effect of Time Management Program on Job Satisfaction for head nurse,Journal of Education and Practice. 2015; 6 (.32) :
- [19]. **Emadi,A.(2015):**Studying the factors affecting job satisfaction of employees of Semnan health centers.Semnan University of Medical Sciences, Semnan, Iran Journal Paramedical Sciences (JPS) Summer 2015 Vol.6, No.3 ISSN 2008-4978
- [20]. **Gautham,R.(2017):**Job satisfaction in organizational behavior- LinkedIn Corporation-Copyright 2017. Retrieved from: www.slideshare.net/raje shvcetmca/job-satisfaction-seminar
- [21]. **Herzberg .F.(1966):** One more time :How do you motivate employees? Harv Bus Rev, 46:55-65.
- [22]. **Ibrahim,S.,A.(2002):**The effect of a management training program on head nurses on quality of nursing care rendered in port said general hospital
- [23]. **Jabunkosi,L.(2011):**The exploration of the effective use of team nursing amongst professional nurses in drgeorgemukhari hospital .University of Limpopo medunsa campus .
- [24]. **Kentucky Board of Nursing,(2011):** Responsibility and Accountability of Nurses for Patient Care Assignment and Nursing Care Delivery, Advisory Opinion Statment, 1/2011, <http://kbn.ky.gov>.

- [25]. **Kvist,T.,Mäntynen,R.,Partanen,P.,Turunen,H.,Miettinen,M.,&Vehviläinen-Julkunen1,K.(2012):**The job satisfaction of finnish nursing staff: The development of a job satisfaction scale and survey results. *Nursing researchandpractice*. Volume 2012 (2012), Article ID 210509, 11 pages.
- [26]. **Mahlegha Dehghan,Dorsa Dehghan, Akbar Sheikhrabari, Masoume Sadeghi, and Mehrdad Jalalian (2013):** Quality improvement in clinical documentation: does clinical governance work?. *J Multidiscip Healthc*. 2013; 6: 441–450.
- [27]. **Mather CA, McKay A, Allen P. (2015):** Clinical supervisors' perspectives on delivering work integrated learning: A survey study. *Nurse Educ Today*. 2015;35:625–31. [PubMed].
- [28]. **Miller,D.K.(2015) :**Matching staffing assignments to patient acuity ,Agile Healthcare, Announcements, human capital management, management, RetrievedinOctober6, 2015.Retrieved from: <http://blogs.infor.com/healthcare/2015/10/matching-staffing-assignments-to-patient-acuity.html#sthash.IvXTSoMw.dpuf>.
- [29]. **Mohamed ,H.(2009):**The relation between nurses'job satisfaction and quality of their performance in Abu-Kabiergeneral Hospital
- [30]. **Motacki,K.,& Burke, K.(2016):** Nursing Delegation and Management of Patient Care,2nd Edition.
- [31]. **Mullinax,C., and Lawley.,(2002) :**Assigning patients to nurses in neonatal intensive care,Journal of the operational research society,January 2002, 53, Issue 1 : 25–35.
- [32]. **Mustafa Y.Sir, BayramDundar,Linsey M.Barker Steege and Kalyan S.Pasupathy (2015):** Nurse–patient assignment models considering patient acuity metrics and nurses' perceived workload. *Journal of Biomedical Informatics*.55, June 2015, 237-248
- [33]. **NCSBN. (2015):** National guidelines for nursing delegation, 7Issue 1 April 2016,Retrieved from :www.journalofnursingregulation.
- [34]. **Numminen O. , Leino-Kilpi H., Isoaho H. , Meretoja R., (2015):**Congruence between nurse managers' and nurses' competence assessments: A correlation study. *Journal of Nursing Education and Practice* .2015, 5(1):142-150.
- [35]. **Punnakitikashem,p.,Rosenberger,j.,&Behan,D.(2007):**A Stochastic programming approach for integrated nurse staffing and assignment,department of industrial and manufacturing systems engineering, The University of Texas at Arlington
- [36]. **Rashed,S.,A.,Mohamed,M.,A.&Morsey,S.,M.(2015):**Performance of head nurses management functions and its effect on nurses' productivity at AssiutUniversity Hospital,Journal of nursing and health science (IOSR-JNHS)Volume 4, Issue 5 Ver. II (Sep. -Oct. 2015), PP 38-49
- [37]. **Selebi,C.,Minnaar,A.(2007):**job satisfaction among nurses in a public hospital in gadteng,vol30,No 3(2007).pp 53-61,university of Witwatersrand, Southafrica
- [38]. **Schoener B.(2000):**The effect of clinical staff assignment models on perceived responsibility ,autonomy, team membership, role relationships and job satisfaction ,122-123
- [39]. **Stedman's.(2017):** Nursing assignment definition, Medical dictionary ,Lippincott Williams &wilkins ,2017.Retrievedfrom:<https://www.amazon.com/Stedmans-Medical-Dictionary-Professions-Nursing/dp/1608316920>
- [40]. **Teeter,K.(2014):**Relationship Between Job satisfaction and nurse to patient ratio with nurse burnout. Gardner-Webb University,PP39,Retrievedfrom:http://digitalcommons.gardner-webb.edu/nursing_etd.
- [41]. **Tomic K. (2017):** Nursing Assignment based on Patient Acuity: The Road to Nursing Job Satisfaction, in partial fulfillment of the requirements for the degree of doctor nursing practice, submitted to the College of Nursing and Heath Profession of Valparaiso University, Valparaiso, Indiana.
- [42]. **UK Essays.(2017):**Job satisfaction and its importance In the workplace education essay.Retrievedfrom: <https://www.ukessays.com/essays/education/job-satisfaction-and-its-importance-in-the-workplace-educ>
- [43]. **Yamane, Taro. (1967):** Statistics: An Introductory Analysis, 2nd Ed., New York: Harper and Row.
- [44]. **YONG-SHIAN GOHand VIOLETA LOPEZ (2016):** Job satisfaction, work environment and intention to leave among migrant nurses working in a publicly funded tertiary hospital. *Journal of Nursing Management*, 2016, 24, 893–901.

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