

Factors Affecting on Nursing Shortage and its Relation to Organizational Commitment at Matai General Central Hospital

Asmaa Mohamed Ahmed¹, Safaa Mohamed Abd Elrhmaan², Ebtsam Ahmed Mohamed³, Heba Dakrory Ali El-said⁴

1. B. Sc in Nursing, Minia University.
2. Professor of Nursing Administration, Faculty of Nursing –Minia University.
3. Assistant prof. of Nursing Administration, Faculty of Nursing –Minia University.
4. Lecturer of Nursing Administration, Faculty of Nursing –Minia University

Abstract

Background: Nurses are the most important resources of healthcare organizations. The sustained profitability of an organization depends on its workforce, job satisfaction and organizational commitment; as well the employees' job satisfaction enhances their motivation, performance, reduces absenteeism, turnover and nursing shortage. **Aim of the study** to assess factors affecting on nursing shortage and its relation to organizational commitment at Matai General Central Hospital. **Research design:** A descriptive correlational research design was used to achieve the aim of the present study. **Setting:** The study was conducted at Matai General Central Hospital. **Subjects:** All staff nurses were included in this study with number 141 nurses (19 head nurse and 122 staff nurse). **Tools of data collection:** Tool (I): Factors affecting Nursing Shortage scale contained two parts Part I: Personal Data. Part II: Factors Affecting Nursing Shortage Scale. Tool (II): Organizational Commitment Scale. **Results:** The main findings of the study revealed that, (61%) of staff nurses have moderate level regarding total factors effect nursing shortage, followed by (39%) of them have high level of total factors effect nursing shortage, in addition to the total organizational commitment (48.9%) of staff nurses have moderate level, followed by (47.6%) of them have high level of organizational commitment. **Conclusion:** The study findings concluded that there was a positive correlation between factors affecting on nursing shortage and organizational commitment. **Recommendations:** Nursing director, Human Resource Personnel and Chief Executive Officer's of the hospital should develop various strategies to increase organizational commitment of nurses

Key Words: Factors Affecting, Nursing Shortage, Organizational Commitment.

Introduction:

Nurses are a critical part of healthcare and make up the largest section of the health profession. Also, they are the main stone of care during the most vulnerable times in their lives. They play an important role in impacting the quality and effectiveness of health care delivery which is provided on 24 hours' basis each day of the year. Furthermore, the ability of health care delivery system to respond to rapidly evolving health care will depend on the numbers and qualification given to professional nurses, so the shortage in such category could be serious problem (Haddad et al., 2022).

Nursing shortage is a condition in which delicate balance of nurse supply and nurse demand is not at equilibrium. A nursing shortage is not just a matter of understating. Nurses or the public may believe there is a shortage based on a variety of factors. Depending on local factors such as tight budgets or poor working conditions, increased workload, dissatisfied nurses and tendency to leave the services. Experts generally use indicators such as employer reports, vacancy rates, turnover, recruitment difficulty, staffing levels, Registered nurse (RN) supply per population, or forecasting models to determine a nursing shortage (Abdelhamed et al., 2017).

The same author added that nursing shortage is considered as a major cause that affects the nurses' productivity, efficiency, effectiveness, and competency. Nurses will become more likely to be dissatisfied with their job. Nursing shortage also affects negatively on patient safety and outcome. These lead to increase mortality rates, accident rates, patient injuries, and cross infection rates.

Organizational commitment is defined by management experts as an attitude or a direction to an organization which link the individual identity to an organization. Organizational commitment refers to the extent to which an individual's identification with involvement in a particular organization (Karem et al., 2019; Manaloto et al., 2021).

Nurses' organizational commitment is an essential precondition not only for the reduction of negative consequences such as conflicts, exhaustion and turnover, but also for the maintenance of patients' health through a deeper commitment to patients. Members who are highly committed to their organization tend to earn external as well as internal remuneration (e.g., job satisfaction), to maintain friendly relationships with coworkers, and to perform tasks in favor of the organization (Han & Chung, 2019).

Based on nursing shortage statistics, there is an urgent need to protect and support this profession. The shortage is getting critical that hospitals find themselves competing for nurses by offering the best benefit plans and the highest pay. Major strategies to manage nursing shortage include; improving workforce planning, incorporation of the characteristics of magnet hospital for attracting and retaining nurses, improving nursing recruitment, retaining nursing staff and improving the image of nursing as a profession (Yusuf et al., 2020, Tamata et al., 2021).

Significance of the study:

Nurses are the heart and backbone of all hospital facilities and the cornerstone of the health care in Egypt. The total number of nurses in Egypt is estimated to be 207.000

nurses with only 56.000 of them members of the syndicate and enjoying its privileges. The majorities of them are marginalized and cannot acquire the basic rights. The Ministry of Health and Population estimates that Egypt suffers from a shortage of 44.000 nurses at all levels (Abdelhamed et al., 2017).

According to Yusuf et al., (2020) Job satisfaction as a factor affect mainly on nursing satisfaction has a relationship with the commitment of nurses in hospital organizations. High job satisfaction is essential to increase the engagement of nurses in hospital organizations. Job satisfaction is created from the culture in the organization that can guarantee nurses in terms of capacity building and career development of nurses.

Also through my work in Matai General Central Hospital. It was observed that some of staff nurses are leaving the profession due to highly dissatisfaction toward their job arising from current working condition that are characterized by heavy workloads, poor of communication between of them, lack of development opportunities and salary, etc. all These issues affect negatively on organization commitment. So the researcher introducing this study about factors effect on nursing shortage and its relation to organizational commitment at Matai General Central Hospital.

Aim of the study:

Current study aimed to assess factors affecting on nursing shortage and its relation to organizational commitment at Matai General Central Hospital.

Research questions:

1. What are factors affecting on nursing shortage among nurses at Matai General Central Hospital?
2. What is the level of organizational commitment among nurses at Matai General Central Hospital?
3. Is there a relation between factors affecting on nursing shortage and organizational commitment among nurses at Matai General Central Hospital?
4. What are the relation between personal data, factors affecting on nursing shortage and organizational commitment among nurses at Matai General Central Hospital?

Subjects and methods:

Research Design: A descriptive research design was utilized to achieve the aim of the current Study.

Research Setting: This study was conducted at Matai General Central Hospital.

Matai General Central Hospital which located on Alaksa Mosque, Madent Matay and affiliated to Ministry of Health and Population in Minia government. This hospital provide care for the largest group of population (urban and rural) as it serves Matai District and surroundings and provides different services. This hospital consisted of one building its capacity (90 beds) that contain four floors.

Subjects: A convenience sample which represent all staff nurses were included in this study, the subjects of the study sample who included were "head nurses and staff nurses" who working at Matai Central General Hospital. Their total numbers are 141 nurses (19 head nurse and 122 staff nurse).

Data collection tools: Two tools were used to collect data as

Tool (I): Composed of two parts

Part I: Personal data, it was used to collect data about nursing staff and encompassed item such as age, gender, job title, education level, department name, years of experience in the nursing field, position, salary, and residence.

Part II: Factors Affecting Nursing Shortage Scale.

This tool developed by Leong et al., (2012) and modified by the researcher to determine the factors effect on nurses' shortage among nurses. It consisted of 79 items; and it was divided into 9 dimensions as follow: workload (12 items); turnover (6 items); salary and employment benefits (8 items); new nursing staff (6 items); continuing nursing education (5 items); work environment (12 items); staff recognition (8 items), ability to experience the emotions of others (8), and job satisfaction (14 items). Each item was measured by 3 point Likert scale ranged as: (Agree=3, Uncertain=2, Disagree =1). The scoring system ranged from (79 to 237), and it divided into three levels as follow:

- Low factors affecting nursing shortage from 79 to 131.
- Moderate factors affecting nursing shortage from 132 to 184.
- High factors affecting nursing shortage 185 to 237.

Tool (II): Organizational Commitment Scale:

This tool developed by Hamad, (2006) to assess organizational commitment among nurses. It consisted of 49 items; and it was divided into 5 dimensions as follow: job loyalty (11 items); responsibility for the direction of the employer (11 items); desire to continue working (8 items); faith in the institution (9 items); elements that affect the level of job commitment (10 items); Each item was measured by 5 point Likert scale ranged as: (Strongly Agree=5, Agree= 4, Neutral =3 Disagree =2, strongly Disagree =1). The scoring system ranged from (49 to 245), and it divided into three levels as the following:

- Low organizational commitment from 49 to 114.
- Moderate organizational commitment from 115 to 180.
- High organizational commitment from 181 to 245.

Validity of Tools:

The tools were tested for the face validity by a jury of 5 experts in the field of Nursing Administration. The jury composed of one Professor from Faculty of Nursing, Minia University, also one Assistant Professor and three Professors from Faculty of Nursing, Assuit University. Each of the expert panel was asked to examine the instrument for content coverage, clarity, wording, length, format and overall appearance. No necessary modification was done from jury panel.

Reliability of Tools:

Reliability of the tools was performed to confirm consistency of tool. The internal consistency measured to identify the extent to which the items of the tool measure the same concept and correlate with each other by Cronbach's

alpha test. The Cronbach's alpha for the tools categorized as follow:

- 1st tool: Factors affecting nursing shortage scale (0.86)
- 2nd tool: Organizational commitment scale (0.82)

Pilot Study:

A pilot study was conducted on 10% of participants which equal of staff nurses (14=12nurses+2head nurse) from Matai Central General Hospital to ascertain the clarity, comprehensiveness and applicability of the tool as well as to estimate the appropriate time required to fill the tool. Based on pilot study there was no modification done, and it was added to final results.

Ethical Considerations:

- An oral agreement (consent) was obtained from each participant to collect the study data before data collection. After explanation of the purpose of the study, the privacy and confidentiality of the answers were guaranteed by the researcher.
- Each sheet was coded and participants' names not appeared on the sheets for the purpose of anonymity and confidentiality.
- The participants were informed that their participation in the study was completely voluntary and there was no harm if they not participate in the study.

Data Collection Procedure:

Written approvals were obtained from administrative authorities. Also meet director of the Matai Central General Hospital to gain cooperation. Oral agreement (consent) taken from each participant after explained the aim of this study. Data was collected using a self-administered tool covering staff nurses' data. The tools were distributed to all the staff nurses after explaining the purpose and process of data collection. Staff nurses were given from 25 minute to 30

minute to answer the tools. Finally data was collected during three months from beginning of August to end of October 2021.

Administrative Design:

- A written initial approval was obtained from the Research Ethics Committee of the Faculty of Nursing, Minia University .
- Permission to conduct the study was obtained from the Dean of the Faculty of Nursing, Minia University.
- Permission to conduct the study was obtained from director of the Matai Central General Hospital and head of each department

Statistical analysis:

The data obtained from the study tools were categorized, tabulated, analyzed and data entry were performed using the SPSS software (statistical package for social sciences version (25.0). **Fisher Exact Test:** It is a non-parametric statistic that is used to test for the association (or relationship) between the categories of two independent samples (row and column variables) to reflect a real association between these 2 variables in the population. Probability (P-value) is the degree of significance, less than 0.05 was considered significant. The smaller the P-value obtained, the more significant is the result (*) and less than 0.001 was considered highly significant (**). **Correlation analysis:** correlation is used to test the nature and strength of relation between two quantitative / ordinal variables. The spearman correlation co-efficient (rho) is expressed as the Pearson co efficient. Correlation is a statistical method for determining the nature and strength of a relationship between two numerical variables. The sign of the co-efficient denotes the nature of the relationship (positive/negative), and the value denotes its strength, as follows: Rho values less than 0.25 have a weak correlation, 0.25-0.499 have a reasonable correlation, 0.50-0.74 have a moderate correlation, and values greater than 0.74 have a strong correlation.

Results:

Table (1): Percentage distribution of staff nurses according to personal data at Matai General Central Hospital (no.=141).

Characteristics	(no.= 141)	%
Age		
• 21-31yrs	87	61.7
• 32-42yrs	40	28.4
• >43	14	9.9
Mean+SD =30.02+7.54		
Gender		
• Male	43	30.5
• Female	98	69.5
Educational qualification		
• Secondary school of nursing diploma	20	14.1
• Technical institute of nursing	88	62.4
• Bachelor of nursing	33	23.5
Years of experience		
• 1-10yrs	108	76.6
• 11-20yrs	26	18.4
• >21yrs	7	5
Mean+SD =8.39+5.81		
Salary		
• 1400-<2500	42	29.8
• >2500-<3500	80	56.7
• >3500	19	13.5
Position Title		
• Nurse	122	86.5
• Head nurses	19	13.5

Characteristics	(no.= 141)	%
Residence		
• Rural	95	67.4
• Urban	46	32.6

Table (1) shows that (61.7%) of staff nurses are in age group ranged between 21-31 yrs. with mean score (30.02±7.54) also, (69.5%) of them are females. As regards to educational qualification (62.4%) of them have technical institute of nursing. In addition, (76.6%) of them have 1-10 yrs. of experience with mean score (8.39±5.81). Regarding to salary (56.7%) of them have >2500-<3500, and (86.5%) of them are staff nurses. Finally regarding the residence (67.4%) of them from rural area.

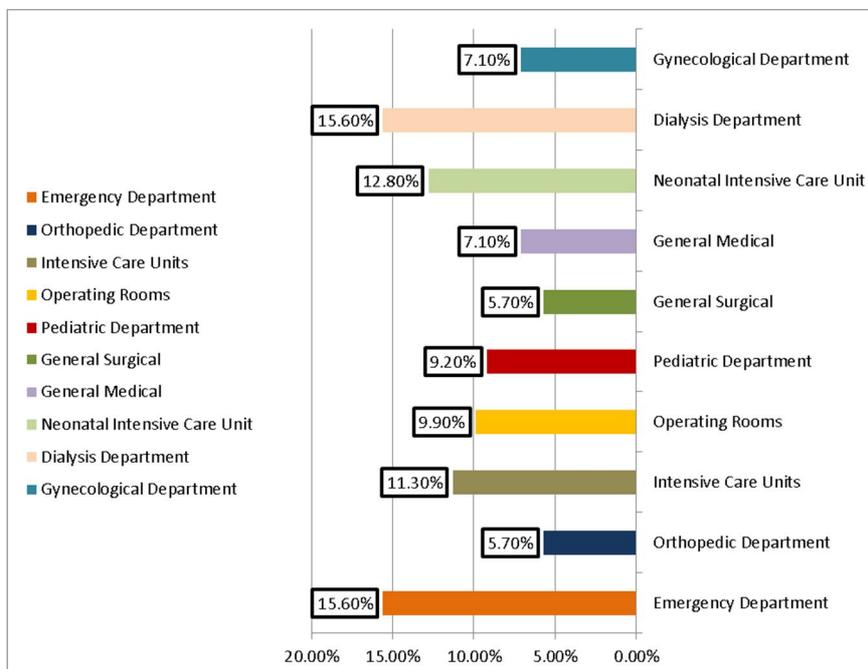


Figure (1): Percentage distribution of the staff nurses in relation to their department at Matai General Central Hospital (no.=141).

Figure (1) shows that (15.6%) of staff nurses are working in emergency and dialysis department, while (12.8%) of them working in neonatal intensive care unit, follow by (11.3%) of them working in intensive care unit.

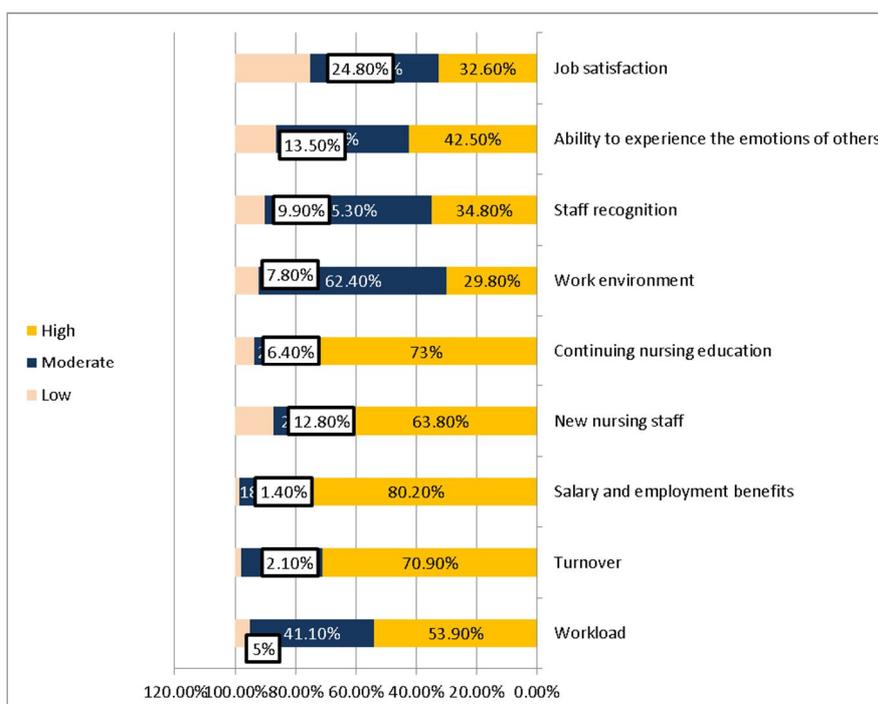


Figure (2): Percentage distribution of all dimensions in relation to factors effect on nursing shortage among staff nurses at Matai General Central Hospital (no=141).

Figure (2) illustrates that highly percentage of staff nurses have high level regarding salary and employment benefits, continuing nursing education, turnover, new nursing staff and workload factor by (80.2%, 73%, 70.9%, 63.8% and 53.9%) respectively. While (24.8% & 13.5%) of them have low level for factors of “job satisfaction and ability to experience the emotions of others respectively”.

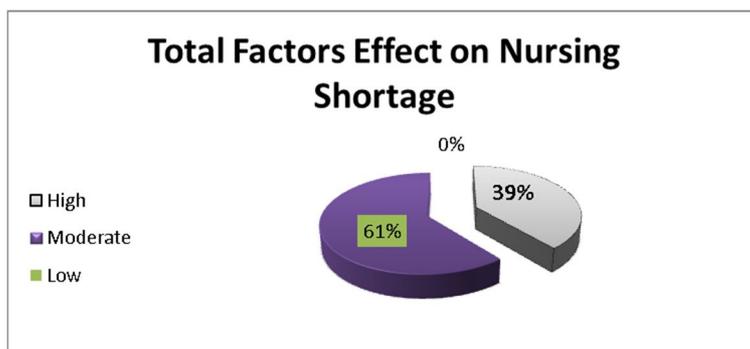


Figure (3): Percentage distribution of total factors effect on nursing shortage among staff nurses at Matai General Central Hospital (no.=141).

Figure (3) illustrates that (61%) of staff nurses have moderate level regarding total factors effect nursing shortage, followed by (39%) of them have high level.

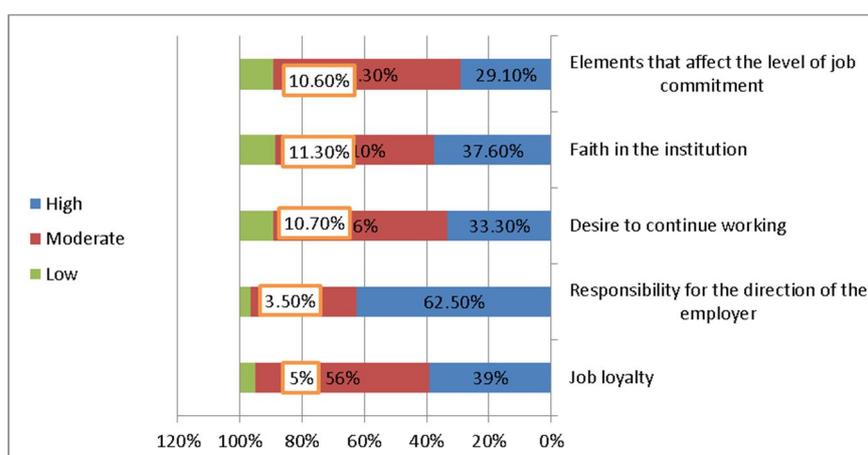


Figure (4): Percentage distribution of all dimensions in relation to organizational commitment among staff nurses at Matai General Central Hospital (no.=141)

Figure (4) illustrates that highly percentage of staff nurses have high level regarding dimensions of responsibility “the direction of the employer, job loyalty& faith in the institution” by (62.5%,39% & 37.6%) respectively. While (11.3%, 10.7% &10.6%) of them have low level for dimensions of “faith in the institution, desire to continue working & elements that affect the level of job commitment” respectively.

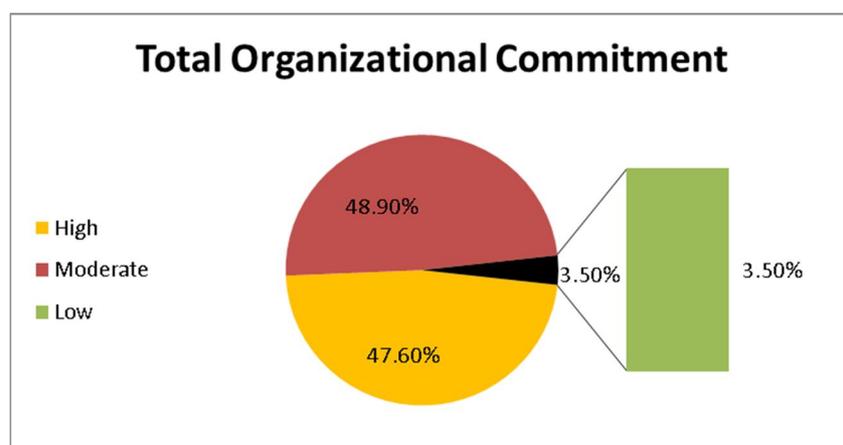


Figure (5): Percentage distribution of total organizational commitment among staff nurses at Matai General Central Hospital (no.=141).

Figure (5) shows that (48.9%) of staff nurses have moderate level regarding total organizational commitment, followed by (47.6%) of them have high level and (3.5%) have low level of organizational commitment.

Table (2): Relation between personal data of staff nurses regarding factors affecting on nursing shortage at Matai General Central Hospital (no.= 141).

Personal data	Low n=0		Moderate n=86		High n=55		Fisher-exact test (p value)
	No.	%	No.	%	No.	%	
Age							
• 21-31yrs	0	0	61	70.1	26	29.9	8.78(.011*)
• 32-42yrs	0	0	17	42.5	23	57.5	
• ≥43	0	0	8	57.1	6	42.9	
Gender							
• Male	0	0	27	62.8	16	37.2	.084(.461)NS
• Female	0	0	59	60.2	39	39.8	
Position							
• Nurse	0	0	71	58.2	51	41.8	3.99(.148)NS
• Head nurse	0	0	15	78.9	4	21.1	
Educational qualification							
• Secondary school nursing diploma	0	0	13	65	7	35	.173(.939)NS
• Technical institute of nursing	0	0	53	60.2	35	39.8	
• Bachelor of nursing	0	0	20	60.6	13	39.4	
Years of experience							
• 1-10yrs	0	0	67	62	41	38	3.18(.187)NS
• 11-20yrs	0	0	17	65.4	9	34.6	
• ≥21yrs	0	0	2	28.6	5	71.4	
Salary							
• 1400-<2500	0	0	27	64.3	15	35.7	5.19(.079)NS
• ≥2500-<3500	0	0	52	65	28	35	
• ≥3500	0	0	7	36.8	12	63.2	
Residence							
• Rural	0	0	52	54.7	43	45.3	4.75(.042*)
• Urban	0	0	34	73.9	12	26.1	

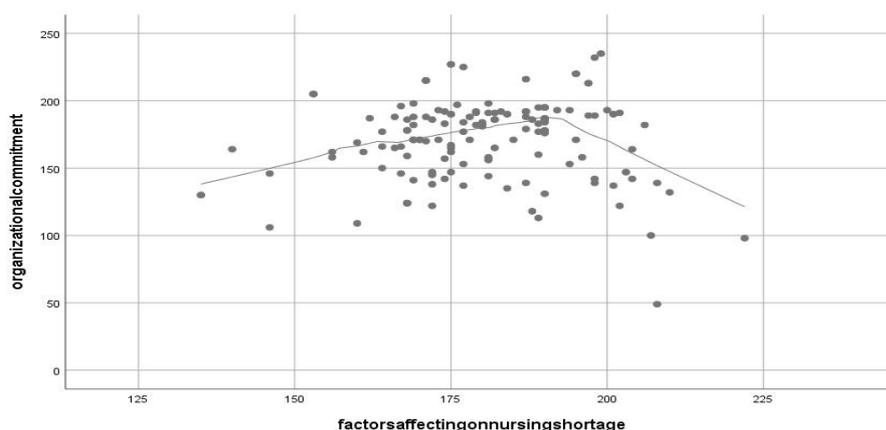
NS: no significant difference, *: Significant difference in between departments (p value ≤ 0.05)

Table (2) explained that, there was no statistically significant differences between all personal data and total factors affecting on nursing shortage among staff nurses except age and residence as (P=.011* & P=.042*), respectively.

Table (3): Relation between personal data of staff nurses regarding organizational commitment at Matai General Central Hospital (no= 141).

Personal data	Low n=5		Moderate n=69		High n=67		Fisher-exact test (p value)
	No.	%	No.	%	No.	%	
Age							
• 21-31yrs	3	3.4	55	63.3	29	33.3	20.5(.001**)
• 32-42yrs	2	5	9	22.5	29	72.5	
• ≥43	0	0	5	35.7	9	64.3	
Gender							
• Male	0	0	23	53.5	20	46.5	2.06(.389)NS
• Female	5	5.1	46	46.9	47	48	
Position							
• Nurse	4	3.2	59	48.4	59	48.4	2.84(.536)NS
• Head nurse	1	5.3	10	52.6	8	42.1	
Educational qualification							
• Secondary school nursing diploma	0	0	15	75	5	25	13.2(.006*)
• Technical institute of nursing	1	1.1	38	43.2	49	55.7	
• Bachelor of nursing	4	12.1	16	48.5	13	39.4	
Years of experience							
• 1-10yrs	5	4.6	54	50	49	45.4	1.93(.752)NS
• 11-20yrs	0	0	11	42.3	15	57.7	
• ≥21yrs	0	0	4	57.1	3	42.9	
Salary							
• 1400-<2500	1	2.4	30	71.4	11	26.2	14.6(.003)**
• ≥2500-<3500	4	5	34	42.5	42	52.5	
• ≥3500	0	0	5	26.3	14	73.7	
Residence							
• Rural	4	4.2	40	42.1	51	53.7	5.30(.058)NS
• Urban	1	2.2	29	63	16	34.8	

Table (3) reported that, there was no statistically significant differences between all personal data and total organizational commitment among staff nurses except age, educational qualification and salary as ($P=.001^{**}$, $P=.006^{*}$ & $P=.003^{**}$) respectively.



****Correlation is significant at the 0.01 level (2-tailed). * $p \leq 0.05$ (significant) ** $p \leq 0.05$ (highly significant), PCC: P – value based on Pearson correlation coefficient**

Figure (6): Correlation between factors affecting on nursing shortage and organizational commitment at Matai General Central Hospital (no= 141).

Figure (6) explored that, there was a positive correlation between factors affecting on nursing shortage and organizational commitment ($r=.019$, $P=.822$).

Discussion:

Nurses are considered the heart of health care organizations and keeping nurses in the organization remains a challenge for nurse administrators. Therefore, organizational measures must be instituted in order to ensure highly committed and dedicated nursing workforce and promote nurse retention. This is necessary to ensure the continuity of quality patient care and services (Al Soqair, 2021; Tamata et al., 2021).

As regard to personal characteristics among the studied sample, findings showed that more than half of staff nurses were in age group ranged between 21-31 yrs., with mean score (30.02 ± 7.54). Regarding to gender, more than two thirds of them were females. As regards educational qualification, findings of the present study showed that about two thirds of them had a degree of technical institute of nursing. Related to years of experience, findings of the current study showed that, the majority of the current study had ten years of experience. As regards the salary more than half of the study sample had salary from (>2500 - <3500). Concerning job position, the present study displayed that the vast majority of the studied sample were staff nurse. Moreover greater two thirds of the study sample reside in rural areas. Concerning the staff department, it was observed that the high percent of the study nurses was worked in emergency and dialysis units.

As regards distribution of all dimensions in relation to factors effect on nursing shortage among staff nurses, the current study findings showed that high percentage of the study sample assured high level of factors related to salary and employment benefits, continuing nursing education, turnover, new nursing staff and workload that affect directly on nursing shortage. That might be explained by one of the most important reasons for nursing shortage was the nursing dissatisfaction with their salaries in exchange for the number of working hours and heavy workloads, which pushes them to change the field and increase the turnover rate.

This was similar to the study conducted by Aiken et al., (2018) who reported that one of the main factors that effect on nursing shortage were salary, work pressure and heavy workload. Also it supported with Hakami et al., (2020) who concluded that there was a highly statistical significant difference between studied group regarding their agreement about total organizational factors, this may be due to inadequate salary and benefits, increase number of patient, unequal distribution of night and evening, lack of nurses involvement in decision making.

The same as reported by Al Momani, (2017) that the most five prominent for nursing shortage and influencing the intention to leave were pay and benefits, work pressure, praising and recognition for achievements, growth opportunities provided for job advancement, and lack of involvement in making decisions related to their units.

This finding also was compatible with Abdelhamed et al., (2017) who displayed that most of studied sample agreed that the organizational, personal, educational and social factors are contributing to the nursing shortage. Most of them agreed work overload, inadequate salary and incentives, unsafe work environment, lack of educational program and society sees nursing as career for profit only are contributing to nursing shortage

As regards distribution of total factors affect on the nurses shortage, the actually study illustrated that two thirds of staff nurses had moderate level regarding total factors effect nursing shortage, might be due to the staff nurses had many factors effect on their job and lead to the shortage in nursing as salary and employment benefits, continuing nursing education, turnover, new nursing staff and workload.

As regards distribution of total organizational commitment among staff nurses, the current study showed that nearly half of the study sample had moderate and high level regarding total organizational commitment. This may be explained with many factors as administrative structure and working environment, job security and social utility, career

improvement facilities and working conditions and payments have all important effects on organizational commitment respectively in different time and forms.

The current study finding was compatible with the study of **Ahmed et al., (2017)**, who reported that regarding organizational commitment of nurses in their study, the total mean score of organizational commitment was moderate, which means that nurses had a moderate level of organizational commitment to their hospital. The mean score of affective commitment and continuance commitment was also moderate, meaning that nurses had a moderate level of both types of commitment.

the same as reported by **Saad Elzohairy et al.,(2019)**, who reported that nearly half of professional nurses got moderate level of organizational commitment. The same as reported by **Yusuf et al., (2020)** as that the majority of nurses were in the medium satisfaction level, and the vast majority of nurses have an organizational commitment with medium criteria.

Also, these findings against **Aboelmhasen et al.,(2022)**, illustrated that the study sample had a high level of organizational commitment in all dimensions, which was reflected in the total mean percent. Also, **Karem et al.,(2019)** who reported that the results nearly half of the subjects reported high level of organizational commitment and the finding of a study showed that nurses who worked in organizations that valued their contributions and concerned for their well-being were highly committed to their organizations. Moreover **Amer and Atiea (2020)**, who reported that total commitments among the studied nurses reveal that nearly half had the low scoring scale, while the minority of the study sample had a high scoring scale.

Regarding relation between personal data of staff nurses and factors affecting on nursing shortage, the current study findings explained that, there were no statistically significant differences between all personal data and total factors affecting on nursing shortage among nursing except age and residence.

The current study was agreeing with **Gharib, (2019)**, who concluded that there were statistically significant differences between total factors affecting on nursing shortage among nursing and age and residence, marital status .

This result didn't match with **Amer and Atiea,(2020)**, who reported that there was not statistically significant difference between the total factors level affecting on nurse shorting and personal characteristics of the study nurses. The same as reported by **Tamata et al., (2021)**, who concluded that there was not any statistically significant difference between the total factors level affecting on nurse shorting and personal characteristics of the study nurses except job position.

According to relation between personal data of staff nurses and organizational commitment, the present findings explained that there were no statistically significant differences between all personal data and total organizational commitment among nursing except age, educational qualification and salary.

This is in agreement with the study of **Ahmed et al.,(2017)**, who reported that there were statistically significant differences between total organizational commitment among nurses and age, educational level. The same as reported by **Labrague et al., (2018)**, who concluded

that there were statistically significant differences between total organizational commitment among nurses and age, educational level, salary, years of experiences.

According to correlation between factors affecting on nursing shortage and organizational commitment, the current findings showed that there was a positive correlation between factors affecting on nursing shortage and organizational commitment. This seemed to imply that extremely committed nurses are often pleased and content with their professions, and would like to continue in their professions for a longer period of time.

It also might be explained that organizational commitment in nurses may be developed to enhance nurses' working practices by improving staffing levels, improving hospital resources, giving appropriate patient-nurse ratios, providing professional growth, and establishing open forums for staff-administration collaboration. Integrating nurses with one another can boost organizational commitment in nurses.

This is in agreement with the study of **Manaloto et al., (2021)** who reported that there was a positive correlation between turnover as a factor affecting on nursing shortage and organizational commitment.

The same as reported by **Bell and Sheridan, (2020)** who concluded that there was a positive correlation between workload and turnover as a factor affecting on nursing shortage and organizational commitment. Also, **Cherian et al., (2018)** who found that the nurses' total Organizational commitment levels were significantly correlated to their extrinsic job satisfaction as a factor effect on nursing shortage .

Conclusion:

In light of the study results and research questions, it can be concluded that, the results of the present study revealed that factors related to salary and employment benefits, continuing nursing education turnover, new nursing staff and workload affect mainly on nursing shortage which badly affect nurses' organizational commitment greatly.

Also the actually study illustrates that more than half of staff nurses had moderate level regarding total factors effect nursing shortage, followed by more than one third of them had high level. In addition to the total organizational commitment less than half of staff nurses had moderate as well as high level of organizational commitment.

In addition there were no statistically significant differences between all personal data and total factors affecting on nursing shortage among staff nurses except age and residence as ($P=.011^*$ & $P=.042^*$), respectively. Also there was no statistically significant differences between all personal data and total organizational commitment among staff nurses except age, educational qualification and salary as ($P=.001^{**}$, $P=.006^*$ & $P=.003^{**}$) respectively. Finally it also showed that there was a positive correlation between factors affecting on nursing shortage and organizational commitment

Recommendations:

In the light of the present findings, the researcher recommended the following:

At practical level: -

- Improve the working environment of the hospitals and health care agencies improve recruitment and retention of nurses.

- Develop a clear plan for nurses' distribution all over the country and at the hospital level to cover work needs and prevent workload.
- Develop various strategies by Nursing director, Human Resource Personnel and Chief Executive Officer's (CEO's) of the hospital should to increase organizational commitment of nurses.
- Improve salary and upgrade position of nurses.
- Give necessary support to nurses by the hospital management to sense how they are important to this organization through close supervision, meetings and give appreciation for their contributions to the organization.
- Encourage voluntary overtime and its pay should be increased regularly.
- Encouraging a good nurse honoring by the ideal nurse from the hospital administrators.

At research level: -

- Conducting further studies on large probability sample to achieve generalizable results.
- Apply a comparative study between hospitals to identify adequately staffed to provide additional evidence of the relationship between nursing shortage and effect on organizational commitment.

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