Nurses' perception regarding nursing practice environment and its effects on intention to quit

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The nursing practice environment is a predominant factor that affects nurses' decisions to quit or stay. Aim: to assess the nurses' perception regarding the nursing practice environment and its effect on the intention to quit. Methods: It's a descriptive correlational study design. The samples of the present study include [360] nurses from selected hospitals. Three tools were used; namely, 1) A demographic sheet 2) A practice Environment Scale, and 3) An intention to quit questionnaire. Results: The majority of the nurses perceptions are mixed concerning the practice environment (78.9%). the highest percentage of nurses' perceive a better practice environment in El Rajehy hospital (46.7%), while, the lowest percentage of them is in the main hospital (2.2%). About (67.5%) of the nurses had the intention to quit. Conclusion: There was a negative correlation between the intention to quit and the total practice environment with highly statistically significant differences (P. value <0.01).

INTRODUCTION

Recent health organizations have focused on providing high-quality work environment and services that require motivated and committed employees. For that reason, one of the greatest challenges facing these organizations is related to the long-term retention of their competent employees, who are expected to provide excellent services to agencies Suleyman (2018).

The work environment in health organizations is considered a basic factor in the welfare of a health service, De Oliveira, et al. (2017).

Nurses who intend to leave their jobs do not take such a decision suddenly haphazard; their decision grows day by day due to work environment dissatisfaction Parry, (2019). A good nursing work environment can facilitates nurses' work and leads to the best nurse and patient outcomes Unruh and Zhang, (2019), American Association of Colleges of Nursing, (2018) and Jain & Kaur, (2019).

Kohun (2019) defined the work environment as the sum of the potential sufferings, actions, and other factors related to the activities and performances of personnel. Mobley (2017) classified the work environment as the all aspects of relations between personnel and their work, and defined the intention to quit as the employee's idea of finding an alternative job in another organization due to their dissatisfaction with the current work.

Many international studies assessed the nursing practice environment and its effect on the intention to quit Lin, and Chen, (2011), Murrells, and Leone, (2015), Mandy (2020) and Alsufyani, et al. (2021). There is still high nursing turnover and intention to quit, which represent major problems facing many countries including Egypt. Consequently, such shortage of nursing staff due to high rates of nursing turnover affects the quality of received patients care services Oktizulvia et al. (2017) and Chan, & Morrison, (2020).

According to our experience during training the nursing students' and direct contact with nurses, we have noticed that not few nurses were motivated to quit and change their work to another job inside or outside the hospitals. We were motivated to assess the nurses' perception regarding the nursing practice environment and its effect on the intention to quit. To the best of our knowledge, this research has not yet been performed in Egypt.

Significance of the study

High nursing turnover and intention to quit are still becoming problems facing many countries including Egypt. Consequently, high rates of nursing can lead to shortage of nursing staff in health setting. Furthermore,

high turnover rates may lead to stress and un-satisfaction with practice environment for nurses Oktizulvia et al. (2017). Practical environment is the cornerstone of promoting nurse retention at the organizational levels and within the profession Chan, and Morrison, (2020). From the researchers' experience during training the nursing students' and direct contact with nurses, they noticed that some nurses inclined to quit them and moving work to other job inside or outside the hospitals. Moreover, this kind of research has not been performed before at Egypt, so the researchers encouraged to study these factors among nurses.

Aim of the study
Assess the nurses' perception regarding nursing practice environment and its effects on intention to quit.

Specific objectives
- Assess nurses' perception regarding nursing practice environment and intention to quit.
- Explore the effects of nursing practice environment on intention to quit.

Research questions
Research questions that guided this study were:
- What are the nurses' perception regarding nursing practice environment?
- Are there a negative effect of intention to quit for nurses on nursing practice environment?

MATERIALS AND METHODS
The present study assesses the nurses' perception regarding the nursing practice environment and its effect on the intention to quit. This study was conducted at Assiut University Hospitals, Assiut, Egypt, which include seven hospitals; namely, the main Hospital, Productive Woman Hospital, Pediatric Hospital, Al Orman Hospital, El Rajehy Hospital, Neurological Hospital, and Urological Hospital.

Study design
A descriptive correlational design was utilized.

Study sample
A random sample was taken from nurses working at Assiut University Hospitals. The representative sample includes 2400 nurses, and 360 nurses (15%) were taken in every hospital. Data collection began in October 2021 and ended in March 2022

Method of data collection
Tools of the study;
1. Socio-demographic data for nurses; age, gender, marital status, educational qualification, unit, name of hospital, years of experience and having children.
2. Practice Environment Scale of the Nursing Work Index (PES-NWI): which was modified by the authors based on the related literature, Lake (2002) and Aiken (2008) to

assess the practice environment of nurses. This tool consisted of 31 items grouped into five dimensions as the following: Nurse Involvement in hospital concerns (9 items); Managing the head nurse and her ability to support nurses (5 items); Quality of Nursing Care (10 items); Professional nurse-physician relations (3 items) and Personnel and resource adequacy (4 items). Nurses were asked to respond to 5 items on the Likert scale, which contained five scores ranging from strongly disagree to strongly agree. In the scoring system, nurses' responses of less than (25%) indicated a worse practice environment level; from (25 -75%) indicated mixed, and more than (75%) indicated a better practice environment level.
3. Intention to Quit Questionnaire: We developed this tool after reviewing the texts of Viklund (2017) to assess the nurses' responses to the intention to quit. It consists of 14 items. The response to items with the Likert Scale ranges from Strongly Never = 1, Sometimes = 2, and Always = 3. In the scoring system, the total score on the scale ranged from 14 to 42. Participant responses were distributed as follows: (1-14) indicates a low level of intention to quit; (15 -28) indicated a moderate level of intention to quit; and (29 – 42) means a high level of intention to quit.

The study preparatory phase took from October to November 2021, which included preparing and translating tools into the Arabic language, checking validity by collecting expert opinions from three professors and two assistant professors working in nursing administration and community health department in the faculty of nursing at Assiut University. The validity was measured using a confirmatory factor analysis test to obtain a score of 1.8 and more.

A pilot study was carried out on 10% of nurses; every questionnaire took about 20 minutes to be filled. Then the authors met with nurses to explain the purpose of the study by taking their oral consent. Then, the authors distributed the completed questionnaires during morning shifts. Data collection took about three months, from January to March 2022.

Statistical analysis
We used the SPSS (statistical software package) version 20 for measuring the Frequency, Percentages, Mean ± SD of the study data. The correlation analysis of the present study was applied to assess the inter-relationships among quantitative variables and Spearman rank correlation for ranked ones. P-value < 0.05 was considered to correspond to statistical significance differences.

RESULTS
A total number of three hundred and sixty (360) nurses participated in this study. The participant nurses were female married, having children, having a nursing technical institute, and having less than 10 years of experience with percentages of 79.2%, 80.0%, 75.0%, 59.4%, and 45.6%, respectively. Also, more than one-third of the nurses were aged less than 30 years, and half of

them work in Main Assiut University hospital with percentages of 43.6% and 50.0%, respectively.
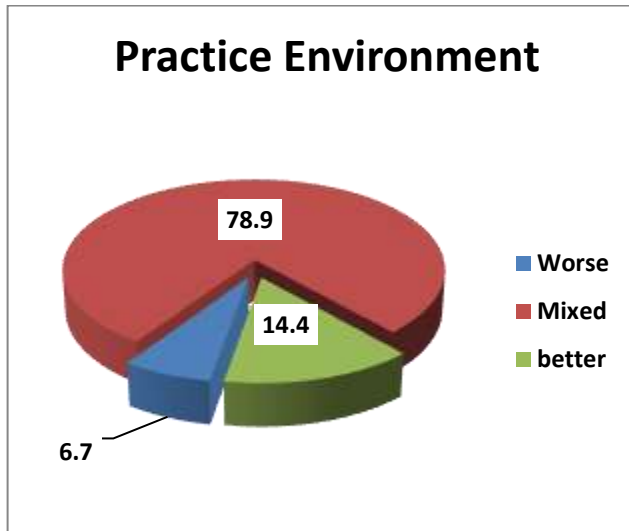
Figure 1: Distribution of nurses' perceptions regarding practice environment levels (n=360)

Figure (1) is a plot of the distribution of nurses' perceptions regarding practice environment levels (n=360). The figure shows that the majority of nurses' perceptions are mixed regarding the practice environment level (78.9%).

Figure 2: Distribution of nurses' perceptions regarding practice environment levels according to working hospital (n=360)

Figure (2): Shows that the highest percentages of nurses perceive better practice environment in El Rajehy hospital (46.7%). Meanwhile, the lowest percentage of them perceive better practice environment in Main hospital (2.2%).

Table (1): lists the mean scores of practice environment dimensions for the studied Nurses (n=360). It shows that the highest mean score corresponds to the quality of care then nurse involvement in hospital concerns (25.69±11.41 & 24.22±9.4) respectively. There are high statistically significant differences between all dimensions of the practice environment (P. value <0.01).

Table 1: Mean scores of practice environment dimensions for the studied Nurses (n=360)

Practice Environment Dimensions	Mean ± SD	P. value
1. Nurse Involvement in Hospital Concerns	24.22±9.4	0.000**
2. Managing the head nurse and her ability to support nurses	13.09±5.75	0.000**
3. Nursing Basics for Quality of Care	25.69±11.41	0.000**
4. Friendly Nurse–Physician Relations	7.66±3.57	0.000**
5. Personnel and Resource Adequacy	9.63±4.65	0.000**

Table 2: Correlation matrix of practice environment dimensions for the studied Nurses (n=360)

Practice Environment Dimensions		Nurse Involvement in Hospital Concerns	Managing the head nurse and her ability to support nurses	Nursing Basics for Quality of Care	Friendly Nurse–Physician Relations	Personnel and Resource Adequacy
Nurse Involvement in Hospital Concerns	R					
	P. value					
Managing the head nurse and her ability to support nurses	R	0.787**				
	P. value	0.000				
Nursing Basics for Quality of Care	R	0.702**	**0.829****			
	P. value	0.000	0.000			
Friendly Nurse–Physician Relations	R	0.589**	0.675**	0.785**		
	P. value	0.000	0.000	0.000		
Personnel and Resource Adequacy	R	0.575**	0.711**	**0.854****	**0.815****	
	P. value	0.000	0.000	0.000	0.000	

(**) Highly Statistically Significant correlation at P. value <0.01

Table (2): lists the correlation matrix of the practice environment dimensions for the studied Nurses (n=360). It shows that there is a strong positive correlation between the personnel and resource adequacy with nursing basics for quality of care & friendly nurse-physician relations; R=0.854 and 0.815, respectively. Also, there is a strong positive correlation between nursing basics for quality of care & managing the head nurse and her ability to support nurses, R=0.829. There are high statistically significant differences among all dimensions of the practice environment (P. value <0.01).
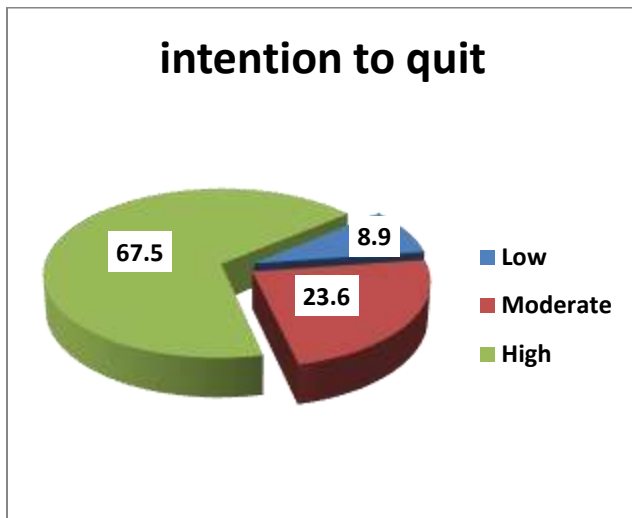
Figure 3: Distribution of intention to quit levels for the studied Nurses (n=360)

Figure (3) plots the distribution of intention to quit levels for the studied Nurses, and shows that more than two third (67.5%) of nurses had a high level of intention to quit.
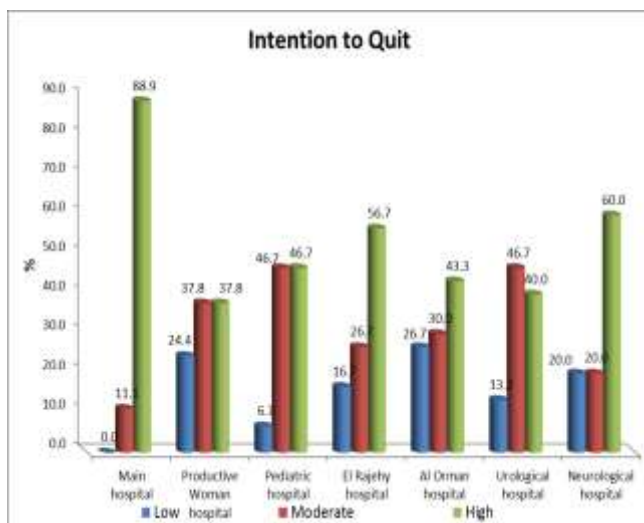

Figure 4: Distribution of intention to quit levels according to working hospital for the studied nurses (n=360)

Figure (4), which plots the distribution of intention to quit levels according to working hospital for the studied nurses, indicates that the highest percentage of nurses that had intention to quit is in the Main hospital (88.9%), while the lowest percentage of them are in the Productive Woman hospital (37.8%).
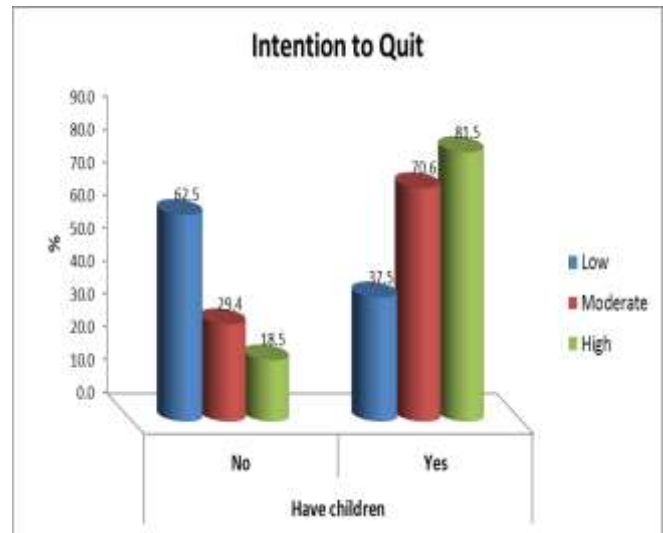

Figure 5: Distribution of intention to quit levels according to have children for the studied Nurses (n=360)

In Figure (5), we plot the distribution of intention to quit levels according to have children for the studied nurses. This figure reveals that the highest percentage of nurses having intention to quit were those who have children (81.5%).
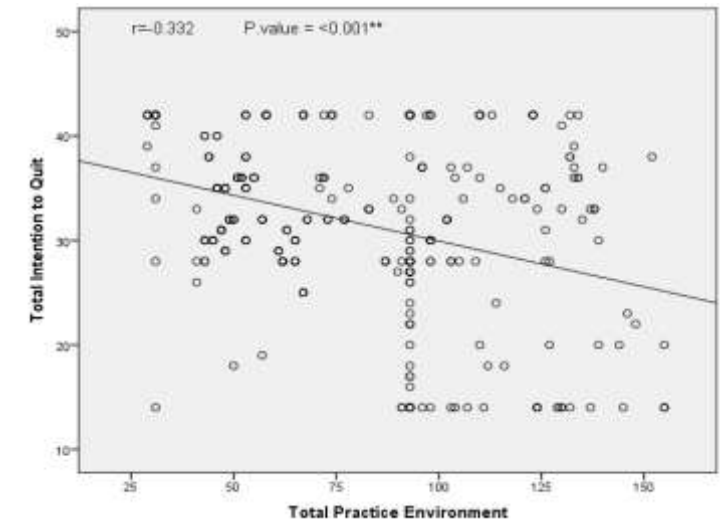

Figure 6 : Correlation between total practice environment and intention to quit for the studied Nurses (n=360)

Finally, figure (6) plots the statistical correlation

between the total practice environment and the nurses intention to quit for the studied nurses (n=360). As seen in the figure, there is a negative correlation between the intention to quit and the total practice environment with high statistically significant differences (P. value < .01).

DISCUSSION

The work environment is affected both directly and indirectly by the quality of nursing care Zhao et al. (2019).

The job satisfaction of nurses mainly lowers not only their level of exhaustion, but also their intention to work abandoning, which leads to improved patient care. So, the nursing practice environment is a major factor that affects the nurses' decisions to quit or to stay Sasso et al. (2019). The present study was conducted to assess the nurses' perception regarding the nursing practice environment and its effects on the intention to quit.

The study of Ulusoy and Polatkan (2016) informed that once nurses skilled in a healthy relationship with other health workers found a supportive environment and participated in work decision-making, they perceived their practical environment as extraordinary.

The current study established that the majority of the nurses' perceptions are mixed "between worse to better" as regard the practice environment in figure (1). This result agrees with the finding of Ozer et al. (2017).

The present results indicated that the highest percentage of nurses' perceives a better practice environment were in El-Rajehy hospital. Whereas, the lowest percentage of the nurse perceiving a better practice environment are in the Main Hospital, as indicated in figure (2). These results agree with those of the Chen and Fang (2020) study, which reported that the worst working environments increase the intention to quit work, while the better environments lower this intention.

Also, the study results by Nantsupawat et al. (2017) agreed with our study results; they reported that nurses who worked in the university hospitals had significantly less intension to leave. Nurses who work in the main hospital have many patients and different specialties that require a more nursing staff and more resources, therefore this leads to un-satisfaction to the practice environment for nurses. On the other hand, Al-Rajhi hospital is a private hospital and has one specialty, which is gastroenterology, and it has a sufficient number of nursing staff and resources. Also, the infrastructure of Al-Rajhi hospital is modern and all types of equipment and supplies are available.

The current study revealed also that 67.5% of Assuit nurses, who were included in our study, had a high level of intention to quit, as given in figure (3). This result agreed with the Viklund (2017) study results that found that the nurses' intention to quit was 67.4%.

On the other side, Albougami et al. (2020) reported that the physical and psychological health may predict the nurses' intention to resign from their current workplaces. Also, they found that nurses who are single, Filipino, or Indian working in the medical and surgical department, or have a low monthly gross salary are correlated with a high intention to leave the nursing job. This result may be due to the nursing profession is difficult and requires substantial effort and time in addition to the material capabilities that help to perform the work efficiently and effectively. In additions, the nurses have a conflict between mastering the work with achieving the goals of the organization and fulfilling the requirements of the family, and they do not find enough time to take care of their children and families after completing the daily work. We think that the low salary of the Egyptian nurses may explain their intention to leave work for another place either internal or external.

MacPhee et al. (2019) reported that the size of staff and resources is the highest mean score because the decrease in the nurses' number causes work overload with significant effects on adverse events in the patients and quality of care. Also, Unruh and Zhang (2019), found that negative perceptions of nurses toward their work environment lead to strong predictors of the intent to leave their work. Regarding the present results, they could be attributed as the administration in the Main hospital did not provide the nursing staff the opportunity to participate in the hospital affairs, which is reflected of their feeling of less commitment to the hospital and less satisfaction.

It is worth noting that the present results revealed that the highest percentage of nurses that had the intention to quit do have children. These nurses have additional family burdens and requirements that must be fulfilled, in addition to the arduous responsibilities of the nursing profession that require effort and time as well as requiring them to stay at work for a long time

There was a negative correlation between the intention to quit and the total practice environment with high statistically significant differences. This agrees with the study results of De Oliveira, et al. (2017), who found a negative relationship between the nursing work environment and the nurses' intention to quit. Also, the results agree with Goh and Lopez (2016), who found a negative relationship between a supportive work environment and immigrant nurses. Agreement is seen also with the findings of Aboshaiqah (2021), who showed a negative relation between nurses' intentions to quit; and the good perception of work environment or communication. Other agreement is found with Kim, et al. (2017), who showed that there is a negative relationship between the job organization and employee turnover intention.

However, the present results disagree with those of AbuAlRub, et al. (2019), found a positive relationship between a good work environment and workers job intention. Also, the study results of Zunaidah (2019), indicated that the work stress has a positive influence on the employee turnover intention.

CONCLUSION

The majority of the nurses' perceptions were mixed

concerning the practice environment and the highest percentage of nurses who perceived better practice environment in El Rajehy hospital. Whereas, the lowest percentage of the nurse perceived better practice environment in the Main hospital. Sixty-seven and half of the study nurses had the intention to quit. And the highest percentage of nurses had the intention to quit were in the Main hospital. Meanwhile, the lowest percentage of these nurses that had the intention to quit were in the Productive Woman hospital. There was a negative correlation between the intention to quit and the total practice environment with high statistically significant differences.

Recommendation:
1-   Nursing practice environments must become a priority for Assiut University Hospitals.
2-   Nurse Managers need to create supportive and attractive working environments for nurses in order to decrease intention to quit for nurses.
3-   The nursing practice environment must be improve for promoting nurse job satisfaction.
4-   Encouragement of positive perception of nursing job.

CONFLICT OF INTEREST
No conflict of interest in this study.

AUTHOR CONTRIBUTIONS
 All authors equally designed the research article, acquisition, analysis, and interpretation of data for the work drafting the work, revising it, checked the article for plagiarism and at the end approved the final version.

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