

Sickness Presenteeism and Job Performance among Nurses at Tanta University Emergency Hospita

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Abstract:

Background: Sickness presenteeism is an emerging occupational health problem that affects nurses; however, it receives little attention despite its culmination, which leads to poor health and sickness absenteeism that consequently affect nurses' job performance and productivity.

Aim: This study aimed to assess sickness presenteeism and job performance among nurses at Tanta University Emergency Hospital. **Subjects and Method: Design:** A descriptive-correlational research design was used in the present study. **Subjects:** This study included 256 nurses at various departments at Tanta University Emergency Hospital. **Tools:** Two tools were used to collect data: the first, entitled Sickness Presenteeism Structured Questionnaire, and the second, named Nurses' Performance Observation Checklist. **Results:** The majority (84.0%) of the studied nurses experienced sickness presenteeism and two-thirds (65.2%) of them had a moderate level of overall perception of Stanford presenteeism. Moreover, about two thirds (64.8%) of nurses had a satisfactory overall score for job performance.

Conclusion: There was a significant negative statistical correlation between the overall score of nurses' job performance and their perception and predisposing factors of sickness presenteeism. **Recommendations:** It was recommended that hospital management develop policies and practices with clearer guidelines to avoid vagueness regarding what nursing professionals should do while sick, arrange workplace ergonomic elements that reduce the sickness presenteeism propensity, provide flexible scheduling that allows balance between work and family, monitor nurses' job performance regularly, and provide frequent feedback.

Keywords: Nurses, Job performance, Sickness presenteeism

Introduction

Nurses represent the majority of the healthcare workforce and play a crucial role in responding to crises in public health, including direct patient care and risk of exposure to infectious diseases. ⁽¹⁾ Many nurses prefer to attend work even if suffering from low-efficiency physical or psychological problems rather than an absence to earn full wages and maintain

their employment, which is called the act of presenteeism. Sickness presenteeism is an emerging occupational health problem that affects nurses; however, it receives little attention despite its culmination in poor health and sickness absenteeism. ⁽²⁾ Sickness presenteeism is a serious organizational burden and represents health and patient safety problems. It occurs when nurses go to work while sick and are incapable of performing

effectively because of their illness.⁽³⁾ The sickness presenteeism phenomenon is a contemporary concept showing nurses at work despite their complaints and ill health.⁽⁴⁾ Moreover, presenteeism was described as chatting, procrastination, or surfing the internet, which decreases nursing staff performance. It is a global occupational health problem that is prevalent among healthcare providers, particularly among nursing staff, and costs organizations much more than absenteeism does.⁽⁵⁾

The causes of sickness presenteeism can be categorized as either job-related factors or health-related factors. The job-related factors incorporate feelings of job insecurity, fear of losing income, downsizing, work overload, burnout, understaffing, overtime, establishing new relationships in the work environment, fear of termination, and the risk of putting off promotion opportunities.⁽⁶⁾

On the other hand, health-related factors include stress, difficulty sleeping, anxiety, depression, dizziness, acute illnesses, recurring complaints, chronic conditions or lifestyle factors, and personal characteristics. It has a variety of adverse effects not only on nurses but also on organizations, affecting recruitment, retention, team productivity, work performance, and collaboration between occupations and other parts of the organization.⁽⁷⁾

Sickness presenteeism has received considerable attention in the field of occupational health because it negatively affects work performance, lowers work. It is difficult to estimate the impact and loss caused by nurses presenting to work despite a health problem, therefore, it is essentially that both factors of sickness

presenteeism and absenteeism must be considered when discussing nurses' work productivity.⁽⁸⁾

In nursing, job performance is defined as providing nursing care to the patient based on the nurses' professionalism and all other related activities and processes. The job performance of nurses is measured by their level of electiveness in carrying out roles and responsibilities related to direct nursing care and the quality of health care services.⁽⁹⁾ Nursing job performance reflects the quality of care delivered and consequently, patient outcomes and patient satisfaction. Poor job performance as a result of occupational stress and decreased satisfaction is considered a risk factor for patient safety.⁽¹⁰⁾

Job performance is a multifaceted phenomenon that is influenced by a wide range of factors, including individual characteristics, workload, work satisfaction, personal competencies, recognition of achievements, social support, supportive communication and feedback, leadership behavior and organizational climate.⁽¹¹⁾ By improving nursing job performance, nurses can cope with changes in the medical environment and the patient's needs according to the times by applying their skills and knowledge.⁽¹²⁾

Nurses' job performance incorporates nine dimensions: work habits, staff relations and communication, communication with patients, nursing care plan activities, material planning and coordination, safety measures and patient safety, innovation, documentation, and keeping up-to-date technically.⁽¹³⁾

Significance of the study

Low performance of presentist nurses can be the origin of active errors related to

decreasing the productivity level and increasing organizational cost.⁽⁷⁾ Li Zhang et al. (2019) confirmed that the nurses' sickness presenteeism motives an incline in their health (physically and mentally) and job performance.⁽⁴⁾ It had adverse effects of applying care for patients, especially in emergency hospitals where it requires specialized nursing care, quick decisions, high levels of attention, and responsibility to provide effective care for critically ill patients.^(5,6) Nevertheless, there is a limited number of researchers have paid attention to this phenomenon in the field of healthcare. Therefore, the aim of this study is to determine the extent of sickness presenteeism among nurses who are working in the emergency hospital to discover the predisposing factors for determining the influence of presenteeism on their job performance.

Aim of study:

This study aims to assess sickness presenteeism and job performance among nurses at Tanta University Emergency Hospital.

Research Questions :

1. What are the frequency and experiences of presenteeism among nurses working at Tanta Emergency Hospital?
2. What are the levels of nurses' job performance?
3. What are the relations between nurses' experiences of presenteeism / job performance and their socio-demographic data?

Subjects and Method

Study design:

A descriptive-correlational research design was used in the present study.

Study setting:

The study was conducted at Tanta University Emergency Hospital, which is

affiliated to Ministry of Higher Education and Scientific Research.

Subjects:

The study's participants were recruited by proportionate stratified random sampling. Each department was considered as a stratum and the samples were selected based on the proportion (number) of nurses who attended in the morning, afternoon and night shifts. The total study sample was calculated using the Epi. Info. Microsoft to ensure obtaining an adequate and representative size, where N = population size (765), Z = confidence level at 95% (1.96), d = margin of error proportion (0.05). A total number of sample was 256 out of 765 nurses who was enrolled during data collection time. The sampling process was continued until the required sample size was obtained.

Sampling collection method:

The sampling method was done using stratified sampling technique with proportional allocation equally on each ward by multiplying the percent 33% (the result of dividing the sample by the total population in all wards) by the number in each ward. The selection of the study's elements was recruited using a simple random sampling technique from nurses' list names.

Tools

The data of this study was collected through the following two tools:

Tool I: Sickness Presenteeism Structured Questionnaire. It consisted of four parts

Part (1): Nurses' socio-demographic data: It included nurses' sex, age, years of experience, educational qualification, department, marital status, number of children, working shift, number of working hours per week, and method of

delivering care. Moreover, there are two additional questions asked about working overtime or working in another hospital.

Part (2): Frequency of Sickness Presenteeism: It involved closed-end questions that were developed by the investigator to assess the frequency of sickness presenteeism among nurses based on related literature reviews. ^(14,15) It consisted of two questions; the first was asking about the experience of sickness presenteeism, which happened during the last six months. The second question was asking about the number of times exposed to sickness presenteeism .

Scoring system

The nurses' responses were expressed as a percentage score representing the frequency of sickness presenteeism that happened during the last six months. It was calculated by dividing the number of nurses who experienced sickness presenteeism by the total number of sampling multiplying by 100.

Part (3): Predisposing Factors of Sickness Presenteeism: This part was developed by Mdziniso (2016) ⁽¹⁶⁾ and adapted by the investigator based on literature reviews.^(17,18) It was used to assess the predisposing factors that lead to sickness presenteeism inside and outside the workplace. It included four factors containing, job demand (2 items), locus of control (2 items), social support (9 items) and health problems (six items).

Scoring system

The nurses' responses were measured on five points Likert Scale ranging from (5) = strongly agree to (1) = strongly disagree. A sum of scores for each respondent was calculated to determine the sources of sickness presenteeism. The ranking of factors was determined by the more

common reasons influencing the presence of sickness presenteeism among nurses based on the number of participants' responses.

Part (4): Stanford Presenteeism Scale (SPS-6)

It was developed by Koopman et al., (2002). ⁽¹⁹⁾ It was used to measure the nurses' ability to concentrate and accomplish work despite health problems. It had two dimensions of sickness presenteeism containing two dimensions, avoiding distractions (3 items) and completing work (3 items)

Scoring system:

Nurses' responses were measured on a five-point Likert Scale ranging from (5) = strongly agree to (1) = strongly disagree. The total scores will be calculated by summing all scale's items for participants and the mean score was indicated as follows:⁽²⁰⁾

- High level of sickness presenteeism ranged from 3.40–5.00.
- Moderate level of sickness presenteeism ranged from 2.60– 3.39
- Low level ranged of sickness presenteeism from 1.00–2.59

Tool II: Nurses' Performance Observation Checklist

This tool was developed by Mahmoud (2019) ⁽²¹⁾ and was modified by the investigator to assess the nursing staff job performance. It included nine dimensions containing work habits (11 items), staff relations and communication (9 items), communication with patients (16 items), nursing care plan activities (12 items), material planning and coordination (5 items), safety measures and patient safety (7 items), innovation (one item), Documentation (8 items) and Keeping up to date technically (two items).

Scoring system

Nurses' performance was assessed using a three-point Likert Scale ranging from 2 to 0, (0) for not done and (2) for completely done. The total score will be categorized into three levels as follows: ⁽²¹⁾

- Satisfactory level: ≥ 80 % of the total score.
- Unsatisfactory level: $<80\%$ of the total score.

Validity of Study's tools:

The study's tools were submitted to a panel of five experts in the field of nursing administration. The face and content validity value of tool (I) part 2 that entitled "Frequency of Sickness Presenteeism" was 100%, part 3 that entitled "Predisposing Factors of Sickness Presenteeism" was 95.5%, and part 4 that entitled "Stanford Presenteeism Scale"(SPS-6) was 95.0%, whereas Tool II for "Nurses' Performance Observation Checklist" was 98.5%.

Pilot study:

A pilot study was carried out on a sample of 10% of nurses (n=26) who were excluded from the main study sample during the actual collection of data. The pilot study was done to test the clarity, sequence of items, applicability, and relevance of the questions and to determine the needed time to complete the questionnaire. According to feedback from pilot study, the tool was modified by the investigator. The pilot study's subjects were excluded from the final study's sample because they were collected from nurses who worked in different workplace; but they have been the main key feature of the study's sample. The estimated time needed to complete the questionnaire items from the head nurses and their staff nurses was around 10-15 minutes.

Reliability of study's tools:

The reliability was tested using the Cronbach Alpha Coefficient test. The reliability value of **Tool I**, Part 2 (Frequency of Sickness Presenteeism) was 0.99, Part 3 (Predisposing Factors of Sickness Presenteeism) was 0.883, and Part 4 (SPS-6) was 0.892, in a total value of was 0.893 for **Tool I**. While, the reliability value for **Tool II** (Nurses' Performance Observation Checklist) was 0.706.

Ethical and legal considerations:

Before conducting the study, approval from the Scientific Research Ethical Committee, as well as from the Dean of the Faculty of Nursing and authoritative personnel of Tanta University Emergency Hospital, was obtained from the Faculty of Nursing at Tanta University. Nurses' consents were obtained after being informed about the nature of the study, their right to withdraw, protection from risk, confidentiality, and privacy of information.

Data collection technique:

The data were collected from nurses by the investigator. The investigator met the respondents' nurses in different areas under study during working hours to distribute the questionnaire. The subjects recorded the answer in the presence of the investigator to ascertain that all questions were answered.

The investigator observed each staff nurse during her or his work three times on different days during morning and afternoon shifts. Each nurse was observed for 30 to 45 minutes. The daily observed nurses ranged from 3–4 nurses in each shift based on a random selection from the list of nurses' names, and the space

between each observation and the next was around one month. The data was collected over a period of two months, starting from the beginning of October 2021 until the end of March 2022.

Statistical analysis:

Data were fed to the computer and analyzed using IBM SPSS software package version 20.0. (Armonk, NY: IBM Corp). The internal consistency was analyzed using Cronbach alpha coefficient test. Qualitative data were described using numbers and percepts. The Kolmogorov-Smirnov test was used to verify the normality of distribution. Quantitative data were described using range, mean, standard deviation and median.

The Chi-square was used to compare different groups, while the Monte Carlo test was used for correction of the chi-square when more than 20. Pearson's correlation coefficient to study correlation between two variables. A regression test was used to detect the most independent factor affecting nurses' job performance. The level of significance was adopted at $p < 0.05$.

Results

Table 1 shows frequency and distribution of nurses' socio-demographic data. The table reveals that the majority (84.8%) of nurses were females and around half (46.1%) of them were in the age group >30 with a mean score 31.31 ± 6.78 . More than two-thirds (71.5%) of them had <10 years of experience in nursing, and more than half of them (53.5%) graduated from Bachelor degree, and 30.1% of them worked in intensive care units. The majority (87.1%) of nurses were married and had children with a mean score 1.88 ± 1.22 .

Additionally, more than half (54.3%) of them worked during night shift, 91.8% of them worked for 36 hours with mean score 31.31 ± 6.78 . More than two-thirds (72.3%) of nurses used case method for care delivering and slightly more than three-quarters of them (77%) took an average salary 2000- <3000 per month with mean score 2357.4 ± 433.2 . The majority of nurses (83.2%) didn't receive overtime and also 73% of them didn't work in other hospitals.

Table 2 describes the frequency of sickness presenteeism among the studied nurses. This table demonstrates that the majority (84.0%) of nurses experienced sickness presenteeism and 44.9% of them experienced health problems while attending their work in the frequency group 2-3 times during last six months.

Figure 1 represents the total mean score for predisposing factors of sickness presenteeism. It was noticed that the job demand factor had the highest mean score (92.48 ± 14.33) followed by social support (72.02 ± 16.94) then health problems (32.01 ± 15.62), and finally locus of control (23.63 ± 21.85).

Figure 2 illustrates the total mean scores of Stanford presenteeism dimensions as perceived by nurses. As noticed, the total mean score percent for completing work dimension was 63.05 ± 29.37 while the total mean score percent for avoiding distractions was 40.20 ± 29.84 . The total mean score percent for overall presenteeism perception was 51.63 ± 15.44 .

Figure 3 presents the levels of overall job performance among the studied nurses. It was observed that about two-thirds (64.8%) of nurses had a satisfactory level in overall score of job performance

dimensions and the rest (35.2%) of them had an unsatisfactory level.

Figure 4 declares the levels of job performance dimensions among the studied nurses. The majority (93%, 84.8%, 84%, 77.3%, and 75.4%) of nurses had a satisfactory level of job performance in relation to keeping up-to-date technically, documentation, safety measures and patient safety, material planning and coordination, and innovation, respectively. While, more than half (61.7 %, 53.5% and 51.6%) of them had a satisfactory level concerning staff relations and communication, work habits and nursing care plan activities. On the other side, more than two-thirds (74.6%) had an unsatisfactory level in communication with patients.

Table 3 highlights the relations between nurses' overall Stanford presenteeism levels and their socio-demographic data.

Based on this table, there were statistically significant relations between Stanford presenteeism levels and nurses' gender ($\chi^2 = 8.205$, $p = 0.017$), age ($\chi^2 = 10.974$, $p = 0.027$), years of experience ($\chi^2 = 12.575$, $p = 0.014$), marital status ($\chi^2 = 6.750$, $p = 0.034$), method of delivering care ($\chi^2 = 33.620$, $p < 0.001$), and average salary per month ($\chi^2 = 12.165$, $p = 0.012$).

Table 4 reveals the relation between nurses' overall job performance and their socio-demographic data. It demonstrated no statistically significant difference between all items of nurses' sociodemographic data and their job performance except for having overtime at $p = 0.004$.

Table 5 shows the correlation between nurses' overall job performance and sickness presenteeism. This table indicated significant a negative statistically

correlations between nurses' job performance and their predisposing factors of sickness presenteeism ($r = -0.134$ & $p = 0.032$), as well as with Stanford presenteeism ($r = -0.0164$ and $p = 0.010$).

Table 6 denotes the multivariate regression between overall nurses' job performance and sickness presenteeism.

The table shows a negative statistically contribution to the prediction of the explained variance between overall nurses' job performance and predisposing factors of sickness presenteeism, as well as Stanford presenteeism with regression coefficient value $R^2 = 0.06$ and F test $= 8.080$ at high significant levels of $p < 0.001$.

Table (1): Frequency and percentage of nurses' socio-demographic characteristics

Socio-demographic characteristics of nurses	No. (256)	%
Gender		
Male	39	15.2
Female	217	84.8
Age (years)		
>30	118	46.1
30-40	97	37.9
≥40	41	16.0
Min. – Max.	21.0 – 55.0	
Mean ± SD.	31.31 ± 6.78	
Years of working experience		
<10	183	71.5
10-20	35	13.7
≥20	38	14.8
Min. – Max.	1.0 – 42.0	
Mean ± SD.	9.70 ± 7.54	
Educational qualification		
Secondary Nursing Diploma	46	18.0
Nursing Technical Institute	73	28.5
Bachelor of Science in Nursing	137	53.5
Department		
ICUs*	77	30.1
Neurosurgery Department	18	7
Burn	13	5.1
Emergency Rooms	62	24.2
Recovery Unit	11	4.3
Toxicology	8	3.1
Vascular Surgery Department	22	8.6
Orthopedics Department	18	7
General Surgery Department	27	10.5

SD: Standard deviation

ICUs* Intensive Care Units includes (anesthesia, medical and traumatology)

Table (1) continue

Socio-demographic characteristics of nurses	No.	%
Marital Status		
Married	223	87.1
Unmarried	33	12.9
Number of children		
<2	77	30.1
≥2	179	69.9
Min. – Max.	0.0 – 5.0	
Mean ± SD.	1.88 ± 1.22	
Median	2.0	
Working shift		
Morning	116	45.3
Evening	131	51.2
Night	139	54.3
Number of working (hours/week)		
<36	21	8.2
36	235	91.8
Min. – Max.	21.0 – 55.0	
Mean ± SD.	31.31 ± 6.78	
Median	30.0	
Method of delivering care		
Functional	37	14.5
Team method	34	13.3
Case method	185	72.3
Average salary/month		
<2000	28	10.9
2000– <3000	197	77.0
≥3000	31	12.1
Min. – Max.	1000.0 – 3500.0	
Mean ± SD.	2357.4 ± 433.2	
Median	2500.0	
Are you having overtime?		
Yes	43	16.8
No	213	83.2
Are you working in other hospital?		
Yes	69	27.0
No	187	73.0

Table (2): Frequency of sickness presenteeism among the studied nurses

Sickness Presenteeism Items	No. (256)	%
Q1: Did it happen over the last six months that you experience sickness presenteeism (attend the work despite feeling sick)?		
Yes	215	84.0
No	41	16.0
Q2: How many times did you experience health problems while attending the work?		
Once	59	23.0
2-5 times	115	44.9
More than 5 times	82	32.0

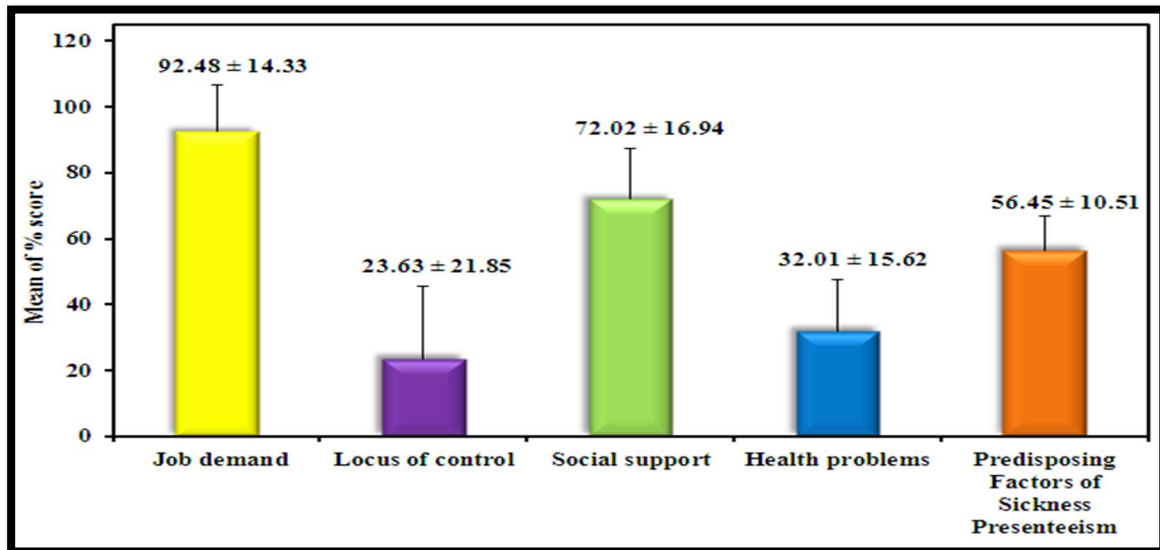


Figure (1): Total mean score for predisposing factors of sickness presenteeis

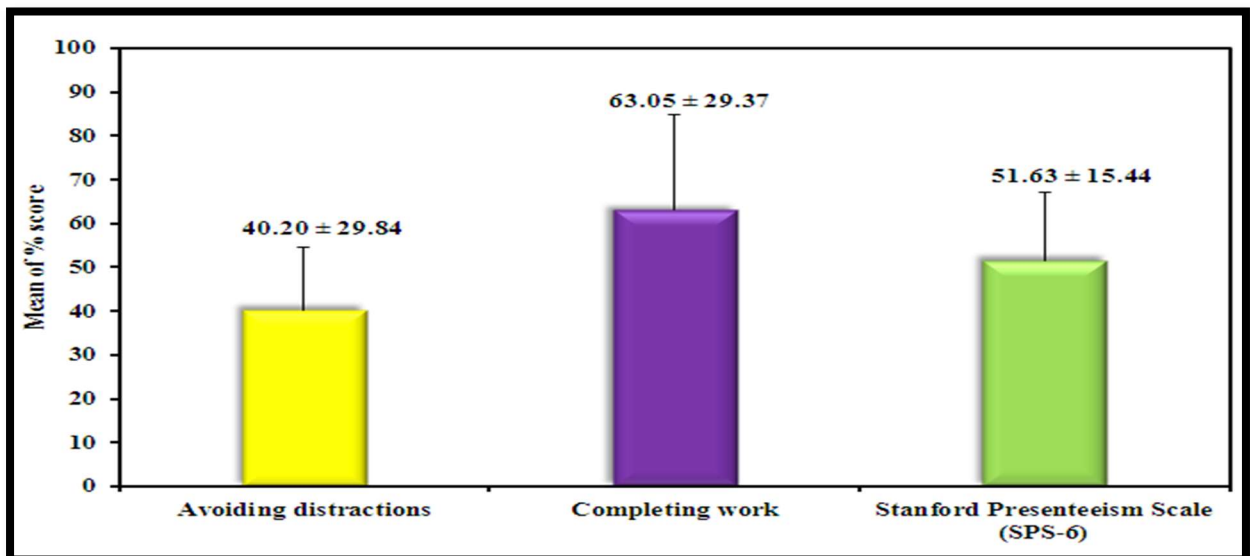
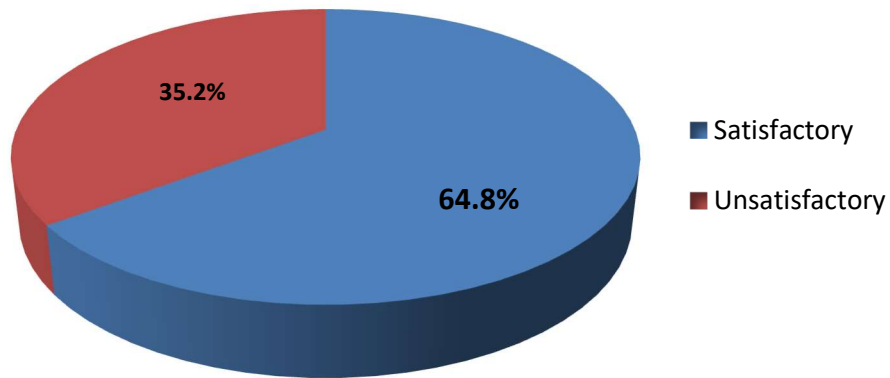


Figure (2): Total mean scores of Stanford Presenteeism dimensions as perceived by nurses



Levels of nurses 'overall job performance

Figure (3): Levels of nurses' overall job performance

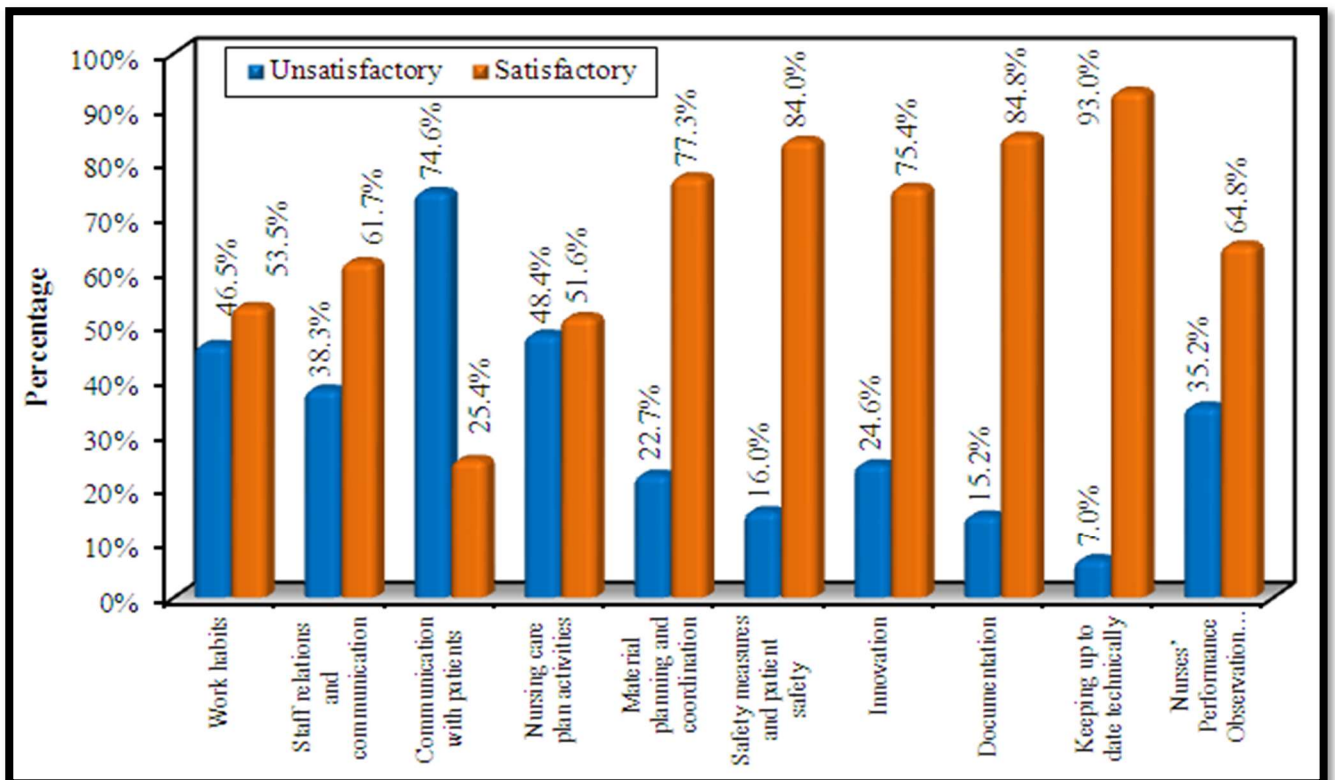


Figure (4): Levels of overall job performance among studied nurses

Table (3): Relation between nurses overall Stanford presenteeism levels and their socio-demographic characteristics

Socio-demographic characteristics of nurses		Stanford Presenteeism Scale (SPS-6)						χ^2	P
		Low(n = 36)		Moderate(n = 167)		High(n = 53)			
		No.	%	No.	%	No.	%		
Gender	Male	10	27.8	18	10.8	11	20.8	8.205*	0.017*
	Female	26	72.2	149	89.2	42	79.2		
Age (years)	>30	14	38.9	87	52.1	17	32.1	10.974*	0.027*
	30-40	12	33.3	58	34.7	27	50.9		
	≥40	10	27.8	22	13.2	9	17.0		
Years of working experience	<10	18	50.0	129	77.2	36	67.9	12.575*	0.014*
	10-20	9	25.0	16	9.6	10	18.9		
	≥20	9	25.0	22	13.2	7	13.2		
Educational qualification	Nursing diploma	11	30.6	27	16.2	8	15.1	8.567	0.073
	Institute of nursing	20	55.6	85	50.9	32	60.4		
	Bachelor Science of Nursing	5	13.9	55	32.9	13	24.5		
Marital Status	Married	28	77.8	152	91.0	43	81.1	6.750*	0.034*
	Unmarried	8	22.2	15	9.0	10	18.9		
Common working shift #	Morning	18	50.0	81	48.5	17	32.1	4.753	0.093
	Evening	14	38.9	88	52.7	29	54.7	2.595	0.273
	Night	21	58.3	83	49.7	35	66.0	4.602	0.100
Number of working (hr/wk)	<36	1	2.8	18	10.8	2	3.8	3.640	MC p= 0.195
	36	35	97.2	149	89.2	51	96.2		
Method of delivering care	Functional	12	33.3	11	6.6	14	26.4	33.620*	<0.001*
	Team method	3	8.3	31	18.6	0	0.0		
	Case method	21	58.3	125	74.9	39	73.6		
Average salary/month	<2000	7	19.4	21	12.6	0	0.0	12.165*	MC p= 0.012*
	2000– <3000	25	69.4	126	75.4	46	86.8		
	≥3000	4	11.1	20	12.0	7	13.2		
Are you having overtime?	Yes	4	11.1	32	19.2	7	13.2	1.990	0.370
	No	32	88.9	135	80.8	46	86.8		
Are you working in other hospital?	Yes	11	30.6	42	25.1	16	30.2	0.795	0.672
	No	25	69.4	125	74.9	37	69.8		

 χ^2 : Chi square test

MC: Monte Carlo

*: Statistically significant at $p \leq 0.05$

Table (4): Relation between nurses' overall job performance and their socio-demographic data

Socio-demographic characteristics of nurses		Nurses' Job Performance				χ^2	P
		Unsatisfactory (n = 99)		Satisfactory (n = 166)			
		No.	%	No.	%		
Gender	Male	10	11.1	29	17.5	1.827	0.176
	Female	80	88.9	137	82.5		
Age (years)	>30	43	47.8	75	45.2	0.159	0.924
	30-40	33	36.7	64	38.6		
	≥40	14	15.6	27	16.3		
Years of working experience	<10	66	73.3	117	70.5	0.295	0.863
	10-20	11	12.2	24	14.5		
	≥20	13	14.4	25	15.1		
Educational qualification	Nursing diploma	16	17.8	30	18.1	3.021	0.221
	Institute of nursing	54	60.0	83	50.0		
	Bachelor Science of Nursing	20	22.2	53	31.9		
Marital Status	Married	77	85.6	146	88.0	0.298	0.585
	Unmarried	13	14.4	20	12.0		
Common working shift #	Morning	38	42.2	78	47.0	0.535	0.465
	Evening	43	47.8	88	53.0	0.640	0.424
	Night	53	58.9	86	51.8	1.179	0.277
Number of working (hours/week)	<36	8	8.9	13	7.8	0.087	0.768
	36	82	91.1	153	92.2		
Method of delivering care	Functional	16	17.8	21	12.7	2.187	0.335
	Team method	9	10.0	25	15.1		
	Case method	65	72.2	120	72.3		
Average salary/month	<2000	11	12.2	17	10.2	1.466	0.481
	2000– <3000	71	78.9	126	75.9		
	≥3000	8	8.9	23	13.9		
Are you having overtime?	Yes	7	7.8	36	21.7	8.079*	0.004*
	No	83	92.2	130	78.3		
Are you working in other hospital?	Yes	23	25.6	46	27.7	0.138	0.711
	No	67	74.4	120	72.3		

 χ^2 : Chi square test*: Statistically significant $p \leq 0.05$

Table (5): Correlation between nurses' job performance and sickness presenteeism perception

Sickness Presenteeism Structured Questionnaire	Nurses' Job Performance	
	R	P
Predisposing Factors of Sickness Presenteeism	-0.134*	0.032*
Stanford Presenteeism dimensions	-0.161*	0.010*

r: Pearson coefficient

*: Statistically significant at $p \leq 0.05$ **Table (6): Multivariate regression between overall nurses' job performance**

	B	SE	Beta	T	p
(Constant)	97.506	5.571		17.503*	<0.001*
Part(3):Predisposing Factors of Sickness Presenteeism	-0.216	0.076	-0.178	2.850*	0.005*
Part(4): Stanford Presenteeism Scale(SPS-6)	-0.165	0.052	-0.201	3.205*	0.002*
$R^2=0.060, SE=12.36, F=8.080^*, p<0.001^*$					

F, p: f and p values for the model, R^2 : Coefficient of determination, B: Unstandardized Coefficients, SE: Estimates Standard error, Beta: Standardized Coefficients, t: t-test of significance

*: Statistically significant at $p \leq 0.05$

Discussion

Sickness presenteeism (SP) has received considerable attention in the field of nursing because it negatively affects work performance, lowers work productivity, increase professionals' health problems, decrease patients' safety and increases financial burden.⁽⁵⁾ SP in hospital nurses is linked to care quality and patient safety.⁽²²⁾ Nurses who attend work while ill cannot function at their full capacity, increasing the likelihood of negative patient outcomes, such as falls and medication errors.⁽²³⁾ Therefore, this study aimed to

assess sickness presenteeism and job performance among nurses at Tanta University Emergency Hospital.

In the present study the majority of nurses experienced sickness presenteeism and more than two-thirds of them experienced health problems at least twice and more than five times while attending work during the last 6 months. These findings indicated that the studied nurses suffered from high presenteeism prevalence over the last 6 months. The explanation for these results may be attributed to the fact that the majority of studied nurses we're

female married and head more than two children which burdened them with their children's and families' responsibilities.

These results in agreement with the study conducted by **Elsherbiny et al. (2022)**⁽²⁴⁾ who found that all studied nurses reported having sickness presenteeism associated with all physical health problem and disorders during the last 12 months especially in intensive care units. Furthermore, **Mohamed et al. (2021)**⁽²⁵⁾ displayed that the vast majority of nurses experienced sickness presenteeism and more than half of them had two to five times frequency of occurrence.

In this aspect, **Mekonnen et al. (2018)**⁽²⁶⁾ claimed a high overall prevalence of sickness presenteeism among healthcare workers, accompanied by two to more than five times the frequency of occurrence. Additionally, **Min et al. (2021)**⁽³⁾ documented a higher rate of sickness presenteeism among Korean shift nurses than non-shift nurses in the preceding 12 months, with more health problems and sleeping disorders. On the other hand, **Yang et al. (2017)**⁽²⁷⁾ discovered a moderate level of sickness presenteeism among healthcare workers.

Regarding predisposing factors for sickness presenteeism, it was noticed that the job demand factor had the highest mean score of predisposing factors causing sickness presenteeism followed by social support then health problems and locus of control.

This is due to the fact that the vast majority of nurses reported a shortage of staff in their department and inflexible scheduling. The studied nurses reported that they felt under pressure from senior or the first line managers and couldn't obtain a medical certificate of sick leave, which negatives

impacted their promotion, in which many people are entirely dependent on their earnings. More than half of nurses reported that they used self-prescribed pharmaceutical medication and experienced signs and symptoms of episodic illness.

These results are congruent with **Lee et al. (2017)**⁽²⁸⁾ and **Ahmed and Abd-ElGhani (2021)**⁽²⁹⁾ who stated that job resources (job autonomy and performance feedback) and job demands (work overload, emotional demands, technology demands) in the work context induced constant nurses job pressure. **Attia et al. (2021)**⁽³⁰⁾ demonstrated a high level of job demand among nurses. Moreover, **Kim et al. (2019)**⁽³¹⁾ revealed that the prevalence of presenteeism was higher in women and those with higher job demands and interpersonal conflict.

In this scene, **Elsherbiny et al. (2022)**⁽²⁴⁾ showed that the independent predictors of higher sickness presenteeism were female nurses who had increasing musculoskeletal complaints with more demands, had high decision latitude, and had an additional job.

In contrary, **Shan et al. (2020)**⁽³²⁾ concluded that workload, leave system, and conscientiousness are the main causes for nurses sickness presenteeism, as well as financial demands as an important reason that was likely neglected by chief nurses. **Mohamed et al. (2021)**⁽²⁵⁾ found out that organizational factors, including fear of disciplinary actions, the staff shortage, organizational policy and limited paying for sick absence were the most dominant reasons for sickness presenteeism among nursing staff rather than personal factors such as job insecurity, lacking job opportunities, being

appreciated as productive members, professional obligation and work commitment.

Concerning perception of Stanford presenteeism dimensions, the current study revealed that the overall mean score of the completing work dimension was higher than the avoiding distraction dimension, in which around the two-thirds of nurses had a moderate overall score of scale items. The highest percent of nurses had a moderate level of sickness presenteeism in terms of completing work. This could be attributable to the fact that although more than half of the studied nurses were distracted from taking pleasure in their work, had more stressful situations that were difficult to handle, and felt hopeless about finishing certain tasks, they were still able to finish hard tasks, focus on achieving their goals, and feel energetic despite having health problems.

These findings are consistent with the result of **Magalhães et al. (2022)**⁽³³⁾ who obtained a high score regarding the complete work dimension and a low score concerning the avoiding distraction dimension of the SPS-6 subscales. This result supported by **Borges et al. (2015)**⁽³⁴⁾ who found that the overall level of Stanford presenteeism perception was moderate among nurses. But these results are inconsistent with **Simonetti et al. (2021)**⁽³⁵⁾ who declared that nurses showed the highest levels of presenteeism perception considering both dimensions of avoiding distraction and completing work, in which male nurses has a lower degree of presenteeism than female.

Nurses' job performance

In the current study, around two-thirds of the studied nurses had a satisfactory level in the overall score of job performance in

terms of keeping up-to-date, documentation, safety measures and patient' safety, planning and coordination materials, innovation, staff relations and communication, work habits, and nursing care plan activities, respectively. These findings suggested that as the studied nurses got younger and had a Bachelor of Science in Nursing, they were more confident, expert, and knowledgeable about their job performance. Additionally, the majority of participants were married, which led to better work performance because of their social stability and support from their families.

In this scene, **Mahmoud et al. (2019)**⁽²¹⁾ who observed that the majority of nurses showed a satisfactory score of job performance. The vast majority of nurses reported that they documented their work with ink, collect subjective and objective data, and apply safety measures. However, they documented that keeping to date technology and develop new solution were the lowest percent. Moreover, **Safarpour et al. (2018)**⁽³⁶⁾ reported that nurses had a high level of job performance.

In disagreement, the study of **Mohamed and Ghalab (2022)**⁽¹³⁾ stated nearly half of staff nurses had a moderate level of total overall job performance. Furthermore, this finding was at odds with that of **Morsi and Ebraheem (2020)**⁽³⁷⁾ who discovered that nearly half (49.80%) of nurses performed below average. While **Ibrahim et al. (2016)**⁽³⁸⁾ indicated that the performance scores among staff nurses were relatively low, all nurses' performance was incompetent and needed improvement.

Correlations between study variables

There were statistically significant relations between perceptions of Stanford presenteeism levels and nurses'

sociodemographic data of gender, age, years of experience, marital status, method of delivering care and average salary per month. In this study, female married nurses with less than ten years of experience who took between 2000 to 3000 pounds per month and used the case method perceived more presenteeism phenomenon.

The current findings are similar to those of **Elsherbiny et al. (2022)**⁽²⁴⁾ who reported that presenteeism was significantly higher among female nurses who are married nurses than male nurses who are unmarried. **Santos et al. (2018)**⁽³⁹⁾ studied presenteeism among nursing professionals in Brazil. They reported that age and gender were significantly associated with sickness presenteeism.

In contrast to these findings, **Min et al. (2021)**⁽³⁾ reported insignificant relations between sickness presenteeism and age, sex and working experience. Furthermore, **Mohamed et al. (2021)**⁽²⁵⁾ documented insignificant associations between age, gender, marital status, years of experiences and method of care delivery with sickness presenteeism. **Mekonnen et al. (2018)**⁽²⁶⁾ documented insignificant associations between sickness presenteeism and nurses' age, sex and educational status.

In the current study, there wasn't a statistically significant difference between all items of nurses' sociodemographic data and dimensions of their job performance except for having worked overtime. This result is incompatible with **Alkorashy et al. (2023)**⁽⁴⁰⁾ who found the only personal factor that had a statistically significant association with the level of work engagement was age. Also, **Abd El-Hamid et al. (2018)**⁽⁴¹⁾ who reported an insignificant association between the job

performance of nurses and their age, gender and years of experiences.

This result is in accordance with **Min et al. (2021)**⁽³⁾ who reported higher sickness presenteeism among nurses who are working in shifts. Shift nurses are particularly vulnerable to long hours and insufficient rest, therefore, most of them take regular breaks during work hours indicating that these factors can lead to sickness presenteeism among them.

These results disagreed with **Meliala et al. (2022)**⁽⁴²⁾ who stated a significant relationship amongst gender, age, working time, marriage status, responsibility, achievement, work result, self-actualization, work relationship, work procedure, and supervision with nurses' performance in conducting patient safety. Also this results disagreed with those of **Son et al. (2013)**⁽⁴³⁾ who reported that age and marital status were significantly associated with nurses' job performance.

This result indicated a significant negative statistical correlation between nurses' job performance and predisposing factors of sickness presenteeism as well as Stanford presenteeism. The results showed negative statistical contribution to the prediction of the explained variance between overall nurses' job performance and predisposing factors of sickness presenteeism, as well as Stanford presenteeism perception. From the investigator's perspective, the prevalence of sickness presenteeism phenomena among nurses lessens the quality of working life, worsens current medical illnesses and decreases nurses' job performance and leads to inefficiency at work and decreased productivity.

A significant association between work stress and presenteeism score was recently observed by **Al-Mutairi et al. (2022)**⁽⁴⁴⁾

who studied the prevalence of job stress and presenteeism among nurses in hospitals in Hafr Al-Batin City, Saudi Arabia. They justified their findings by saying that although the staff nurses are facing job stress-related work, but they go to work despite their illness. Job stress had a negative impact on work performance as stress is noted to have a negative effect on the psychological, behavioral, and physiological status of individuals.

In the same context, **Li et al. (2019)**⁽⁴⁵⁾ reported that the higher frequency of sickness presenteeism, the greater the negative impact on nurses' productivity and performance. Moreover, **Ho et al. (2022)**⁽⁴⁶⁾ highlighted that sickness presenteeism leads to lower work performance and job satisfaction. Additionally, **Aboagye et al. (2019)**⁽⁴⁷⁾ reported that both presenteeism and absenteeism were salient correlates of impaired work performance.

These results are in agreement with **Shan et al. (2020)**⁽³²⁾ who evaluated the prevalence, consequences, and causes of presenteeism in Chinese nurses from the perspectives of nurses and chief nurses. They observed that the majority of nurses, who experienced presenteeism, reported that their work productivity was reduced when they worked while sick. Also, **Silva-Costa et al. (2020)**⁽⁴⁸⁾ reported that working when sick impaired both the nurses' work performance and their health.

Conclusion

According to the study findings, it was concluded that the majority of nurses experienced sickness presenteeism and more than one-third of them had health problems while attending work and had two to three times of frequency during the

last six months. Nurses reported that job demand and social support were the most dominant predisposing factors for sickness presenteeism. Overall, the studied nurses had a moderate level of sickness presenteeism. On the other side, the majority of nurses had a satisfactory overall level of job performance dimensions. Keeping up to date technically, documentation, and safety measures were the prominent dimensions of job performance. The findings indicated a significant negative statistical correlation between nurses' job performance and predisposing factors of sickness presenteeism as well as Stanford presenteeism.

Recommendations

Based on the study's results, the following recommendations were suggested:

- Developing policies and practices with clearer guidelines to avoid vagueness regarding what nursing professionals should do while sick.
- Providing flexible scheduling that allows balance between work and family as well as monitoring performance, and providing frequent feedback for nurses.
- Using adequate remuneration to increase nurses' motivation, improve job performance, and, consequently, improve the quality of healthcare.
- Validating further research studies to confirm the current study results in different healthcare sectors such as private, governmental and health insurance hospitals.

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