Healthy Work Environment, Occupational Burnout, and Psychological Wellbeing among Staff Nurses: A Comparative Study

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Abstract

Background: The healthcare environment is crucial for the performance, productivity, and psychological well-being of the healthcare team. A healthy work environment ensures safety, addresses emotional and physical needs, and enhances quality of care and patient safety. **Aim:** To explore the relationship between the healthy work environments, occupational burn out, and psychological well-being among staff nurses at government and private hospitals. **Design:** A Comparative-correlational research design. **Setting:** The study was conducted in one government and one private hospital at Giza Governorate. **Sample:** A convenience sample of 85 staff nurses from a government hospital and 73 staff nurses from a private hospital who agreed to participate in the study were included. **Tools:** Healthy work environment questionnaire, Maslach burnout inventory test, and psychological well-being manifestation measurement scale. **Results:** In the government hospital, 61.2% of staff nurses showed a moderate level of healthy work environment, compared to 68.5% in the private hospital. Moderate burnout levels were experienced by 89.4% in the government and 93.2% in the private hospital. A strong positive correlation was observed between healthy work environment and psychological well-being scores among staff nurses in both settings. **Conclusion:** Slightly over three fifths of government hospital staff nurses showed moderate perception of a healthy work environment, while in the private hospital; more than three fifths had higher perception. Both hospitals had moderate occupational burnout and psychological well-being. Notably, a positive link existed between healthy work environment and psychological well-being in both hospitals. **Recommendations**: Both government and private hospitals should proactively establish policies aimed at preventing, early detection, and effective management of occupational burnout among their staff nurses. Implementation of an ongoing program designed to enhance and maintain a healthy work environment and promoting psychological well-being among staff nurses as well.

Key words: Healthy work environment, occupational burnout, psychological wellbeing & staff nurses.

Introduction

Work environment is a significant concern in nursing, as they not only affect individual nurses personally and professionally, but also the organizations in which they are employed and the patients they care for. So, several parameters of the nurse's healthy work environment led to fewer patient complications and lower nurse burnout. Various factors contributing to a nurse's positive work environment have been linked to increase nurses' satisfaction, reduced patient complications and nurse burnout ***(Chung et al., 2020).***

Healthy work environment can be described as the efficient setting that has strategies and regulations which intended to empower nurses for achieving the organization aims and personal contentment simultaneously ***(Labrague, 2021)***. Additionally, an optimal work environment is crucial for effective patient care and operational effectiveness ***(Mabona et al., 2021).***

There are a six standards that serve as the fundamental principles of such environments. These standards encompass proficient communication, genuine collaboration, effective decision-making, appropriate staffing, meaningful acknowledgment, and authentic leadership. These standards contribute to enhanced outcomes for both patients and nurses, as well as the entire healthcare team ***(American Association of Critical-Care Nurses, 2021).***

Furthermore, the nursing personnel necessitate considerable commitment to their duties; nevertheless, inadequate constructive acknowledgment leads to physical and psychological exhaustion, occupational pressure, workplace weariness, health issues, and domestic disproportion. A worldwide concern exists about enhancing the conditions under which nurses are working. Ensuring a conducive work atmosphere is progressively crucial for healthcare establishments to ensure top-notch care provision and safeguard patient welfare ***(Dawood et al., 2021).***

Conversely, an unfavorable work environment is characterized as one that lacks functionality or performs inadequately. This type of environment is marked by inadequate communication, heightened stress levels, dissatisfaction with work and life, compromised care provision, ineffective teamwork, and interpersonal conflicts that run counter to the organization's mission, vision, and values ***(AACN, 2021; Thornsberry & Jennifer, 2018).***

Burnout is a condition of physical, mental, and emotional depletion that arises from the stress someone encounters, intense emotional engagement, and combined with the elevated expectation of personal achievement ***(Saravanabavan et al., 2019)***. Similarly, burnout comes from a decline in personal resilience, leading to fatigue and despair that appears during facing challenges ***(Jameson & Bowen, 2020)***. Burnout encompasses three distinct dimensions: emotional fatigue, depersonalization, and reduced self-accomplishment. Furthermore, the origin of burnout is influenced by two categories of factors: environmental and individual. Environmental factors encompass an excessive workload, repetitive tasks, a lack of control, inadequate recognition or rewards, conflicts, perceptions of injustice, and conflicting values. Conversely, individual factors encompass demographic characteristics and personality traits ***(Aljabri et al., 2022)***.

Furthermore, Occupational Burnout stands as a crucial gauge for appraising the psychological welfare of healthcare professionals. Starting from the early 1990s, measurements of burnout have been employed to evaluate the welfare of nurses, under the presumption that burnout and welfare exist as opposing poles along the same spectrum **(*Crowe et al., 2023).*** Psychological soundness is a fluid condition marked by a reasonable equilibrium between an individual's capabilities, requisites, and aspirations, along with external demands and prospects. Psychological well-being primarily revolves around adeptly managing the existential challenges presented by life ***(Rasheed-Karim, 2022; Levi, 1987).***

Psychological well-being (PWB) is recognized as a constructive state in an individual's life, encompassing their quality of life. It encompasses feelings of satisfaction, reassurance, attainment, and satisfaction with life in general ***(Kundi et al., 2021)***. Additionally, PWB centers on an individual's assessment of enduring happiness, their mental and physical health satisfaction, and how this aligns with various psychosocial elements like life or job satisfaction. PWB significantly influences an individual's professional and personal life as well as their overall state of well-being, and consequently impacting job satisfaction ***(De Kock et al., 2021).***

In addition, Psychological well-being (PWB) is specifically focused on evaluating the six dimensions of psychological well-being, which encompass maintaining a favorable outlook on oneself and one's past experiences (self-acceptance), the ability to adhere to personal convictions (autonomy), adeptly managing the intricate challenges of the environment (environmental mastery), fostering meaningful life objectives (purpose in life), cultivating an ongoing sense of growth and self-fulfillment (personal growth), and fostering nurturing and trustworthy relationships with others (positive relations with others) ***(Bannon et al., 2022; Arnold, 2017).***

As a result, burnout and the psychological well-being of nurses stand as crucial factors within the scope of human resource management for nursing organizations. The capacity of nurses to effectively navigate stressful circumstances while concurrently sustaining job satisfaction is strongly influenced by an array of environmental factors ***(Bakker & Sanz-Vergel, 2017).***

Significance of the study

Establishing and maintaining healthy work environments is crucial for organizational success. Neglecting this can lead to nurse

burnout, turnover, and negative impacts on patient and nurse satisfaction, as well as patient safety (Huddleston et al., 2017). Furthermore, Nurses' psychological well-being is essential as it affects the quality of patient care. As nurses play a pivotal role in delivering high quality care to patients, it is essential for them to achieve a high standard of both physical and psychological well-being **(Elhosany, Abd-Elazeem & Helal, 2020)**.

Work in a health care setting is recognized as inherently demanding due to the emotional complexities associated with managing ill patients. Moreover, prolonged exposure to such stressors can contribute to the development of burnout, which subsequently can result in diminished personal welfare, heightened absenteeism, elevated instances of errors, depression, fatigue and a compromised quality of patient care **(Saravanabavan et al., 2019).**

Therefore, from the researchers' perspective, it is crucial to elevate awareness towards the importance of healthy work environments and nurturing nurses' psychological welfare, given its susceptibility to the impacts of occupational burnout. Thus, this study aims to explore the relationship between healthy work environments, burnout, and psychological well-being among staff nurses in government and private healthcare settings, filling a gap in existing research.

Subjects and Methods

Research Design:

Comparative-correlational research design was utilized in the current study.

Research questions:

1- What are the perceptions of staff nurses regarding healthy work environment in both government and private hospitals?
2- What is the prevalence of occupational burnout among the staff nurses in both government and private hospitals?
3- What are the levels of the staff nurses' psychological wellbeing in both government and private hospitals?
4- What is the relationship between healthy work environment, occupational burnout, and psychological wellbeing among staff nurses in both government and private hospitals?
5- What are the differences between government and private hospitals regarding the study variables?

Study Setting and sample:

The research was carried out within the healthcare settings of Giza Governorate (one government and one private hospital), encompassing the surgical ICU, emergency department, medical units, and cardiac ICU. These units were established within both government and private hospitals, providing a comprehensive overview of diverse clinical environments.

The study targeted a convenient sample of staff nurses who were actively engaged in these specialized areas. This choice aimed to ensure that the participants' experiences were representative of the specific challenges and dynamics inherent to each of these specialized fields.

The combined sample size consisted of 85 out of 117 staff nurses from the government hospital, and 73 out of 80 nurses from the private hospital, from those who agreed to participate in the study. This meticulous selection process sought to include a variety of perspectives from both government and private healthcare sectors, contributing to a comprehensive understanding of the research variables.

Tools of Data Collection:

Three instruments were used to collect data for the present study.

1- Healthy work environment questionnaire: It was adopted from **Huddleston et al., (2017)**. It was divided into two sections (A&B).

- **Section A: Personal data of the staff nurses:** This section aimed to capture data such as; age, gender, level of education, area of specialty, and years of experience.
- **Section B**: **Healthy work environment questionnaire among staff nurses:** This section aimed to assess staff nurses' perceptions toward the healthy work environment. It encompassed (39) items categorized across five dimensions: authentic leadership (8 questions), effective decision-

making and skilled communication (8 questions), genuine teamwork (9 questions), appropriate staffing (6 questions), and physical and psychological safety (8 questions). **Scoring System:** The answers were measured by three-point Likert scale ranging from: 3= agree, 2 =neutral and 1= disagree. According to the total scores of nurses' responses, the healthy work environment perception levels were classified as follow: High: More than 75%, moderate: 50%-75%. And low: Less than 50%.

2- **Maslach burnout inventory questionnaire**: It was adopted from ***Maslach et al., (1996),*** this questionnaire was employed to gauge participants' perceptions of occupational burnout. Comprising (21 items), the questionnaire was divided into (3) dimensions: emotional exhaustion (8 questions), depersonalization (5 questions), and personal accomplishment (8 questions). **Scoring system:** The nurses' responses were measured on a three-point Likert scale ranged from 2= always, 1= sometimes and 0 = never. According to the total scores of nurses' responses, the burnout levels were classified as follow: High: More than 75%, moderate: 50%-75%, and low: Less than 50%.

3- **Psychological Well-Being Manife-station Measurement Scale:** It was adopted from ***Ryff and Keyes, (1995)***. This scale was employed to evaluate staff nurses' perspectives on psychological well-being. Comprising (18) items, the scale was organized into six dimensions: autonomy (3 items), environmental mastery (3 items), personal growth (3 items), positive relationships with others (3 items), purpose in life (3 items), and self-acceptance (3 items). **Scoring system:** Nurses' responses were assessed using a three-point Likert scale, with options ranging from (2) agree, (1) somewhat agree, to (0) disagree. Based on the cumulative scores of nurses' responses, levels of psychological well-being perception were categorized as follows: High: More than 75%, moderate: 50%-75%, and low: Less than 50% ***(Niosh, 2002).***

Tools validity:

The three instruments were presented to a panel comprising of five professors specializing in Community Health Nursing, Nursing Administration, and Psychiatric Nursing at the Faculty of Nursing, Cairo University. These professors were asked to assess the tools' content coverage, clarity, wording, length, format, and overall presentation. Following their expert feedback and recommendations, essential adjustments were made, including the correction of grammatical errors and the rephrasing of certain sentences.

Reliability:

The internal consistency of the research instruments was evaluated using Cronbach's alpha coefficient for the independent variable. The Cronbach's alpha values for internal consistency were found to be (0.95) of the Healthy Work Environment Questionnaire, (0.74) for the Maslach Burnout Inventory, and (0.87) of the Psychological Well-Being Questionnaire, this was shown that study tools are highly reliable.

Pilot study:

A pilot study was undertaken, involving 10% of the complete staff nurses' sample. This included (8) nurses from the private hospital and (12) nurses from the government hospital. The purpose was to assess the clarity and practicality of the study instruments. Following the pilot study, no alterations were made to the data collection tools. As a result, the findings from the pilot study were incorporated into the main study results.

Ethical Consideration:

The study was granted ethical approval by the Scientific Ethics Research Committee at the Faculty of Nursing, Cairo University, with the reference number Ethical Approval (NO. 0006883). Additionally, official consent was obtained from the medical and nursing directors of the participating hospitals to conduct the study. The researchers made a commitment to the managers of the private hospital, assuring them that the results or research paper would not be published with the hospital's name mentioned, in order to uphold the institution's reputation.

Participation in the research was entirely voluntary, affording each participant the right to freely choose to partake or abstain. Informed

consent was duly acquired from the nurses involved in the study. To ensure anonymity and confidentiality, data was encoded. Participants retained the right to withdraw from the study at any juncture, with the assurance that their data would not be repurposed for other research without their explicit permission. Ethical considerations encompassed a comprehensive explanation of the study's objective and nature, with an emphasis on safeguarding participants from any potential risks. Collected data were exclusively employed for the research's intended purpose.

Procedure:

Following the acquisition of ethical approval from the Scientific Ethics Research Committee at the Faculty of Nursing, Cairo University, and securing the consent of both medical and nursing directors from the study hospitals, the researchers commenced the data collection process. Or the government hospital, the researchers engaged with the staff nurses during two shifts (morning and afternoon) within their respective units. They elaborated on the study's purpose and extended formal written invitations to participate voluntarily, backed by written consent. Individual study questionnaires were distributed among the staff nurses, accompanied by comprehensive instructions regarding their completion. The estimated time required for questionnaire completion spanned from 15 to 25 minutes for all instruments. Upon completion, the collected questionnaires were gathered concurrently and subjected to scrutiny to ensure completeness, thereby mitigating the likelihood of missing data.

Conversely, in the private hospital setting, staff nurses were informed to complete the questionnaire electronically using a Google form. The form was disseminated via platforms such as WhatsApp, Facebook groups, and other online communication channels to all staff nurses involved in the study. The researchers emphasized to the staff nurses that the collected data would exclusively serve the purpose of the research. Data collection was conducted over the course of one month, specifically in January 2023.

Statistical Design

Upon the completion of data collection, the gathered data underwent scoring, tabulation, and analysis through computer-based processing employing the "Statistical Package for the Social Sciences" (SPSS), version 21. The analytical process encompassed the utilization of descriptive statistics, including measures such as frequency, mean, and standard deviation, to comprehend the data presented in this study.

Furthermore, relative statistical tests of significance, namely the independent t-test and correlation coefficient, were employed to unveil relationships among the study variables. The significance of these relationships was gauged through the p-value, where a significance level of (P-value $\leq$ 0.05) was employed to assess the statistical analyses. A p-value which was greater than 0.05 indicated non-significant results.

Results

Table (1) provides an overview of the studied staff nurses' personal data. In the government hospital, (65.9%) of the staff nurses were females, while (52.1%) in the private hospital were males. As for age distribution, in the government hospital (32.9%) fell within the age range of 30 to less than 35 years, with a mean age of (33.9±5.3). Conversely, 37% of them in the private hospital were aged between 20 to less than 25 years, with a mean age of (27±4.3). In terms of educational level, (63.5%) of staff nurses in the government hospital held associate technical diplomas, whereas (85%) in the private hospital possessed a bachelor's degree in nursing. Turning to professional experience, (37.6%) of staff nurses in the government hospital had 6 to 10 years of nursing experience, while (58.9%) of them in the private hospital reported 1 to 5 years of experience.

Figure (1) displays the highest percentage of the staff nurses in both the government and private hospitals working in surgical ICU (30.6% & 49.3%) respectively.

Table (2) clarifies a highly statistically significant difference in total healthy work environment dimensions of the studied staff nurses between government and private hospital (T=7.720, p=.0001*), where the mean scores of total healthy work environment is higher in the private hospital than government hospital (95.85 ±15.67 & 76.79 ± 15.29) respectively. In terms of burnout, there is only a statistically significant difference between depersonalization dimension

of burnout of the studied staff nurses in both government and private hospitals (T=2.118, p=.036*) as the mean score for this dimension was higher in the private hospital in comparison to the government hospital (10.10±1.73& 9.06±3.86) respectively. Regards the psychological well-being; a highly statistically significant differences between autonomy, personal growth, positive relationships with others, and self-acceptance (T= 3.684, p=.0001*, T=3.269, p=.001*, T=3.202, p=.002* and T=6.244, p=.0001*) respectively, except environmental mastery and purpose in life domain of the studied staff nurses in both government and private hospital(T= 1.080, p=.282 and T=0.992, p=.323) respectively.

Table (3) clarifies that; within the government hospital, (61.2%) of staff nurses reported a highly significant difference (X = 34.5, P ≤ 0.0001). In terms of occupational burnout, within both government and private hospitals the staff nurses had 89.4% and 93.2% of experiencing a moderate level of burnout, with no significant difference was detected in the levels of occupational burnout between the two types of hospitals (X = 0.68, P= 0.41). Furthermore 89.4% of staff nurses in the government hospital and 64.4% of those in the private hospital reported a moderate level of psychological well-being, with a highly significant difference was detected in the levels of Psychological wellbeing (X = 14.2, P ≤ 0.0001*).

Table (4) reveals that there was no statistically significant correlation between the total scores of a healthy work environment and total score of occupational burnout among staff nurses in either the government or private hospitals (r=.09 and p=. 23). However, there was a highly statistically positive significant correlation between the total scores of a healthy work environment and total score of psychological well-being for the studied staff nurses in both government and private hospitals (r = 0.19, p =.01*). Also, there was no statistically significant correlation between the total scores of occupational burnout and total score of psychological well-being among the studied staff nurses in either government or private hospitals (r=.14 and p=. 07).

Table (1): Distribution of the studied staff nurses' personal data from both government and private hospitals (n= 85, n=73 respectively).

Personal data	Government (n=85)		Private (n=73)	
	No.	%	No.	%
Gender				
Male	29	34.1	38	52.1
Female	56	65.9	35	47.9
Age				
20-less than 25	0	0.0	27	37.0
25-less than 30 years	21	24.7	26	35.6
30 years - less than 35	28	32.9	13	17.8
35 years - less than 40	17	20.0	7	9.6
40 and more	19	22.4	0	0.0
Mean±SD	**33.9±5.3**		**27±4.3**	
Educational level				
Technical diploma in nursing	20	23.5	0	0.0
Associate technical diploma	54	63.5	11	15.0
Bachelor's degree in nursing	11	12.9	62	85.0
Years of experience				
1-5	13	15.3	43	58.9
6-10	32	37.6	20	27.4
11-15	12	14.1	9	12.3
16-20	9	10.6	1	1.4
>20	19	22.4	0.	0.0
Mean ±SD	**12.7±7.4**		**5.9±4.1**	

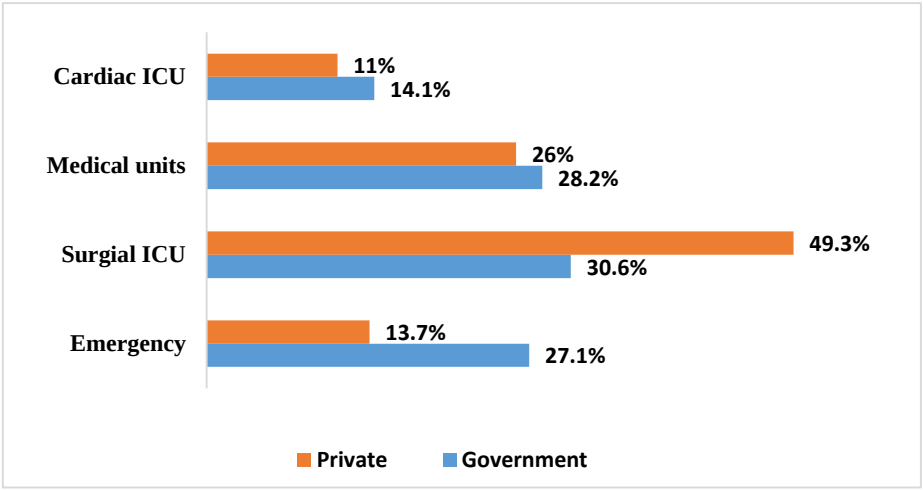

Figure (1): Distribution of the studied staff nurses' specialty in government and private hospitals (n= 85, n=73 respectively).

Table (2): Differences among studied staff nurses within government and private hospitals regarding mean scores across dimensions of healthy work environment, occupational burnout, and psychological wellbeing (n= 85, n=73 respectively).

Variables	Government		Private		t	P
	Mean	SD	Mean	SD		
Healthy work environment						
Authentic leadership	16.76	3.42	19.08	3.68	4.000	0.0001*
Effective decision making	16.00	4.01	20.18	3.72	6.745	0.0001*
Skilled communication	17.51	5.39	22.32	4.10	6.220	0.0001*
Genuine teamwork	11.82	3.23	14.51	2.71	5.600	0.0001*
Appropriate staffing	14.69	4.41	19.77	3.63	7.803	0.0001*
Total	76.79	15.29	95.85	15.67	7.720	0.0001*
Occupational Burnout						
Emotional exhaustion	16.82	2.51	16.18	1.69	1.866	0.064
Depersonalization	9.06	3.86	10.10	1.73	2.118	0.036*
Personal accomplishment	17.55	2.11	17.05	2.08	1.490	0.138
Total	43.44	4.85	43.33	2.65	0.167	0.867
Psychological wellbeing						
Autonomy	5.99	0.96	6.60	1.14	3.684	0.0001*
Environmental mastery	6.24	1.86	6.51	1.17	1.080	0.282
Personal growth	5.98	2.47	7.01	1.20	3.269	0.001*
Positive relationships with others	6.65	1.91	5.82	1.22	3.202	0.002*
Purpose in life	6.06	1.12	6.26	1.43	0.992	0.323
Self-acceptance	5.76	1.11	6.93	1.24	6.244	0.0001*
Total	36.65	3.69	39.14	4.03	4.055	0.0001*

Significant at p-value<0.05

Table (3): Distribution of the staff nurses' perceptions concerning the overall levels of a healthy work environment, occupational burnout, and psychological well-being within both government and private hospitals (n= 85, n=73 respectively).

Variables	Government		Private		Chi-square	P
	No.	%	No.	%		
Healthy work environment						
Low	13	15.3	1	1.4	34.5	0.0001*
Moderate	52	61.2	22	30.1		
High	20	23.5	50	68.5		
Occupational Burnout						
Low	0	0.0	0	0.0	0.68	0.41
Moderate	76	89.4	68	93.2		
High	9	10.6	5	6.8		
Psychological wellbeing						
Low	0	0.0	0	0.0	14.2	0.0001*
Moderate	76	89.4	47	64.4		
High	9	10.6	26	35.6		

Significant at p-value≤0.05

Table (4): Correlation between total scores of a healthy work environment, occupational burnout and psychological wellbeing among the studied staff nurses within government and private hospitals.

Variables	Healthy work environment		Occupational Burnout		Psychological well being	
	R	P	r	P	R	P
Healthy work environment	1	-	-	-	-	-
Occupational Burnout	.09	.23	1	-	-	-
psychological well being	.19	.01*	.14	.07	1	-

Significant at p-value≤0.05

Discussion

Nurses working within hospital environments are susceptible to burnout, a phenomenon that can detrimentally affect their job satisfaction and overall performance. Consistent experiences of burnout can further contribute to various physical, mental, and psychological challenges.

The outcomes of the present study unveiled a noteworthy trend: the majority of staff nurses in the government hospital were female, whereas slightly over half of the staff nurses in the private hospital were male. These findings stand in contrast to the research conducted by ***Jasim & Faris, (2020),*** which reported a predominant female composition among staff nurses in both private and government hospitals.

In terms of age distribution, the current study's findings indicated that; over one-third of the staff nurses in the government hospital fell within the age range of 30 to less than 35 years. Similarly, a comparable proportion of staff nurses in the private hospital were aged between twenty and less than 25 years. This contrasted with the observations made by ***Roghaye et al., (2019)*** who suggested that the majority of staff nurses in both private and government hospitals were clustered within the age groups of 20 to 30 years. Additionally, ***Abukhader et al., (2020)*** reported a mean age range of 22 to 53 years for nurses across both government and private hospitals.

The current study's findings indicated that; over three-fifths of the staff nurses in the government hospital possess associate technical diplomas, whereas the majority of staff nurses in

the private hospital hold bachelor's degrees in nursing. These outcomes contrasted with the research conducted by ***Abarghouei et al., (2018)*** which reported that approximately 43% of private nurses held bachelor's degrees, while 46% of government nurses had graduated from institutes.

The present study highlighted a significant difference in the dimensions of healthy work environment among the examined staff nurses within government and private hospitals. These findings were consistent with the research conducted by ***Thornsberry, (2018)*** which assessed the health of work environments and reported that the private hospital exhibited higher mean scores in total healthy work environment compared to the government hospital.

The outcomes of the current study revealed that; slightly more than three-fifths of the staff nurses in the government hospital held a moderate perception level regarding a healthy work environment. In contrast, more than three-fifths of the staff nurses in the private hospital demonstrated a higher perception level of a healthy work environment. These findings aligned with ***Al Moosa et al., (2020)*** who observed that nurses in government hospitals exhibited a moderate perception level of their work environment. Conversely, ***Almuhsen et al., (2017)*** noted that nursing staff in private hospitals reported a moderate perception level concerning a healthy work environment dimensions.

According to the researchers' perspective, the heightened level of a healthy work environment among staff nurses in private hospitals could be attributed to several factors. These include a management style that emphasizes support and collaboration, a well-structured and balanced work schedule, the presence of professional autonomy, the availability of sufficient resources, and comprehensive training programs that contribute to the overall quality of patient care.

Regarding the incidence of occupational burnout, the findings of the current study indicated that; a moderate level was prevalent among the majority of the staff nurses in both government and private hospitals. This finding contrasted with the research by ***Lombo, Lapian & Tumewu, (2018)*** who reported that the majority of nurses in public hospitals experienced a low level of burnout, while the majority of nurses in private hospitals exhibited a moderate level of burnout.

The variation in outcomes could potentially be attributed to the specific context of the current study, which focused on staff nurses working within ICUs. These units inherently operate under highly stressful conditions, which can contribute to the development of burnout syndrome among nurses. The noticeable prevalence of occupational burnout underscores the importance for both government and private hospital managers to acknowledge and address this concern. Prolonged burnout can lead to a range of adverse effects, including compromised communication, sleep disturbances, physical discomfort such as muscle tension, and, in severe cases, may contribute to mental health issues like anxiety, depression, and even substance abuse among staff nurses.

Concerning the findings of the present study, it was evident that a substantial proportion of the staff nurses in both government and private hospitals reported a moderate level of psychological wellbeing. The researchers hypothesized that these outcomes could be attributed to the prominent emphasis on positive relationships and a sense of purpose in the lives of the participants. Such factors likely provide significant psychological motivation for them to strive toward their individual goals. Additionally, it is noteworthy that a moderate or high level of psychological wellbeing can contribute to an enhanced sense of self-esteem, a positive outlook, a feeling of personal competence, and a propensity for pro-social and altruistic behavior. Furthermore, these attributes are associated with improved interpersonal skills and heightened satisfaction with the quality of relationships among staff nurses.

These findings were in contrast with the research conducted by ***Madhuchandra & Srimathi, (2016)*** which examined psychological wellbeing among nurses in a government hospital in India and reported a high level of psychological wellbeing among nurses. Similarly, ***Mahmoud, Elhosany & Helal, (2020)*** studied the correlation between psychological wellbeing and work motivation among staff nurses in government hospitals in Port Said and observed that the majority of nurses exhibited a high level of psychological wellbeing.

The current study outcomes indicated the absence of the significant relationship between the overall scores of a healthy work environment and those of occupational burnout among the staff nurses in both government and private hospitals. This outcome was inconsistent with the findings of ***Abu-El-Noor et al., (2019)*** whose research demonstrated a statistically significant correlation between the total score of a healthy work environment and the total score of job burnout among nurses in various hospitals.

The current study's findings indicated a highly significant and positive relationship between the overall scores of a healthy work environment and the total score of psychological wellbeing among both government and private hospital staff nurses. This correlation can be attributed to the fact that nurses who are experiencing a sense of wellbeing – characterized by autonomy in decision-making, control over their environment, a sense of purpose, and positive interpersonal relationships – are more likely to be motivated to excel in their work. This outcome aligned with the research of ***Mahmoud, Elhosany & Helal, (2020)*** who also identified a positive and significant correlation between the healthiness of the work environment for nurses and various domains of their psychological wellbeing.

Furthermore, the present study's findings indicated the absence of the significant relationship between the total scores of burnout and the total score of psychological wellbeing among the examined staff nurses in both government and private hospitals. This finding contrasted with the results of ***Arslan, (2021)*** whose research identified a highly significant and positive correlation among the total scores of organizational commitment, burnout levels, and psychological wellbeing scores among the studied staff nurses.

The outcomes of the present study demonstrated a significant disparity between the depersonalization dimension of burnout among the studied staff nurses in both government and private hospitals, with a higher mean observed in the private hospital. However, no statistically significant distinction was observed between the emotional exhaustion and personal accomplishment dimensions of burnout among the studied staff nurses in either government or private hospitals. This pattern could be attributed to the possibility that nurses, irrespective of their workplace setting, experience similar levels of occupational burnout. The lack of significant differences may arise from other contributing factors beyond the hospital's status.

These findings were in contrast to the study conducted by ***Sudha Katyal, (2017)*** which focused on burnout among nurses in government and private hospitals in the Nablus District as revealed that nurses in government hospitals exhibited significantly higher levels of emotional exhaustion and depersonalization compared to those working in private hospitals. However, there were no significant differences between the two groups in terms of personal accomplishment.

Furthermore, these findings were at odds with the research conducted by ***Khan, (2020)*** who indicated a significant disparity in the total burnout scores between nursing staff in government and private hospitals. In a similar vein, ***Windayanti & Prawasti, (2007)*** discovered that; nurses in government hospitals exhibited high scores regarding emotional exhaustion, depersonalization, and personal accomplishment categories, although these scores were not significantly higher than those of nurses in private hospitals. ***Windayanti & Prawasti, (2007)*** explained that despite the differences in hospital status, nurses in both settings experienced a comparable level of burnout, along with similar levels of appreciation, sensitivity, and a sense of competency in fulfilling their responsibilities.

Furthermore, the present study's findings revealed significant variations between all psychological wellbeing domains, except for environmental mastery and purpose in life domains, among the studied staff nurses in both government and private hospitals. Notably, the mean scores were marginally higher in the private hospital compared to the government hospital for these specific domains.

These findings aligned with the research conducted by ***Brunetto, Farr-Wharton & Shacklock, (2012)*** which explored communication, work environment, psychological well-being, and commitment across different nurse generations in various hospitals. Their study also demonstrated a substantial statistical distinction in nurses' commitment, healthy work environment, and

psychological well-being. Similarly, ***Amin, (2016)*** identified a highly significant statistical difference in psychological well-being dimensions among nurses in a government hospital.

Conclusion

With reference to the study's outcomes; a slightly higher proportion of the staff nurses in the government hospital, just over three fifths demonstrated a moderate level of perception regarding a healthy work environment. In contrast, more than three fifths of the staff nurses in the private hospital exhibited a heightened perception of a healthy work environment. Furthermore, the study underscores that a significant portion of the surveyed staff nurses in both the government and private hospitals experienced a moderate level of occupational burnout and psychological well-being. Importantly, the research determined a statistically significant positive association between the total scores of a healthy work environment and the total scores of psychological well-being among the studied staff nurses in both government and private hospitals.

Recommendations

The following recommendations were suggested with reference to the present study outcomes:

1- Implementing Health Education in Pre-Employment Training to Mitigate Burnout: Incorporating effective strategies into pre-employment training programs to prevent burnout among nurses is crucial.

2- Early Detection and Periodic Screening for Burnout Management: Health-care professionals should undergo regular screenings to detect and manage burnout at its early stages.

3- Resilience-Oriented Training for Nurse Well-Being: Introducing resilience-focused training can fortify nurses against burnout, leading to improved nurse well-being and organizational outcomes.

4- Continuous Training for Psychological Well-Being and Burnout Prevention: Developing and sustaining ongoing training programs to enhance psychological well-being among staff nurses and prevent burnout is recommended.

5- Diverse Educational Approaches to Enhance Nurse Work Environments: Policymakers should prioritize providing diverse educational methods to enhance nurse work environments, aiming to retain skilled nurses.

6- Investigating Factors Linked to Burnout: Further research should explore the intricate factors contributing to burnout syndrome, establishing a comprehensive understanding of its causes.

7- Replication and Generalization: Expanding the study's scope by replicating it with a larger sample size and across various health care settings would enhance its generalizability and validity.

References

Abukhader, I., Abukhader, K., Naser, O., Saeed, Y. & Maliashe, A. (2020). Burnout among Palestinian Nurses Working in Government and Private Hospitals at Nablus District. *Open Journal of Social Sciences*, 8, 1-11. https://doi.org/10.4236/jss.2020.87001

Aljabri, D., Alshatti, F., Alumran, A., Al-rayes, S. & Alsalman, D. (2022). Sociodemographic and Occupational Factors Associated With Burnout : *A Study Among Frontline Healthcare Workers During the COVID-19 Pandemic*. 10(March), 1–10. https://doi.org/10.3389/fpubh. 2022.854687.

Al Moosa, M., Eweis Hassanein, S., Alnems, A., Ahmed Abdrbo, A., Minguez, O. & Anwar Al Ghadheeb, F. (2020). Perception of Nurses Work Environment in Tertiary Care Hospital in Saudi Arabia. *American Journal of Nursing Science*, 9(1), 23. https://doi.org/10.11648/j.ajns.20200901.14

Almuhsen, F., Alkorashy, H., Baddar, F. & Qasim, A. (2017). Work environment characteristics as perceived by nurses in Saudi Arabia. *International Journal of Advanced Nursing Studies*, 6(1), 45. https://doi.org/10.14419/ijans.v6i1.7453.

American Association of Critical Care Nurses (2021). [Online] Available at: http://www.aac.org/nursing -excellence /healthy- work environment.

Amin, Z. (2016). The mediating effect of quality of work life on the relationship between career development and psychological well-being.

International Journal of Research Studies in Psychology 2:67–80. ISSN: 2243-7681.

Arslan, G. (2021). Psychological well-being in college students: Psychometric properties of the Brief Inventory of Thriving (BIT) and the Comprehensive Inventory of Thriving (CIT). *Journal of School and Educational Psychology*, 1(1), 6–16.https://doi.org/10.47602/ josep. v1i1.6.

Arnold, K.A. (2017). Transformational leadership and employee psychological well-being: A review and directions for future research. *Journal of Occupational Health Psychology*, 22(3), 381.

Bannon, J., Evans, C.T., Freedman, M., Lee, C., Vu, T.H., Wallia, A., Wilkins, J.T., Moskowitz, J.T. & Hirschhorn, L.R. (2022). Psychological wellbeing and the association with burnout in a cohort of healthcare workers during the COVID- pandemic. *Fronteirs in Health Services*.

Baker, A.B. & Sanz-Vergel, A.I. (2017). Weekly work engagement and flourishing: The role of hindrance and challenge job demands. *Journal of Vocational Behavior*, 83, 397-409. Do: 10.1016/j. jvb. 2013.06.008.

Brunetto, Y., Farr-Wharton, R. & Shacklock, K. (2012). Communication, training, well-being, and commitment across nurse generations. *Nursing Outlook*, 60(1), 7-15.

Chung, H., Chen, Y., Chang, S. & Hsu, W. (2020). Nurses' Well-Being, Health-Promoting Lifestyle and Work Environment Satisfaction Correlation : A Psychometric Study for Development of Nursing Health and Job Satisfaction Model and Scale. *International Journal of Environmental Research and Public Health, 17*, 1–10.

Crowe, L., Sw, B., Am, J.Y., Smith, A. C., Vitangcol, K. & Haydon, H.M. (2023). Australian Critical Care Critical care staff wellbeing : A new paradigm for understanding burnout. *Australian Critical Care*, *36*(1), 59–65. https://doi.org/ 10.1016/j.aucc.2022.10.010

Dawood, S., Sabei, A., Abualrub, R., Labrague, L.J., Ali, I., Omar, B. & Rawajfah, A. (2021). The impact of perceived nurses' work environment, teamness, and staffing levels on nurse - *reported adverse patient events in Oman Study design.* May, 897–904. https://doi.org/10.1111/ nuf.12639.

De Kock, J.H., Latham, H.A., Leslie, S.J., Grindle, M., Munoz, S.A., Ellis, L& O'Malley, C.M. (2021). A rapid review of the impact of COVID-19 on the mental health of healthcare workers: implications for supporting psychological well-being. *BMC public health*, *21*(1), 1-18.

Huddleston, P., Mancini, M.E. & Gray, J. (2017). Measuring nurse leaders' and direct care nurses' perceptions of a healthy work environment in acute care settings, part 3. *The Journal of Nursing Administration*, 47(3), 140-146.

International Labor Organization, (2022). The International Labour Conference accessed from: https:// www.ilo.org/global/topics/safety-and-health-at-work/areasofwork/ fundamental-principle/lang--en/index.htm.

Jasim. A.H. &F aris, H.I. (2020). A comparative study of burnout among nurses in public and private hospitals at Karbala city. International Journal of Scientific and Research Publications, Volume 10, Issue 7, July 2020 869, ISSN 2250-3153. DOI: 10.29322/ IJSRP. 10.07.2020. p10399. http://dx.doi.org/ 10.29322/ IJSRP.10.07.2020.p10399.

Khan, I. (2020). Theories and Practices of Organizational Behavior, pp. 46-48.

Kundi, Y.M., Aboramadan, M., Elhamalawi, E.M. & Shahid, S. (2021). Employee psychological well-being and job performance: exploring mediating and moderating mechanisms. *International Journal of Organizational Analysis*, *29*(3), 736-754.

Leiter, M.P. & Maslach, C. (2019). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management*, 17, 331-339.

Levi, L. (1987). Fitting work to human capacities and needs. In Katme et al (Eds.) Improvements in ICU nurses' moral distress with burnout and anticipated turnover. *Nursing ethics*, 22(1). 64-76.

Lombo, P.A., Lapian. S.V. & Tumewu, F.J., (2018), *burnout level among nurses between*

public and private hospitals in Manado. *Jurnal EMBA*,6 (4), 3328 – 3337.

Mabona, J.F., van Rooyen, D.R.M.. , & Ham-Baloyi, W. ten. (2021). Best practice recommendations for healthy work environments for nurses: An integrative literature review., *Health SA Gesondheid* 27(0), a1788. https://doi.org/ 10.4102/ hsag.v27i0.1788.

Madhuchandra, M.K. & Srimathi, N. L. (2016). Psychological Well-being among Doctors and Nurses: A Comparative Study. *The International Journal of Indian Psychology*, 3(4), 203-210.

Mahmoud, A.S., Elhosany, W.A. & Helal, O.M. (2020), the relationship between psychological wellbeing and work motivation among staff nurses in Government Hospitals in Port Said. *Port Said Scientific Journal of Nursing*, 7(4) 21-39.

Markwell, P., Polivka, B.J. & Morris, K. (2016): a strategy to address nurses' professional quality of life. *Journal of Holistic Nursing*. March 2016.

Maslach, C., Jackson, S.E. & Leiter, M.P. (1996). The Maslach Burnout Inventory Manual, 3rd ed. Consulting Psychologists Press, Palo Alto, CA.

NIOSH, (2002). NIOSH Manual of analytical methods, 2nded, vol.3, s162, s164, s168, s310, u.s.Department of health, education, and welfare, publ. (NIOSH)77-157-c.

Rasheed Karim, W. (2022). Psychological Wellbeing Among Post Compulsory Students in London @ ECRTD-UK : https:// www.eajournals.org/. 10(3), 25–39.

Roghaye Abedi-Gilavandi, Fateme Talebi, Elahe Abedi-Taleb, Saeed Nateghi, Leila Khedmat, Fariba Amini, Shohre Moshfeghi, Mohammad Effatpanah (2019). Burnout among Nursing Staff *in Ziaeian Hospital journal of Mater Sociomed*; 31(1): 10-13.

Thornsberry, Jennifer (2018). "Defining the Health of a Work Environment: *An Assessment and Evaluation."*