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THE EFFECT OF WORKPLACE BULLYING ON NURSES' MENTAL WELL-BEING IN SAUDI ARABIA

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ABSTRACT

Introduction: Bullying at the workplace can be a source of stress that affects mental wellbeing. Mental well-being has been acknowledged as a significant factor that can impact the individual's ability to cope with the moderate stresses of life to enhance their effective functioning to work productively, contribute to their workplace and profession, and realize their potential.

Purpose: The present study aimed to investigate the correlation between nurses' exposure to workplace bullying and their mental well-being.

Material and methods: A descriptive cross-sectional and correlational design was utilized, and 328 nurses working in the first cluster of the Ministry of Health in Jeddah, Saudi Arabia participated in the present study. Data were collected using the Negative Act Questionnaire-Revised and Warwick-Edinburgh Mental Well-being Scale.

Results: The results showed that workplace bullying was high and prevalent as more than two-thirds (70.7%) of the participants were sometimes or severely bullied. At the same time, 54% of the participants have average or poor mental well-being. Furthermore, there was a significant inverse correlation between workplace bullying and nurses' mental well-being.

Conclusion: The present study emphasizes the need to solve this issue by rise nursing administration awareness and establishing educational programs for nurses in order to minimize the adverse effects of workplace bullying and foster a safe workplace climate for nurses.

Keywords: workplace bullying, mental well-being, consequences, nurses, nursing staff.

Introduction

Workplace bullying (WPB) harms healthcare professionals, particularly nurses, and is a significant concern. Specifically, bullying affects nurses more than other healthcare professionals, which leads to toxic workplace settings [Syed F et al., 2022].

According to Nielsen M.B. and Einarsen S.V. (2018), WPB is defined as circumstances in which a worker is exposed to degrading actions by coworkers, administrators, or colleagues [Nielsen M, Einarsen S, 2018]. There are three essential criteria for the definition of WPB. First, an employee becomes

the focus of a pattern of unpleasant and undesirable workplace social actions. The second criterion is that the exposure happens persistently and constantly. Lastly, the person who is the victim of the maltreatment feels unable to readily flee the situation or put an end to it [Nielsen M, Einarsen S, 2018].

The common types of WPB that a worker might face include work-related bullying, person-related bullying, and physical bullying [Einarsen S et al., 2020]. In relation to work-related behavior, which the former refers to as the victim's work activities,

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includes actions like giving victims unrealistic deadlines or unmanageable workloads, closely examining their work, giving them meaningless tasks or even no tasks at all, and limiting their access to information that makes it difficult for them to fulfill their responsibilities [Einarsen S et al., 2020].

Regarding person-related bullying, it is clearly psychological in nature. Bullying can be categorized as passive and subtle, active and direct, or in a midway between them. Passive bullying includes actions like talking and spreading rumors, excluding someone from social gatherings, or not communicating with them [Einarsen S et al., 2020]. On the other hand, verbal threats and verbal hostility are forms of active and direct bullying. Belittlement, offensive statements, invasion of privacy, unjustified judgments, making jokes, or other forms of humiliation fall into the midway category [Einarsen S et al., 2020].

Moreover, physical bullying refers to the practice of using physical actions as a means of threatening or intimidating others, such as hitting, beating, and other forms of physical aggression. However, it is a consensus that the behaviors involved in WPB are predominantly psychological rather than physical in nature [Einarsen S et al., 2020].

As a result, WPB is considered an alarming source of job stress, which has a negative impact on the psychological well-being of nurses [Lee J, Lee B, 2022]. Furthermore, WPB has been correlated with lower job satisfaction, resilience, and sleep quality [Finchilescu G et al., 2019; Fang L et al., 2021; Peng J et al., 2022]. It has also been found to increase burnout, presenteeism, and intentions to leave among nurse professionals, as well as contributing to a higher turnover rate [Rayan A et al., 2019; Özkan A, 2021; Al Muharraq E et al., 2022; Lee J, Lee B, 2022].

Workplace bullying has a detrimental effect on the mental health of nurses and has been associated with distressing psychological symptoms such as anxiety, irritability, depression, and post-traumatic stress disorder symptoms. It particularly affects those who already have pre-existing mental health issues, exacerbating their symptoms [Lever I et al., 2019]. Additionally, WPB is also associated with various physiological symptoms including tiredness, insomnia, indigestion, and poor sleep quality [Fang L et al., 2021; Konttila J et al., 2021; Syed F et al., 2022].

In Saudi Arabia, the literature demonstrates that WPB is a serious and highly prevalent problem that has a negative impact on the well-being of nurses [Rayan A et al., 2019; Al-Surimi K et al., 2020; Al Muharrag E et al., 2022; Syed F et al., 2022]. A study conducted in 2022 revealed that nurses were exposed to a higher proportion of severe and occasional bullying compared to other healthcare providers [Syed F et al., 2022]. However, there is a scarcity of research investigating the specific effects of WPB on nurses' mental well-being [World Health Organization, 2022]. Mental well-being encompasses more than just the absence of mental illnesses and disorders; it is considered the foundation for overall well-being and effective functioning for both individuals and communities [World Health Organization, 2022].

According to the World Health Organization (2022), mental well-being is a crucial factor that can influence an individual's ability to cope with moderate life stresses, enhance effective functioning, contribute efficiently to their workplace and profession, and realize their potential. Mental well-being encompasses both hedonic characteristics, such as positive emotions and feelings, and eudaimonic characteristics, including beneficial performance, thoughts, and relationships [World Health Organization, 2022].

Despite the pervasiveness of WPB in healthcare facilities in Saudi Arabia, there is limited empirical evidence available regarding the impact of WPB on the mental well-being of nurses. Recognizing the importance of mental well-being for nurses, it is crucial to investigate the relationship between WPB and mental well-being. Therefore, the purpose of this study was to address the existing gap by examining the consequences of WPB on the mental well-being of nurses.

Workplace bullying is a prevalent issue among healthcare providers, with nurse professionals being particularly affected [Syed F et al., 2022]. Several studies have suggested that increased experience of WPB is associated with decreased resilience, increased job dissatisfaction, burnout, intention to leave, and higher turnover rates [Al Muharraq EH et al., 2022; Finchilescu G et al., 2019; Peng J et al., 2022]. While there are multiple adverse effects linked to WPB, there has been a notable increase in the recognition of the potential

impact of WPB experience on mental well-being.

Mental well-being plays a significant role in an individual's capacity to cope with moderate life stresses and enhance effective functioning, enabling them to contribute efficiently to their workplace and profession and reach their full potential [World Health Organization, 2022]. It carries a substantial burden in promoting overall well-being and facilitating optimal performance in various aspects of life.

Nurses play a vital role in the healthcare system, and their exposure to WPB can have detrimental effects. It is likely to result in reduced job satisfaction, increased burnout, and job stress among nurses. Moreover, the impact of WPB on nurses can be significant, including the potential for increased turnover rates [Finchilescu G et al., 2019; Rayan A et al., 2019; Özkan A, 2021; Lee J, Lee B, 2022]. The well-being and retention of nurses are essential for maintaining a healthy and effective healthcare workforce.

Furthermore, several studies have indicated that WPB is prevalent among nurses working in Saudi Arabia [Rayan A et al., 2019; Al-Surimi K et al., 2020; Al Muharraq E et al., 2022; Syed F et al., 2022]. Therefore, it is crucial to investigate the relationship between WPB and mental well-being among nurses in order to support and promote their optimal mental well-being. The findings of this study can increase nurses' awareness about WPB and provide insights on how to manage or cope with it. Additionally, it can assist nursing administration in implementing various methods and interventions to create a work environment that promotes respect and dignity, fostering a culture of support and well-being for nurses.

This study explained how WPB influences mental well-being, which is likely valuable for researchers and makes a substantial discovery. Moreover, the findings could advance the nursing literature by providing a baseline for upcoming research locally and internationally to properly understand and interpret WPB and its effect on mental well-being.

This study aims to explore the correlation between WPB and nurses' mental well-being in Saudi Arabia.

MATERIAL AND METHODS

Research Design: The current study employed a quantitative, descriptive, cross-sectional correlational design, which is suitable for investigating

the correlation between exposure to WPB and mental well-being among nurses working in the Ministry of Health (MOH) [LoBiondo-Wood G, Haber J, 2018].

In quantitative research, numeric data is summarized and analyzed using statistical techniques to test hypotheses or address research questions. The descriptive correlational design, as described by LoBiondo-Wood G. and Haber J. (2018), allows researchers to examine the relationship between variables. Additionally, the cross-sectional design involves collecting and analyzing data at a specific point in time, rather than following the same participants over an extended period [LoBiondo-Wood G, Haber J, 2018].

Research Setting: The MOH is the primary sector to deliver health services free of charge for citizens in Saudi Arabia. In addition, the MOH articulates legislation that directs both public and private healthcare organizations and keeps track of their execution. The MOH guides many clusters; each cluster is in charge of several hospitals. There are two clusters (first, and second cluster) of MOH in Jeddah city, which is the second biggest city in Saudi Arabia.

The present study was conducted at the first MOH cluster in Jeddah as it is responsible for three of the city's major publicly funded hospitals. King Abdulaziz Hospital, which is a high-capacity hospital, and includes 436 beds, East Jeddah Hospital with a 300-bed capacity, and Althager Hospital with 100 beds capacity, which relatively seems the smallest compared to the other hospitals.

Sampling: The participants for this study were recruited using a non-probability convenience sampling technique. Convenience sampling involves selecting participants who are readily available and accessible [LoBiondo-Wood G, Haber J, 2018]. In this sampling strategy, there are no specific criteria or requirements for enrollment other than the participants' accessibility and willingness to participate. Convenience sampling is often chosen for its simplicity, cost-effectiveness, and ease of implementation in quantitative research [LoBiondo-Wood G, Haber J, 2018].

The target population for this study was nurses working in Saudi Arabia. However, the reachable population for the study was limited to nurses working at the first cluster of the Ministry of Health (MOH) in Jeddah, specifically at King Ab-

dulaziz Hospital, East Jeddah Hospital, and Althager Hospital.

Inclusion criteria: Nurses working in any hospital department and Nurses who have at least a diploma degree in nursing science.

Exclusion criteria: Administrator nurses (directors, managers, supervisors, head nurses) due to the variation nature of work.

Sample size: The total population size was 1749 nurses from all departments of the included hospitals after excluding administrative nurses. King Abdulaziz Hospital involves 809 nurses, East Jeddah Hospital has 740 nurses, and 200 nurses from Althager Hospital.

The required sample size was calculated using the Raosoft software from the whole target population at a confidence level of 95%, and a margin error of 5%. Thus, the outcome of the calculation was 316 nurses are the minimum sample size to reach a representative sample for this study. However, 328 nurses were participated in the current study.

Study Tools: The data was collected through a self-administered online questionnaire, which consisted of three tools.

Socio-demographic characteristics and participant's clinical experience questions: The researchers formulated the first tool, which contains two main components based on a comprehensive review of the literature. The first component is the socio-demographic part which comprises five questions about age, gender, marital status, level of education, and nationality. The second component includes four questions about the clinical experience of nurses, which are the current work position, current work department, years of experience, and shift hours per day.

Revised Negative Acts Questionnaire: The second tool used in this study aimed to assess nurses' experience of WPB and utilized the Revised Negative Acts Questionnaire (NAQ-R) scale developed and validated by Einarsen S et al. (2009). The NAQ-R consists of 22 items that describe behaviors representing bullying towards individuals (12 items), bullying through work (7 items), and physical intimidation (3 items). To obtain a more reliable estimation of WPB experience, the terms abuse, bullying, and harassment were eliminated from the questionnaire, as suggested by Einarsen S et al. (2009).

Nurses were asked to estimate the frequency of exposure to the defined abusive behaviors within the last six months using a five-point Likert scale ranging from 1 (Never bullied) to 5 (Daily bullied) [Einarsen S et al., 2009]. A higher score on the scale indicates a more frequent exposure to WPB. The psychometric qualities of the NAQ-R scale were tested, demonstrating good content and discriminatory validity. The reliability of the scale was assessed using Cronbach's alpha, with a resulting value of α = 0.90, indicating strong internal consistency [Einarsen S et al., 2009].

In Lebanon, Makarem N.N. et al. (2018) utilized a team of bilingual translators to translate the NAQ-R into Arabic over the course of two sessions, including back translation. Additionally, the authors assessed the psychometric qualities of the Arabic version of the NAQ-R and reported satisfactory construct validity, as well as strong internal consistency with a Cronbach's alpha of 0.90 [Makarem N et al., 2018].

Regarding the scoring system, scores ranging from 22 to 32 indicate that participants were never or rarely bullied, scores from 33 to 44 indicate occasional bullying experiences, and scores of 45 and above suggest that participants have been victims of bullying at work [Makarem N et al., 2018].

Warwick-Edinburgh Mental Wellbeing Scale: The third tool used in this study was the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), developed by Tennant R et al. (2007), to assess subjective well-being and psychological functioning. The WEMWBS utilizes a 5-point Likert-type scale, with a response range from 1 ("None of the time") to 5 ("All of the time"). The overall score on the scale ranges from 14 to 70, with a higher score indicating better well-being [Tennant R et al., 2007].

The validity of the WEMWBS scale was evaluated, and it was found to have good face and content validity. Additionally, Cronbach's alpha test was conducted to assess the internal consistency and reliability of the scale. The study population achieved a reliability score of α = 0.91, indicating a high level of internal consistency and reliability [*Tennant R et al.*, 2007].

Concerning the scoring system, scores ranging between 14 and 32 indicated that they had poor mental well-being, 33-51 scores indicated that they had average mental well-being, and finally 52-70 scores indicated that they had good mental well-being.

Validity: The study tools were reviewed for their content validity and relevance for both Arabic and English versions by a jury of three experts with a doctorate degree in nursing from the Nursing Faculty at King Abdulaziz University (KAU). Thus, the tools were adapted according to the jury's suggestions and comments.

Reliability: The tools used in the current study were tested for its reliability by Cronbach's Alpha test. The result showed α = 0.976 for the NAQ-R tool. While the result of the WEMWBS scale was α = 0.951. Overall, Cronbach's Alpha results for the study tools showed high internal consistency and are considered reliable tools.

Pilot Study: The MOH and Faculty of Nursing provided their ethical approvals (IRB Log No: A01418; NREC Serial No. 2M.50) therefore the pilot study was implemented which involved 10% of the study's expected sample size (32 nurses) from different hospital departments. It was used to evaluate the tools and the study's readability and clarity. The researcher created and disseminated the barcode for the online survey for staff nurses. The study tools were obvious and simple. The pilot study's participants were included in the actual study since the study tools were no notable change.

Actual Study Process: In the present study, the researcher collected the data using an online questionnaire. The data collection process in the present study followed these steps:

- The researcher utilized Google Forums to create an electronic questionnaire for collecting study data.
- The aim of the study was clearly stated; also, participant confidentiality and anonymity were ensured since no personal identifiable information was requested from the participants.
- The tools provided in both Arabic and English versions to consider non-Arabic speaking nurses.
- The principal researcher explained the study to the nursing education department, and afterward, met and explained the study to head nurses along with available staff nurses.
- The online questionnaire link was sent to the units' WhatsApp groups by their head nurses.
- The meetings with staff nurses were repeated in the morning, evening, and night shifts to explain the study and encourage nurses to partici-

- pate, with consideration to avoid endorsement, medication, and visit times to facilitate nurses' workflow continuity.
- The internal communication department of the MOH had been contacted to distribute the online questionnaire to nurses through their official emails.
- The data were collected between November 2022 and January 2023. The total number of responses was 328 responses.

Ethical Consideration: Permission to use the NAQ-R and WEMWBS tools for both Arabic and English versions was obtained from the authors.

- Ethical approval was obtained to conduct the research from the Nursing Research Ethical Committee of the Faculty of Nursing at KAU.
- Ethical approval was obtained to conduct the study on MOH hospitals from the ethical committee of the MOH in Jeddah, Saudi Arabia.
- The nurses were notified that they could reject to participate in this study and withdraw at any time.
- Prior to participation, the electronic agreement was regarded as consent for participation.
- The collected data from the participants were managed confidently.

Statistical Analysis: The statistical analysis of the study was performed using the Statistical Package for the Social Sciences, version 25.0. The study data were sent to a skilled and experienced statistician for analysis. The cutoff for statistical significance was p<0.05.

To interpret the collected data, descriptive and inferential statistical strategies have been used. Descriptive statistics comprised frequencies, percentages, mean values, and standard deviations. For inferential statistics, the correlation between the study participants' exposure to WPB and their level of mental well-being was investigated using a Pearson correlation test to determine the direction and intensity of the correlation between the current study variables.

RESULTS

Socio-Demographics and Clinical Experience Characteristics of Study Participants: As shown in table 1 the frequency and percentages of sociodemographic variables related to 328 nurses who participated in the current study. Regarding participants' age, it is observed that nearly twothirds (59.8%) of the participants fell within the 25 to 35 age range and followed by 29.6% of those in the age range between 35 and 45. Results clearly show that the majority (91.2%) of participants were female and 75.9% were Saudi citizens. Furthermore, it is noted that over half (55.2%) of the participants were married, and 58.8% had a bachelor's degree.

Table 2 represents the frequency and percentage distribution of the participants according to their clinical experience characteristics. More than three-quarters (83.8%) of the participants were staff nurses, followed by 12.5% charge nurses and 3.7% educators. For the years of experience, more than two-thirds (71.3%) had 6-10 years of experience, and comparatively a small percentage (1.8%) had less than one year of experience in the nursing

TABLE 1
Frequency and Percentage Distribution of Study
Participants According to their Sociodemographic
Characteristics

Sociodemographic Characteristics		Study Participants (n=328)			
Characteristics	n	%			
Age					
18 to less than 25	13	4			
25 to less than 35	196	59.8			
35 to less than 45	97	29.6			
45 and above	22	6.7			
Gender					
Female	299	91.2			
Male	29	8.8			
Nationality					
Saudi	249	75.9			
Non-Saudi	79	24.1			
Marital Status					
Single	127	38.7			
Married	181	55.2			
Divorced	17	5.2			
Widowed	3	0.9			
Education					
Diploma	93	28.4			
Bachelor's degree	193	58.8			
High Diploma Degree	22	6.7			
Master's degree	20	6.1			

TABLE 2
Frequency and Percentage Distribution
of Study Participants According
to their Clinical Experience Characteristics

Clinical Experience Characteristics	Study Participants (n=328)		
	n	%	
Current Work Position			
Staff Nurse	275	83.8	
Charge Nurse	41	12.5	
Educator	12	3.7	
Experience			
Less than one year	6	1.8	
1-5 years	88	26.8	
6-10 years	234	71.3	
Shift			
9 hours a day	199	60.7	
12 hours a day	129	39.3	
Department			
Medical/Surgical department	94	28.7	
Critical care department	71	21.6	
OB/GYN department	38	11.6	
Neonatal/pediatric department	32	9.8	
Outpatient department	31	9.5	
Emergency department	29	8.8	
Psychiatric department	10	3	
Others			
Nursing education	9	2.7	
Operating room	7	2.1	
Nursing quality	4	1.2	
Endoscopy department	2	0.6	
Wound management	1	0.3	

profession. Regarding shift hours, it was found that two-thirds (60.7%) of participants worked nine hours shifts. Furthermore, nearly one-third (28.7%) of the participants were working in medical /surgical departments, followed by 21.6% working in critical care departments.

Negative Act Questionnaire Scale: Table 3 illustrates the distribution of study participants according to their mean scores ± SD for each statement of the work-related bullying subscale. As seen the statement "being exposed to an unmanageable workload" had the highest mean score of 2.79±1.43. Furthermore, the statement "Pressure not to claim something to which by right you are entitled (e.g., sick leave, holiday entitlement,

TABLE 3

Distribution of Study Participants According to their Mean ± SD Responses to Work-Related Bullying Subscale

Work-Related Bullying Subscale Statement	Study Participants (n=328) Mean ± SD
Being ordered to do work below your level of competence	2.52±1.35
Having your opinions ignored	2.29±1.26
Being given tasks with unreasonable deadlines	2.17±1.25
Excessive monitoring of your work	$2.38{\pm}1.32$
Pressure not to claim something to which by right you are entitled (e.g., sick leave, holiday entitlement, travel expenses)	2.7±1.49
Being exposed to an unmanageable workload	2.79±1.43
Total work-Related Bullying Subscale	2.23±1.23

TABLE 4

Distribution of Study Participants According to their Mean \pm SD Responses to Person-Related Bullying Subscale

Statement	Study Participants (n=328)	
Being humiliated or ridiculed in connection with your work	1.96±1.18	
Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	2.73±1.37	
Spreading of gossip and rumours about you	2.41±1.48	
Being ignored or excluded	2.2±1.26	
Having insulting or offensive remarks made about your person, attitudes or your private life	1.73±1.08	
Hints or signals from others that you should quit your job	1.74±1.15	
Repeated reminders of your errors or mistakes	1.99±1.18	
Being ignored or facing a hostile reaction when you approach	1.7±1.06	
Persistent criticism of your errors or mistakes	2.07±1.19	
Practical jokes carried out by people you don't get along with	1.72±1.10	
Having allegations made against you	1.75±1.04	
Being the subject of excessive teasing and sarcasm	1.54±0.93	
Total person-Related Bullying Subscale	1.95±0.81	

TABLE 5

Distribution of Study Participants According to their Mean \pm SD Responses to the Physical Bullying Subscale

Physical Bullying Subscale Statement	Study Participants (n=328)
Being shouted at or being the target of spontaneous anger (or rage)	2.23±1.23
Intimidating behaviors such as finger- pointing, invasion of personal space, shoving, blocking your way	1.7±1.07
Threats of violence or physical abuse or actual abuse	1.44±0.93
Total physical Bullying Subscale	1.79±0.89

travel expenses)" had the highest SD of 2.7±1.49.

Table 4 refers to the mean score \pm SD for person-related bullying subscale statements. The statement "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks" had the highest mean score of 2.73 ± 1.37 . Moreover, the statement "Spreading of gossip and rumours about you" had the highest SD of 2.41 ± 1.48 .

As shown in table 5 the mean scores \pm SD for the physical bullying subscale statements were relatively lower than other NAQ-R subscales. However, it founds that the statement "being shouted at or being the target of spontaneous anger (or rage)" had the highest mean score \pm SD 2.23 \pm 1.23.

Briefly, as seen in table 6 the total mean score of the work-related bullying subscale (2.42±0.95) was the highest among the other subscales including person-related bullying subscale with a score of 1.95±0.81 and the physical bullying subscale with 1.79±0.89. The grand mean score for the NAQ R scale is 45.59±17.64.

As seen in figure 1, the percentage distribution of the study participants according to their level of WPB exposure; is clearly seen that nearly half of

TABLE 6

 $\begin{array}{c} Distribution \ of \ Study \ Participants \ According \\ to \ their \ Total \ Mean \pm SD \ Responses \\ to \ the \ NAQ-R \ Scale \end{array}$

NAQ-R Subscales	Study Participants (n=328)
Work-Related Bullying Subscale	2.42±0.95
Person-Related Bullying Subscale	1.95 ± 0.81
Physical Bullying Subscale	1.79±0.89
Grand Mean and SD of NAQ-R Scale	45.59±17.64

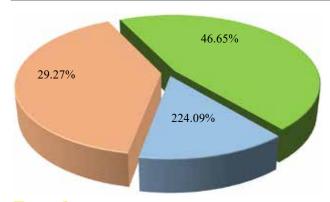


FIGURE 1. Percentage distribution of study participants according to their exposure to WPB (n=328), where Rarely bullied/not bullied (22-32) (Orange segment), Sometimes bullied (33-43) (Blue segment), A victim of workplace bullying (\geq 45) (Green segment)

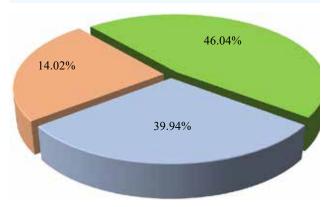


FIGURE 2. Percentage distribution of study participants according to their mental well-being level (n=328), where Orange (14-32) 14.02%, Bluee (33-51) 39.94% and Green (52-70) 46.04%

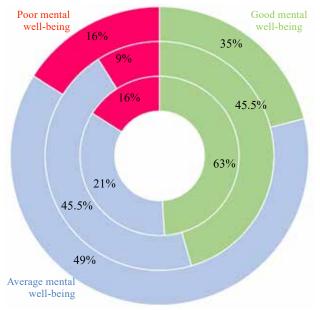


FIGURE 3. Percentage distribution of study participants according to their exposure to WPB and mental well-being level (n=328), where Inner Circle tis Never/rarely bullied, Middle Circle is Sometimes bullied, Outer Circle is Victims of WPB

the participants (46.6%) were victims of WPB, followed by 29.3% who were not bullied or rarely bullied. Finally, 24.1 % reported they were bullied sometimes at the workplace.

Warwick Edinburgh Mental Wellbeing Scale (WEMWBS): Table 7 shows the mean scores ± SD of study participants' responses to the WEMWBS and its statement. The total mean score of total WEMWBS is 48.52±13.90 which represents average mental well-being overall. Although the statement 'I've been able to make up my own mind about things' had the highest mean score of 3.95±1.23. While the statement 'I've been feeling optimistic about the future' had the highest SD with a mean of 3.39±1.42.

Figure 2 illustrates the percentage distribution related to study participants' level of mental wellbeing. Less than half (46.0%) of the study participants had good mental health, which is followed by 39.9% had average mental health, and 14.0% had poor mental health.

Exposure to WPB and participants' level of mental well-being: Figure 3 summarized the percentage distribution of study participants according to their exposure to WPB and level of mental

Table 7
Mean Scores ± SD of Study Participants'
Responses to WEMWBS (n=328)

	Study
WEMWBS Statement	Participants
	(n=328)
I've been feeling optimistic about the future	3.39±1.42
	2.011.20
I've been feeling useful	3.8±1.38
I've been feeling relaxed	2.77±1.36
I've been feeling interested in other people	3.33±1.28
I've had energy to spare	2.95±1.33
I've been dealing with problems well	3.45 ± 1.27
I've been thinking clearly	3.05±1.26
I've been feeling good about myself	3.79±1.26
I've been feeling close to other people	3.47±1.31
I've been feeling confident	3.87±1.24
I've been able to make up my own mind about things	3.95±1.23
I've been feeling loved	3.7±1.199
I've been interested in new things	3.6±1.31
I've been feeling cheerful	3.38±1.33
Total mean score \pm SD for WEMWBS	48.52±13.90

well-being. Regarding good mental well-being, more than half (63%) of participants who were rarely or never bullied had good mental well-being, followed by 45.5% for sometimes bullied, and 35% for victims of WPB. Contrastingly, it was shown a rise of participants who had average mental well-being with higher exposure to WPB, this finding could be referred to the decline of good mental well-being percentage. Finally, the percentage of poor mental well-being was equal for victims and rarely or never bullied participants, whereas the percentage was relatively lower for participants who were sometimes bullied. Overall, when WPB increases, it contributes to decrease nurses' mental well-being.

Correlation between Participants' Mental Well-Being and NAQ-R Subscales: Table 8 represents the Pearson coefficients (r) and p-values between mental well-being and the NAQ-R scale and its subscales. As shown, there is a significant negative correlation between mental well-being and NAQ R (r = -.150, p<.01) which represents that when WPB increase, mental well-being will decrease. Similarly, there is a significant negative correlation (r = -.164, p<.01) between mental wellbeing and work-related bullying. On the other hand, person-related bullying has no correlation (p >.05) with mental well-being. Moreover, there is a significant negative correlation between physical bullying and mental well-being, as indicated by a correlation value of (r = -.126, p < .05). Out of all the types of bullying, work-related bullying has the strongest correlation with mental well-being.

Correlation between Participants' Mental Well-Being, WPB, and Sociodemographic and Clinical Experience Characteristics; As shown in table 9 the Pearson coefficients (r) and p-values between mental well-being, NAQ-R, sociodemographic, and clinical experience characteristics. Firstly, there is a significant positive correlation (r = .172, p<.01) between mental well-being and age. On the other hand, no correlation (r = -.084, p > .05)was observed between age and NAQ-R. Regarding gender, no correlation is observed between gender and NAQ-R owing to the insignificant p-value. On the other hand, there is a significant correlation at a 90% confidence interval with mental well-being which denotes those male participants had better mental well-being than female participants. Additionally, there is a significant correlation (p<.01) between Nationality and mental well-being as it exhibits those Saudi participants had higher mental well-being than non-Saudi participants, whereas no correlation was observed between the nationality of participants and exposure to WPB. Furthermore, the level of education hasn't shown any significant correlation (p>.05) with both mental wellbeing and NAQ-R. Next, a significant positive correlation (r = 0.153, p<.01) was observed between years of experience and mental well-being, while no significant correlation (r = -.048, p > .05) was observed between years of experience and NAQ-R. Moreover, there is a significant negative correlation (r = -0.136, p<.05) between shift hours and

Table 8
Pearson correlation between study participants' mental well-being and NAQ-R subscales (n=328)

Correlations		Mental Well-being	Total NAQ_R	Work-related Bullying	Person-related Bullying	Physical- related Bullying
Mental Well-being	r	1				
Mental Well-benig	p-value					
Total NAQ_R	r	-0.150**	1			
	p-value	0.007				
Work-related Bullying	r	-0.164**	0.899**	1		
	p-value	0.003	0.000			
Person-related Bullying	r	-0.085	0.960**	0.744**	1	
	p-value	0.147	0.000	0.000		
Physical-related Bullying	r	-0.126*	0.803**	0.609**	0.742**	1
	p-value	0.022	0.000	0.000	0.000	
Notes: ** Significant at 0.01 level, * significant at 0.05 level						

TABLE 9
Pearson Correlation between Mental Well-Being, WPB, and Sociodemographic and Clinical Experience
Characteristics (n=328)

Correlations		1	2	3	4	5	6	7	8
Mantal 11 1	r	1							
Mental well-being	p-value								
NAO D	r	-0.150**	1						
NAQ-R	p-value	0.007							
Gender	r	00.105	-0.084	1					
Gender	p-value	0.057	0.128						
A	r	0.172**	-0.084	0.075	1				
Age	p-value	0.002	0.130	0.176					
Nationality	r	-0.159**	0.053	-0.150	00.182	1			
Nationality	p-value	0.004	0.342	0.006	0.001				
Level of Education	r	-0.079	0.026	-0.082	-0.111	0.305	1		
Level of Education	p-value	0.153	0.635	0.138	0.045	0.000			
Years of experience	r	00.153**	-0.048	00.082	0.471	00.081	-0.362	1	
rears of experience	p-value	0.006	0.141	0.141	0.000	0.142	0.000		
Shift hours	r	-0136*	0.225**	0.013	-0.077	0.349	0.245	-0.217	1
Sillit liouis	p-value	0.014	0.000	0.814	0.161	0.000	0.000	0.000	

Notes: ** Significant at 0.01 level; * significant at 0.05 level

mental well-being, while the correlation between shift hours and WPB is a significant positive correlation (r = .225, p<.01) which denoted that increase shift hours will increase WPB and decrease mental well-being. However, increasing age and years of experience help nurses to maintain mental well-being in a tough working environment.

DISCUSSION

Since nurses constitute the largest group of healthcare practitioners in hospitals and play a crucial role in healthcare organizations, it is important to acknowledge and address their challenges and concerns. Ignoring these issues can have adverse effects on both nurses and the quality of care provided. Mental well-being carries a significant burden on an individual's ability to cope with life's moderate stresses, enhance effective functioning, and make meaningful contributions to their workplace and profession, thereby realizing their full potential [World Health Organization, 2022].

Therefore, the primary objective of the present study was to investigate the correlation between exposure to WPB and the level of mental well-being among nurses working in hospitals affiliated with the Ministry of Health. By exploring this relationship, the study aimed to contribute to the understanding of factors that can impact nurses' mental well-being and help support them in maintain-

ing optimal mental health and well-being in the workplace.

The result of the current study showed that the WPB was high and prevalent as more than twothirds of the participants were sometimes or severely bullied. Also, the findings revealed that WPB has no significant correlation with age and years of experience. Even more important, the younger nurses who have fewer years of experience showed lower levels of mental well-being. This might be related to the shifting from the studying atmosphere and being a student to being responsible, and at the same time exposed to many unfamiliar situations that one might be unable to deal with it in addition to the lack of training. On another side, this might be attributed to that older nurses with more years of experience have improved their communication skills, social interactions at work, ability to handle the workload, and they convey information more effectively to patients and their relatives.

Even though many authors concur that WPB is common in the nursing environment, it was surprising that Kanitha D. and Poonam R.N. (2020) and Yang Y.M. and Zhou L.J. (2020) contradicted the present study results and showed that the proportion of victims of WPB was relatively small [Harb A et al., 2019; Rayan A et al., 2019]. On the other hand, Finchilescu G et al. (2019) agreed with

the present study's finding that WPB is widespread, and a proportion of participants were regularly exposed to WPB. Al Muharraq et al. (2022) supported the current study's findings that there is no significant correlation between WPB and years of experience.

Moreover, Cetinkaya F. (2018), Al-Surimi K. (2020), and Al Muharraq E.H. (2022) and their coauthors contradicted the present study's results, which revealed that younger nurses are more likely to be bullied than older nurses. In the same line, Al-Surimi K et al. (2020) mentioned that WPB was less common among participants with more than ten years of work experience, and Syed F et al. (2022) discovered that serious bullying was more prevalent in participants with less than two years of experience, while sporadic bullying was more prevalent in participants with less than five years of experience.

Furthermore, the current study findings manifested that the level of education has no significant correlation with WPB and even mental well-being [Harb A et al., 2019; Al Muharraq EH et al., 2022]. A more plausible explanation for these findings would be that the nature of nursing work places the nurses in the first line to deal with the patients compared to other healthcare providers. Also, the job descriptions might be the factor that plays a role regarding the correlation between the level of education and WPB. In the current study's setting, the job descriptions of different degrees of nursing education are similar. The current study findings match the results of Al Muharraq E et al. (2022) and Harb A et al. (2019), while Lang M et al. (2022) contradicted the current study results that nurses with higher educational degrees are more vulnerable to being bullied. On the opposite, Al-Surimi K. (2020) and Yosep I (2021) and their colleagues found that nurses with lower educational degrees are more likely to be bullied.

Regarding gender, the current study findings revealed that there is no significant correlation between WPB and gender, while there is a significant correlation at a 90% confidence interval as male participants have a higher level of mental well-being [Harb A et al., 2019]. This finding could be attributed to the view that men and women overcome stressful situations in various ways. This viewpoint matches the findings of Harb A et al.

(2019), who noticed that male participants demonstrate better-coping abilities than female participants. Similarly, Al Muharraq EH et al. (2022) revealed no significant correlation between gender and WPB, whereas Ohr SO et al. (2021) claim that female participants have lower levels of well-being than male participants. In contrast, Al-Surimi K et al. (2020) and Syed F et al. (2022) reported that female nurses were more likely to be bullied. Furthermore, Yosep I et al. (2021) contradicted the present study's result and stated that male nurses were more likely to be bullied.

Additionally, according to the results of the current study, non-Saudi participants had a lower level of mental well-being, whereas no association between participants' nationality and exposure to WPB was noted [Al Muharraq E et al., 2022]. This could be attributed to the nurses who don't speak Arabic struggling to interact with their patients due to cultural and linguistic variations as Arabic is still the native language of the general population. In addition, non-Saudi participants might be dispersed from their families and society, thus their probability of feeling sad arises that led to poor mental well-being. Similarly, Al Muharraq EH et al. (2022) match our findings that the correlation between nationality and WPB was negligible. Contrastingly, it was discovered by Al-Surimi K et al. (2020) and Syed F et al. (2022) that non-Saudi participants had higher levels of WPB than Saudi participants.

In the respect of NAQ-R subscales, the current study found the work-related bullying subscale had the greatest mean score, followed by the person-related bullying subscale, while the lowest mean score was for the physical bullying subscale as coincided with previous studies [Harb A et al., 2019; Al Muharrag E et al., 2022]. Moreover, the current study found the most frequent WPB behavior was overwhelming workload followed by striving to gain rights and withdrawn accountabilities. According to some of the current study participants, "the shortage of nursing staff, patient-nurse ratio, loose and indefinite job description, and shortage of allied healthcare personnel are some factors that increased work overload". From the researchers' view, these factors may play a role in delivering a lower quality of care and may lead to WPB incidents.

In this context, multiple studies agree with the most frequent WPB behaviors reported in the present study (overwhelming workload, striving to gain rights, and withdrawn accountabilities) but with different sequences, and they also added that working below self-proficiency, neglecting nurses' viewpoints, and concealing required information were commonly reported WPB behaviors by nurses [Yang Y, Zhou L, 2020; Al Muharraq E et al., 2022]. While other studies point out that the bullying behavior was mainly in verbal form [Al-Surimi K et al., 2020; Yosep I et al., 2021]. For a detailed description, Konttila J et al. (2021) explain that screaming, despise of proficiency, and publicly demeaning are the most popular forms of verbal aggression.

Regarding the relationship between WPB and mental well-being, the present study found that as nurses are more exposed to WPB, their mental well-being decreases. Numerous studies were homogeneous with the present study finding that WPB was associated with poor mental well-being, negative affect, impaired autonomy, life dissatisfaction, and compassion dissatisfaction as well as higher rates of depression, anxiety, post-traumatic stress disorder, emotional tiredness, and fatigue [Harb A et al., 2019; Konttila J et al., 2021; Lang M et al., 2022; Peng J et al., 2022; Syed F et al., 2022].

Moving on, the current study findings exhibit that longer shift hours predict higher incidents of WPB and poorer mental well-being. Even so, many factors might play a role in nurses' mental well-being like resilience, as nurses with higher resilience, their mental well-being is less affected by stressful work situations. In this line, Ohr SO et al. (2021) suggest that resilience, a supportive environment, and self-efficacy were the main reasons for mental well-being. Whereas Peng J et al. (2022) found that WPB was inversely correlated with resilience.

Subsequently, lack of social support and worklife imbalance might be other factors that could worsen mental well-being deterioration, as stated by some of the current study participants: "Our social life had deteriorated due to long working hours, and emotional and physical exhaustion, which result in a work-life imbalance". Finchilescu G et al. (2019) provided a deep view of this point, that nurses exposed to low or average levels of WPB but received a high level of social support had greater mental well-being, while the role of social support was insignificant for victims of WPB, as a result, mental well-being was poorer. Finally, it was widely believed by many researchers that WPB was associated with job dissatisfaction, job stress, burnout, absenteeism, and turnover intention. Therefore, appropriate measures and actions must be initiated and implemented to solve the WPB issues and improve nurses' mental well-being.

Conclusion

The current study aimed to investigate the correlation between workplace bullying and mental well-being among nurses working in Saudi Arabia. A descriptive correlational design was used to implement the study. The total number of nurses who participated in the present study was 328 nurses. The data were collected from study participants using an online questionnaire. The results showed that nearly half of the participants were victims of WPB. Moreover, the current study had proven the negative correlation between WPB and nurses' mental well-being. The study recommends developing educational programs for nursing to empower nurses in dealing with workplace bullying and improving their mental well-being. It suggests educating nurses about their rights and responsibilities, promoting resilience, and providing indicators for psychological consultation. In nursing practice, it recommends raising awareness among administration, resolving consequences of workplace bullying, and supporting nursing staff. In terms of research, it suggests conducting comparative studies, examining barriers to a safe workplace, and investigating the impact of educational programs on nurses' mental well-being.

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