Impact Of Work Environment Factors On The Mental Health Of Nurses In Psychiatric Settings

Khaled Hamed,
MSN
Department Of Nursing,
Mental Health Service At Hamad Medical Corporation (HMC),
Doha, Qatar

Abstract
Background: *The mental health of nurses in psychiatric settings is profoundly influenced by specific work environment factors, including the health profession's culture, excessive workload, and workplace violence (Ugwu, 2020; Neves, 2021). This study explores the impact of workload, bullying, and support mechanisms, uniquely focusing on their effects within mental health nursing.*

Objective: *To identify and analyze how distinct environmental stressors such as workload, role ambiguity, and lack of support affect mental health outcomes among nurses in psychiatric care facilities, aiming to propose targeted interventions.*

Methods: *Employing a mixed-methods approach, the study surveyed 382 mental health nurses using both quantitative Likert-scale questionnaires and qualitative interviews. The methodology, supported by the post-positivist paradigm, was selected for its appropriateness in addressing the complex dynamics of psychiatric nursing settings (Ugwu, 2020).*

Results: *The study found that high workload, frequent exposure to workplace bullying, and insufficient support systems are critical stressors significantly compromising mental health nurses' well-being and job satisfaction. Particularly, nurses with less than two years of experience in mental health settings were most vulnerable to these negative impacts.*

Conclusion: *Addressing these key environmental factors is crucial for improving mental health nurses' working conditions and, consequently, the quality of care provided in psychiatric settings. The study suggests implementing structured support systems and policy reforms aimed at reducing workplace stressors.*

I.   Introduction
The healthcare sector is marked by constant changes and challenges, necessitating adaptive strategies and innovations to maintain operational effectiveness and meet evolving care demands. The success of healthcare organizations is intrinsically linked to their work environments, which directly influence employee productivity, patient safety, and overall care quality (Ginter, 2018). These environments are particularly impactful in the field of nursing, a profession that requires a blend of emotional resilience and clinical competence.

Nursing, especially in psychiatric settings, involves high levels of occupational stress due to the emotionally charged nature of the work (Stanford, 2018). Mental health nurses are at the forefront of dealing with patients who often present complex emotional and psychological challenges. This places them at an increased risk of occupational stress, which can significantly impact their mental health, professional competency, and overall well-being.

Effective management of the nursing work environment in mental health settings is crucial not only for maintaining high standards of patient care but also for fostering a supportive atmosphere that can mitigate stress and enhance job satisfaction. While much of the existing research has focused on general nursing environments, there is a distinct gap in studies specifically exploring the unique challenges faced by mental health nurses. These professionals operate in settings that require not only general nursing skills but also specialized knowledge and approaches to manage the specific demands of mental health care.

Moreover, the impact of work environments on mental health nurses has not been extensively studied, particularly in how these environments influence burnout, job satisfaction, and turnover rates. Addressing these gaps, this study focuses on the interplay between work environment factors and their effects on the mental health of nurses in psychiatric wards, aiming to draw conclusions that could lead to more informed, effective management strategies tailored for mental health care settings (Ambani, 2020).

Background of the study

The healthcare sector is fraught with challenges that detrimentally affect the mental health of its workers. These challenges include high-stress environments, excessive workloads, and exposure to workplace violence, all of which are exacerbated in mental health settings (Hobson, 2017). Mental health nurses, in particular, operate in uniquely stressful conditions due to the nature of their patient interactions and the critical care they provide.

Factors such as emotional labor, the necessity of managing personal boundaries, and the potential for encountering aggressive behavior significantly contribute to stress and burnout among these professionals. Research indicates that both work-related and individual factors—including workload, role ambiguity, job security, and personal resilience—play critical roles in the well-being of healthcare workers (Lake, Riman, and Sloane, 2020). However, there is a noticeable gap in literature specifically addressing these factors within mental health facilities, where such stressors may have more pronounced effects (Shorey, 2021).

Studies focusing on general healthcare settings have identified fatigue, bullying, workplace hostility, and organizational bias as predominant factors negatively affecting nurse health and job satisfaction. In mental health settings, these factors can lead to severe psychological distress, impacting nurses' ability to provide care and potentially leading to higher rates of job turnover and missed care opportunities. This underlines the need for more targeted research into the specific environmental stressors that mental health nurses face and how these can be effectively managed to support their mental health and professional performance.

Problem statement

In mental health nursing, workplace factors profoundly impact nurses' mental well-being; key stressors include excessive workload, exhaustion, workplace bullying, aggressive behavior from patients or coworkers, and organizational bias (Cranage, 2022). These stressors not only diminish mental health but also lead to stress-related disorders, severely affecting nurses' professional competence and their motivation to remain in the profession (Grobler, 2021).

A supportive and well-managed work environment is critical in reducing turnover rates and retaining skilled nursing staff in mental health facilities. Research has demonstrated that positive relationships among healthcare teams, including between nurses and physicians, as well as effective leadership from nurse managers, significantly influence mental health nurses' job satisfaction and their decisions to continue in or leave their roles (Eriksson, 2022). Moreover, increased engagement in hospital affairs and having a say in workplace matters have been shown to decrease the likelihood of mental health nurses leaving their positions, by fostering a sense of belonging and satisfaction (Al Sabei et al., 2020; Yang, 2018).

The high turnover rates and the severe impact of these workplace factors on mental health nurses highlight a critical need for focused research to develop targeted strategies that enhance work environments in psychiatric settings. This study aims to address this gap by identifying key factors that contribute to stress and burnout among mental health nurses and proposing interventions that could mitigate these challenges.

II. Literature Review

Introduction

This section systematically reviews existing literature to evaluate the impact of work environment factors on the mental health of nurses, particularly within psychiatric care settings. By exploring a range of studies, this review aims to highlight gaps in current research, particularly in how these factors uniquely affect mental health nurses, setting the stage for this study's focus on devising targeted interventions.

Review of Literature
Factors that impact the Mental Health of the Nurses
Workload: In psychiatric settings, nurses face immense pressures due to high patient demands and critical care situations. Heavy workloads not only lead to physical fatigue but also to significant mental stress, exacerbating challenges in mental health nursing (Ugwu, 2020; Neves, 2021). The imbalance between job demands and resources is stark, with inadequate staffing often failing to meet the complex needs of mental health care, ultimately impacting patient care and nurse well-being (Graveto, 2021).

Fatigue: Mental health nursing involves extensive emotional labor, contributing to both physical and psychological exhaustion. This fatigue compromises nurses' ability to perform effectively, endangering both their health and patient safety (Singh, 2020). The relentless workload in psychiatric care often leads to chronic exhaustion, negatively affecting the quality of care and increasing the incidence of medical errors (Hudson, 2020).

Bullying: Workplace bullying is particularly prevalent in mental health settings where the high-stress environment may exacerbate interpersonal conflicts. This bullying can lead to significant psychological distress for nurses, impacting their ability to provide compassionate care and increasing turnover rates (Yun, 2018; Kang,

2018). The hostile work environment not only affects those directly involved but also creates a pervasive culture of fear and disrespect, which can undermine overall team effectiveness (Shorey, 2021).

Evidence-Based Strategies: Addressing these workplace challenges requires robust, evidence-based interventions. Mindfulness and resilience training are among the strategies that have shown promise in helping mental health nurses manage stress and improve their well-being (Duncan, 2017; Chong, 2021). These techniques foster a greater sense of control and professional satisfaction, potentially mitigating the high turnover rates and improving the quality of psychiatric care.

Mindfulness Strategy: Mindfulness practices, specifically tailored for high-stress environments like psychiatric nursing, can significantly alleviate stress symptoms and enhance nurses' resilience and job satisfaction. Regular mindfulness exercises, such as meditation and focused breathing, help nurses maintain their emotional stability and remain present and attentive to patients' needs, thus enhancing the therapeutic environment (Dignadice, 2021).

This section aims to establish a comprehensive foundation for the study problem by conducting a thorough review of a wide range of previously examined literature. The goal of this study is to evaluate how working conditions and the environment affect nurses' mental health. A comprehension of the research issue, and literature gap assessment gaps that formed the basis for further study were obtained by reviewing several articles.

Nursing is a career that requires not only physical engagement but also a mental commitment. In a situation where the nurses are already carrying an enormous burden, a heavy workload can serve as a turning point for many people, (Ugwu, 2020). A heavy workload is the primary cause of nurses' declining mental health and reduced professional performance, which leads to burnout and affects their commitment to the organization.

Workload refers to the ongoing imbalance between an individual's daily job tasks and their professional competencies. Excessive workload in the nursing workforce is primarily caused by inadequate nurse staffing, which does not meet the healthcare demands of various regions. Additionally, factors such as a high influx of patients contribute to the excessive workload, (Neves, 2021). The health care industry frequently fails to achieve the safe-staffing standards set by the Nursing and Midwifery Federation. Consequently, the staff members are burdened with an excessive workload, which is both unethical and unjustifiable, leading to severe burnout. It is important to recognize that an increased burden in the nursing workforce would result in a single nurse having to care for more patients than they can effectively handle, leading to a decrease in the amount of time and attention given to each patient. This will ultimately diminish the quality of treatment and patient contentment, placing the burden entirely on the nursing staff and aggravating their existing stress levels. All of nurses is impacted in different ways by all these variables that are linked to an excessive workload. For example, burnout causes significant tiredness, impatience, and hostility in nursing staff members, which appears in their methods of working effectively, (Graveto, 2021). As a result of this increasing distress, the nursing staff becomes more and more incompetent and incapable.

Gaps in Literature

While the impact of work environment factors on nurses' mental health has been explored to some extent, the research has predominantly focused on general nursing contexts rather than the unique conditions of psychiatric settings. Key factors such as workload, exhaustion, bullying, workplace hostility, and organizational bias are known to detrimentally affect mental health nurses' well-being, leading to stress disorders that significantly impair their professional competence and engagement (Mathieson, 2021).

Existing studies often emphasize the consequences of these work environment characteristics on patient care and nurse availability but fall short of providing a detailed understanding of their direct impact on the mental health of nurses in psychiatric care. There is a notable deficiency in the literature regarding how these environmental stressors specifically affect mental health nurses, who face distinct challenges that differ significantly from those in general medical settings.

Furthermore, while some research addresses broad workplace dynamics, there is a scarcity of focused studies that delve into the nuanced aspects of the social work environment—such as interpersonal relations, team dynamics, and management styles—within mental health nursing. This gap is critical because the social environment in psychiatric nursing can have profound implications for the mental health and retention of nursing staff.

Consequently, this study aims to fill these gaps by specifically investigating how social and organizational factors in psychiatric settings influence the mental health of nurses. By focusing on these under-researched areas, the study seeks to contribute valuable insights that could inform targeted interventions designed to improve the work environments of mental health nurses, thereby enhancing their well-being and professional efficacy.

Research Hypothesis
Null Hypothesis (H0): There is no significant impact of work environment factors on the mental health of nurses in psychiatric settings.

Alternative Hypothesis (H1): Work environment factors significantly impact the mental health of nurses in psychiatric settings, leading to decreased professional performance and increased incidence of mental health issues.

Conclusion
The review of literature underscores the severe impacts of work environment factors on the mental health of nurses, particularly those in psychiatric settings. Various approaches have been identified that can assist in mitigating the emotional and psychological burdens faced by these professionals, including targeted support programs and intervention strategies (DeLeo, 2022). However, despite existing knowledge, there remains a significant need for comprehensive and specific interventions tailored to the unique challenges of mental health nursing.

Nurses dealing with depression, anxiety, and other mental health issues as a result of occupational stress require robust support systems that not only offer relief but also proactively prevent the onset of such conditions. Effective resolution of these issues demands collaboration among all stakeholders in the healthcare sector—ranging from hospital administration to mental health professionals and policy makers. Such cooperative efforts are essential to develop and implement strategies that ensure mental health nurses receive the same level of care and support they provide to society.

The current study aims to build on these findings by exploring specific environmental factors in psychiatric nursing settings that contribute to mental health challenges. By identifying and addressing these factors, the study seeks to propose actionable strategies that enhance the work environment and overall well-being of mental health nurses, ultimately improving the care provided to patients.

III.   Methodology

Study Design and Research Approach
Objective: The primary objective of this study is to evaluate the impact of various work environment factors on the mental health of nurses, specifically within psychiatric settings. Given the complexities involved in measuring mental health outcomes and environmental factors, a robust and appropriate research design is essential.

Design: This study employs a cross-sectional research design, which is particularly suited for assessing the prevalence of outcomes and exposure to risk factors at a single point in time. This design facilitates the analysis of the relationship between work environment factors and mental health outcomes among nurses.

Justification: Cross-sectional studies offer a snapshot that helps in identifying associations between variables at a specific time, making them ideal for exploratory analyses in fields where longitudinal data may be limited or hard to obtain (Setia, 2016). This approach is cost-effective and less time-consuming compared to prospective studies, which is particularly advantageous given that the current study is not financially supported.

Research Paradigm: The study operates under a post-positivist paradigm, acknowledging that while absolute reality might be challenging to capture, careful, scientific observation and measurement can provide insights into the patterns of association between work environment factors and nurse mental health. This paradigm supports the objective measurement and quantitative analysis of external factors and their effects, aligning with the empirical nature of the study.

Application: The findings from this research are intended not only to identify key factors but also to inform the development of targeted interventions. These interventions could include training programs and policy changes designed to improve the work environment and, consequently, the mental health of nurses in psychiatric care settings.

Research Setting
Context: The study was conducted within various psychiatric care units across multiple healthcare facilities to ensure a broad understanding of the work environment factors affecting mental health nurses. These settings were chosen because they represent a wide spectrum of scenarios and challenges that mental health nurses face daily, which are critical to the study's aims.

Participant Recruitment: All nurses currently employed in the Mental Health Services at the selected facilities were invited to participate in the study. The inclusion of all available nurses helped to maximize response rates and ensure a diverse representation of experiences and perspectives, which is vital for the reliability and generalizability of the findings.

Bias Reduction: By selecting multiple settings across different geographic and institutional contexts, the study aimed to minimize environmental bias. This approach helps in understanding how work environment factors universally impact mental health across different types of psychiatric care facilities rather than being specific to a single location or type of service. The diversity of settings also allows for a more comprehensive analysis of the environmental factors at play, enhancing the robustness of the study's conclusions.

Ethical Considerations: All participants were informed about the purpose of the study and the confidentiality of their responses was assured. Participation was voluntary, the respondent was offered to fill out informed consent on the survey sheet prior to start of the questionnaire. These measures ensure ethical compliance and respect for the participants' rights and wellbeing.

Population
Participant Selection: This study targeted registered nurses working in mental health services across various psychiatric care facilities. The participants were selected based on specific inclusion criteria, which required them to be actively employed in a psychiatric setting for at least six months, ensuring that they had sufficient experience and exposure to the work environment factors being studied.

Exclusion Criteria: Nurses who were on leave during the period of the study or who worked in administrative positions without direct patient contact were excluded. This criterion was established to ensure that the study focused solely on those individuals directly affected by the work environment factors typical of mental health nursing settings.

Retention Strategies: To keep participants engaged throughout the study period, regular updates were provided regarding the study's progress, and preliminary findings were shared where appropriate. This approach helped maintain transparency and fostered a sense of involvement and importance among participants, contributing to high retention rates.

Sampling
Approach: The study utilized a purposive sampling technique, which is particularly effective when specific characteristics that are relevant to the research question must be present in the sample population. This method allows for the intentional selection of individuals who are most likely to experience the phenomena under study—namely, the impacts of work environment factors on mental health among nurses in psychiatric settings.

Justification: The choice of purposive sampling was driven by the need to study individuals directly affected by the research problem and possessing insights into the specific issues being investigated (Etikan et al., 2016). This approach ensures that the findings are deeply informed by the experiences and perspectives of those most involved in mental health nursing.

Inclusion and Exclusion Criteria: Nurses were eligible for the study if they had been employed in psychiatric settings for more than three months, ensuring adequate exposure to the work environment. Those who refused to engage or had been employed for fewer than six months were excluded to ensure that participants had sufficient experience in the field to provide informed responses.

Recruitment: Recruitment emails were sent to potential participants explaining the study's purpose, what participation would involve, and the voluntary nature of their involvement. This process was designed to respect the autonomy of potential participants and ensure informed consent.

Sample Size
Determination: The target sample size for the study was set at 382 nurses based on the staffing levels at the participating mental health services. This number was deemed sufficient to achieve statistical power and representativeness, allowing for robust analysis of the data.

Selection Criteria: The sample included nurses from various locations and shifts to capture a broad range of experiences and perspectives on the work environment. Considerations for inclusion in the study also included

the nurses' availability and willingness to participate, ensuring that those included in the sample were genuinely interested and able to provide meaningful data.

Recruitment Strategy: To ensure a comprehensive understanding of the issues at hand, all eligible nurses were initially invited to participate, with follow-ups to encourage a high response rate and to address any concerns potential participants might have about the study.

IV. Instruments Of Data Collection

Questionnaire Design: For this study, a structured questionnaire was developed to systematically collect data on the impact of work environment factors on the mental health of nurses in psychiatric settings. The questionnaire consisted of both closed-ended questions, which allow for quantitative analysis of the data, and structured questions designed to capture consistent, comparable data across all respondents.

Content of the Questionnaire: The questions were carefully crafted to elicit information about specific work environment factors such as workload, staff relationships, management support, and instances of workplace bullying. Responses were structured to provide options ranging from strongly agree to strongly disagree, which enables the analysis of trends and patterns in perceptions and experiences among mental health nurses.

Advantages of Using Questionnaires: The choice to use questionnaires was informed by their efficiency and cost-effectiveness in collecting data from a large number of participants across different locations (Williamson, 2014). Questionnaires facilitate the gathering of data at the convenience of the participants, who can complete them without the need for direct interaction with the researcher, thus minimizing disruption to their work schedules and reducing research costs.

Distribution and Collection: The questionnaires were distributed electronically, which allowed for a swift dissemination and collection process. This method also increased the reach of the study, ensuring that nurses from various shifts and schedules could participate. Participants were given a two-week window to complete and return the questionnaires, with reminders sent at one-week intervals to encourage participation and completion.

Validity and Reliability of Tools
Validity of the study
Ensuring Validity: Validity refers to the degree to which an instrument accurately measures what it is intended to measure (Martensson et al., 2019). For this study, the questionnaire was designed to assess the influence of social work environment characteristics on the mental health of nurses. To ensure the content validity, each item on the questionnaire was developed based on existing literature and input from field experts.

Pre-testing and Adjustments: To evaluate the face validity and refine the instrument, the questionnaire was pre-tested with 10% of the intended sample population—selected randomly from the initial group of participants. Feedback was solicited on clarity, relevance, and comprehensiveness of the questions. Based on the pre-test results, necessary revisions were made to improve the clarity and focus of the questionnaire items, ensuring they adequately cover the constructs being studied. The pre-test participants were excluded from the main study to prevent bias in the final data collection.

Reliability of the study
Measuring Reliability: Reliability refers to the consistency of the measurements obtained from the research instrument over time (Gakuu, 2016). It indicates the extent to which the instrument can produce stable and consistent results across different occasions and various respondents under similar conditions.

Test-Retest Reliability: To assess the reliability of the questionnaire, the test-retest method was utilized. This involved administering the revised questionnaire to a small subgroup of the sample twice, with a two-week interval between the first and second administration. This method helped to determine the stability of the responses over time.

Reliability Coefficient: The responses were statistically analyzed to calculate a reliability coefficient, with a value of 0.80 or higher being indicative of good reliability (Mugenda, 2003). This high reliability coefficient confirms that the questionnaire is a dependable tool for measuring the intended outcomes in this study.

Pilot Testing: Additionally, a pilot test was conducted involving five different respondents from the target group, which helped in identifying any ambiguities or inadequacies in the questionnaire. Adjustments were made accordingly to refine the tool further before it was distributed widely.

V. Data Collection Procedure

Survey Distribution and Participation: The study utilized a structured questionnaire to gather data on the impact of work environment factors on the mental health of nurses, specifically within psychiatric settings. Participants were contacted via email, which included a detailed synopsis of the study's objectives, the benefits and potential drawbacks of participation, and a comprehensive research information sheet. This document ensured that all participants were fully informed about the nature of the study, the voluntary basis of their involvement, and the confidentiality with which their responses would be treated.

Informed Consent: Prior to participating, all respondents were required to provide informed consent. This consent process was conducted electronically alongside the survey distribution. The consent form provided detailed information about the research methods, the data collection process, the researchers conducting the study, and the ethical safeguards in place to protect participants and their information.

Survey Administration: The questionnaire was administered online to accommodate the varying schedules of nurses and to maximize response rates. Participants were given a four-week window to complete the survey, with reminder emails sent bi-weekly to encourage participation and to address any questions or concerns that might arise during the process.

Data Handling and Analysis: After collection, survey responses were anonymized to ensure confidentiality; no personal identifiers were included in the dataset. The data was then coded and analyzed using SPSS software, a statistical analysis tool that allowed for a comprehensive evaluation of the responses in relation to the study's hypotheses. The use of SPSS also facilitated the identification of any significant patterns or trends in the data related to the work environment factors being studied.

Ethical Considerations: The research protocol was designed to ensure that there was no risk to participants, as the study did not involve any physical procedures or handling of biological specimens. All data collection and analysis processes were designed to prevent any potential harm or distress to the participants.

Utilization of Findings: The insights gained from the analysis are expected to inform targeted interventions aimed at improving the work environments of mental health nurses, thereby enhancing both nurse and patient outcomes. These findings will be crucial for developing future guidelines and recommendations for healthcare facilities.

VI. Data Analysis

Descriptive Statistics: The initial phase of the data analysis will involve descriptive statistics to summarize the dataset's basic features. Specifically, frequencies (n) and percentages (%) will be used to describe the distribution of responses across different categories. This will provide a clear picture of the general trends and patterns in the data related to work environment factors and their impact on mental health among nurses.

Likert Scale Analysis: The responses to the questionnaire items, which are based on a 5-point Likert scale ranging from 1 (never) to 5 (usually), will be analyzed to assess the degree to which various work environment factors affect nurse mental health. This scale helps in quantifying subjective assessments of frequency or intensity related to specific behaviors or perceptions in the workplace.

Reliability and Validity: The reliability of the data collection instruments, previously confirmed through pre-testing and pilot testing, ensures that the tools are consistent and accurate in measuring the intended variables. The validity of these instruments indicates that they are effectively capturing the aspects of the work environment that are hypothesized to impact mental health.

Advanced Statistical Analysis: For analyzing the survey data, SPSS software will be utilized. The Shapiro-Wilk test will be conducted to determine the normality of the distribution of scores. This test is critical in deciding whether parametric or non-parametric statistical methods are appropriate for further analyses.

Inferential Statistics: Depending on the results of the Shapiro-Wilk test, appropriate statistical tests (e.g., t-tests, ANOVA, regression analysis) will be used to explore significant relationships and differences within the data.

This will allow for rigorous testing of the study hypotheses about the relationships between work environment factors and mental health outcomes among nurses.

Interpretation of Results: The final stage of analysis will involve interpreting the findings in the context of existing literature and the theoretical framework established for the study. This will help in understanding the implications of the results for practice and policy in mental health nursing environments.

Ethical Considerations
This research will adhere strictly to the guidelines set forth in the Good Clinical Practice (ECMA, 2002). To prevent any difficulties, ethical approaches and mindsets shall be combined.

Data Management
Data Collection and Handling: The data collected from the study will be used exclusively for the purposes of this research. Upon collection, all response sheets will be promptly de-identified to protect participant privacy. This means that any identifiable information that could be linked back to individual participants will be removed or obscured before the data is analyzed.

Data Storage: All de-identified data will be stored on an encrypted computer to ensure the security and confidentiality of the data. The encryption process will safeguard the data against unauthorized access, making it accessible only to the researcher. This measure is crucial for maintaining the integrity of the data and ensuring that participant information is handled responsibly.

Data Retention Period: The de-identified data will be retained for a period of five years, after which it will be permanently erased. This retention period allows for the validation of the study results and the completion of any follow-up analyses or publications that may arise from the initial findings. The five-year period strikes a balance between allowing sufficient time for academic scrutiny and not retaining personal data longer than necessary.

Data Access: Access to the study data will be strictly limited to the researcher involved in this study. This restricted access is necessary to prevent any potential misuse of the data and to further ensure that the confidentiality agreements made with the study participants are honored.

Data Utilization and Dissemination: While individual data will not be distributed, aggregated and analyzed data sets will be used for public dissemination through scholarly publications and presentations. The results shared will always be in a form that does not allow for the identification of any study participant, adhering to ethical guidelines for the reporting of research data.

Data management plan
A Data Management Plan (DMP) outlines how data will be collected, processed, analyzed, explained, maintained, and shared throughout a research project.
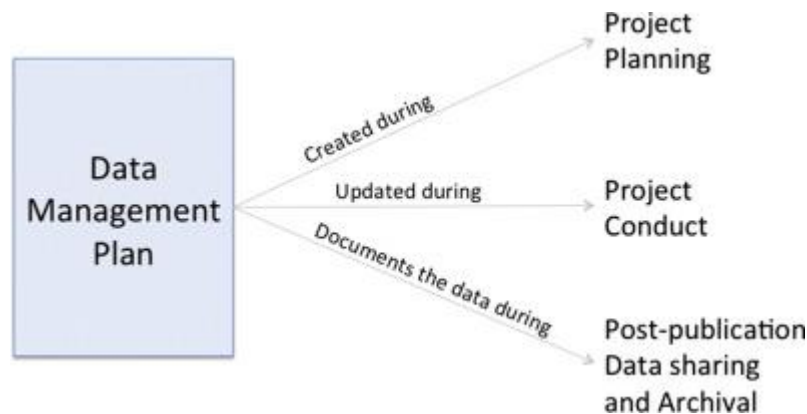
Figure 1: Data management Plan

Conclusion
The study's research methodology, ethical standards, and methods for disseminating the findings have all been covered in this chapter.

VII. Data Presentation And Analysis

Introduction

This section outlines the processes involved in analyzing and presenting the data collected from 199 nursing staff who completed an online survey. The application of statistical methods facilitated the transformation of raw data into meaningful insights, enabling the evaluation of the impact of work environment factors on the mental health of nurses (Popenoe, 2021). Data analysis was conducted using SPSS software, and results were organized into descriptive statistics and inferential analyses, which are presented in tables and figures to enhance understanding and interpretation.

Key Areas of Analysis:
1. **Demographic Characteristics of Nursing Personnel**: Overview of the sample's demographic attributes such as gender, position, years of experience, department, and language.
2. **Impact of Work Environment on Nurses' Mental Health**: Examination of how various factors within the work environment affect mental health outcomes among nurses.
3. **Correlations Between Work Environment Characteristics and Demographic Data**: Analysis of the relationships between demographic factors and work environment characteristics.
4. **Strategies to Mitigate Negative Impacts**: Discussion on potential interventions or strategies to improve the work environment and mental health of nurses.

Participants Demographic Data

Gender, position, years of experience in mental health, department, and language are among the demographic details of the study participants.
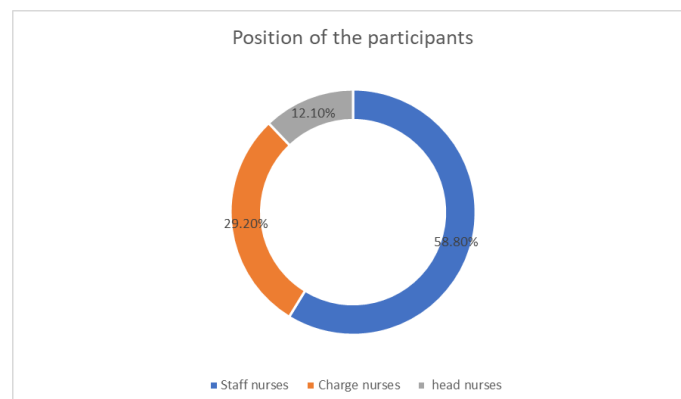
Participants Gender

According to figure 4.1, the majority of the participants were male, including 138 (69.4%), while 61 (30.6%) were female.
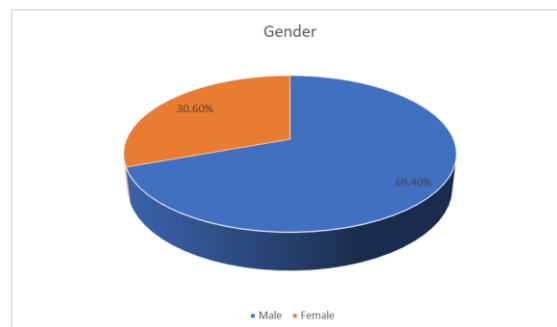
Figure 2: Participants of Gender

Nursing position

Different positions were held by nurses; a nurse's position in the nursing field specifies whether she was a staff nurse, staff nurse, supervisor, or director, head nurse. Head nurses, charge nurses, and staff nurses took part in the study. Figure 4.2 illustrates that of the nursing personnel under study, 117 (58.8%) were staff nurses, 58 (29.2%) were charge nurses, and 24 (12.1%) were head nurses.

Figure 3: Participants Position
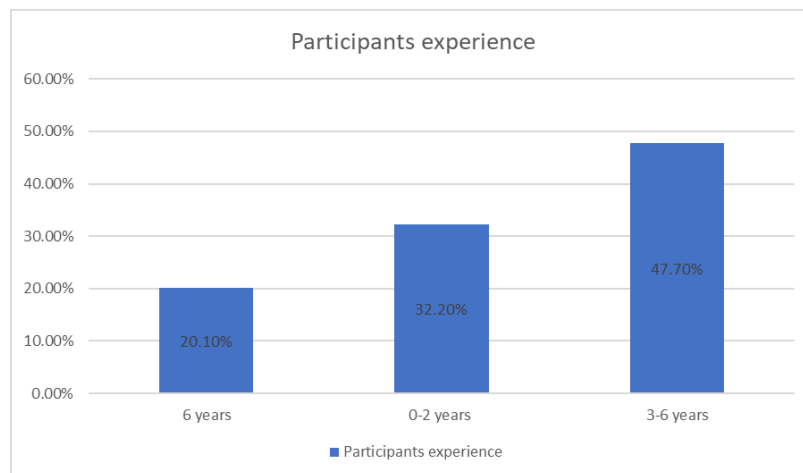
Mental health Experience.

In order to understand the influence of experience on perceptions and impacts of work environment factors, participants in the study were categorized based on their years of experience in mental health. They were asked to identify their length of service within three distinct ranges:

- **Less than two years**
- **Three to six years**
- **More than six years**

The distribution of experience among the participants was as follows:

- **More than six years**: 50.3% of the participants, indicating a substantial proportion of the nursing staff have extensive experience in mental health. This group is crucial for understanding the long-term impacts of work environment factors.
- **Three to six years**: 47.7% of the participants, representing a significant middle range of experience. This group provides insights into the developmental phase of professional adaptation to the mental health work environment.
- **Less than two years**: 32.2% of the participants, highlighting the perspectives of those relatively new to the field. This group is important for understanding initial impressions and early effects of the work environment on mental health.

Figure 4.3: Distribution of Mental Health Experience - This figure visualizes the percentage of nursing staff within each experience category, illustrating the diversity of experience levels among the participants and providing a basis for analyzing how experience may influence perceptions of and reactions to the work environment.

Figure 4: Participants Experience years

Factors that impact the mental health of the nurses

This study identified several critical factors affecting the mental health of nurses in psychiatric facilities, as detailed in **Table 4.1**. The primary stressors include workload, fatigue, and workplace bullying, each associated with unique challenges in psychiatric nursing.

- **Workload**: Workload had the highest mean score (4.51, SD: 0.64), reflecting its significant impact. High workload in psychiatric nursing can lead to increased stress, emotional exhaustion, and burnout, affecting nurses' ability to provide empathetic care. Aprilia et al. (2019) noted that excessive workload compromises not only nurse well-being but also the quality of care provided, which is particularly critical in psychiatric settings where patient interaction is intensive and emotionally demanding.
- **Fatigue**: The mean score for fatigue was 4.03 (SD: 0.84), highlighting it as a prevalent issue. Fatigue in psychiatric nursing results from long shifts, the emotional intensity of patient interactions, and often inadequate staffing. This can diminish a nurse's mental alertness and emotional resilience, crucial in managing the complexities of psychiatric care.
- **Bullying**: Bullying scored a mean of 4.35 (SD: 0.81), underscoring its prevalence and detrimental effect in psychiatric facilities. Bullying among nursing staff can create a toxic work environment, leading to increased stress, reduced job satisfaction, and higher turnover rates, which are particularly problematic in environments requiring high levels of teamwork and emotional support.

The findings suggest that reducing workload, managing fatigue, and combating workplace bullying are crucial for improving mental health outcomes in psychiatric nursing. Effective strategies might include implementing more supportive staffing models, offering regular mental health breaks, and establishing a zero-tolerance policy towards bullying.

Table 1: Factors that impact the mental health of the nurses

Factors	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Mean±SD
	N (%)	N (%)	N (%)	N (%)	N (%)	
1. Workload	0 (0.0)	3 (1.5)	7 (3.5)	75 (37.7)	114 (57.3)	4.51±0.64
2. Fatigue	3 (1.5)	10 (5.0)	20 (10.1)	112 (56.3)	54 (27.1)	4.03±0.84
3. Bullying	3 (1.5)	3 (1.5)	15 (7.5)	78 (39.2)	100 (50.3)	4.35±0.81

On a five-point Likert scale, where 1 signifies never or strongly disagreeing and 5 means always or strongly agreeing, the nursing staff's replies were recorded. The purpose of calculating mean scores for each statement was to assess the impact of work environment variables on the mental health of nurses. To find the average score, we added up everyone's scores across all statements and then divided that total by the total number of participants.

VIII.   Findings And Results Discussion

Demographic features of the participants
According to the findings, the majority of nurses (69.4%) were male, with female nurses accounting for 30.6%. There are more males than females, indicating a selection bias.

Experience of mental health
Mental health nurses should have the necessary experience to handle the scenario. The findings revealed that the duration of experience in mental health varies; the more mental healthcare experience they have, the better equipped they are to provide the best possible treatment to disturbed patients.

Factors that impact the mental health of the nurses
The factors that affect the mental health of nurses are shown in Table 4.1. The categories with the highest mean score are workload (4.51, SD: 0.64), fatigue (4.03, SD: 0.84), and bullying (4.35, SD: 0.81).

IX.   Conclusion And Recommendations

Conclusion
This study has highlighted several strategies and practices that can help psychiatric nurses manage the emotional traumas associated with their profession, such as embarrassment, stress, or fatigue. Importantly, nurses experiencing severe symptoms such as depression or self-harming tendencies due to work stress require robust support and compassion from their peers and institutions. Enhanced cooperation among all healthcare stakeholders is essential to address these issues effectively, ensuring that nurses receive the necessary support comparable to what society expects for other critical services.

Furthermore, nurses should be encouraged to suggest specific changes to their training or work processes that they believe would help mitigate the negative impacts of their work environment on their mental health. Such bottom-up feedback can be invaluable in designing more effective interventions and support systems.

Recommendations for Future research:
While this study provided quantitative insights into the factors affecting the mental health of nurses in psychiatric settings, future research could benefit from a qualitative approach to gain a deeper understanding of these dynamics. Specifically, exploring how nurses' mental health influences their perceptions of structural empowerment could provide valuable information for designing more supportive work environments. Such studies could employ interviews or focus groups to capture detailed personal experiences and suggestions.

Limitation of the Study
Scope and Generalizability: The primary limitation of this study was its scope. As it was conducted within a single organization, the findings might not fully represent the experiences of nurses in different psychiatric settings or geographical locations. Future studies should consider including multiple organizations to enhance the generalizability of the findings.

Data Management: Another challenge was managing the volume of data collected. The extensive amount of data required a significant amount of time for thorough analysis, which delayed the final stages of the research. This underscores the need for efficient data management strategies in future studies to streamline the analysis process and reduce delays.

References

[1] Ambani, Z., Kutney-Lee, A. And Lake, E.T., 2020. The Nursing Practice Environment And Nurse Job Outcomes: A Path Analysis Of Survey Data. Journal Of Clinical Nursing, 29(13-14), Pp.2602-2614.

[2] Cranage, K. And Foster, K., 2022. Mental Health Nurses' Experience Of Challenging Workplace Situations: A Qualitative Descriptive Study. International Journal Of Mental Health Nursing, 31(3), Pp.665-676.

[3] Deleo, K., Maconick, L., Mccabe, R., Broeckelmann, E., Rains, L.S., Rowe, S. And Johnson, S., 2022. Experiences Of Crisis Care Among Service Users With Complex Emotional Needs Or A Diagnosis Of'personality Disorder', And Other Stakeholders: Systematic Review And Meta-Synthesis Of The Qualitative Literature. Bjpsych Open, 8(2), P.E53.

[4] Eriksson, A., Vulkan, P. And Dellve, L., 2022. A Case Study Of Critical Reasons Behind Hospital Nurses Turnover Due To Challenges Across System Levels. Journal Of Multidisciplinary Healthcare, Pp.1213-1224.

[5] Ferris, P.A., Deakin, R. And Mathieson, S., 2021. Workplace Bullying Policies: A Review Of Best Practices And Research On Effectiveness. Dignity And Inclusion At Work, Pp.59-84.

[6] Ginter, P.M., Duncan, W.J. And Swayne, L.E., 2018. The Strategic Management Of Health Care Organizations. John Wiley & Sons.

[7] Ho, A.H.Y., Tan-Ho, G., Ngo, T.A., Ong, G., Chong, P.H., Dignadice, D. And Potash, J., 2021. A Novel Mindful-Compassion Art-Based Therapy For Reducing Burnout And Promoting Resilience Among Healthcare Workers: Findings From A Waitlist Randomized Control Trial. Frontiers In Psychology, 12, P.744443.

[8] Hobson, A.J. And Maxwell, B., 2017. Supporting And Inhibiting The Well-Being Of Early Career Secondary School Teachers: Extending Self-Determination Theory. British Educational Research Journal, 43(1), Pp.168-191.

[9] Neves, T.M.A., Parreira, P.M.S.D., Rodrigues, V.J.L. And Graveto, J.M.G.N., 2021. Impact Of Safe Nurse Staffing On The Quality Of Care In Portuguese Public Hospitals: A Cross-Sectional Study. Journal Of Nursing Management, 29(5), Pp.1246-1255.

[10] Popenoe, R., Langius-Eklöf, A., Stenwall, E. And Jervaeus, A., 2021. A Practical Guide To Data Analysis In General Literature Reviews. Nordic Journal Of Nursing Research, 41(4), Pp.175-186.

[11] Shorey, S. And Wong, P.Z.E., 2021. A Qualitative Systematic Review On Nurses' Experiences Of Workplace Bullying And Implications For Nursing Practice. Journal Of Advanced Nursing, 77(11), Pp.4306-4320.

[12] Singh, J., Karanika-Murray, M., Baguley, T. And Hudson, J., 2020. A Systematic Review Of Job Demands And Resources Associated With Compassion Fatigue In Mental Health Professionals. International Journal Of Environmental Research And Public Health, 17(19), P.6987.

[13] Søvold, L.E., Naslund, J.A., Kousoulis, A.A., Saxena, S., Qoronfleh, M.W., Grobler, C. And Münter, L., 2021. Prioritizing The Mental Health And Well-Being Of Healthcare Workers: An Urgent Global Public Health Priority. Frontiers In Public Health, 9, P.679397.

[14] Stanford, C., 2018. Addiction In The Lives Of Registered Nurses And Their Wake-Up Jolt To Recovery. Rowman & Littlefield.

[15] Ugwu, F.O. And Onyishi, I.E., 2020. The Moderating Role Of Person-Environment Fit On The Relationship Between Perceived Workload And Work Engagement Among Hospital Nurses. International Journal Of Africa Nursing Sciences, 13, P.100225.

[16] Wharne, S., 2019. How Do Mental Health Practitioners Experience And Understand Resilience: The Risk Of Death In Mental Healthcare.

[17] Wongtongkam, N., Krivokapic-Skoko, B., Duncan, R. And Bellio, M., 2017. The Influence Of A Mindfulness-Based Intervention On Job Satisfaction And Work-Related Stress And Anxiety. International Journal Of Mental Health Promotion, 19(3), Pp.134-143.

[18] Yang, B.X., Stone, T.E., Petrini, M.A. And Morris, D.L., 2018. Incidence, Type, Related Factors, And Effect Of Workplace Violence On Mental Health Nurses: A Cross-Sectional Survey. Archives Of Psychiatric Nursing, 32(1), Pp.31-38.

[19] Yun, S. And Kang, J., 2018. Influencing Factors And Consequences Of Workplace Bullying Among Nurses: A Structural Equation Modeling. Asian Nursing Research, 12(1), Pp.26-33.