

Evolution of Occupational Health Among Women Nurses: The Role of the ILO and WHO in Promoting Workplace Health and Safety

Devika Dileep¹, Sallap K²

¹ Research scholar, Govt. Law College Ernakulam.

² Assistant professor, Nehru Academy of Law.

Abstract—Occupational health and safety (OHS) are fundamental labour rights and key elements of the management of health care, especially for women nurses who are frequently exposed to biological, physical, ergonomic and psychosocial hazards in health care settings. In the context of the increasing importance of protecting healthcare workers, this study analyzes the role of International Labour Organization (ILO) and World Health Organization (WHO) occupational health and safety initiatives in promoting workplace health and safety and their impact on the well-being and job satisfaction of women nurses. The study uses a quantitative cross-sectional research design and primary data collected via a structured questionnaire administered to 300 female nurses working in public and private healthcare institutions. The four key constructs examined were ILO and WHO Occupational Health and Safety Initiatives, Workplace Health and Safety, Well-being of Female Nurses and Job Satisfaction of Female Nurses. For the analysis of the data, descriptive statistics, reliability and validity assessment, and regression analysis were performed using SPSS. This is reinforced by a legal analysis of constitutional provisions, labour legislation, judicial precedents and the New Labour Codes on occupational health protection in India. The results show good reliability and validity for all constructs with Cronbach's alpha values more than 0.87. Regression analysis showed ILO and WHO occupational health and safety initiatives are significant to workplace health and safety. ($R^2 = 0.424$, $\beta = 0.651$, $p < 0.001$). Furthermore, workplace health and safety had a positive effect on the well-being ($R^2 = 0.375$, $\beta = 0.613$, $p < 0.001$) and job satisfaction ($R^2 = 0.347$, $\beta = 0.589$, $p < 0.001$) of women nurses. The study concludes that the effective implementation of occupational health initiatives, supported by constitutional guarantees and labour law protections, makes a significant contribution to safer workplaces, improved well-being and enhanced job satisfaction for

women nurses.

Index Terms—Occupational Health, Women Nurses, ILO, WHO, Workplace Health and Safety, Well-being, Job Satisfaction.

I. INTRODUCTION

The domain of occupational health has seen substantial transformations during the last two decades due to an evolving work environment, advancements in technology, globalization, demographic alterations, and diverse political and economic developments¹. The discipline is undergoing a substantial shift in response to a dramatically changed environment². The recent years of the worldwide COVID-19 epidemic have significantly increased and expedited the shift, elevating occupational health to a primary concern in corporate matters and decision-making. It is so opportune to examine the domain and assess the present condition. The worldwide pandemic continues to demand our collective attention and remains the primary concern for occupational health (OH) professionals striving to maintain employee well-being. Job duties for OH professionals have markedly evolved, necessitating additional skills and knowledge. Ensuring and improving employee health is a multifaceted responsibility that extends beyond the primary occupational health function of protecting workers from physical health-related job hazards. Psychosocial hazards have emerged as a primary concern in promoting mental health, and workers are being supported in improving their health behaviours and cultivating their own health resources. The aforementioned changes, together with the

repercussions of the COVID-19 epidemic, provide a significant opportunity for the occupational health sector to establish itself as a vital workplace service and enhance its worldwide visibility and status ³.

The WHO Global Plan of Action on Workers' Health (2008 to 2017) indicates that a limited segment of the global workforce has access to occupational health services. The expanding workforce faces heightened risks of occupational hazards and industry-specific illnesses ⁴. This has significantly elevated the significance of occupational health and the need to cultivate a healthy and productive workforce. The preservation of good health in the workplace and the cultivation of healthy work environments significantly enhance productivity, therefore contributing to a nation's gross national product, as well as to individual employees' motivation and job satisfaction. The objective of occupational health care is to provide a healthy and safe workplace, foster a functioning work community, avoid work-related illnesses and accidents, and enhance working capacity ⁵.

Nurses represent the biggest group of healthcare professionals and are more susceptible to occupational health risks compared to their counterparts. Clinical staff, particularly nurses, have a greater risk of menstruation problems than administrative staff. Nurses in industrialised nations, like the United States, may have safer working circumstances compared to nurses in developing countries ⁶.

To mitigate the increasing prevalence of occupational disorders, India needs suitable occupational health services that include a multiprofessional occupational health team ^{7 8}.

According to worldwide estimates, 2.9 million individuals perished from work-related diseases or injuries in 2019, while 395 million had non-fatal accidents. Work-related fatalities account for 6.7% of yearly worldwide mortality. This results in significant economic losses and human suffering, establishing occupational health and safety (OHS) as a worldwide and national concern ⁹. Safety and health in the workplace are essential components of sustainable development and may aid in the attainment of the Sustainable Development Goals (SDG) 2030

¹⁰.

The International Labour Organization (ILO) is a tripartite United Nations body with 187 member states, dedicated to promoting workers' health and safety as one of its basic missions. This was further confirmed during the 110th session of the International Labour Conference (ILC) in June 2022, where it was resolved to incorporate a safe and healthy working environment as a fundamental principle and right at work, thereby acknowledging the Occupational Safety and Health Convention, 1981 (No. 155) and the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) as essential conventions ^{11, 12}.

ILO Conventions 155 and 187, which complement each other, ensure good national governance as well as effective workplace implementation of OSH systems. Both of these conventions highlight the roles of government, employers and workers in improving workplace safety and health ¹³. Member states that ratify these conventions shall promote occupational safety and health, and develop a safe and healthy working environment through a national OSH policy and a programme to be developed in consultation with employers and employees to prevent occupational injuries, illnesses and deaths. Ratification of these ILO standards is important as it shows political support to protect workers and ensures social justice across countries for sustainable development; however, a study by Wilson et al. showed that only 42 (23.7%) member countries had ratified the ILO Convention 155 by 2006.6 ILO launched an active action plan in 2010 to enhance ratification of Conventions 155 and 187, and again had a centenary ratification campaign in 2019 with a target of universal ratification by all member countries ^{14, 15}.

Given the increasing recognition of occupational health as a fundamental component of worker well-being and healthcare sustainability, it is important to examine how occupational health among women nurses has evolved over time and to evaluate the contributions of international organizations in promoting workplace health and safety. Therefore, this paper explores the evolution of occupational health among women nurses, examines the major occupational health challenges they face, and assesses the role of the WHO and ILO in advancing workplace health and safety through international policies, frameworks, and initiatives.

1.1. Objectives

- To assess the impact of ILO and WHO occupational health and safety guidelines on the workplace health and safety of women nurses.
- To examine the relationship between occupational health measures and the overall well-being and job satisfaction of women nurses.

II. LITERATURE REVIEW

Occupational health focuses on promoting and maintaining the physical, mental, and social well-being of workers while preventing work-related diseases and injuries. The conceptual framework established by the Joint ILO/WHO Committee on Occupational Health emphasizes adapting work to workers and workers to their jobs, thereby ensuring safe and healthy working conditions (Joint ILO/WHO Committee, 1950; revised 1995). The WHO (2022) identifies occupational health as an essential component of workplace safety and public health, while the ILO recognized a safe and healthy working environment as a fundamental principle and right at work in 2022 (ILO, 2024). These developments have broadened the scope of occupational health from physical hazard prevention to include psychosocial well-being, mental health, and workplace sustainability.

Women are the majority of the global health workforce, with nurses being the largest professional group. The nature of nursing work exposes women nurses to a variety of occupational hazards including biological, physical, ergonomic and psychosocial hazards. According to Bolghanabadi et al. (2024)¹⁶, the most common occupational health problems among female healthcare workers are stress, fatigue, musculoskeletal disorders, sleep disturbances, anxiety, depression and workplace violence. Similarly, the National Academies of Sciences, Engineering, and Medicine (2021) reported that nurses are adversely affected by infectious diseases, needle stick injuries, long standing, patient-handling injuries, and excessive workload.

Several studies have highlighted the burden of occupational stress among nurses. Santos et al. (2003)¹⁷ recognized nursing as one of the most stressful healthcare professions due to high job demands and emotional involvement in patient care. In mental health

settings, nurses often face complex and unpredictable situations requiring substantial emotional labour Delgado et al.

(2020)¹⁸, Edward et al.(2017)¹⁹. Tonso et al. (2016)²⁰ found that exposure to violence and aggression significantly increases occupational stress among mental health nurses. Supporting these findings, (Al-Azzam et al. (2018)²¹ reported that more than 80% of mental health nurses experienced workplace violence within a two-year period, demonstrating the widespread nature of this occupational hazard.

Musculoskeletal disorders (MSDs) continue to be one of the most prevalent occupational health problems experienced by nurses. A study by Hon & Bergamaschi, (2025)²² reported that the prevalence of low back pain among nurses can be as high as 80% and is generally due to repeated patient handling, lifting activities, and extended standing. Additionally, staffing shortages increase physical workload and contribute to higher rates of occupational injuries (National Academies of Sciences, Engineering, and Medicine, 2021). The findings indicate that ergonomic hazards continue to be a significant challenge in the nursing profession. Workplace violence and burnout are significant issues for nurses across the globe. One of the most vulnerable occupational groups for workplace violence is healthcare workers and nurses are among the most exposed Arnetz et al. (2025)²³. Nurses suffer from higher burnout levels than many other professional groups, as a result of overwork, understaffing and demanding shift schedules, as shown by Gimenez Lozano et al. (2021)²⁴. In addition, He et al.(2026)²⁵ performed a meta-analysis of 94 studies and estimated that approximately 30% of nurses suffer from burnout symptoms. Burnout has been associated with anxiety, depression, sleep disorders, lower job satisfaction and poorer quality of patient care.

The COVID-19 pandemic compounded the occupational health challenges for nurses. In a global scoping review of 220 studies, Franklin & Gkiouleka,(2021)²⁶ revealed that healthcare workers underwent considerable physical and psychological strain during the pandemic. Women nurses reported especially bad outcomes in relation to heavy workloads, shortages of personal protective equipment and unfavourable working conditions. The

WHO and ILO (2022) reported a 25% increase in anxiety and depression globally, partly due to the pandemic, highlighting the need for urgent workplace mental health interventions. Reproductive health also has emerged as an important occupational health problem among women nurses. Rotating shift work was associated with an increased risk of irregular menstrual cycles among female nurses, according to data from the Nurses' Health Study Mayama et al. (2020)²⁷. Similarly, Jiang et al. (2019)²⁸ reported that 41% of female nurses in China had menstrual disorders associated with long working hours and night shifts. Moen et al. (2015)²⁹ also found associations between night work, menstrual irregularities and reduced fertility in nurses. Most recently, Peng & Chang, (2024)³⁰ showed that occupational stress and poor sleep quality independently contribute to adverse reproductive health outcomes in female nurses.

To address these occupational health challenges, WHO and ILO have developed a number of frameworks and initiatives to protect healthcare workers. WHO Resolution WHA74.14 advocates for protecting and investing in the health workforce via occupational health programmes and workplace safety measures (WHO, 2022). The ILO promotes safe working environments through international labour standards, including Conventions 155 and 187. The joint WHO–ILO HealthWISE programme also offers practical advice on how to enhance occupational health and safety in healthcare facilities Zhang et al. (2022)³¹. The WHO–ILO Framework for National Occupational Health Programmes further promotes mental health

support, safe staffing practices and risk prevention strategies for health workers Friedman et al. (2023)³².

2.1. Research gap

Occupational health problems of nurses have been widely explored in existing literature including workplace stress, burnout, musculoskeletal disorders, workplace violence and reproductive health problems. However, most studies are on individual occupational hazards and not on a holistic understanding of the overall occupational health status of women nurses. Moreover, there are few studies that have examined the cumulative effect of physical, ergonomic, psychosocial and reproductive health hazards on

women nurses. Another important gap is the lack of studies that adequately evaluate the contribution of international organisations such as the World Health Organisation (WHO) and the International Labour Organisation (ILO) in addressing these occupational health challenges, especially in developing countries where occupational health services and policy implementation are still lacking.

To address these gaps, the current study takes a holistic approach, examining the evolution of occupational health among women nurses and identifying the major occupational hazards that affect their health and well-being. The study also explores the role of policies, frameworks and initiatives of WHO and ILO in promoting workplace health and safety for nurses. This study synthesises the evidence on occupational hazards with international occupational health strategies to provide an overview of the health issues in the workplace faced by women nurses and points to possible avenues for enhancing the occupational health practices and policies in health care settings.

III. LEGAL FRAMEWORK GOVERNING OCCUPATIONAL HEALTH OF WOMEN NURSES IN INDIA

The occupational health of women nurses in India is protected by constitutional guarantees, labour legislation, social security laws, judicial precedents and international labour standards. Due to the nature of nursing work, which includes exposure to infectious diseases, workplace violence, psychological stress, long working hours, and reproductive health risks, legal protection has become a vital part of healthcare governance and labour rights.

3.1. Constitutional and International Framework

The constitutional basis for the protection of occupational health is found in Article 21 of the Constitution of India which guarantees the right to life and has been interpreted by the courts to mean the right to health and a safe working environment. Articles 39(e), 42 and 47 further impose an obligation on the State to ensure humane conditions of work, maternity relief and promotion of public health.³³

The International Labour Organization (ILO) and the World Health Organization (WHO) have been instrumental in the development of occupational

health standards at the global level. The ILO Occupational Safety and Health Convention, 1981 (No. 155), the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) and the WHO Global Plan of Action on Workers' Health, among other measures, focus on safe working conditions, risk prevention and workers' well-being.³⁴

3.2. Statutory Protection of Women Nurses

The labour law reforms were preceded by occupational health protection primarily governed by the Employees' State Insurance Act, 1948, the Maternity Benefit Act, 1961 and the Sexual Harassment of Women at Workplace Act, 2013. These laws provide medical benefits, maternity protection, social security coverage and protection from harassment at the workplace.³⁵

A major development has been the enactment of the New Labour Codes between 2019 and 2020. The Code on Wages, 2019 guarantees equal remuneration and minimum wage protection, thereby addressing wage discrimination against women workers.³⁶ The Code on Social Security, 2020 consolidates various welfare legislations and strengthens maternity, insurance, and social security benefits for employees, including contractual and agency-based workers.³⁷

Most importantly, the Occupational Safety, Health and Working Conditions Code, 2020 (OSH Code) provides a comprehensive framework for workplace safety. The Code requires employers to provide a safe working environment, health monitoring, welfare facilities and protective equipment. It also provides women with the opportunity to work in night shifts with adequate security, transportation and protection against harassment which is very relevant for the nursing professionals working in 24 h health-care services.³⁸

3.3. Judicial Protection of Occupational Health Rights

Indian courts have significantly expanded occupational health protection through progressive judicial interpretation. In *Consumer Education and Research Centre v. Union of India*, the Supreme Court recognised occupational health and medical care as integral components of the right to life under Article 21.³⁹ Similarly, in *Municipal Corporation of Delhi v. Female Workers (Muster Roll)*, the Court adopted a beneficial approach towards maternity protection and

affirmed the rights of women workers to maternity benefits.⁴⁰

In *Vishaka v. State of Rajasthan*, workplace sexual harassment was recognised as a violation of fundamental rights, leading to the development of a legal framework for workplace safety and dignity for women employees.⁴¹ Furthermore, in *M.C. Mehta v. Union of India*, the Court emphasised employer responsibility in preventing harm arising from hazardous activities, a principle relevant to healthcare institutions where nurses are exposed to occupational risks.⁴²

3.4. Critical Legal Assessment

The new Labour Codes combined together fragmented labour laws and strengthened social security and workplace safety protections, thereby strengthening the legal framework for occupational health. But there are big obstacles. There are no specific laws governing nursing occupational hazards such as needle-stick injuries, exposure to infectious diseases, workplace violence and burnout. Additionally, weak enforcement mechanisms and inconsistent implementation of legal protections in private healthcare institutions continue to undermine their effectiveness.

Therefore, despite having a fairly comprehensive legal framework, there is a need for greater focus on effective implementation, nursing-specific occupational health standards and adherence to ILO and WHO guidelines to ensure meaningful protection of women nurses in health settings.

IV. METHODOLOGY

4.1. Research Design

This study used a quantitative research technique to investigate the determinants affecting occupational health and workplace well-being among female nurses. The research was constructed upon a conceptual framework that regarded occupational health hazard management, workplace stress management, working conditions, and awareness of WHO and ILO occupational health initiatives as independent variables, with the workplace well-being of female nurses as the dependent variable. The study intended to evaluate the degree to which these occupational health determinants improve workplace health and safety for female nurses. A cross-sectional survey methodology was used to gather primary data

from respondents at a certain moment. The quantitative technique was deemed suitable since it allows for the measuring of relationships between variables and the testing of proposed hypotheses using statistical analysis.

4.2. Conceptual Framework

The conceptual framework was developed based on occupational health theories and international workplace safety guidelines proposed by the WHO and ILO. Workplace well-being of women nurses was considered the dependent variable, while occupational hazard management, workplace stress management, working conditions, and WHO–ILO occupational health initiatives were treated as independent variables. Figure 1 shows the conceptual framework of the study, illustrating the relationship between the independent variables and dependent variable.

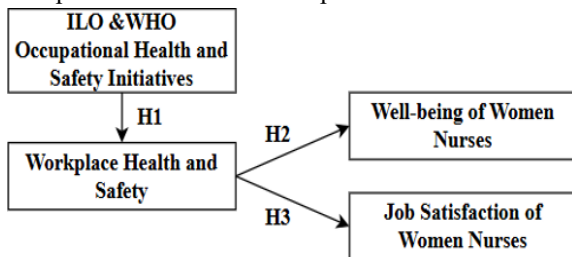


Figure 1 Conceptual framework

4.3. Population and Sample size

The study's target group consisted of female nurses employed in both public and private healthcare facilities across many departments, comprising general wards, emergency units, critical care units, operating theatres, and maternity wards. These nurses were chosen because

of their direct exposure to occupational health hazards, workplace stress, and health and safety protocols. A sample of 300 female nurses was recruited by a basic random sampling method, deemed sufficient for statistical analysis as well as hypothesis testing. The chosen sample adequately represented various healthcare environments and facilitated the analysis of the correlations among occupational health hazard management, workplace stress management, workplace conditions, WHO and ILO occupational health initiatives, and workplace well-being among female nurses.

4.4. Data collection

The study's primary data were gathered by a structured and standardised questionnaire sent to female nurses employed at chosen healthcare facilities. The questionnaire was designed based on recognised research pertaining to occupational health, workplace safety, stress management, working conditions, global occupational health efforts, and employee well-being. Data collection was executed using offline as well as online approaches to enhance participation and guarantee extensive respondent coverage. Before data collection, the study's goal was explicitly communicated to the individuals, and their involvement was completely voluntary. Ethical issues, including confidentiality, anonymity, and informed consent, were rigorously upheld throughout the study procedure. The questionnaire collected data on the management of occupational health hazards, workplace stress, working conditions, knowledge of WHO along with ILO occupational health programs, and the well-being of women nurses in the workplace.

4.5. Measures

A systematic questionnaire was used as the main tool for data collection. The questionnaire consisted of closed-ended questions design to collect relevant information on the selected study variables. The items were carefully designed to measure different aspects of awareness and satisfaction regarding government policies. The constructs and number of items that used in the study are presented below

Table 1 Study Variables

Variables	Items
ILO and WHO Occupational Health and Safety Initiatives	5
Workplace Health and Safety	5
Well-being of Women Nurses	5
Job Satisfaction of Women Nurses	5

4.6. Data Collection Procedure

A structured questionnaire was administered to women nurses working in selected health care institutions. Data were collected through online and offline modes for maximum participation and wider reach of the respondents. Before data collection the purpose of the study was explained to the participants and participation was voluntary. The confidentiality

and anonymity of respondents were maintained at all stages of the research process.

The questionnaire was structured to obtain data on management of occupational health hazards, workplace stress, working conditions, awareness on WHO and ILO occupational health initiatives and workplace well-being of women nurses. Data were used to explore the relationship between the independent variables and women nurses' workplace well-being.

4.7. Data Analysis

The gathered data were examined using the Statistical Package for Social Sciences (SPSS). Descriptive statistics, including frequency, percentage, mean, as well as standard deviation, were used to summarise the demographic attributes of the respondents and their perspectives of study variables. Multiple regression analysis was used to investigate the impact of ILO and WHO Occupational Health and Safety Initiatives, Workplace Health and Safety, and the Well-being of Women Nurses on the Job Satisfaction of Women Nurses. The study aimed to assess the

strength and significance of the correlations among the variables and to ascertain the degree to which the independent variables influence job satisfaction. The connections' statistical significance was evaluated at a 5 percent significance level ($p < 0.05$), therefore confirming the study's reliability and validity.

V. RESULTS

This section presents the outcomes of the research on occupational health and safety among female nurses. The analysis includes the demographic profile of respondents, evaluation of the reliability and validity of measuring scales, descriptive statistics of research variables, and hypothesis testing by regression analysis. The findings assess the impact of ILO and WHO occupational health and safety programs on workplace health and safety, together with the ensuing consequences of workplace health and safety on the well-being and job satisfaction of female nurses. The results provide empirical evidence for the interrelations among the investigated variables and fulfil the research goals.

5.1. Demographic variables

Table 2 Demographic variables

Demographic variables		Frequency	Percentage
Age	20 - 25 years	62	20.7
	25-35 years	55	18.3
	36-45 years	72	24
	46-55 years	54	18
	Above 55 years	57	19
	Total	300	100
Educational Qualification	Diploma in Nursing	72	24
	B.Sc. Nursing	47	15.7
	Post Basic B.Sc. Nursing	58	19.3
	M.Sc. Nursing	69	23
	Ph. D	54	18
	Total	300	100
Work Experience	Less than 5 years	57	19
	5-10 years	60	20
	11-15 years	61	20.3
	16-20 years	51	17
	Above 20 years	71	23.7
	Total	300	100
Type of Hospital	Government Hospital	144	48
	Private Hospital	156	52
	Total	300	100

The demographic examination of the 300 polled female nurses indicates a varied distribution concerning age, marital status, educational attainment, professional experience, hospital type, and monthly pay. The majority of responders were aged 36–45 years (24.0%), followed by 20–25 years (20.7%), over 55 years (19.0%), 25–35 years (18.3%), and 46–55 years (18.0%), reflecting many periods of professional life. In terms of marital status, married nurses were the biggest segment at 30.0%, followed by single and divorced nurses, each at 24.7%, and widowed nurses at 20.7% of the sample. In terms of educational credentials, holders of a Diploma in Nursing were the biggest group (24.0%), followed by M.Sc. Nursing (23.0%), Post Basic B.Sc. Nursing (19.3%), Ph.D. holders (18.0%), and B.Sc. Nursing graduates (15.7%). The majority of respondents had over 20 years of professional experience (23.7%), followed by

those with 11–15 years (20.3%), 5–10 years (20.0%), fewer than 5 years (19.0%), and 16–20 years (17.0%), indicating a diverse distribution of seasoned and novice nurses. A little greater proportion of respondents were employed in private hospitals (52.0%) than in government hospitals (48.0%). The income distribution indicates that the predominant group of respondents earned between ₹25,001 and ₹50,000 per month (22.7%), accompanied by those earning ₹50,001–₹75,000 and ₹75,001–₹100,000 (21.7% each), below ₹25,000 (18.3%), and over ₹100,000 (15.7%). The demographic profile reveals a diverse sample of female nurses with differing personal, educational, and professional backgrounds, hence augmenting the representativeness and trustworthiness of the study's results.

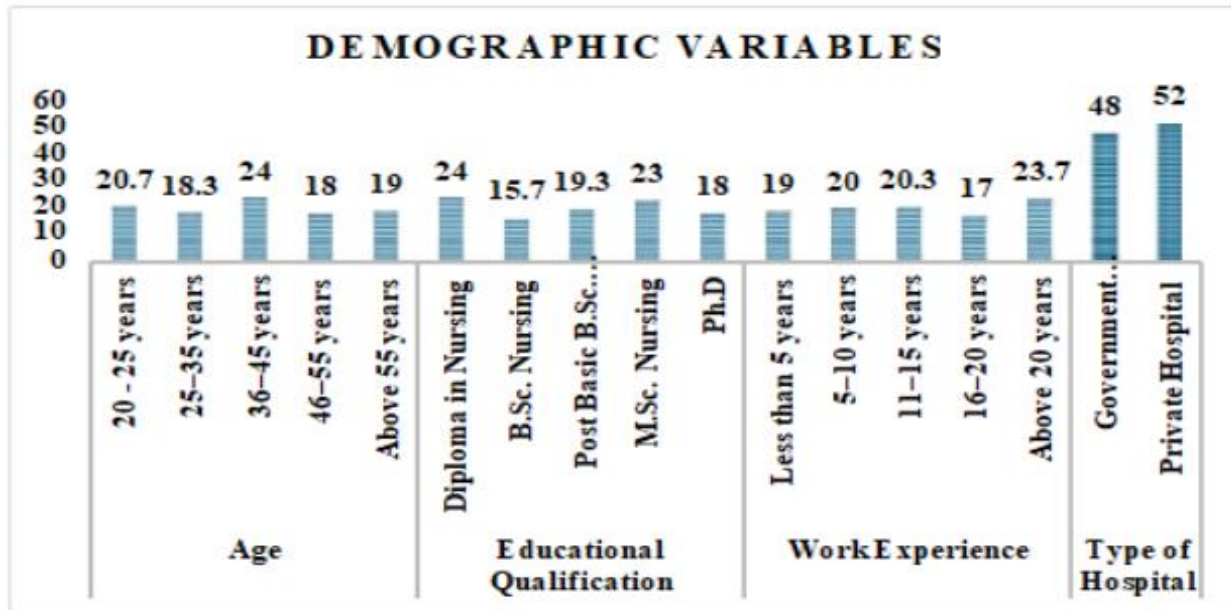


Table 3 Validity and Reliability

Variables	Items	Cronbach's Alpha	CR	AVE
ILO and WHO Occupational Health and Safety Initiatives	5	0.872	0.832	0.690
Workplace Health and Safety	5	0.903	0.846	0.726
Well-being of Women Nurses	5	0.893	0.838	0.704
Job Satisfaction of Women Nurses	5	0.896	0.844	0.71927

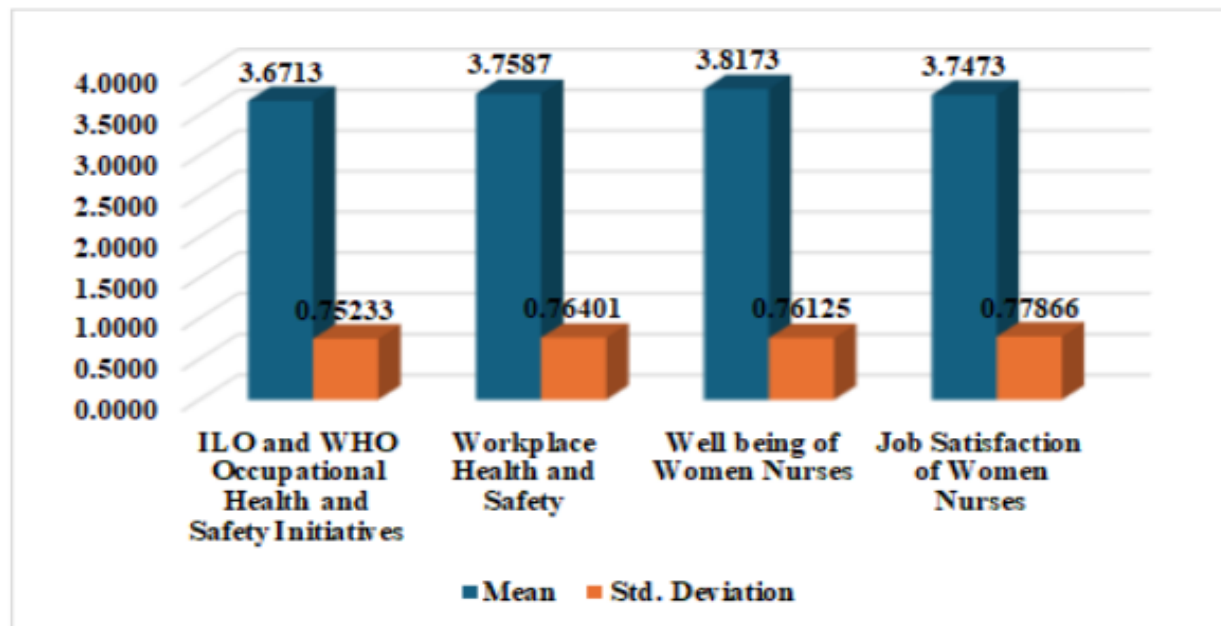
The evaluation of reliability and validity indicates that all research constructs exhibit adequate internal consistency and convergent validity. The ILO and WHO Occupational Health and Safety Initiatives attained a Cronbach's Alpha of 0.872, Composite Reliability (CR) of 0.832, and Average Variance Extracted (AVE) of 0.690, indicating substantial reliability and sufficient convergent validity. Workplace Health and Safety had the best reliability among the constructs, with a Cronbach's Alpha of 0.903, a Composite Reliability (CR) of 0.846, and an Average

variation Extracted (AVE) of 0.726, indicating exceptional measurement consistency and significant variation accounted for by the construct indicators. The construct Well-being of Women Nurses demonstrated a Cronbach's Alpha of 0.893, a Composite Reliability (CR) of 0.838, and an Average Variance Extracted (AVE) of 0.704. Conversely, Job Satisfaction of Women Nurses revealed a Cronbach's Alpha of 0.896, a CR of 0.844, and an AVE of 0.719. All Cronbach's Alpha scores above the required level of 0.70, indicating robust internal consistency dependability. All CR values are over 0.70, while AVE values beyond the minimum suggested threshold of 0.50, so confirming acceptable convergent validity. Consequently, the measuring scales used in the research are both trustworthy and valid for assessing the occupational health as well as workplace safety experiences of female nurses.

Table 4 Mean and standard deviation

Constructs	Mean	Std. Deviation
ILO and WHO Occupational Health and Safety Initiatives	3.6713	0.75233
Workplace Health and Safety	3.7587	0.76401
Well-being of Women Nurses	3.8173	0.76125
Job Satisfaction of Women Nurses	3.7473	0.77866

The descriptive data provide an outline of respondents' views on occupational health initiatives, workplace health and safety, well-being, and job satisfaction among female nurses. The concept of Well-being of Women Nurses had the highest mean score (Mean = 3.8173, SD = 0.76125), suggesting that respondents mostly viewed their overall well-being favourably. Subsequently, Workplace Health and Safety yielded a mean of 3.7587 and a standard deviation of 0.76401, indicating positive opinions of workplace safety conditions and health protection measures. The job satisfaction of female nurses had a mean score of 3.7473 and a standard deviation of 0.77866, indicating a moderate to high degree of contentment with their professional tasks and work environment. The ILO and WHO Occupational Health and Safety Initiatives reported a mean of 3.6713 and a standard deviation of 0.75233, suggesting that respondents generally recognised the existence and impact of occupational health and safety initiatives advocated by international organisations. The standard deviation values for all constructs are below 1.00, showing a satisfactory degree of consensus among respondents and demonstrating that answers are largely uniform. The results indicate favourable attitudes of occupational health efforts, workplace safety, well-being, and job satisfaction among female nurses, underscoring the significance of occupational health policies as well as procedures in the healthcare industry.



5.2. Hypothesis Implementation

H1: There is a significant relationship between awareness of ILO and WHO occupational health guidelines and workplace health and safety among women nurses.

Table 5 Model Summary

R	R Square	Adjusted R Square	F-Value	Sig.
.651 ^a	0.424	0.422	219.207	0.000
a. Predictors: (Constant), ILO and WHO Occupational Health and Safety Initiatives				

The regression analysis has revealed a significant connection between awareness about ILO and WHO occupational health guidelines and workplace health and safety among women nurses. The correlation coefficient ($R = 0.651$) proves the existence of a strong positive correlation between the variables under consideration. Moreover, the coefficient of determination ($R^2 = 0.424$) means that 42.4% of the variation in workplace health and safety can be accounted for by ILO and WHO occupational health and safety policies, whereas the other 57.6% of the variation can be attributed to some other factors. The adjusted R^2 value of 0.422 also testifies to the reliability of the model. In addition, the significant F-value of 219.207 (significance level, $p = 0.000$) proves that the regression model is statistically valid and fits well the data set. Hence, awareness and compliance with ILO and WHO occupational health guidelines significantly affect workplace health and safety of women nurses.

According to coefficients analysis, the ILO and WHO occupational health and safety campaigns have a positive impact on workplace health and safety of female nurses. As shown by the regression coefficient ($B = 0.661$), every unit increase in the awareness/implementation of the occupational health and safety measures will increase workplace health and safety by 0.661 units. Furthermore, the standardized beta coefficient ($\beta = 0.651$) shows a strong positive impact of the independent variable on the dependent variable. The high value of the t-statistics ($t = 14.806$) and the significance level ($p = 0.000$) prove that there is an effect of the independent variable on the dependent variable. Constant $B = 1.331$ represents the baseline level of the health and safety of the workplace without the existence of any occupational health measure.

H2: Occupational health and safety measures have a significant positive effect on the well-being of women nurses.

Table 6 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.331	.167		7.957	.000
	ILO and WHO Occupational Health and Safety Initiatives	.661	.045	.651	14.806	.000
a. Dependent Variable: Workplace Health and Safety						

Table 7 Model Summary

R	R Square	Adjusted R Square	F-Value	Sig.
.613 ^a	0.375	0.373	179.04100	0.000
a. Predictors: (Constant), Workplace Health and Safety				

Based on the regression results, there exists a significant positive correlation between the work place health and safety and the well-being of female nurses.

With the correlation coefficient being $R = 0.613$, the variables have a strong positive relationship. This means that the R^2 of 0.375 shows that workplace

health and safety accounts for 37.5% of variance in the well-being of female nurses. The adjusted R^2 is equal to 0.373, which shows that the regression model has consistent results. The statistical significance of the

model is indicated by the F-value of 179.041 ($P=0.000$). This means that the model is able to explain variations in well-being of the nurses.

Table 8 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.523	.175		8.704	.000
	Workplace Health and Safety	.610	.046	.613	13.381	.000
a. Dependent Variable: Well-being of Women Nurses						

Based on the coefficients, it can be concluded that there is a substantial positive effect that workplace health and safety have on the well-being of women nurses. With the use of the unstandardized regression coefficient ($B = 0.610$), it can be said that every unit increase in the level of workplace health and safety will cause 0.610 units improvement in the well-being of women nurses. In addition to that, the standardized beta coefficient ($\beta = 0.613$) shows that there is an

extremely positive influence on the well-being of women nurses due to occupational health and safety. Moreover, such high t-value (13.381) with $p = 0.000$ signifies the statistically significant effect of the variable on the dependent variable.

H3: Improved workplace health and safety significantly influence the job satisfaction of women nurses.

Table 9 Model Summary

R	R Square	Adjusted R Square	F-Value	Sig.
.589 ^a	0.347	0.344	158.01500	0.000
a. Predictors: (Constant), Workplace Health and Safety				

In the regression analysis, there is a strong positive correlation between workplace health and safety, and job satisfaction among women nurses. From the correlation coefficient $R = 0.589$, it can be deduced that there is a positive correlation among the two variables under consideration. It is clear that R^2 is 0.347, meaning that workplace health and safety account for 34.7% of the variability in job satisfaction.

Also, the value of adjusted R^2 is 0.344, suggesting that the regression equation has remained consistent even after considering the sample size and predictors in question. Lastly, from the F-value (158.015), with a p-level of 0.000, it is clear that the regression model is significantly related to job satisfaction among women nurses.

Table 10 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.492	.183		8.153	.000
	Workplace Health and Safety	.600	.048	.589	12.570	.000
a. Dependent Variable: Job Satisfaction of Women Nurses						

Coefficients indicate that there is a strong and significant effect of workplace health and safety on job satisfaction for women nurses. This is because the unstandardized coefficient ($B = 0.600$) signifies that an increase by one unit in workplace health and safety results in an increase by 0.600 units in job satisfaction. Standardized beta coefficient ($\beta = 0.589$) signifies a positive and significant impact of workplace health and safety on job satisfaction. T-value at 12.570 and significance of 0.000 prove that the effect is both significant and meaningful. The constant ($B = 1.492$) gives the basic score of job satisfaction without considering factors of workplace health and safety.

VI. DISCUSSION

The study's results indicate that occupational health and safety programs endorsed by international organisations significantly enhance workplace health and safety for female nurses. The awareness and use of occupational health recommendations substantially enhance the safety of healthcare facilities, mitigate occupational hazards, and fortify protective measures for nursing workers. These results correspond with prior studies highlighting the significance of institutional and policy-level measures in protecting healthcare workers against physical, biological, ergonomic, and psychological risks. The research indicates that workplace health and safety protocols significantly enhance the overall well-being of female nurses. A friendly and secure work environment improves physical health, psychological well-being, and professional confidence, allowing nurses to execute their responsibilities more efficiently. This result corresponds with prior study that emphasised the connection between safe working conditions, less occupational stress, and enhanced quality of life for healthcare professionals. Moreover, workplace health and safety were identified as positively influencing job satisfaction among female nurses. Nurses who see their workplace as secure, helpful, and attentive to their professional requirements often demonstrate increased motivation, dedication, and job satisfaction. The results corroborate current research indicating that good occupational health regulations protect workers while also enhancing workforce retention and organisational success. The research

highlights the interrelated nature of occupational health efforts, workplace safety, employee well-being, as well as job satisfaction in healthcare environments.

VII. CONCLUSION

The study indicates that workplace health and safety are fundamental elements of a healthy and effective nursing staff. The occupational health efforts promoted by the International Labour Organization and the World Health Organization significantly enhance workplace health and safety measures for female nurses. These efforts provide a crucial foundation for healthcare institutions to mitigate occupational risks and enhance workplace safety. The findings demonstrate that advancements in workplace health and safety significantly enhance the well-being of female nurses. Secure working circumstances mitigate occupational difficulties, promote physical and emotional well-being, and cultivate a constructive professional atmosphere. Improved well-being subsequently fosters optimal circumstances for increased job satisfaction and enhanced work performance. The report emphasises the need for healthcare organisations to prioritise occupational health policies, ongoing safety training, risk management strategies, and employee support systems. Enhanced alignment with global occupational health standards may bolster workforce sustainability and elevate the quality of healthcare services. Future initiatives must prioritise the enhancement of occupational health programs, tackle developing workplace issues, and guarantee that female nurses have sufficient protection and support throughout their careers. The research underscores the need of incorporating occupational health and safety policies into healthcare management to enhance nurse well-being, work satisfaction, and organisational efficacy.

FOOT NOTES

- ¹ Paul A Schulte et al., "Toward an Expanded Focus for Occupational Safety and Health: A Commentary," *International Journal of Environmental Research and Public Health*, 2019, <https://doi.org/10.3390/ijerph16244946>.

- ² Trevor K Peckham et al., “Creating a Future for Occupational Health,” *Annals of Work Exposures and Health* 61, no. 1 (January 2017): 3–15, <https://doi.org/10.1093/annweh/wxx011>.
- ³ Wolf Kirsten, “The Evolution from Occupational Health to Healthy Workplaces,” 2024, 64–74, <https://doi.org/10.1177/15598276221113509>.
- ⁴ Bonnie Rogers et al., “International Survey of Occupational Health Nurses’ Roles in Multidisciplinary Teamwork in Occupational Health Services,” *Workplace Health & Safety* 62, no. 7 (July 2014): 274–81, <https://doi.org/10.1177/216507991406200702>
- ⁵ Rajnarayan R Tiwari et al., “Does Occupational Health Nursing Exist in India?,” *Indian Journal of Occupational and Environmental Medicine* 18, no. 3 (2014).
- ⁶ Mahua Patra, “Occupational Health Hazards of Women in Healthcare : The Lived Experience of Female Nurses of West Bengal , India,” *International Journal of Research and Scientific Innovation (IJRSI)* X, no. 231 (2023): 23–28, <https://doi.org/10.51244/IJRSI>.
- ⁷ Rajnarayan R Tiwari et al., “Occupational Health Nursing Course in India : Stakeholder ’ s Perspective,” *Journal of Environmental and Occupational Science*, n.d., 111–13, <https://doi.org/10.5455/jeos.20150514034952>.
- ⁸ Xivananda Priolcar, “Occupational Health Nursing-Growing Influence at Workplace in India,” *Indian Journal of Occupational and Environmental Medicine* 17, no. 1 (2013).
- ⁹ Jukka Takala et al., “Global-, Regional- and Country-Level Estimates of the Work-Related Burden of Diseases and Accidents in 2019.,” *Scandinavian Journal of Work, Environment & Health* 50, no. 2 (March 2024): 73–82, <https://doi.org/10.5271/sjweh.4132>.
- ¹⁰ Sotirios Kavouras et al., “Occupational Health and Safety Scope Significance in Achieving Sustainability,” 2022, <https://doi.org/10.3390/su14042424>.
- ¹¹ Occupational Safety et al., *The Fundamental Conventions on Occupational Safety and Health The Fundamental Conventions on Occupational Safety and Health*, vol. 1981, 2006.
- ¹² ILO, “PLAN OF ACTION (2010-2016) to Achieve Widespread Ratification and Effective Implementation of the Occupational Safety and Health Instruments (Convention No. 155, Its 2002 Protocol and Convention No. 187),” n.d.
- ¹³ ILO.
- ¹⁴ ILO.
- ¹⁵ Ashish A Trivedi and Alice Lai, “Occupational and Environmental Medicine Journal of Indonesia Original Article Ratification Status of International Labour Organization (ILO) Fundamental Conventions on Occupational Safety and Health,” *Occupational and Environmental Medicine Journal of Indonesia* 2, no. 2 (2024).
- ¹⁶ Somayeh Bolghanabadi, Aida Haghighi, and Mehdi Jahangiri, “Insights into Women’s Occupational Health and Safety: A Decade in Review of Primary Data Studies,” *Safety* 10, no. 2 (2024): 47.
- ¹⁷ Cynthia D Santos, Robert B Bristow, and Jaclyn V Vorenkamp, “Which Health Care Workers Were Most Affected during the Spring 2009 H1N1 Pandemic?,” *Disaster Medicine and Public Health Preparedness* 4, no. 1 (2010): 47–54.
- ¹⁸ Cynthia Delgado et al., “Workplace Resilience and Emotional Labour of Australian Mental Health Nurses: Results of a National Survey,” *International Journal of Mental Health Nursing* 29, no. 1 (2020): 35–46.
- ¹⁹ Karen-leigh Edward, Gylo Hercelinskyj, and Jo-Ann Giandinoto, “Emotional Labour in Mental Health Nursing: An Integrative Systematic Review,” *International Journal of Mental Health Nursing* 26, no. 3 (2017): 215–25.
- ²⁰ Michael A Tonso et al., “Workplace Violence in Mental Health: A Victorian Mental Health Workforce Survey,” *International Journal of Mental Health Nursing* 25, no. 5 (2016): 444–51.
- ²¹ Manar Al-Azzam et al., “Mental Health Nurses’ Perspective of Workplace Violence in Jordanian Mental Health Hospitals.,” *Perspectives in Psychiatric Care* 54, no. 4 (2018).
- ²² Chun-Yip Hon and Enrico Bergamaschi, “Innovative Prevention Strategies for Occupational Health Hazards,” *Frontiers in Public Health* (Frontiers Media SA, 2025).
- ²³ Judith E Arnetz et al., “Workplace Violence, Work-related Exhaustion, and Workplace Cognitive Failure among Nurses: A Cross-sectional Study,” *Journal of Advanced Nursing* 81, no. 1 (2025): 271–85.
- ²⁴ Jose Miguel Gimenez Lozano, Juan Pedro Martinez Ramon, and Francisco Manuel Morales Rodriguez,

“Doctors and Nurses: A Systematic Review of the Risk and Protective Factors in Workplace Violence and Burnout,” *International Journal of Environmental Research and Public Health* 18, no. 6 (2021): 3280.

25 Jiaqing He et al., “Workplace Violence Against Nurses and Its Association With Mental Health and Turnover Intention: A National Cross-Sectional Study,” *Journal of Nursing Management* 2026, no. 1 (2026): 2818047.

26 Paula Franklin and Anna Gkiouleka, “A Scoping Review of Psychosocial Risks to Health Workers during the Covid-19 Pandemic,” *International Journal of Environmental Research and Public Health* 18, no. 5 (2021): 2453.

27 Michinori Mayama et al., “Frequency of Night Shift and Menstrual Cycle Characteristics in Japanese Nurses Working under Two or Three Rotating Shifts,” *Journal of Occupational Health* 62, no. 1 (2020): e12180.

28 Zhaoqiang Jiang et al., “Menstrual Disorders and Occupational Exposures among Female Nurses: A Nationwide Cross-Sectional Study,” *International Journal of Nursing Studies* 95 (2019): 49–55.

29 Bente E Moen et al., “Menstrual Characteristics and Night Work among Nurses,” *Industrial Health* 53, no. 4 (2015): 354–60.

30 Yu-Xuan Peng and Wen-Pei Chang, “Influence of Chronotype on Sleep Quality and Menstrual Regularity in Nurses on Monthly Shift Rotations,” *Journal of Occupational Health* 66, no. 1 (2024): uiae058.

31 Min Zhang et al., “Improving Occupational Health for Health Workers in a Pilot Hospital by Application of the HealthWISE International Tool: An Interview and Observation Study in China,” *Frontiers in Public Health* 10 (2022): 1010059.

32 Eric A Friedman et al., “The Global Health and Care Worker Compact: Evidence Base and Policy Considerations,” *BMJ Global Health* 8, no. 7 (2023).

33 Constitution of India, arts. 21, 39(e), 42 and 47.

34 ILO Convention No. 155 (1981); ILO Convention No. 187 (2006); WHO Global Plan of Action on Workers' Health 2008–2017.

35 Employees' State Insurance Act, 1948; Maternity Benefit Act, 1961; Sexual Harassment of Women at Workplace Act, 2013.

36 Code on Wages, 2019.

37 Code on Social Security, 2020.

38 Occupational Safety, Health and Working Conditions Code, 2020.

39 *Consumer Education and Research Centre v. Union of India* (1995) 3 SCC 42.

40 *Municipal Corporation of Delhi v. Female Workers (Muster Roll)* (2000) 3 SCC 224.

41 *Vishaka v. State of Rajasthan* (1997) 6 SCC 241.

42 *M.C. Mehta v. Union of India* (1987) 1 SCC 355.

REFERENCES

- [1] Al-Azzam, Manar, Ahmad Yahya AL-Sagarat, Loai Tawalbeh, and Robin J Poedel. “Mental Health Nurses’ Perspective of Workplace Violence in Jordanian Mental Health Hospitals.” *Perspectives in Psychiatric Care* 54, no. 4 (2018).
- [2] Arnetz, Judith E, Nathan Baker, Eamonn Arble, and Bengt B Arnetz. “Workplace Violence, Work-related Exhaustion, and Workplace Cognitive Failure among Nurses: A Cross-sectional Study.” *Journal of Advanced Nursing* 81, no. 1 (2025): 271–85.
- [3] Bolghanabadi, Somayeh, Aida Haghighi, and Mehdi Jahangiri. “Insights into Women’s Occupational Health and Safety: A Decade in Review of Primary Data Studies.” *Safety* 10, no. 2 (2024): 47.
- [4] Delgado, Cynthia, Michael Roche, Judith Fethney, and Kim Foster. “Workplace Resilience and Emotional Labour of Australian Mental Health Nurses: Results of a National Survey.” *International Journal of Mental Health Nursing* 29, no. 1 (2020): 35–46.
- [5] Edward, Karen-leigh, Gylo Hercelinskyj, and Jo-Ann Giandinoto. “Emotional Labour in Mental Health Nursing: An Integrative Systematic Review.” *International Journal of Mental Health Nursing* 26, no. 3 (2017): 215–25.
- [6] Franklin, Paula, and Anna Gkiouleka. “A Scoping Review of Psychosocial Risks to Health Workers during the Covid-19 Pandemic.” *International Journal of Environmental Research and Public Health* 18, no. 5 (2021): 2453.
- [7] Friedman, Eric A, Robert Bickford, Charles Bjork, James Campbell, Giorgio Cometto, Alexandra Finch, Catherine Kane, Sarah Wetter,

- and Lawrence Gostin. "The Global Health and Care Worker Compact: Evidence Base and Policy Considerations." *BMJ Global Health* 8, no. 7 (2023).
- [8] Gimenez Lozano, Jose Miguel, Juan Pedro Martinez Ramon, and Francisco Manuel Morales Rodriguez. "Doctors and Nurses: A Systematic Review of the Risk and Protective Factors in Workplace Violence and Burnout." *International Journal of Environmental Research and Public Health* 18, no. 6 (2021): 3280.
- [9] He, Jiaqing, Jiabin Yang, Jianghao Yuan, Qiang Yu, Elihuruma E. Stephano, Wenjia Zhang, Yamin Li, and Yusheng Tian. "Workplace Violence Against Nurses and Its Association With Mental Health and Turnover Intention: A National Cross-Sectional Study."
- [10] *Journal of Nursing Management* 2026, no. 1 (2026): 2818047.
- [11] Hon, Chun-Yip, and Enrico Bergamaschi. "Innovative Prevention Strategies for Occupational Health Hazards." *Frontiers in Public Health*. Frontiers Media SA, 2025.
- [12] ILO. "PLAN OF ACTION (2010-2016) to Achieve Widespread Ratification and Effective Implementation of the Occupational Safety and Health Instruments (Convention No. 155, Its 2002 Protocol and Convention No. 187)," n.d.
- [13] Jiang, Zhaoqiang, Jing Wang, Xinnian Guo, Lingfang Feng, Min Yu, Jianhong Zhou, Yan Ye, Liangying Mei, Li Ju, and Dandan Yu. "Menstrual Disorders and Occupational Exposures among Female Nurses: A Nationwide Cross-Sectional Study." *International Journal of Nursing Studies* 95 (2019): 49–55.
- [14] Kavouras, Sotirios, Ioannis Vardopoulos, Roido Mitoula, Antonis A Zorpas, and Panagiotis Kaldis. "Occupational Health and Safety Scope Significance in Achieving Sustainability." 2022. <https://doi.org/10.3390/su14042424>.
- [15] Kirsten, Wolf. "The Evolution from Occupational Health to Healthy Workplaces," 2024, 64– 74. <https://doi.org/10.1177/15598276221113509>.
- [16] Mayama, Michinori, Takeshi Umazume, Hidemichi Watari, Sho Nishiguchi, Takuhiro Moromizato, and Takashi Watari. "Frequency of Night Shift and Menstrual Cycle Characteristics in Japanese Nurses Working under Two or Three Rotating Shifts." *Journal of Occupational Health* 62, no. 1 (2020): e12180.
- [17] Moen, Bente E, Valborg Baste, Tone Morken, Kjersti Alsaker, Ståle Pallesen, and Bjørn Bjorvatn. "Menstrual Characteristics and Night Work among Nurses." *Industrial Health* 53, no. 4 (2015): 354–60.
- [18] Patra, Mahua. "Occupational Health Hazards of Women in Healthcare : The Lived Experience of Female Nurses of West Bengal , India." *International Journal of Research and Scientific Innovation (IJRSI)* X, no. 231 (2023): 23–28. <https://doi.org/10.51244/IJRSI>.
- [19] Peckham, Trevor K, Marissa G Baker, Janice E Camp, Joel D Kaufman, and Noah S Seixas. "Creating a Future for Occupational Health." *Annals of Work Exposures and Health* 61, no. 1 (January 2017): 3–15. <https://doi.org/10.1093/annweh/wxw011>.
- [20] Peng, Yu-Xuan, and Wen-Pei Chang. "Influence of Chronotype on Sleep Quality and Menstrual Regularity in Nurses on Monthly Shift Rotations." *Journal of Occupational Health* 66, no. 1 (2024): uiae058.
- [21] Priolcar, Xivananda. "Occupational Health Nursing-Growing Influence at Workplace in India." *Indian Journal of Occupational and Environmental Medicine* 17, no. 1 (2013).
- [22] Rogers, Bonnie, Keiko Kono, Maria Helena Palucci Marziale, Marjatta Peurala, Jennifer Radford, and Julie Staun. "International Survey of Occupational Health Nurses' Roles in Multidisciplinary Teamwork in Occupational Health Services." *Workplace Health & Safety* 62, no. 7 (July 2014): 274–81. <https://doi.org/10.1177/216507991406200702>.
- [23] Safety, Occupational, Health Convention, Promotional Framework, Occupational Safety, and Health Convention. *The Fundamental Conventions on Occupational Safety and Health The Fundamental Conventions on Occupational Safety and Health*. Vol. 1981, 2006.
- [24] Santos, Cynthia D, Robert B Bristow, and Jaclyn V Vorenkamp. "Which Health Care Workers Were Most Affected during the Spring 2009 H1N1 Pandemic?" *Disaster Medicine and Public Health Preparedness* 4, no. 1 (2010): 47–54.
- [25] Schulte, Paul A, George Delclos, Sarah A Felknor, and L C Chosewood. "Toward an

- Expanded Focus for Occupational Safety and Health: A Commentary.” *International Journal of Environmental Research and Public Health*, 2019. <https://doi.org/10.3390/ijerph16244946>.
- [26] Takala, Jukka, Päivi Hämäläinen, Riitta Sauni, Clas-Håkan Nygård, Diana Gagliardi, and Subas Neupane. “Global-, Regional- and Country-Level Estimates of the Work-Related Burden of Diseases and Accidents in 2019.” *Scandinavian Journal of Work, Environment & Health* 50, no. 2 (March 2024): 73–82. <https://doi.org/10.5271/sjweh.4132>.
- [27] Tiwari, Rajnarayan R, Anjali Sharma, Sanjay P Zodpey, and Shobha M Khandare. “Does Occupational Health Nursing Exist in India?” *Indian Journal of Occupational and Environmental Medicine* 18, no. 3 (2014).
- [28] Tiwari, Rajnarayan R, Anjali Sharma, Sanjay P Zodpey, and Shruti P Patel. “Occupational Health Nursing Course in India : Stakeholder ’ s Perspective.” *Journal of Environmental and Occupational Science*, n.d., 111–13. <https://doi.org/10.5455/jeos.20150514034952>.
- [29] Tonso, Michael A, Roshani Kanchana Prematunga, Stephen J Norris, Lloyd Williams, Natisha Sands, and Stephen J Elsom. “Workplace Violence in Mental Health: A Victorian Mental Health Workforce Survey.” *International Journal of Mental Health Nursing* 25, no. 5 (2016): 444–51.
- [30] Trivedi, Ashish A, and Alice Lai. “Occupational and Environmental Medicine Journal of Indonesia Original Article Ratification Status of International Labour Organization (ILO) Fundamental Conventions on Occupational Safety and Health.” *Occupational and Environmental Medicine Journal of Indonesia* 2, no. 2 (2024).
- [31] Zhang, Min, Yiming Huang, Fengyao Wu, Dongmei Liu, Caiyun Wei, and Yaqin Qin. “Improving Occupational Health for Health Workers in a Pilot Hospital by Application of the HealthWISE International Tool: An Interview and Observation Study in China.” *Frontiers in Public Health* 10 (2022): 1010059.
- ILO Convention No. 155 (1981); ILO Convention No. 187 (2006); WHO Global Plan of Action on Workers' Health 2008–2017.
- Employees' State Insurance Act, 1948; Maternity Benefit Act, 1961; Sexual Harassment of Women at Workplace Act, 2013.
- Code on Wages, 2019.
- Code on Social Security, 2020.
- Occupational Safety, Health and Working Conditions Code, 2020.
- Consumer Education and Research Centre v. Union of India (1995) 3 SCC 42. Municipal Corporation of Delhi v. Female Workers (Muster Roll) (2000) 3 SCC 224. Vishaka v. State of Rajasthan (1997) 6 SCC 241. M.C. Mehta v. Union of India (1987) 1 SCC 395.

Indian Legislation

Constitution of India, arts. 21, 39(e), 42 and 47.