

شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو

# بسم الله الرحمن الرحيم





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# جامعة عين شمس التوثيق الإلكتروني والميكروفيلم قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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MONA MAGHRABY

# Staff Nurses' Compliance with Preventive Measures of Occupational Health Hazards

#### Thesis

Submitted for Partial Fulfillment of Requirements of Master's Degree in Nursing Administration

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B.Sc., Nursing (2014)

Faculty of Nursing
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2021

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# List of Abbreviations

Abb.	Full Term
AORN	Association of Operation Room Nurses
CDC	Centers for Disease Control and Prevention
СТ	Computed Tomography
ECP	Exposure Control Plan
EPA	Environmental Protection Agency
FGI	Facility Guidelines Institute
GNBEs	Gram-Negative Bacterial Endotoxins
HCW	Health Care Workers
HIV	Human Immunodeficiency Virus
IV	Infusion Therapy and Vascular Access
LEV	Local Exhaust Ventilation
MRIs	Magnetic Resonance Imaging Devices
MSD	Musculoskeletal Disease
N95	Respirator Masks N95
NHS	National Health Services
NIOSH	National Institute of Occupational Safety and
	Health
NO	Nitrous Oxide
$NO_2$	Nitrogen Dioxide
NRL	Natural Rubber Latex
NSIs	Nosocomial Infections
OR	Operating Room
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Agency
OSL	Optically Stimulated luminescent
PPE	Personal Protective Equipment
RF	Radiant Fields
SF-CO <sub>2</sub>	Supercritical Fluid Carbon Dioxide
TLD	Thermotumines Cent Dosimeters
UV	Ultra Violet

# Staff Nurses' Compliance with Preventive Measures of Occupational Health Hazards Abstract

**Background**: Nursing job has high risks of exposure to occupational and work-related hazards. Aim of the study: to assess the staff nurses' compliance with preventive measures of occupational health hazards. Subjects and methods: The study was conducted in Ain-Shams University and El-Demardash Hospitals using a descriptive crosssectional design on a convenience sample of 135 staff nurses. Data were collected using a self-administrated questionnaire knowledge, a self-reported practice tool for compliance, observation checklist for actual practice. The fieldwork lasted from December 2019 to February 2020. Results: Nurses' age ranged between 22 and 55 years, and 54.8% were diploma nurses. The majority reported exposure to occupational health hazards (79.3%). Only 23.7% of the nurses reported adequate workplace provision of protection, 44.4% had total satisfactory knowledge, 97.3% of had adequate self-reported practice, and only 37.8% had adequate observed practice. Conclusion and recommendations: Occupational health hazards are high in the study setting, with mostly inadequate workplace provision of related protection. Nurses' knowledge of occupational hazards is suboptimal and their compliance is low. The study recommends training in occupational health hazards and related safety measures, with close supervision and monitoring of nurses' compliance. Further studies are suggested to investigate the effectiveness of nurses' training programs on their compliance with preventive measures of occupational health hazards.

Keywords: Occupational health hazards, Compliance, Nurses.

#### Introduction

Nursing personnel work in a wide range of health services settings including hospitals, nursing homes, and ambulatory and community-based environments. In performing their duties, they encounter a remarkable range of work-related hazards. Nursing is one of the hazardous occupations, in which the risks are four times higher than those in other professions (*Abdi Zarrini et al., 2018*). The dangers that threaten nurses include biological risks emerged from the exposure to infectious agents, risks of chemical contacts, physical dangers, ergonomic hazards, attacks and beatings, and negative effects of psychosocial and organizational factors (*Walton and Rogers, 2017*).

Modern technology has made healthcare very complex with many hazards. The type of hazards faced by the Health Care Workers (HCWs) are physical, chemical, biological, radiation, reproductive health, stress, psychiatric disorders, stalking by patients and violence (*Gorman et al.*, 2013). Needle Stick Injuries (NSIs), radiation exposure, violence, psychiatric disorders, and suicides are common in HCWs (*Mohanty et al.*, 2019).

The high occurrence and burden of occupational hazards in hospitals include sharps/needlestick injuries, contact with blood and body fluids (BBF), blood-borne