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"WORKPLACE WELL-BEING AND SECURITY IN HOSPITALS: AN ANALYSIS OF THE NURSES' AWARENESS OF "WORK-RELATED WEALTH AND SECURITY."

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ABSTRACT:

A descriptive and factor analysis of awareness among hospital nurses. Hospital amenities provide a 'Workplace Well-being and Protection' issue affecting caregivers and patient care quality. Healthcare personnel experience bodily, living, element, and emotional threats while performing their duties, which require knowledge and awareness to manage. Determine the primary component of operating knowledge of workplace health and safety among nurses. Learn about nurses' attitudes toward occupational health and safety. Consider the awareness of workplace well-being and protection among nurses. Create a paradigm for educating nurses about workplace health and safety. It is a quantitative research type, using a descriptive study of the awareness of Workplace Well-being and protection among nurses. Surveys are used to accumulate specific, and truthful evidences that describe a current condition. A comprehensive survey was undertaken of hospitals and nursing in Tamil Nadu. Overall 150 responders were selected among hospitals and nurses in Tamil Nadu. The current study used appropriate primary and secondary data to achieve its objectives. The study found possibilities for improving understanding of 'Workplace Well-being and Protection threats to promote standards of excellence in the workplace.

KEYWORDS: Risks at workplace, Nursing staff, Occupational Health and Safety, Occupational Hazards.

1. INTRODUCTION:

Hospital workers who make the 12% of the world's workers, work in an immensely hazardous workplace. [1-3] Healthcare workers face a variety of workplace dangers due to their job responsibilities. [4,5] Workplace Well-being and Protection several specialized fields, namely physical, psychological, chemical, biological, and mechanical/electrical, that protect employees' overall health and safety. [6,7] Physicians and nurses may face bodily, living, element, and emotional threats through care provision. [8,9] Advising patients on potential hazards and providing necessary knowledge are important to delivering high-quality care. The nursing personnel's awareness of job-related safety and health threats is crucial to giving high-quality patient care, as directed by physicians. The present study aims to measure the similarities among hospital nursing teams.

Nursing staff awareness of various occupational hazards:

Among the many concepts that do not, as yet, have an exact definition is the term “hazard.” The lack of unity on how to define this term affects our understanding of the multi-causes of disasters and may hurt emergency management (EM) strategies and their prospects of implementation.

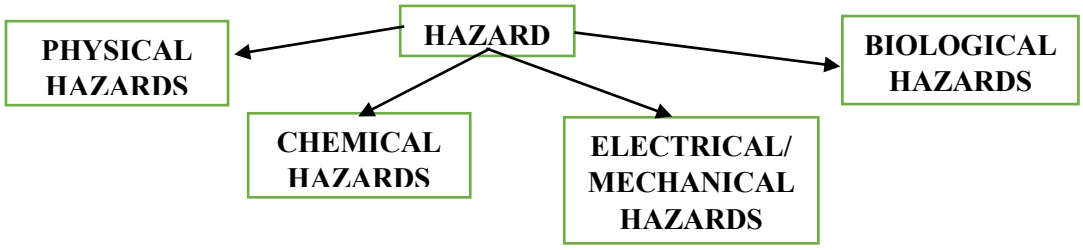

Figure 1.

1. Physical Hazards:

The majority of nurses face ergonomic dangers, including skeletal and muscular problems, as well as physical hazards. [10]

2. Chemical Hazards:

Healthcare workers are exposed to aerosolized drugs and anesthetic gases, which can come into contact with latex materials. This study assessed their awareness of chemical dangers and diseases. [11]

3. Electrical/Mechanical Hazards:

Nursing employees may face electrical or mechanical threats when working with electronic gadgets. [12]

4. Biological Hazards:

Nurses may encounter infectious illnesses and blood-borne infections while providing patient care. [13-15]

AWARENESS ON OCCUPATIONAL SAFETY PRACTICES AND INCIDENT REPORTING:

Nursing personnel should know how to prevent dangers by utilizing PPE, handwashing, reporting incidents, and documenting procedures [16-18] Within the healthcare industry, particularly among nurses, it is necessary to raise knowledge about occupational safety standards and the significance of incident reporting in order to maintain a safe and healthy working environment. The following is a guide that will help raise awareness of this issue. Education and Training, Clear Communication of Safety Protocols, Incident Reporting Awareness, Promotion of a Safety Culture, Regular Safety Audits and Reviews.

2. REVIEW OF LITERATURE:

Hospital personnel, who account for 12% of the global workforce, labor in extremely hazardous conditions (Goniewicz M, Moore Jr. RM, Triolo PK). Hospital Nurses are showing a wide range of occupational hazards as a result of their job obligations. Workplace Well-being and Protection encompasses various specialist sectors, including bodily, mental, chemical, biological, and motorized/electrical, which protect employees' overall health and safety (Lipscomb J). During the provision of care, healthcare employees, excluding doctors and nurses, may be exposed to occupational hazards such as bodily, living, element, and emotional threats (Khaled H. M, Shi Y, Xue H). Advising patients on potential hazards and providing relevant information is critical for providing high-quality care. The nursing team's awareness of job-related safety and health hazards is critical for providing high-quality patient care as instructed by physicians. The present study aims to measure the similarities among hospital nursing teams. Among the many concepts that do not, as yet, have an exact definition is the term “hazard.” The lack of unity on how to define this term affects our understanding of the multi-causes of disasters and may harm emergency management (EM) strategies and their prospects of implementation. The majority of nurses confront ergonomic risks, such as skeletal and muscular issues, as well as physical hazards (Abdi Zarrini K).

Healthcare workers are exposed to aerosolized medications and anesthetic gases that can come into contact with latex materials (NIOSH). This study evaluated their understanding of chemical hazards and diseases. When using technological devices, nursing personnel may be exposed to electrical or mechanical hazards. While caring for patients, nurses may come into contact with infectious diseases and blood-borne infections. Nursing professionals should understand how to avoid hazards by wearing PPE, handwashing, reporting events, and documenting procedures.

3. RESEARCH METHODOLOGY:

The process of obtaining information is sometimes stated as research. Sometimes stated as systematic, scientific research for useful information on a certain topic. Data analysis is a common research approach. The Improvement Learner's Wordbook of Present English states research as **"A diligent investigation or inquiry, especially through search for fresh fact in any sort of knowledge."** To determine the main element of operating awareness of Workplace Well-being and protection among nurses. To know awareness of Workplace Well-being and protection among nurses. To explore the factors of the awareness of occupational health safety among nurses. To create a model of the awareness of Workplace Well-being and Protection among nurses. The quantitative study kind, and the descriptive research method. Data are used to accumulate specific and truthful facts that describe a current state. A full questionnaire survey was undertaken among hospitals and nursing homes in Tamil Nadu that have NABH accreditation. A total of 150 responders were picked from the few hospitals and nurses in Tamil Nadu that have NABH accreditation. These types of resources were utilized to create scientific instruments (questionnaires) for primary data collecting.

Using the statistical method known as deliberate sampling, 150 nurses from select hospitals in Tamil Nadu with certification from NABH (National Certification Board of Hospitals) Furthermore, the investigator together questionnaire survey among healthcare and nurses in Tamil Nadu with NABH accreditation. Both the primary data and secondary data were gathered during the research. A standardized questionnaire was employed to achieve this. Secondary data from easily accessible sources, such as annual reports and hospitals in Tamil Nadu, were used to obtain general information on the selected nurses at a few hospitals in Tamil Nadu that are accredited by NABH. The final survey has thirteen components.

3.1.1. HYPOTHESIS:

H0- Awareness increases in Workplace Well-being and protection among nurses.

H1- Awareness increases in Physical Hazards among nurses.

H2-Awareness increases in Chemical Hazards among nurses.

H3-Awareness increases in Electrical/Mechanical Hazards among nurses.

H4- Awareness increases in Biological Hazards among nurses.

H5- Awareness increases in Personal Protective Equipment.

3.1. OOLS WHICH USED IN THE ANALYSIS:

3.1.1. STATISTICAL ANALYSIS: To analyze professional progress, personal qualities, and employee retention, correlation coefficients were constructed. Multiple regression analyses tested the study's assumptions.

TABLE 1				
VARIABLES	**FREQUENCY**	**PERCENTAGE**	**MEAN (X)**	**SD**
Age			1.85	.938
Below 25	75	50.0		
(26-35)	51	34.0		
(36-45)	13	8.7		
Above 45.	11	7.3		
Gender			1.99	.281
Male	11	7.3		
Female	139	92.7		
Marital Status			1.72	.551
Single	72	48.0		
Married	78	52.0		
Educational Qualification			2.66	.697
Certificate	9	6.0		
Diploma	61	40.7		
UG	72	48.0		
PG	8	5.3		
Experience			2.46	1.150
Below 1yr	49	32.7		
2-5yrs	43	28.7		
5-10yrs	30	20.0		
Above 10yrs	28	18.7		
Income (Salary) / PA			1.62	.972
Bel 4L	116	77.3		
4.1L-8L	17	11.3		
8.1L-12L	11	7.3		
12.1L-16L	2	1.3		
Above 16L.	4	2.7		

Table -1 shows the percentage value and frequency value for personal factors of transport employees. The highest value in age below 25 frequency value is 75 and the percentage is 50 % and the lowest value in age above 45 frequency value is 11 and the percentage value is 7.3%. The highest value in marital status is Married with a frequency value are 78 and a percentage is 52 % and the lowest value in marital status is unmarried with a frequency value is 72 and a percentage value is 48%. The highest value in educational qualification in UG of frequency value is 72 and the percentage is 48% and the lowest value in educational qualification in PG of frequency value is 8 and percentage value is 5.3%. The highest value in Experience from below 1 year of frequency value is 49 and the percentage is 32.7 % and the lowest value in Experience from above 10 years of frequency value is 28 and the percentage value is 18.7%. The highest value is an income below 4L with a frequency value are 116 and a percentage is 77.3 % and the lowest value in in an income above 12.1L-16L with a frequency value is 2 and a percentage value is 1.3%. The highest value in gender in the female frequency value is 119 and the percentage is 92. % and the lowest value in gender by male of the frequency is 11 and the percentage of 7.3.

TABLE-2.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.826
Bartlett's Test of Sphericity	Approx. Chi-Square	1878.980
	Df	351
	Sig.	.000

Kaiser, Meyer, and Olkin (KMO) sample sufficient statistics to evaluate the suitability of value distribution for FA. >0.9 is great, >0.8 is respectable, >0.7 is good, >0.6 is ordinary, >0.5 is horrible, and 0.5 is horrific. Fa without an identity matrix is worthless. The data are multivariate normal and FA-acceptable at 0.05 since they do not form an identity matrix.

The data gave an average sample adequacy value of 0.826 in **Table 2**. Bartlett's sphericity test determines multivariate distribution normalcy. This determines if the FA's correlation matrix is an identity matrix. An identity matrix is needed for FA. According to **George and Mallery (2003)**, multivariate normally distributed data with a significance level of 0.05 do not form an identity matrix, making them suitable for FA. FA may use study data because it was significant at 0.000.

TABLE-3

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.380	31.039	31.039	8.380	31.039	31.039	5.531	20.486	20.486
2	3.034	11.237	42.275	3.034	11.237	42.275	4.540	16.813	37.299
3	1.479	5.478	47.753	1.479	5.478	47.753	1.707	6.324	43.623
4	1.322	4.897	52.650	1.322	4.897	52.650	1.674	6.202	49.825
5	1.222	4.526	57.176	1.222	4.526	57.176	1.487	5.508	55.333
6	1.139	4.219	61.395	1.139	4.219	61.395	1.382	5.120	60.454
7	1.062	3.934	65.329	1.062	3.934	65.329	1.316	4.876	65.329
8	.983	3.641	68.970						
9	.799	2.958	71.928						
10	.787	2.914	74.842						
11	.697	2.583	77.425						
12	.653	2.418	79.844						
13	.606	2.243	82.087						
14	.540	2.002	84.088						
15	.517	1.915	86.003						
16	.463	1.714	87.717						
17	.458	1.697	89.414						
18	.429	1.588	91.002						
19	.406	1.504	92.506						
20	.350	1.295	93.801						
21	.335	1.241	95.042						
22	.311	1.153	96.195						
23	.285	1.054	97.249						
24	.265	.982	98.231						
25	.189	.699	98.931						
26	.166	.614	99.545						
27	.123	.455	100.000						

Table 3 shows that seven characteristics with Eigenvalues of one were extracted from the initial twelve using **Principal Component Analysis** (PCA) with varimax rotation. These thirteen factors accounted for 65.329% of the total variation. **Table 4** presents the FA findings. The factor loadings varied from 0.857 to 0.502. The factor loading increases as the number of features represented or measured by a test grows. Risk-taking in group I is an example of a quality title based on its highest loading. This study interpreted features using components with significant loadings of 0.50 or above.

TABLE-4.

Rotated Component Matrix							
	Component						
	1	2	3	4	5	6	7
In my workplace, PPE is used for Hepatitis B vaccination.	.745						
In my workplace, PPE is used to the Importance of regular health checks. ups.	.712						
In my workplace, PPE is used for Occupational hazards reported to higher authority	.703						
In my workplace, PPE is used to handle a fire extinguisher	.694						
I am aware of biological hazards due to infections in my workplace.	.684						
In my workplace, PPE is used as a First aid kit in minor accidents	.681						
In my workplace, PPE is used to Important of hand washing	.651						
In my workplace, PPE is used to Record system regarding occupational hazards.	.639						
In my workplace, PPE is used to Prevent respiratory problems.	.626						
I am aware of biological hazards due to Inspection done on Linen for sutures, needles, and the like stress in the working environment	.626						
In my workplace, PPE is used to Prevent falls.	.614	.508					
I am Aware of Diseases occurring due to my profession in my workplace.		.728					
Hearing issues at work makes me aware of physical hazards.		.706					
I am Conscious of Physical hazards due to Fall in my workplace.		.674					
I am Aware of Biological hazards due to Skin allergies in my workplace.		.672					
I am aware of electrical/mechanical hazards due to shock in my workplace.		.626					
I am aware of electrical/mechanical hazards due to fire in my workplace.		.558					
I am Aware of Physical hazards due to Headaches in my workplace.		.513					
I am aware of chemical hazards due to Dermatitis in my workplace.			.800				
I am aware of chemical hazards due to Latex allergy in my workplace.		.502	.531				
I am aware of an Occupational hazard.				.647			
I am aware of biological hazards due to Respiratory problems in my workplace.				.575			
I am Aware of the Types of occupational hazards in my workplace.				.570			
I am aware of electrical/mechanical hazards due to in burns at my workplace.					.793		
I am aware of chemical hazards due to Respiratory problems in my workplace.							

In my workplace PPE is used to Prevent cuts, skin abrasions						.821	
I am aware of Workplace Well-being and Protection in the Workplace.							.857

4. FINDINGS AND SUGGESTION.

Research on 'Workplace Well-being and Protection awareness among hospital nurses shows various levels of awareness, as well as knowledge gaps, underlining the importance of continued training, overcoming barriers, and building a supportive safety culture within healthcare companies. Increasing awareness of 'Workplace Well-being and Protection' among nurses in hospitals can be achieved through comprehensive training programs, regular safety drills, clear communication of safety protocols, and ensuring easy access to personal protective equipment. The finding of the study is the highest value in age below 25 frequency value is 75 and the percentage is 50 %. The highest value in marital status is Married with a frequency value are 78 and a percentage is 52 %. The highest value in educational qualification in UG of frequency value is 72 and the percentage is 48%. The highest value in Experience from below 1 year of frequency value is 49 and the percentage is 32.7 %. The highest value is an income below 4L with a frequency value are 116 and a percentage is 77.3 %. The highest value in gender in the female frequency value is 119 and the percentage is 92. %. Ensure that individuals have access to competent counseling and assistance for their mental health, such as on-site therapists or discreet hotlines. Practices that help reduce stress, such as meditation, mindfulness training, and relaxation techniques, should be implemented. In order to avoid burnout and to lessen the likelihood of making mistakes, it is important to maintain optimal nurse-to-patient ratios. This will allow you to fulfill personal demands and lessen fatigue by providing flexible work hours and shift possibilities.

5. CONCLUSIONS.

Thus the study of descriptive factors in the awareness of 'Workplace Well-being and Protection' among nurses in hospitals. Healthcare workers face physical, chemical, biological, and psychological dangers while performing their tasks, requiring knowledge and awareness to manage. Know the awareness of Workplace Well-being and Protection among nurses. Factor the awareness of occupational health safety among nurses. Create a model of the awareness of Workplace Well-being and Protection among nurses. The highest value in age from below 25 frequency value is 75 and the percentage is 50 %. The highest value in educational qualification in UG of frequency value is 72 and the percentage is 48%. The highest value in marital status is Married of frequency value are 78 and the percentage is 52

%. The highest value in Experience from below 1 year of frequency value is 49 and the percentage is 32.7 %. The highest value in an income is below 4L of frequency value is 116 and the percentage is 77.3 %. The highest value in gender in the female frequency value is 119 and the percentage is 92. %. This data produced an average sample adequacy value of 0.826. Using PCA with varimax rotation, seven features with Eigenvalues of one were recovered from the initial twelve. The variation was 65.329% due to these thirteen factors. Factor loadings ranged from 0.857 to 0.502. To summarize, while nurses in hospitals are typically aware of 'Workplace Well-being and Protection', ongoing efforts in education, resource allocation, and cultural support are critical for ensuring thorough implementation and fostering a safe workplace. This will improve the overall quality of healthcare delivery.

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