A Study to Assess the Knowledge Regarding Occupational Health Hazards Among Traffic Police in Aizawl, Mizoram with a View to Develop Awareness

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***Abstract*—Background: Occupational health hazards are workplace conditions that threaten employee health, causing immediate injuries or long-term diseases. Occupational health hazards are injuries and alarming concern among traffic police. It effects the physical, social, and mental well-being of police personnel which has various public health implications.**

Objectives: To assess the level of knowledge regarding occupational health hazards among Traffic Police in Aizawl, Mizoram.

Methods: Quantitative research approach, non-experimental research design (Descriptive research design) was used. 80 Traffic Police in Aizawl, Mizoram were selected using Non probability purposive sampling technique. Self- Administered Structured Questionnaire was used to collect data. Descriptive (Frequence percentage distribution) and inferential statistics (Chi-square) were used to analysed the data.

Result: The majority 38(47%) were 34-41 years of age, 73(92%) were Male, 67(84%) were in Higher secondary, 50(63%) were from nuclear family, 64(80%) were from urban areas and 25(31%) had no information regarding occupational health hazards. The study categorizes knowledge into three levels- Inadequate knowledge (0-7) Moderately adequate knowledge (8 -14) Adequate knowledge (15-20) and examines their distribution across various demographic groups using the Chi-square test for statistical significance. There was significant association obtained between the knowledge score with selected demographic variable i.e. educational qualification at 0.05 level of significance ($p<0.05$). The other demographic variables like Age, Gender, Type of family, Area of residence and source of information regarding occupational health hazards among traffic police were found non-significant. Hence, the research hypothesis was accepted.

Conclusion: The study was conducted to assess the knowledge regarding occupational health hazards among Traffic Police in Aizawl, Mizoram. From the findings of the present study, it can be concluded that most of the Traffic Police had moderate knowledge regarding occupational health hazards. Spreading up to date knowledge, awareness about occupational health hazards will ena1ble to improve existing knowledge and practice.

***Index Terms*—Assess, Knowledge, Occupational health hazards, Awareness**

I. INTRODUCTION

An occupational hazard is a hazard experienced in the workplace. This encompasses many types of hazards, including chemical hazards, biological hazards, (biohazards), psychological hazards, and physical hazards. According to International Labour Organization, 2.3 million individuals are injured at work every year. Moreover, each day, more than 6000 individuals die as a consequence of workplace accidents[1].

Statement of the problem: A study to assess the knowledge regarding occupational health hazards among Traffic Police in Aizawl, Mizoram with a view to develop awareness using leaflet.

Hypothesis

H1: There is significant association between the knowledge score regarding occupational health hazards with selected demographic variables of Traffic Police.

II. METHODOLOGY

The Objectives of the study were to assess the level of knowledge regarding occupational health hazards among traffic police in Aizawl, Mizoram and to find out the association between the knowledge score with selected demographic variables of Traffic Police in Aizawl, Mizoram. Quantitative research approach was used and for the study design - non-experimental research design (Descriptive research design) was selected. 12 samples were from the Aizawl Traffic Police Office, 2nd floor of The Superintendent of Police (SP), Treasury Square, Aizawl, Mizoram and 68 samples were from the Aizawl City Traffic Police Office, Dawrpui, Aizawl, Mizoram. Non probability purposive sampling technique was used. Self-Administered Structured Questionnaire was used to collect data. Descriptive and inferential statistics were used to analysed the data.

Sample Size: The sample size for the present study consists of 80 samples.

Sampling Techniques: Non-probability purposive sampling techniques was used for the study.

Data Collection
The tool for data collection was:
Section I: Demographic Proforma
Section II: Self-Administered Structured Questionnaire
Formal permission for data collection was taken from the concerned authorities. The data collection was done on the 15th and 16th March 2026 and was collected after taking informed consent from the Traffic Police and ensuring confidentiality of the data collected. Assessment of Knowledge score was assessed using Self-Administered Structured questionnaire.

Data analysis: The data was analysed by using Descriptive and inferential statistic.

Table No 1: Frequency and Percentage distribution according to demographic variables.

n=80

Demographic Variables	Frequency(f)	percentage (%)
Age		
34-41	38	47
42-49	24	30
50-57	18	23
Gender		
Male	73	92
Female	7	8
Educational qualification		
Higher Secondary	67	84
Graduate & above	13	16
Type Of Family		
Nuclear Family	50	63
Joint Family	30	37
Area of residence		
Urban	64	80
Rural	16	20
Source of information		
Health Personnel	18	23
Family	17	21
Friends	9	11
Mass Media	11	14
No Information	25	31

The above Table 1 depicts the majority 38 (47%) were 34-41 years of age, 73(92%) were Male, 67(84%) were in Higher secondary, 50(63%) were from nuclear family, 64(80%) were from urban area and 25(31%) had no information regarding occupational health hazards.

Table 2: Frequency and Percentage distribution of knowledge score regarding occupational health hazards among Traffic Police.

n=80

Knowledge Score	Frequency(F)	Percentage (%)
Inadequate knowledge (0-7)	7	9
Moderate knowledge (8-14)	57	71
Adequate knowledge (15-20)	16	20

The above Table 2 depicts that among the selected 80 Traffic Police, majority 57 (71%) had moderate knowledge and 16(20%) had adequate knowledge and 7(9%) had inadequate knowledge.

Table 3: Association between knowledge score with selected demographic variables among traffic police.

Demographic Variables	Knowledge score			Chi-square (X^2)	df	p-value	Inference
	Inadequate (0-7)	Moderate (8-14)	Adequate (15-20)				
Age				5.39	4	0.249	NS
34-41	4	25	9				
42-49	3	15	6				
50-57	0	17	1				
Gender				0.95	2	0.621	NS
Male	7	52	14				
Female	0	5	2				
Education Qualification				27.23	2	0.0001	S*
Higher secondary	7	48	12				
Graduate and above	0	9	4				
Type of Family				3.072	2	0.2152	NS
Nuclear	3	39	8				
Joint family	4	18	8				
Area of residence				1.982	2	0.3712	NS
Urban	7	45	12				
Rural	0	12	4				
Source of information regarding occupational health hazards.				6.969	8	0.5400	NS
Health personnel	3	10	5				
Family	0	13	4				
Friends	2	5	2				
Mass Media	0	10	1				
No information.	2	19	4				

*p<0.05 Level of Significance

NS=Not Significant, n=80

The data presented in Table 3 revealed that significant association was obtained between the knowledge score with selected demographic variable i.e. educational qualification at 0.05 level of significance ($p<0.05$). The other demographic variables like Age, Gender, Type of family, Area of residence and source of information regarding occupational health hazards among traffic police were found non-significant. Hence research hypothesis was accepted.

III. CONCLUSION:

The study was conducted to assess the knowledge regarding occupational health hazards among Traffic Police in Aizawl, Mizoram. From the findings of the present study, it can be concluded that most of the Traffic Police had moderate knowledge regarding occupational health hazards. Spreading upto date knowledge, awareness about occupational health hazards will ena1ble to improve existing knowledge and practice.

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