A study to assess the effectiveness of planned teaching programme on knowledge regarding prevention of occupational hazards among garbage handlers working at selected areas of Sangli, Miraj, Kupwad Corporation

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ABSTRACT

The garbage handlers refer to, those workers who collect garbage and waste materials produced from the community or society. The garbage handlers have more chances to the occurrence of occupational diseases. The garbage handlers should know the knowledge of preventive measures for occupational diseases. The topic was 'A study to assess the effectiveness of planned teaching programme on knowledge regarding prevention of occupational hazards among garbage handlers working at selected areas of Sangli, Miraj, Kupwad Corporation'. The objectives of the study were to assess the existing knowledge regarding the prevention of occupational hazards among garbage handlers, to assess the effectiveness of planned teaching programme on knowledge regarding prevention of occupational hazards among garbage handlers, and to find out the association between the pre-test knowledge score and selected demographic variables. In this study, 40 samples were included. Of which 60% was male and 40% was female samples. All age groups were covered at the time of sampling. The pilot study was conducted in Sangliwadi area and final study was conducted in Sangli area. The planned teaching was effective among garbage handlers. The post-test knowledge score was significantly increased. In the finding of the study showed that there was no significant association between pre-test knowledge with selected demographic variables.

Keywords— *Garbage handlers, Effectiveness, Occupational hazards*

1. INTRODUCTION AND NEED FOR STUDY
Garbage is referred to the waste that produced by the houses area or community area collected by the garbage handlers. The garbage includes the waste paper, dust, waste plastic material, waste vegetables and kitchen material. Our community area, the garbage handlers were working with less knowledge of occupational health problems and its preventive techniques. [1]

Some of the commonly reported occupational health & injury issues related to waste handlers are:
(i)   Back & joint injuries from lifting heavy waste-filled containers.
(ii) Respiratory illness from ingesting particulates, bioaerosols & volatile organics during waste collection and from working in Smokey and dusty conditions at open dumps.
(iii) Infections from direct contact with contaminated materials.
(iv) Skin problems like dermatitis.
(v)   Puncture wound leading to tetanus, hepatitis & HIV infection.
(vi) A headache and nausea from anoxic conditions where disposal sites have high methane, carbon dioxide & carbon monoxide concentration.
(vii) Lead poisoning from burning of materials with lead-containing batteries, paints etc. [2]

2. RESEARCH METHODOLOGY
In the present study, a quantitative research approach and pre-experimental design were used for the study. Planned teaching programme and knowledge regarding the prevention of occupational hazards were the variables. The study was conducted in Sangli, Miraj, Kupwad corporation area. We have taken 40 samples for the study with Simple random sampling technique was used.

The pilot study was conducted in Sangliwadi area, Miraj. Fifteen experts did the content validity of the tool. The reliability coefficient 'r' of the multiple choice questionnaire was 0.73 which is more than 0.7, hence it was found to be reliable. Data collection method include structured questionnaires in which the data will be collected under the section I - Demographic data and section II= Multiple Choice Questionnaire on occupation health hazards to garbage handlers. Data analyzed with frequency, percentage, standard deviation, and t-test. [3]

3. RESEARCH FINDINGS AND DISCUSSION

Table 1: Pre-test and post-test frequency distribution on grading knowledge score (N=40)

Grade	Pre-test (f)	Post-test (f)
Poor	02	00
Average	34	18
Good	04	22

In pre-test shows that 02 garbage handlers have poor knowledge score (0 – 8), 34 garbage handlers have average knowledge score (9 – 16), 04 garbage handlers have good knowledge score (17 – 25). In post-test, 34 garbage handlers have average knowledge score (9 – 16) and 22 garbage handlers have good knowledge score (17 – 25).

Table 2: Difference between pre and post knowledge score on the prevention of occupational hazards (N=40)

Test	Mean	Std. Deviation	Paired t value	df	p-value
Pre score	13.10	2.79	7.943	39	0.000
Post score	16.93	2.90			

In the above table, t calculated value (7.943) is more than t table value at 0.000. It means, planned teaching programme was effective.

This result supported by a quasi-experimental study was conducted in Thailand to assess the effectiveness of comprehensive health risk protection behaviors, knowledge, attitudes, and practices among scavengers in open dump sites. The analysis showed significant differences before and after the intervention program and also between the control and intervention groups. [4]

Table 3: Association between pre-test knowledge score on prevention of occupational health hazards with demo-graphic variables (N= 40)

S. No.	Variables	Level of knowledge			No. of Sample in categories	Fisher's exact test value	P value	Association
		Poor	Average	Good				
1.	**Age**							
	21 – 30 years	1	6	1	8	3.724	0.842	NO
	31 – 40 years	0	13	1	14			
	41 – 50 years	1	9	1	11			
	Above 50 years	0	6	1	7			
2.	**Gender**							
	Female	0	15	1	16	1.534	0.513	NO
	Male	2	19	3	24			
3.	**Educational Qualification**							
	No any formal education	1	3	0	4	6.177	0.315	NO
	Primary education	1	7	1	9			
	Secondary education	0	16	3	19			
	Higher sec. education	0	8	0	8			
4.	**Work Experience**							
	Up to 1 year	0	1	0	1	4.194	0.45	NO
	1 – 5 years	1	7	0	8			
	More than 5 years	1	26	4	31			

Above the table, value showed that chi-square calculated values were less than chi-square table value. So there was no association between knowledge and socio-demographic data.

A study to assess the knowledge regarding prevention of occupational hazards among carpenters working in timber area from Sangli Miraj Kupwad Corporation. The results showed that there was an association between demographic variable and knowledge regarding prevention of occupational hazards among carpenters.

4. SUMMARY
Planned teaching program was effective and there was no association between knowledge and socio-demographic data.

5. CONCLUSION
Periodical teaching on prevention of occupational health hazards is the most important tool to prevent the health problem.

6. REFERENCES

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