



“A Comparative Study To Assess The Knowledge About Occupational Dermatitis Among Male And Female Agriculture Workers Residing In A Selected Rural Area With A View To Develop Information Booklet ”

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ABSTRACT :

The study was conducted in selected rural area about occupational dermatitis. The period of data collection was 4 weeks. A sample of 50 male and 50 female agricultural workers were selected from the Banandur, Baredoddi, Chatra villages coming under the Ittamadu PHC by non probability convenient sampling technique. The researcher initially established rapport with the study samples and assured confidentiality and purpose of the study was explained to samples. The data was collected using semi structured questionnaire to find out the knowledge about the occupational dermatitis. An information booklet was given to the participants and their relatives.

KEY WORDS: OCCUPATIONAL DERMATITIS, MALE & FEMALE AGRICULTURE WORKERS, RURAL AREA.

INTRODUCTION:

A man too busy to take care of his health is like a mechanic too busy to take care of his tools. Health is the general condition of a person in all aspects. Health is depending upon several factors like age, sex, region, religion, occupation, economy, societal status etc. Also man requires several needs to cope up and to live along with society. To fulfill his needs Man created his own occupation. Each occupation has its own consequences towards man development and on his health.

Occupational health is essentially preventive medicine, The joint ILO/WHO committee gave definition as “ occupational health should aim at the promotion and maintenance of the highest degree of physical, mental, social wellbeing of workers in all occupations, the prevention among workers of departures from health caused by their working conditions, the protection of workers in their employment from risks resulting from factors adverse to health, the placing and maintenance of the workers in an

occupational environment adapted to his physiological ,psychological equipment and to summarize , the adaptation of work to man and of each man to his job”.

Dermatitis resulting from occupational activities and work site conditions has been found to represent almost 15% of the total work place injuries, thus making it among the most prevalent of all occupational disorders and serious public health concern in need of continued investigation. The surveillance of occupational dermatitis has been a major task of health researchers aiming to assess risk factors and ultimately develop and interventions to reduce job related injuries to the skin the average claim rate of occupational dermatitis was estimated to be 5.73 per 100000 workers (95% confidence interval 5.66-5.80). Statistically significant differences in claim rates by age, sex, industry and occupation were found .Employees in the farming, forestry, and fishing occupations and industries had significantly higher claim rates compared with employees in other occupations

The two most common types of contact occupational dermatitis are irritant contact and allergen contact. Those caused by irritants occur more often. In this condition, the skin reaction may occur immediately or over time. The amount of time it takes for a reaction to occur will usually depend on the specific substance that causes the problem ,Occupational dermatitis typically occurs on the hands, arms, and face. Symptoms vary, depending on the substance causing the problem, but may include dry skin, chapped skin, redness, scaliness , blisters, ulcers, and cracks in the skin, raw skin, and swelling. A person might also experience thickness of the skin, burning, itching, stinging, and skin that is very irritated.Causedbyplants, medicine, animalshusbandry,rubber,cosmotic,fabric,detergent,adhsieve,perfumes,insecticide,pesticide,exposure to sun ,wet hands.

OBJECTIVES OF THE STUDY

1. To assess the knowledge about occupational dermatitis among male agricultural workers.
2. To assess the knowledge about occupational dermatitis among female agricultural workers.
3. To compare the level of knowledge among male and female agricultural workers.
4. Find out association between male and female agricultural workers knowledge about occupational dermatitis and selected demographic variables.
5. To develop information booklet about occupational dermatitis.

OPERATIONAL DEFINITIONS

ASSESS

It refers to identifying the knowledge of male and female agricultural workers regarding occupational dermatitis which is measured by using structured questionnaire.

KNOWLEDGE

It refers to measure the depth and range of information of agricultural workers regarding occupational dermatitis.

MALE & FEMALE AGRICULTURAL WORKERS

It is referred as the workers who are working in agricultural fields in selected urban areas at Bangalore.

OCCUPATIONAL DERMATITIS

It refers to a range and depth of delayed skin reactions that occurs on direct skin contact with a sensitizing agent.

INFORMATION BOOKLET

It refers to information regarding prevention of occupational dermatitis among agricultural workers.

ASSUMPTIONS

- 1) Agricultural workers working in various rural areas may have inadequate knowledge.
- 2) Tool prepared for study would be sufficient to assess knowledge about occupational dermatitis.

RESEARCH VARIABLES

Dependent variables: knowledge about occupational dermatitis.

Dependent variables: male and female agricultural workers.

Demographic variables: sex, age, marital status, education, qualification, number of working hours and years of experience.

DELIMITATIONS

1. The study is delimited to agricultural workers who are aged between 25 to 45 years.
2. Agricultural workers residing in a area under Ittamadu PHC , Bidadi, Bangalore.

HYPOTHESIS

H1: There is a significant relationship between knowledge level regarding occupational dermatitis with selected demographic variables.

RESEARCH APPROACH

The selection of research approach is the basic procedure conducting research enquiry. A research approach tells the researcher what data to collect and how to analyse it. It also suggests possible

conclusions to be drawn from the data. In view of the nature of the problem under the study and to accomplish the objectives of the study .The research approach adopted for this study is quantitative approach. Quantitative approach helps to explain the effect of the independent variables on the dependent variables. This approach is considered most suitable for this study so the investigator selected this approach.

RESEARCH DESIGN

The research design selected for this study belongs to non experimental research design with survey design .

RESEARCH VARIABLES

- Dependent variables: knowledge about occupational dermatitis.
- Independent variables: male and female agricultural workers.
- Socio-demographic variables: These are the variable which helps to differentiate the subject from each other such as age in years, gender, education, family income, , type of family, hours of work, work experience, sources of information about occupational dermatitis.

RESEARCH SETTING

The setting is the location where a study is conducted. For the present study the setting was at selected villages Baredoddi,Banandur, which comes under Ittamadu PHC of Bangalore. The selected setting was provided the required samples adequately, feasibility and accessibility of the samples

POPULATION

Population is an entire set of individuals having some common characteristics, sometimes universal. Population refers to the aggregate or totality of all objects, subjects or members that conform to a set of specification. It is any set of persons, objects or measurements having observable characteristics in common. The population of the study comprises of the agricultural workers at the age group of 20 to 45 years ,total population was 100 ,50 male and 50 female agricultural workers , working under Ittamadu PHC area , Bangalore.

SAMPLE SIZE AND SAMPLING TECHNIQUE

Sample Size:

Sample refers to a subset of population that is selected to participate in a particular study. Sampling refers to the process of selecting a portion of population to represent the entire population. The sample size of the study consists of 100 people. 50 male and 50 female agricultural workers, working under Ittamadu PHC area, Bangalore.

Sampling Technique:

Sampling technique is the process of selecting a group of people or other elements with whom or which to conduct a study. For selecting the sample for the present study, non probability convenient sampling technique was used.

SAMPLING CRITERIA

➤ Inclusion Criteria

- Agricultural workers who can read Kannada
- Agricultural workers who are available during data collection period.
- Agricultural workers who are actively willing to participate in the study.

➤ Exclusion Criteria

- Not available at the time of collection.
- Agricultural workers who are not willing to participate.

Limitations

The study is limited to the agricultural workers who are working under Ittamadu PHC area, Bangalore.

DESCRIPTION OF THE TOOL

After the thorough review of literature related to the topic and with suggestion of research guide tool was finalized. The study tool consists of two parts:-

Part A: Deals with the Structured Interview Schedule for assessing socio-demographic profile which consists of 9 items which were used to collect the sample characteristics such as age in years, gender, marital status, education, income, type of family, hours of working, experience, sources of information.

Part B Structured interview schedule consists of 30 knowledge items which include information regarding occupational dermatitis.

Scoring key was prepared for part B, score “1” was awarded to correct response and “0” for wrong response in all items. Thus a total score of 30 were allotted. To interpret the level of knowledge regarding occupational dermatitis, the scores were distributed as

1. Inadequate Knowledge --<50%
2. Moderate Knowledge--50-75%
3. Adequate Knowledge-- >75%

VALIDATION OF THE TOOL

The prepared tool along with the problem statement, objectives and other details was submitted to 3 doctors and 6 experts who had specialization in community health nursing. Suggestions and recommendations given by the experts were accepted and necessary corrections were done to modify the tool.

Association between knowledge with their selected demographic variables of male

S.No	Demographic Variables	No	%	Level of Knowledge				Chi square value
				≤ Median (36)		< Median (14)		
				No	%	No	%	
1	Age							
	a. 25--30 years	5	10	4	80.0	1	20.0	
	b. 31--36 years	9	18	6	66.7	3	33.3	0.289
	c. 37--42 years	11	22	8	72.7	3	27.3	df 3
	d. Above 42 years	25	50	18	72.0	7	28.0	N.S
2	Gender							
	a. Male	50	100	36	72.0	14	28.0	0.000
	b. Female	0	0	0	0.0	0	0.0	invalid
3	Marital Status							
	a. Single	12	24	9	75.0	3	25.0	1.053
	b. Married	34	68	25	73.5	9	26.5	df 2
	c. Divorced/Separated	4	8	2	50.0	2	50.0	N.S
4	Type of family							
	a. Nuclear	26	52	15	57.7	11	42.3	5.500
	b. Joint	24	48	21	87.5	3	12.5	df 1
	c. Extended	0	0	0	0.0	0	0.0	S
5	Education							
	a. No formal education	0	0	0	0.0	0	0.0	6.67
	b. Primary	28	56	22	78.6	6	21.4	df 5
	c. Secondary.	13	26	10	76.9	3	23.1	S
	d. Graduation	7	14	4	57.1	3	42.9	
	e. Post graduation	2	4	0	0.0	2	100.0	
	f. Any other, if specify...	0	0	0	0.0	0	0.0	

6	How many hours per day do you work?							
	a. Less than 6	14	28	11	78.6	3	21.4	3.463
	b. 7--8	29	58	22	75.9	7	24.1	df 2
	c. 8--9	7	14	3	42.9	4	57.1	N.S
	d. More than 10	0	0	0	0.0	0	0.0	
7	Year of working in the field							
	a. < 2years	8	16	6	75.0	2	25.0	5.613
	b. 2--6 years	14	28	12	85.7	2	14.3	df 3
	c. 7--10 years	12	24	11	91.7	1	8.3	N.S
	d. >10 years	16	32	9	56.3	7	43.8	
8	Income per month (in Rs)							
	a. < 2000	0	0	0	0.0	0	0.0	
	b. 2001--4000	23	46	20	87.0	3	13.0	10.605
	c. 4001--6000	24	48	16	66.7	8	33.3	df 2
	d. 6001 and above	3	6	0	0.0	3	100.0	S
9	Source of health information							
	a. Other farmers	21	42	18	85.7	3	14.3	13.090
	b. Mass media	23	46	16	69.6	7	30.4	df 3
	c. Family members	2	4	2	100.0	0	0.0	S
	d. Health personnel	4	8	0	0.0	4	100.0	
	e. Others	0	0	0	0.0	0	0.0	

Note: N.S- Not significant S- Significant at $P<0.05$ level

Association between knowledge with their selected demographic variables of female

n=50

S.No	Demographic Variables	No	%	Level of Knowledge				Chi square value
				≤ Median (32)		< Median (28)		
				No	%	No	%	
1	Age							
	a. 25--30 years	2	4	2	100	0	0.0	
	b. 31--36 years	15	30	11	73.3	4	26.7	2.55
	c. 37--42 years	6	12	4	66.7	2	33.3	df 3
	d. Above 42 years	27	54	15	55.6	12	44.4	N.S
2	Gender							
	a. Male	0	0	0	0.0	0	0.0	Invalid

	b. Female	50	10	32	0.0	18	0.0	
3	Marital Status							
	a. Single	2	4	2	100.0	0	0.0	1.17
	b. Married	48	96	30	62.5	18	37.5	df 2
	c. Divorced/Separated	0	0	0	0.0	0	0.0	N.S
4	Type of family							
	a. Nuclear	23	46	13	56.5	10	43.5	11.13
	b. Joint	23	46	19	82.6	4	17.4	df 2
	c. Extended	4	8	0	0.0	4	0.0	S
5	Education							
	a. No formal education	0	0	0	0.0	0	0.0	3.90
	b. Primary	34	68	22	64.7	12	35.3	df 3
	c. Secondary.	14	28	10	71.4	4	28.6	N.S
	d. Graduation	2	4	0	0.0	2	100.0	
	e. Post graduation	0	0	0	0.0	0	0.0	
	f. Any other, if specify...	0	0	0	0.0	0	0.0	
6	How many hours per day do you work?							
	a. Less than 6	10	20	8	80.0	2	20.0	10.04
	b. 7--8	30	60	20	66.7	10	33.3	df 3
	c. 8--9	8	16	2	25.0	6	75.0	S
	d. More than 10	2	4	0	0.0	2	0.0	
7	Year of working in the field							
	a. < 2years	10	20	5	50.0	5	50.0	2.37
	b. 2--6 years	14	28	11	78.6	3	21.4	df 3
	c. 7--10 years	9	18	6	66.7	3	33.3	N.S
	d. >10 years	17	34	10	58.8	7	41.2	
8	Income per month (in Rs)							
	a. < 2000	2	4	2	0.0	0	0.0	
	b. 2001--4000	33	66	21	63.6	12	36.4	1.47
	c. 4001--6000	11	22	7	63.6	4	36.4	df 3
	d. 6001 and above	4	8	2	50.0	2	50.0	N.S
9	Source of health information							
	a. Other farmers	9	18	7	77.8	2	22.2	7.42
	b. Mass media	25	50	18	72.0	7	28.0	df 3
	c. Family members	2	4	2	100.0	0	0.0	N.S

d. Health personnel	14	28	5	35.7	9	64.3	
e. Others	0	0	0	0.0	0	0.0	

Note: N.S- Not significant S- Significant at P<0.05 level

Analysis and interpretation of the male and female score of knowledge on occupational dermatitis.

N=100

Domain	Max Statement	Max Score	Range	Mean	SD	Mean%
Male (n=50)	30	30	7--26	18.14	5.03	60.5
Female (n=50)	30	30	8--23	15.12	4.08	50.4

Table 3 showing the Mean, SD and Mean% of knowledge among Male and Female agricultural workers regarding occupational dermatitis

RESULTS

- Over all male agricultural workers mean 18.14, SD 5.03 and mean percentage 60.5%
- Over all female agricultural workers mean 15.12, SD 4.08 and mean percentage 50.4%
- Paired 't' test analysis used to test the male and female score of knowledge. The 't' value is 4.58 ($P < 0.001$) (DF 98 't' value 2.61) shows that there is significant difference between the knowledge about occupational dermatitis among male and female agricultural workers
- The chi-square value shows that there will be a significant association between the knowledge about occupational dermatitis with their selected demographic variables (type of family ,education, hours of income, source of information)

CONCLUSION AND RECOMMENDATIONS

The findings of the study recommended the further interventional approaches regarding the occupational dermatitis in various groups. Special information booklet related to the occupational dermatitis improves their knowledge.

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