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A Study to Assess Occupational Hazard Among Farmers Residing in Rural Area of Rahata Taluka with a view to Develop information Booklet on it

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ABSTRACT

Background of the study : Farming is one of the oldest of human occupation, and for about 5000 years it was the prevalent occupation. Until 1970s, over half of the worlds labor force worked the land. Agriculture has undergone tremendous changes over the 25 years. Technological innovation have increase production but have also created new health and safety problems. Agriculture workers suffer the broadest and most extensive exposure to injury and diseases of any occupational group. Farmers are the significant portion of productive work force in Indian economy. **Material and Methods:** A descriptive study design with survey approach is used to assess occupational health hazards. A total of 100 Farmers were selected as samples by non-probability purposive sampling technique. **Result:** The study findings conclude that, skin problems were identified as the most common occupational health hazards as they accounted for about 53% out of which skin infections were in majority about 14%, followed by eye problems were found about 51% with majority of Farmers having far sightedness about 18%. With regards to musculoskeletal problems, they were found about 41% in Farmers, out of which majority 18% were faced nerve and muscle injury followed by gastro intestinal problems about 38% out of which majority 10% were having anorexia. Ear problems were found about 24% which included majority 12% with hearing impairment followed by respiratory problems 22% with majority of workers having 9% breathing difficulty followed by nervous system problems 7% out of which majority 4% of Farmers were having complaints of change in ability to sense movements. The study findings concluded that there is no any significant association between skin problems and demographic variables such as age, gender, education, religion, monthly income, type of family and marital status except substance abuse and residence of brick factory workers.
Key term: Assess, Occupational hazards, Farmer, Booklet

Introduction

The world of work offers countless opportunities, but within its exciting possibilities lurk unseen dangers known as occupational hazards. These are threats to our health and safety that lie inherent in specific jobs or work environments. From the construction site's physical risks to the emotional strains of healthcare, no profession iswithout its own set of hazards. An occupational hazard can manifest in diverse forms: Physical hazards: Think loud noises, harmful chemicals, radiation, extreme temperatures, and unsafe workspaces – all capable of inflicting physical injuries or illnesses, chemical hazards: Exposure to toxic substances, fumes, and dust can wreak havoc on our respiratory systems, skin, and internal organs, biological hazards: Bacteria, viruses, and other pathogens pose significant risks in healthcare, agriculture, and sanitation settings, psychosocial hazards: Stress, burnout, bullying, andviolence can take a toll on our mental and emotional well-being and ergonomic hazards: Repetitive motions, awkward postures, and heavy lifting can lead to chronic musculoskeletal disorders. The place you work can sometimes be hazardous to your health, even fatal. In 2019, there were 5,333 fatal work injuries recorded in the United States, according to the U.S. Bureau of Labor

Statistics. Fishing, hunting, logging, aviation, roofing, construction, and waste management industries have higher-than- average on-the-job death rates. Transportation incidents accounted for the largest shareof deaths, at more than 2,100, followed by falls, slips, and trips; exposure to harmful substances and environments; unintentional overdoses due to nonmedical use of drugsor alcohol; and fires and explosions. Fortunately, in order to keep those risks and hazards to a minimum, there are federal and state organizations to monitor and reviewthe work environment to ensure every employee's safety.[1]

Problem of the statement:

"A Study to Assess Occupational Hazard Among Farmers Residing in Rural Area of Rahata Taluka with a view to Develop information Booklet on it"

Objectives

1) To Assess the occupational hazards among the farmer.
2) To find out association between occupational hazards Among the farmer withselected demographic variable.
3) To develop and distribute information booklet regarding occupational hazards amongfarmer residing in rural area of Rahata Taluka.

METHODOLOGY

Research Approach And Design:
A descriptive study design with cross sectional survey approach was used for current study.

Research Setting:
This study was conducted in the selected the occupational health hazards amongFarmer residing in rural area in Rahata taluka.

Duration of Study: 6 Weeks.
Population:
In the context to present study, it refers to workers of the occupational healthhazards among Farmer residing in rural area in Rahata taluka.

Target Population:
In this study it refers to the occupational health hazards among Farmer residingin rural area in Rahata taluka.

Accessible Population:
In this study it refers to the brick factory workers who will be easily reached fordata collection and those who fulfils criteria of selection in selected the occupational health hazards among Farmer residing in rural area in Rahata taluka.
Sample:
In this study, sample consists of Farmer residing in rural area in Rahata talukawho meet the inclusion criteria and willing to participate in this study.

Sampling Technique:
For the present study non probability purposive sampling technique was used.
Sample Size:
For the current study total number of samples selected was 100 Farmer residingin rural area in Rahata.

Procedure for data collection
The procedure of data collection was done over a period of 4 weeks in selectedfarm area of Rahata taluka. Permissions were obtained from Institutional Research Ethical Committee, from the Principal of SSEVPCON, Loni and from the head of village (sarpanch) selected villages of, Rahata. The participants under the study were introduced about the nature and purpose of the study and an informed consent were obtained from the subjects. The demographic characteristics were assessed with the useof structured questionnaire and occupational health hazards were assessed with the useof structured checklist. Confidentiality of the participants was maintained

throughout the study.

Data analysis

Descriptive and inferential statistics was for data analysis. The collected data was organized and tabulated by using descriptive statistics included mean, standard deviation. The inferential statistics included chi- square was used test association between selected socio-demographic variables with occupational health hazards

SECTION: I

DESCRIPTION OF THE STUDY SUBJECT ACCORDING TO THEIR DEMOGRAPHIC CHARACTERISTICS

Table 3.1: Frequency and percentage wise distribution of demographic variables

N= 100

S N	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE (%)
1	Age		
	a) 18-30 Years	42	42
	b) 31- 40 Years	28	28
	c) 41-50 Years	18	18
	d) 51- 60 Years	12	12
2	Gender		
	a) Male	68	68
	b) Female	32	32
3	Education		
	a) Illiterate	36	36
	b) Primary Education	44	44
	c) Secondary Education	20	20
	d) Degree/ Diploma	0	0
4	Religion		
	a) Hindu	43	43
	b) Muslim	20	20
	c) Christian	15	15
	d) Others	22	22
5	Residence		
	a) Rural	69	69
	b) Urban	31	31
6	Monthly Income		
	a) <5000/Rs	30	30
	b) Rs. 5001 -10,000/-	40	40
	c) Rs. 10,001 -15,000/-	30	30
	d) >15,001/ Rs	0	0
7	Type of Family		
	a) Nuclear	57	57
	b) Joint	25	25
	c) Extended	18	18
8	Marital Status		
	a) Married	65	65
	b) Unmarried	25	25
	c) Widow	8	8
	d) Divorce	2	2
9	Any Substance Abuse		
	a) Yes	56	56
	b) No	44	44
10	Any Associated Illness		
	a) Yes	33	33
	b) No	67	67

SECTION: II

OCCUPATIONAL HEALTH HAZARDS AMONG FARMER RESINDING INRURAL AREA.

Table 3.2: Occupational health hazards among farmer resinding in rural area.

N=100

S N	Health problems	Frequency	Percentage
1	Respiratory problems		
	A) Nasal Allergy	2	2
	B) Sinusitis	4	4
	C) Enlarged Tonsils	3	3
	D) Asthma	9	9
	E) Dry Cough	5	5
	F) Productive Cough	7	7
	G) Breathing Difficulties	9	9
	H) Bronchitis	2	2
	I) Not Present	59	59
2	Gastrointestinal problems		
	A) Gastritis	6	6
	B) Anorexia	10	10
	C) Nausea	10	10
	D) Colon Disorders	2	2
	E) Constipation	5	5
	F) Vomiting	3	3
	G) Gastroenteritis	2	2
	H) Not Present	62	62
3	Nervous system problems		
	A) Difficulty in heat sensation	3	3
	B) Change in ability to sense movement	4	4
	C) Tingling in extremities	0	0
	D) Shivering	0	0
	E) Not present	93	93
4	Musculoskeletal system		
	A) Fracture	2	2
	B) Lower Back Pain	10	10
	C) Sprains And Bruises	0	0
	D) Ligament Tear	0	0
	E) Nerve And Muscle Injury	18	18
	F) Neck Spasm	11	11
	G) Not Present	59	59
5	Eye problems		
	A) Eye Inflammation	3	3
	B) Irritation Of Eye Membranes	8	8
	C) Eye Sensitivity	5	5
	D) Near Sightedness	12	12
	E) Far Sightedness	18	18
	F) Double Vision	0	0
	G) Low Vision	8	8
	H) Not Present	`46	`46
6	Ear problems		

	A)	Otitis Media	4	4
	B)	Earache	7	7
	C)	Hearing Impairment	12	12
	D)	Hearing Loss	1	1
	E)	Not Present	76	76
7	Skin problems			
	A)	Dry Skin	12	12
	B)	Burning sensation in the skin	5	5
	C)	Skin Infections	14	14
	D)	Skin Burns	10	10
	E)	Skin Sensitivity	9	9
	F)	Moist Skin	0	0
	G)	Not Present	50	50

Table 3.3: Frequency and percentage wise distribution of occupational healthhazards

S N	Health problems	Frequency	Percentage
1	Respiratory problems	41	41
2	Gastrointestinal problems	38	38
3	Nervous system problems	7	7
4	Musculoskeletal system	41	41
5	Eye problems	51	51
6	Ear problems	24	24
7	Skin Problems	53	53

SECTION: III

ASSOCIATION OF OCCUPATIONAL HEALTH HAZARDS WITH SELECTED DEMOGRAPHIC VARIABLES

Table 3.4: Association of skin problems with selected demographic variables.
$p<0.05$

S n	Skin problems	χ2 Value	Df	Significance
1	Age	4.29	3	Not Significant
2	Gender	4.18	1	Significant
3	Education	7.39	3	Not Significant
4	Religion	1.39	3	Not Significant
5	Monthly income	8.29	2	Significant
6	Type of family	4.28	2	Not Significant
7	Marital status	3.12	3	Not Significant
8	Substance abuse	3.2	1	Not Significant
9	Residence	5.33	1	Significant

Above table 3.4 shows association between skin problems and selected demographic variables. It concludes that there is no any significant association betweenskin problems and demographic variables such as age, education, religion, type of family, marital status, and substance abuse except gender, monthly income and residence of farmer residing in rural area.

Table 3.5: Association of eye problems with selected demographic variables.
$p<0.05$

S n	Eye problems	χ2 Value	Df	Significance
1	Age	3.48	3	Not Significant
2	Gender	4.5	1	Significant
3	Education	6.41	3	Not Significant
4	Religion	1.3	3	Not Significant
5	Monthly income	6.64	2	Significant
6	Type of family	4.91	2	Not Significant
7	Marital status	3.58	3	Not Significant
8	Substance abuse	2.72	1	Not Significant
9	Residence	6.51	1	Significant

Above table 3.5 shows association between eye problems and selected demographic variables. It concludes that there is no any significant association betweenskin problems and demographic variables such as age, education, religion, type of family, marital status, and substance abuse except gender, monthly income and residence of farmer residing in rural area.

Table 3.6: Association of musculoskeletal problems with selected demographicvariables.
$p<0.05$

S n	Musculoskeletal problems	χ2 Value	Df	Significance
1	Age	4.25	3	Not Significant
2	Gender	2.18	1	Not Significant
3	Education	3.14	3	Not Significant
4	Religion	2.33	3	Not Significant
5	Monthly income	2.49	2	Not Significant
6	Type of family	3.21	2	Not Significant
7	Marital status	5.21	3	Not Significant
8	Substance abuse	6.46	1	Significant
9	Residence	4.38	1	Significant

Above table 3.6 shows association between musculoskeletal problems and selected demographic variables. It concludes that there is no any significant associationbetween skin problems and demographic variables such as age, gender, education, religion, monthly income, type of family and marital status except substance abuse andresidence of farmer residing in rural area.

Table 3.7: Association of gastro intestinal problems with selected demographicvariables.
$p<0.05$

S n	Gastro intestinal problems	χ2 Value	Df	Significance
1	Age	3.84	3	Not Significant
2	Gender	2.33	1	Not Significant
3	Education	6.69	3	Not Significant
4	Religion	3.58	3	Not Significant
5	Monthly income	5.89	2	Not Significant
6	Type of family	6.55	2	Not Significant
7	Marital status	7.37	3	Not Significant
8	Substance abuse	4.33	1	Significant
9	Residence	3.29	1	Not Significant

Above table 3.7 shows association between gastro intestinal problems and selected demographic variables. It concludes that there is no any significant associationbetween skin problems and demographic variables such as age, gender, education, religion, monthly income, type of family and marital status except substance abuse andresidence of farmer residing in rural area.

Table 3.8: Association of ear problems with selected demographic variables.
$p<0.05$

S n	Ear Problems	χ2 Value	Df	Significance
1	Age	5.29	3	Not Significant
2	Gender	3.29	1	Not Significant
3	Education	6.58	3	Not Significant

4	Religion	1.1	3	Not Significant
5	Monthly income	3.19	2	Not Significant
6	Type of family	2.12	2	Not Significant
7	Marital status	2.19	3	Not Significant
8	Substance abuse	8.1	1	Significant
9	Residence	4.55	1	Significant

Above table 3.8 shows association between ear problems and selected demographic variables. It concludes that there is no any significant association betweenskin problems and demographic variables such as age, gender, education, religion, monthly income, type of family and marital status except substance abuse and residenceof farmer residing in rural area.

Table 3.9: Association of respiratory problems with selected demographicvariables.
$p<0.05$

S n	Respiratory problems	$\chi 2$ Value	Df	Significance
1	Age	5.1	3	Not Significant
2	Gender	3.15	1	Not Significant
3	Education	2.59	3	Not Significant
4	Religion	4.54	3	Not Significant
5	Monthly income	3.1	2	Not Significant
6	Type of family	2.89	2	Not Significant
7	Marital status	6.23	3	Not Significant
8	Substance abuse	5.48	1	Significant
9	Residence	4.53	1	Significant

Above table 3.9 shows association between respiratory problems and selected demographic variables. It concludes that there is no any significant association betweenskin problems and demographic variables such as age, gender, education, religion, monthly income, type of family and marital status except substance abuse and residenceof farmer resinding in rural area.

Table 3.10: Association of nervous system problems with selected demographic variables.
$p<0.05$

S n	Nervous system problems	$\chi 2$ Value	Df	Significance
1	Age	4.12	3	Not Significant
2	Gender	3.18	1	Not Significant
3	Education	5.52	3	Not Significant
4	Religion	2.46	3	Not Significant
5	Monthly income	3.18	2	Not Significant

6	Type of family	2.46	2	Not Significant
7	Marital status	3.12	3	Not Significant
8	Substance abuse	7.44	1	Significant
9	Residence	5.36	1	Significant

Above table 3.10 shows association between respiratory problems and selected demographic variables. It concludes that there is no any significant association betweenskin problems and demographic variables such as age, gender, education, religion, monthly income, type of family and marital status except substance abuse and residencefarmer

Discussion: this shows that results was not significant association between the clinical variable with the selected demographical variables.

CONCLUSION:

The study findings have shown that residing in rural area are more prone to haveoccupational hazards like hazards skin problems, eye problems, musculoskeletal problems, gastro intestinal problems, ear problems, respiratory problems, nervous system problems. It was found that there was no association between occupational health hazards and selected demographic variables except any substance abuse and residence of farmers residing in rural area.

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