



ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2019; 5(1): 32-35
www.allresearchjournal.com
Received: 21-11-2018
Accepted: 25-12-2018

Snehal Dharmadhikari
MSc Nursing, Krishna
Institute of Nursing Sciences
Karad, Satara, Maharashtra,
India

Nand Kumar Kakade
Lecturer, Krishna Institute of
Nursing Sciences, Karad,
Satara, Maharashtra, India

Vaishali Mohite
Principal, Krishna Institute of
Nursing Sciences, Karad,
Satara, Maharashtra, India

Correspondence
Snehal Dharmadhikari
MSc Nursing, Krishna
Institute of Nursing Sciences
Karad, Satara, Maharashtra,
India

Effectiveness of structured teaching programme (STP) on knowledge regarding prevention of occupational health hazards among the bricks kiln workers in Karad city

Snehal Dharmadhikari, Nand Kumar Kakade and Vaishali Mohite

Abstract

Background: The industry and workplaces traditionally provided health care under the banner of first Aid Stations/Plant Medical Services. These outfits managed minor health problems and injuries at the worksite.

Objectives: 1) To assess the level of knowledge regarding prevention of occupational health hazards among the bricks kiln workers in Karad City. 2) To determine the effectiveness of structured teaching programme in knowledge regarding prevention of occupational health hazards among the bricks kiln workers in Karad City. 3) To find out the association between level of knowledge with selected demographic variables.

Methodology: The study was conducted on 55 Brick Kiln Workers Working in Karad City. The tool used for Data Collection was a structured Questionnaire. An evaluative approach was used. Non Probability purposive Sampling Technique was used. Quasi experimental one group pre-test and post-test design was used. The study adopted Penders health promotion model Theory.

Result: The pre-test and post test data analysis revealed that the mean score 15.54 was higher than the mean pre-test score 10.69.

Conclusion: The study conclude that there is a strong need to create awareness amongst the subjects regarding prevention & control occupational health hazards in the brick kiln factory.

Keywords: structured teaching programme, knowledge, brick kiln workers, effectiveness

1. Introduction

Occupational health issues are often given less attention than occupational safety issues because the former are generally more difficult to confront. However, when health is addressed, so is safety, because a healthy workplace is by definition also a safe workplace [4]. Even today, many women in rural area of Karad give childbirth while working in the fields, and they stay at the cowshed during menstruation. They are lacking in information about their rights, and have no knowledge of contraceptives is one of the main cause of health problems in women. Working in brick factories exposes workers, especially children, to irreparable health including acute respiratory infections, back injuries etc. Hence, the study is under taken to improve the knowledge regarding prevention of occupational health hazards and to create health awareness among this people [15].

2. Materials and Methods

The study was conducted one 55 bricks kiln workers in selected brick kiln factories in karad city. The tool used for data collection was a structured knowledge questionnaire. An evaluative approach was used. Non probability purposive sampling technique was used. Quasi-experimental one group pre-test post design was used. The study adopted Pender's health promotion model theory.

3. Results: Analysis and interpretation of the data was based on the projected objectives of the study viz.

- 1) To assess the level of knowledge regarding prevention of occupational health hazards among the bricks kiln workers in Karad City.

- 2) To determine the effectiveness of structured teaching programme in knowledge regarding prevention of occupational health hazards among the bricks kiln workers in Karad City.
- 3) To find out the association between level of knowledge with selected demographic variables.

4. Organization of study findings

Section I: Socio-demographic variables of subject in brick kiln factory workers of brick kiln factories in Karad, Satara District.

Section II

Part I: Knowledge of subject regarding occupational health hazards in the brick kiln factory. This part of tool consists of 15 (questionnaire) knowledge test items covering occupational health hazards in brick kiln factory.

Part II: This part of tool consisted of 10 items on prevention /safety/control measure for occupational health hazards in brick kiln factories.

Total: 25 Questions

Table 1: Distribution of subject according to socio-demographic variable N=55

Sr. No.	Demographic Variable	F	%
1	Age in years		
	18 to 30 years	30	54.5
	31 to 40 years	15	27.2
	41 to 60 years	10	18.1
2	Gender		
	Male	29	52.7
	Female	26	47.2
3	Education		
	Illiterate	50	90.9
	Middle school Certificate	2	3.6
	Primary School	3	5.4
4	Income		
	3000 to 6000 Rs	27	49.0
	6001 to 9000 Rs	28	50.9
5	Work of experience		
	1	4	7.2
	2	2	3.6
	3	2	3.6
	4	6	10.9
	5	2	3.6
	6	3	5.4
	7	2	3.6
	8	5	9.0
	9	11	20
	10	10	18.1
	12	4	7.2
15	1	1.8	
20	2	3.6	
30	1	1.8	
6	Diet		
	Vegetarian	-	-
	Non-vegetarian (Mixed Diet)	100	100%

The data presented in table no.1 indicates that majority of the samples (54.4%) belongs to age group of 18 to 30 years. In terms of gender (52.7%) were males, majority hundred percent (100%) of the subjects are taken mixed diet. Educational status of subjects (90.9%) are illiterate. Majority of the family subjects (50.9%) had monthly

income Rs.3000 to 6000. Majority of the work of experience (18.1%) had 10 year experience in working brick kiln factory.

Section-II

Table 2: frequency and distribution of pre-test knowledge score regarding occupational health hazards in the brick kiln factory N=55

Area of Analysis	Particular	Score	Mean	Median	SD	“p” value	“T” value
Part 1: Knowledge regarding occupational health hazards in the brick kiln factory.	Good	00	18.33	22	16.803	0.1994	1.890 (2df)
	Average	22					
	Poor	33					
Part 2: Knowledge on prevention of occupational health hazards in the brick kiln factory.	Good	2	18.33	5	25.736	0.3426	1.234 (2df)
	Average	48					
	Poor	5					

Above the depicts that the knowledge regarding occupational health hazards in brick kiln factories mean (18.33) & median (22) whereas knowledge on prevention of

occupational health hazards in brick kiln factories mean (18.33) & median (5).

Table 3: Statistical Significance of knowledge on occupational health hazards among bricks kiln workers before and after STP. N=55

Variable	Pre-test		Post-test		Paired “t” Test
	Mean	Standard deviation	Mean	Standard deviation	
Knowledge	10.69	1.85	15.54	1.41	22.13

The data presented in table No 11 indicated that the knowledge regarding occupational health hazards in brick kiln factories Pre-test mean (10.69), SD (1.85) & The

knowledge regarding occupational health hazards in brick kiln factories Post-test mean (15.54), SD (1.41), paired “T” value indicated that (22.136).

Table 4: Level of knowledge on Occupational health hazards among Bricks Kiln Workers in pre-test & post-test. N = 55

Sr. No	Level of Knowledge	Pre Test		Post Test	
		F	%	F	%
1	Inadequate (50 and below)	47	85 %	1	2 %
2	Moderately adequate (51 to 75)	8	15 %	53	96 %
3	Adequate (Above 75)	0	0 %	1	2 %
	Total	55	100 %	55	100 %

Table 6: Association between the knowledge and socio-demographic variable of brick kin factory workers N=55

Sr. No.	Demographic Variable	F	%	Chi-square	Df	P-value
1	Age in years			1.730	2	0.4211 NS
	18 to 30 years	30	54.5			
	31 to 40 years	15	27.2			
	41 to 60 years	10	18.1			
2	Gender			0.006	1	0.9373 NS
	Male and Female	55	100			
3	Education			12.764	2	0.0017 S
	Illiterate	50	90.9			
	Middle school Certify	2	3.6			
	Primary School	3	5.4			
4	Income			2.001	1	0.1572 NS
	3000 to 6000 Rs	27	49.0			
	6001 to 9000 Rs	28	50.9			
5	Work of experience			9.815	13	0.7604 NS
	1	4	7.2			
	2	2	3.6			
	3	2	3.6			
	4	6	10.9			
	5	2	3.6			
	6	3	5.4			
	7	2	3.6			
	8	5	9.0			
	9	11	20			
	10	10	18.1			
	12	4	7.2			
	15	1	1.8			
20	2	3.6				
30	1	1.8				
6	Diet			-	-	<0.0001 S
	Vegetarian	-	-			
	Non-vegetarian (Mixed Diet)	100	100%			

Calculated value “ χ^2 ” shows that in there was statistically significant association between Education (P< 0, 0017) and Diet (P<0.0001) level of significance regarding occupational health hazards in the brick kiln factory. Therefore, Education plays an important role in lack of knowledge regarding occupational health hazards in the brick kiln workers.

5. Discussion

In the present study Mean, Standard Deviation of total knowledge score of brick kiln workers was 10.69+1.85, which was increased in post test score 15.54+1.41 with the mean difference 4.85. Paired t value is 22.13 showing that structured Teaching Programme was Effective. The above findings were supported by a similar cross sectional study was done by Dr. Sujata Patil *et al.* The sample size was 79 selected by Non probability purposive sampling technique.

Majority findings: Morbidities like muscular disorders,

respiratory illnesses, allergies, digestive disorders were significantly higher in brick kiln workers than controls (p<0.001) Addiction was significantly higher in brick kiln workers than the controls (p<0.0001).

Conducted study at Mumbai Found that, Musculoskeletal problems like 26.7% of workers had no health problems. Majority (58.7%), Respiratory problems like cough, cold, Asthma (11.1%).

A cross section study was conducted at Lokmanya Medical Research Centre Chinchwad, Pune. The study Found that respiratory illness, noise, heat, lack of head protection (injury) and dust exposure as important hazards at the brick-manufacturing sites.

6. Conclusion

Based on finding of the study, the following conclusions were drawn. This study was identified two major issues for which dissertation of information to the population could make a difference. The education factor had an influence

over the knowledge regarding occupational health hazards because of less knowledge. The study revealed that plan of teaching was effective as the level of knowledge of the subjects had increased. The study conclude that there is a strong need to create awareness amongst the subjects regarding prevention & control occupational health hazards in the brick kiln factory.

7. References

1. Mwaiselage J, Bråtveit M, Moen B.E and Mashalla Y. 'Respiratory symptoms and chronic obstructive pulmonary disease among cement factory workers', *Scand J Work Environ Health*. 2005; 31(4):316-323.
2. Mustajbegovic J, Zuskin E, Schachter E, Kern J, Milas M.L and Pucar J. 'Respiratory Findings in Tobacco Workers', *BS Chest*. 2003; 123:1740-1748.
3. Dehghan F, Mohammadi S, Sadeghi Z, Attarchi M. 'Respiratory Complaints and Spirometric Parameters in Tile and Ceramic Factory Workers' *Tanaffos*. 2009; 8(4):19-25.
4. Anjum Munir, Muhammad Iqbal and Muhammad Adeel Ashraf from Department of farm Machinery and Power, Faculty of Agriculture Engineering and Technology, University of Agriculture, Faisalabad, Pakistan.
5. Ackerson and Awuah. Study on occupational and water related hazards, 2010.