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"A STUDY TO ASSESS THE EFFECTIVENESS OF VEDIO ASSISTED TEACHING PROGRAMME REGARDING PREVENTIVE METHOD OF FARMER'S LUNG AMONG THE COMMUNITY PEOPLE AT RAMNAGAR, KANPUR, UP."

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ABSTRACT

Farmer's lung disease (FLD) is a form of hypersensitivity pneumonitis (HP) caused by inhaling microorganisms from hay or grain stored in conditions of high humidity in the agricultural workplace. It is probably underdiagnosed, especially in northern Spain, where climatic conditions favor the development of this disease. The clinical presentation may vary, differentiating the chronic (exposure to lower concentrations of the antigen over a longer period time) and the acute forms (after exposure to high concentrations of the antigen). In patients with respiratory symptoms and agricultural occupational exposure, radiological, lung function and/or anatomical pathology findings must be compatible with FLD, bronchoalveolar lavage must show lymphocytosis, and tests must find sensitivity to the antigen. The present study was conducted to assess the effectiveness of vedio assisted teaching programme regarding preventive method of farmer's lung among the community people at Ramnagar, Kanpur, Up. Objectives of the study was 1. To assess the existing level of knowledge regarding preventive method of farmer's lung among the community people at Ramnagar, Kanpur, UP. 2. To evaluate the effectiveness of video assisted teaching programme regarding preventive method of farmer's lung among the community people at Ramngar, Kanpur, UP. 3. To find out the association between the pre-test knowledge score among the community people of regarding farmer's lung with their selected Socio demographic variables. The result of the study was In pre-test out of 200 members (25%) were having inadequate knowledge, (70%) were having moderately adequate knowledge, (5%) were having adequate knowledge in pre-test. While in in post-test out of 200 of members of (8%) were having inadequate knowledge, (72%) were having moderately adequate knowledge, (20%) were having adequate knowledge in post-test.

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INTRODUCTION:

Farmer's lung is considered a type of hypersensitivity pneumonitis that was initially identified in the 1700s by Italian researcher Bernardino Ramazzini. He examined exposure risks across multiple professions and found that the disease process was most abundantly found in breeders and farmers who were exposed to organic dust. Interest and knowledge of the disease were rekindled in 1932 when a county tuberculosis officer identified 5 cases of acute respiratory failure seemingly caused by moldy hay during the springtime. Hypersensitivity pneumonitis, as we understand it today, encompasses a wide breadth of exposures that may illicit a delayed allergic response, specifically in the smaller airways. Farmers, in particular, are exposed to various agents in the fields of their workplace. These include organic agents, inorganic agents, gasses, methane, pesticides, fertilizers, and more. The syndrome has great variability in symptom severity and presentation due in large part to the variable exposure durations and innumerable offending agents. Spread between people is nonexistent, however, common exposure history can lead to similar disease states.

The spores that cause Farmer's Lung are not infectious. Instead, they trigger an allergic reaction. Allergic reactions are produced by the immune system, the body's defence system that normally protects against infectious diseases. The immune system reacts when special substances called "antigens" enter the body. Antigens are usually found in germs such as infectious bacteria or viruses. The immune system reacts to neutralize these germs and prevent infections. Antigens are also found in harmless materials such as mould spores. Sometimes the immune system will react against these by producing a harmful reaction (e.g.,an allergic reaction) against an antigen attached to material like a spore that is otherwise harmless.

Farmer's Lung develops in two steps, as other allergic reactions do. The first time a person inhales a large amount of dust and spores from mouldy hay, the immune system often responds by producing specific antibodies against the antigens. Antibodies are chemicals that circulate in the blood and attack specific antigens. Once the body has produced these antibodies, there is a chance that further exposure to mouldy dust can generate a hypersensitive type of allergic reaction. This reaction is typical of Farmer's Lung.

OBJECTIVES

1. To assess the existing level of knowledge regarding preventive method of farmer’s lung among the community people at Ramnagar, Kanpur, UP.
2. To evaluate the effectiveness of video assisted teaching programme regarding preventive method of farmer’s lung among the community people at Ramnagar, Kanpur, UP. .
3. To find out the association between the pre-test knowledge score among the community people of regarding farmer’s lung with their selected Socio demographic variables.

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HYPOTHESIS

1. **H01-** There is no significant difference between pre-test & post-test knowledge score regarding farmer's lung among the community people
2. **H02-** There is no significant association between pre-test knowledge score regarding farmer's lung with their selected Socio demographic variables.
3. **H1-** There is a significant difference between pre-test and post-test knowledge score regarding regarding farmer's lung among the community people.
4. **H2-** There is a significant association between pre-test knowledge score regarding farmer's lung with their selected Socio demographic variables.

METHODOLOGY

Research Approach

The research approach adopted for the study was Quantitative Evaluative Research Approach.

Research Design

The research design adopted for the study was Quasi Experimental One Group Pre-Test Post-Test Research Design.

Population

The population for the study was community people.

Sample

In this study, the sample was the community people at Ramnagar, Kanpur, UP.

Sample Size

In this study sample size was 200 community people.

RESULT

The association between the pre-test knowledge score among the community people o regarding farmer's lung with their selected Socio demographic variables

SL. NO.	DEMOGRAPHIC VARIABLES	X^2	D.F.	INFERENCE
1	**Age of the mother in year**			
A	20-29	3.49	6	N.S
B	30-39			P>3.49

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				at 0.05 level
C	40-49			T=12.59
D	>50			
2	**Educational status of mother**			
A	No formal education	3.9	6	N.S
B	Formal education			P>3.9
C	Higher secondary education			at 0.05 level
D	Graduation or above (Professio**nal)**			T=12.59
3	**No of children**			
A	One	9.91	6	N.S
B	Two			P>9.91
C	Three			at 0.05 level
D	> Three			T=12.59
4	**The monthly income of the of the family**			
A	<15000/-	30.67	6	S
B	15001-25000/-			P<30.67 at 0.05 level
C	25001-35000/-			T=12.59
D	>35001/-			
5	**Religion**			
A	Hindu	0.207	6	N.S
B	Muslim			P>0.207
C	Christian			at 0.05 level
D	Others			T=12.59
6	**Dietary pattern**			
A	Vegetarian	0.99	2	N.S
B	Non vegetarian			P>0.99 at 0.05 level

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				T=5.99
7	**Types of family**			
A	Nuclear	5.79	4	N.S
B	Joint			P>5.79
C	Extended			at 0.05 level
				T=9.49
8	**Economic class of the family**			
A	Middle class			S
B	Lower class	16.86	6	P<16.86
C	Lower-middle class			at 0.05 level
D	Upper class			T=12.59
9	**Farming Experience**			
A	< 3 yr	17.63	6	S
B	3- 5 Yr			P<17.63
C	5-8 Yr			at 0.05 level
D	>8 Yr			T=12.59
10	**If farmer having primary information regarding farmer's lung getting through**			
A	Ongoing Programme	53.44	6	S
B	Health Education			P<53.44
C	Mass media			at 0.05 level
D	Family			T=12.59

Comparison of Pre-Test and Post-Test Level of Knowledge Regarding Regarding Farmer's Lung Among The Community People

Comparison of pre-test and post-test level of regarding Farmer's Lung among the community people

n = 200

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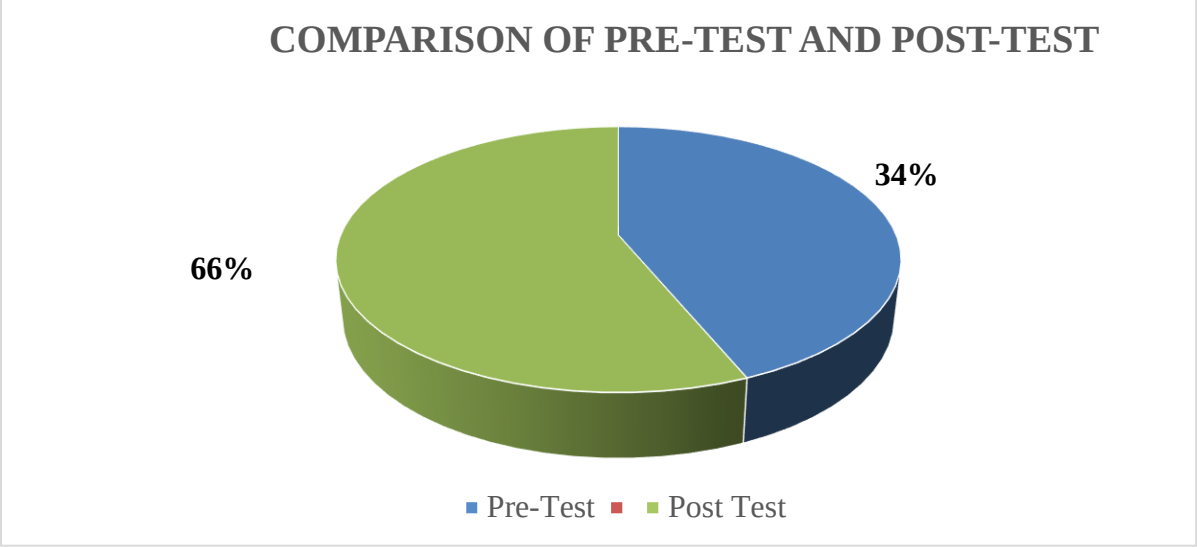
S.NO.	KNOWLEDGE SCORE	MEAN	MEAN DIFFERENCE	MEAN PERCENTAGE	STANDARED DEVIATION
1.	PRE-TEST	12.5	**4**	34%	**4.7**
2.	POST-TEST	16.5		66%	**5.5**



***Pie diagram showing percentage wise distribution of pre-test and post-test level of knowledge regarding farmer's lu*ng among the community people.**

Above (Table No. 13, Fig No.10) The column diagram shows that the mean of pre-test is 12.5 and post-test is 16.5; mean percentage of pre-test is 34% and post-test is 66%; standard deviation of pre-test is 4.7 and post-test is 5.5, mean difference is 4. Thus, it is showing that post-test mean score is higher than pre-test mean score.

DISCUSSION

The discussion chapter shows that after giving the video assisted teaching programme among 200community members, their knowledge regarding preventive method of farmer's lungwas

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increased than before. In pre-test majority of the sample was having moderate and inadequate knowledge and some were adequate knowledge too. But in post-test, very less participants was having inadequate knowledge and moderate knowledge was increased and adequate knowledge level also increased regarding preventive method of farmer's lung.

SUMMARY

The study was conducted "the effectiveness of vedio assisted teaching programme regarding preventive method of farmer's lung among the community people at Ramnagar, Kanpur, UP."In this study quantitative evaluative research approach and quasi-experimental one group pre-test post-test research design was used. Based on the inclusion criteria the sample size was selected by using Non-probability convenient sampling technique at rural area Ramnagar Kanpur Uttar Pradesh.

As there were no standardized tools available, therefore based on the extensive review of literature, two research tools were developed for the data collection, one was a socio-demographic variable tool and second one was a knowledge assessment tool (self-structured knowledge questionnaire which consist 30 multiple choice questions regarding preventive method of farmer's lung. The time taken to complete the questionnaire was 5-7 days. Language was clearly understandable and appropriate.

CONCLUSION

The present study was aimed to assess the effectiveness of vedio assisted teaching programme on knowledge Regarding preventive method of farmer's lung among community members at selected community area of Kanpur Uttar Pradesh. The relevant data was collected and analysed statistically based on the objectives of the study. Following conclusions were drawn. In pre-test knowledge regarding preventive method of farmer's lung, In pre-test out of 200 members (25%) were having inadequate knowledge, (70%) were having moderately adequate knowledge, (5%) were having adequate knowledge in pre-test. While in in post-test out of 200 of members of (8%) were having inadequate knowledge, (72%) were having moderately adequate knowledge, (20%) were having adequate knowledge in post-test.

References

1. Riario Sforza GG, Marinou A. Hypersensitivity pneumonitis: a complex lung disease. Clin Mol Allergy. 2017;15:6.

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2. Dales RE, Munt PW. Farmer's Lung Disease. Can Fam Physician. 1982 Oct;28:1817-20.
3. Deschênes D, Provencher S, Cormier Y. Farmer's lung-induced hypersensitivity pneumonitis complicated by shock. Respir Care. 2012 Mar;57(3):464-6.
4. Tao BG, Shen YE, Chen GX, Wu AL, Hong ZR, Yuan JW, Chen BC, Gu XQ. An epidemiological study on farmer's lung among hay grinders in Dafeng County. Biomed Environ Sci. 1988 Jun;1(1):13-8.
5. Husman K, Vohlonen I, Terho EO, Mäntyjärvi RA. Precipitins against microbes in mouldy hay in the sera of farmers with farmer's lung or chronic bronchitis and of healthy farmers. Eur J Respir Dis Suppl. 1987;152:122-7.
6. Lopez M, Salvaggio JE. Epidemiology of hypersensitivity pneumonitis/allergic alveolitis. Monogr Allergy. 1987;21:70-86.
7. Cushen B, Sulaiman I, Donoghue N, Langan D, Cahill T, Nic Dhonncha E, Healy O, Keegan F, Browne M, O'Regan A. High prevalence of obstructive lung disease in non-smoking farmers: The Irish farmers lung health study. Respir Med. 2016 Jun;115:13-9.