EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON SELECTED RESPIRATORY PROBLEMS INTERMS OF KNOWLEDGE AND RESPIRATORY STATUS AMONG WORKERS.

Dr.Mrs.KALPANARAMESH,Ph.D(NURSING).,

ABSTRACT :

Work is essential for life, development and personal fulfillment .Unfortunately , indispensable activities such as food production , extraction of raw materials, manufacturing of goods energy production and service involve processes, operations and materials which can to a greater or lesser extent , create hazards to the health of workers and those in nearby communities , as well to the general environment. Main aim of the study was evaluate the effectiveness of VATP on selected respiratory problems among the workers. Results and discussion : The mean pretest score of level of knowledge in a group was 9.31 (SD± 4.47) and posttest mean score 19.83 (SD± 8.11) respectively . The posttest mean score was higher than the pretest mean score . The mean pretest score level of respiratory symptoms on respiratory problems in a group was 10.59 (SD±3.03) and mean posttest score2.16 (SD±2.98)respectively. The posttest mean score was lower than pretest mean score, which showed that VATP on respiratory problems and breathing exercise was effective in increased the level of knowledge and reducing the respiratory symptoms among the workers in the spinning mill.

Key words: Video assisted teaching programme, Chronic obstructive respiratory disease, asthma.

Introduction :

India being a developing nation is faced with traditional public health problems like communicable diseases, malnutrition ,poor environmental sanitation and inadequate medical care. However , globalization and rapid industrial growth in the last few years has resulted in emergence of occupational health related issues. Agriculture is the main occupational diseases/morbidity of concern in India silicosis,musculo skeletal injuries , coal workers pneumoconisis, chronic obstructive lung disease , asbestosis,byssinosis, pesticide poisoning and noise induced hearing loss. - Habibullah N Saiyed et.al., (2010)

People face numerous hazards at work . Occupational risks alone account for 1.7% of DALYs lost worldwide.Occupational exposure to airborne particulate is estimate to cause 12% of deaths due to chronic obstructive pulmonary disease. Singh SB. (2012)

Occupational health is branch of community medicine which deals with the effects of occupation of workplace on human health.

Knowledge is power, knowledge is the primary factors that clearly distinguishes the human race from the animals. Man has the power to judge situation decide between what is good and what's bad and make the best use f the gift of knowledge, so that people achieve great feats and heights in every domain of our life. Without knowledge one cannot be successful in life.

According to ILO world day report for safety and health at work, worldwide an estimated 2.34 people die each year from work related accidents and diseases. Now a days the community has been facing increasing risks of respiratory diseases due to smoke , dust exposure , indoor and outdoor air pollution, occupational hazards and infection different industrial section .

The study conducted in Guangzhou in china among workers exposed to cotton dust in factories that processed purely cotton, 18.2% of the employees reported having a cough and phlegm.

Statement of the problem :

A study to evaluate the effectiveness of video assisted teaching programme on selected respiratory problems in terms of knowledge and respiratory status among workers in sree Balaji Spinning mill, Dharapuram.

Objectives:

To assess the pretest and posttest level of knowledge on selected respiratory problems and respiratory status among workers in spinning mill.

To evaluate the effectiveness of VATP on selected respiratory problems among workers in spinning mill.

To find the association between the posttest level of knowledge on selected respiratory problems and respiratory status among workers in spinning mill and their selected demographic variables.

Hypotheses:

H1 : The mean post test level of knowledge score is significantly higher than the mean pretest level of knowledge score among workers in the spinning mill.

H2: The mean posttest level of respiratory symptoms score is significantly lower than the mean pretest level of respiratory symptoms score among workers in the spinning mill.

H3: T he mean posttest level of peak expiratory flow rate is significantly higher than the mean pretest level of peak expiratory flow rate among workers in the spinning mill.

Assumption :

Nurse have an important role in educating the workers on selected respiratory problems .

Workers may have some knowledge on selected respiratory problems.

Knowledge can be imported t individual through other several strategies.

Conceptual frame work :

Nightingale ‘s environmental theory adopted in this study. In this study the main goal of the study was to improve workers health pattern by meets by basic needs of the individuals in their level of knowledge and improve respiratory health.

Methodology :

Evaluative approach and Pre experimental one group pretest posttest design was used for this study. Based on the inclusion and exclusion criteria selected the 400 samples in this study. Tools of the study assess the level of knowledge by using structured knowledge questionnaire on selected respiratory problems, assess the respiratory status by using observational checklist for assess the level of symptoms of respiratory problems and peak expiratory flow meter to assess the level of peak expiratory flow rate . After pretest, VATP on selected respiratory problems and demonstrated the breathing exercises for 30 minutes individually , encouraged and observed the participants to do the exercises for twice a day , 15 days and given the booklet was given the samples. On the 16th day posttest was conducted by using same tool. The data was analysed by using descriptive and inferential statistics.

Data analysis and discussion :

Distribution of demographic variables workers in selected spinning mill .

Regarding sex in a group majority 214 (53.5%) were females and 186(46.5%) were males. With regard to age in years in a group majority 149 (37.25%) belonged to the age group of 20-30 years and educational status in a group majority of the workers 135(33.75%) had

secondary education . With regard to marital status in a group 241 (60.25%) were married and religion in a group majority 362 (90.5%) belonged to hindu religion .Regarding years of working experience in a group majority 128 (32%) were in between 2-5 years of working experience.

Table I:

Frequency and percentage distribution of pretest and posttest level of knowledge on selected respiratory problems among workers in selected spinning mill.

N=400

S. No	**Level of Knowledge**	**Pretest**		**Posttest**	
		F	**%**	**F**	**%**
1	Inadequate knowledge	192	48	28	7
2	Moderately adequate knowledge	176	44	115	28.75
3	Adequate knowledge	32	8	257	64.25

Table I showed that in the pretest majority 192 (48%) had inadequate knowledge, 176 (44%) had moderately adequate knowledge and 32 (8%) had adequate knowledge, where as in the posttest majority 257 (64.25%) had adequate knowledge, 115 (28.75%) had moderately adequate knowledge and 28 (7%) had inadequate knowledge .

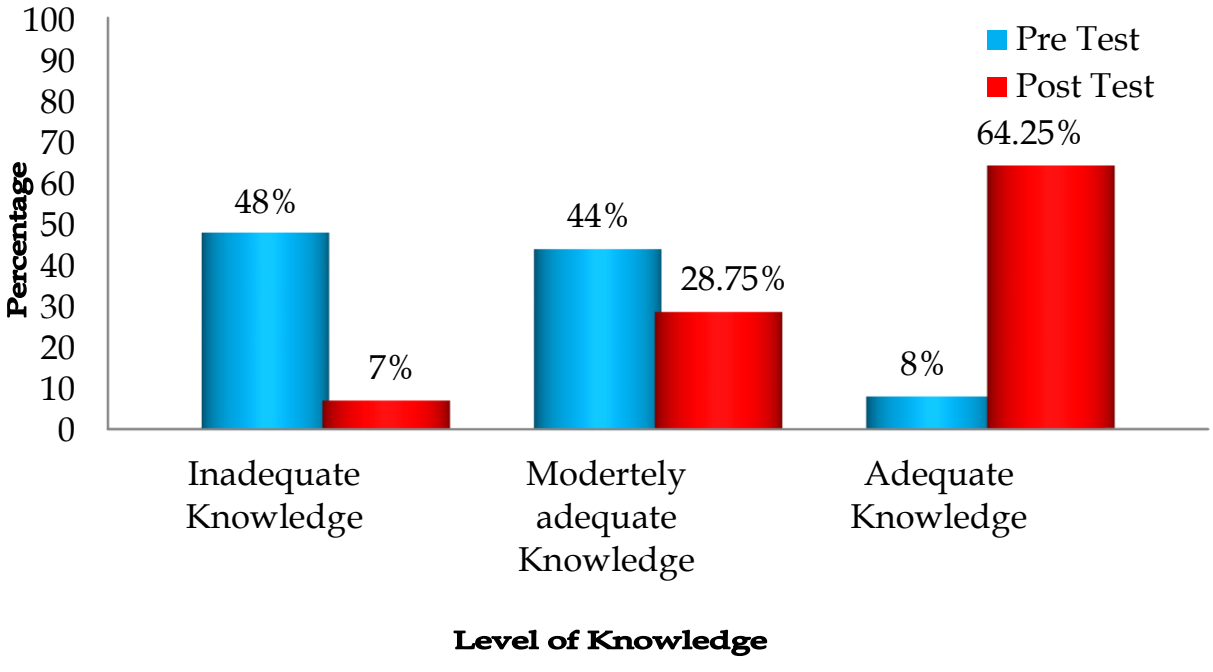


Table II:

Frequency and percentage distribution of pretest and posttest level of symptoms of respiratory problems among workers in selected spinning mill.

N=400

S. No	Level of symptoms of respiratory problems	Pretest		Posttest	
		F	%	F	%
1	Normal	-	-	151	37.75
2	Mild	63	15.75	168	42
3	Moderate	325	81.25	81	20.25
4	Severe	12	3	-	-

Table II showed that, in the pretest majority 325 (81.25%) had moderate level of symptoms of respiratory problems, 63 (15.75%) had mild level of symptoms of respiratory problems, 12 (3%) had severe level of symptoms of respiratory problems and 8 (2%) had normal. Where as in the post test majority 168 (42%) had mild level of symptoms of respiratory problems, 151 (37.75%) had normal and 81 (20.25%) had moderate level of symptom of respiratory problems .

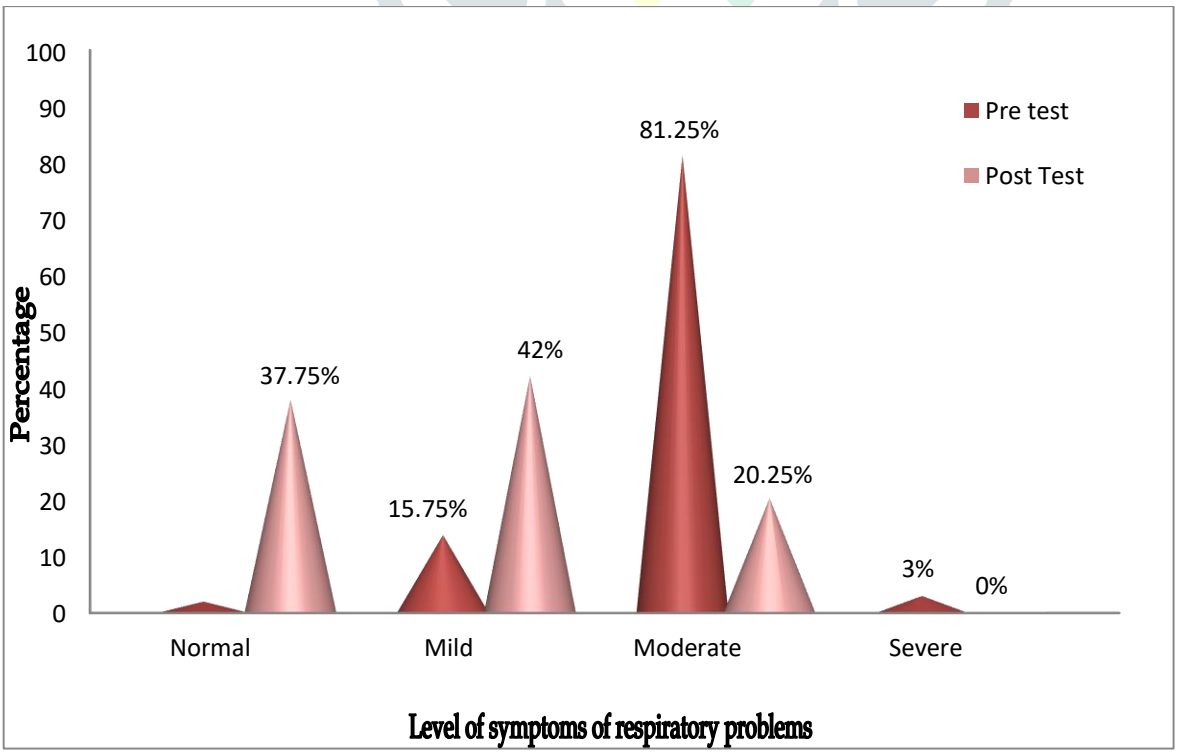


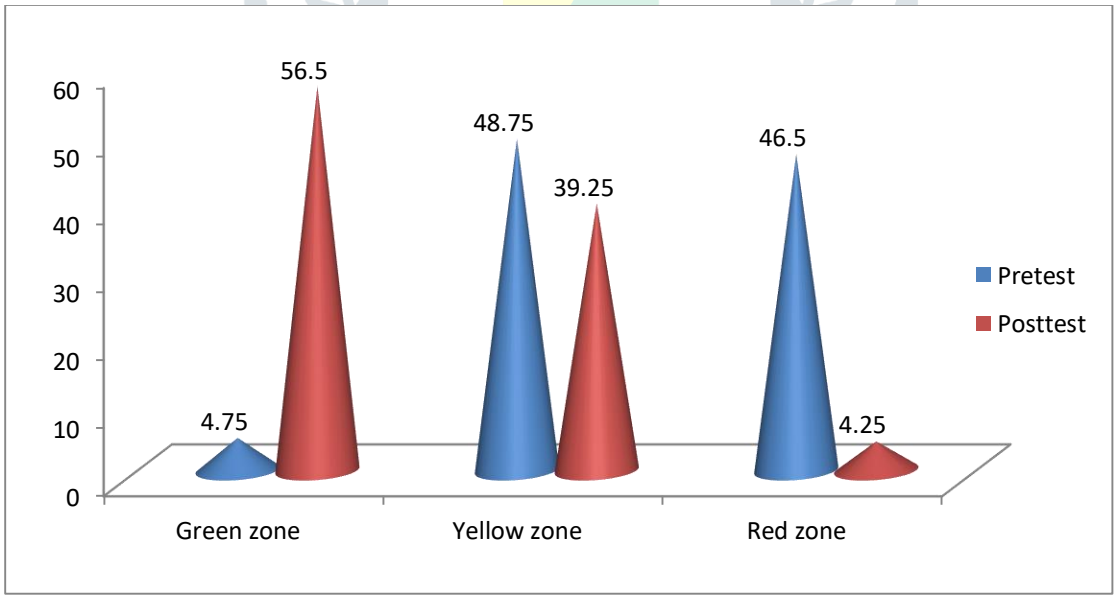
Table III

Frequency and percentage distribution of pretest and posttest level of peak expiratory flow value on respiratory status among workers in selected spinning mill.

N=400

S. No	Level of peak expiratory flow value	Pretest		Posttest	
		F	%	F	%
1	Green zone	19	4.75	226	56.50
2	Yellow zone	195	48.75	157	39.25
3	Red zone	186	46.5	17	4.25

Table III showed that, in the pretest majority 195 (48.75%) had yellow zone level of peak expiratory flow value, 186 (46.5%) had red zone level of peak expiratory flow value and 19 (4.75%) had green zone level of peak expiratory flow value, where as in the posttest, majority 226 (56.50%) had green zone level of peak expiratory flow value, 157 (39.25%) had yellow level of peak expiratory flow value and 17 (4.25%) had red zone level of peak expiratory flow value.



Comparison between the pretest and posttest level of knowledge on selected respiratory problems and respiratory status among workers in spinning mill.

The mean pretest and posttest score of level of knowledge in a group was 9.31 (S.D. ±4.47)and posttest mean score was 19.83 (S.D.± 8.11) respectively. The mean difference was 10.52. The posttest mean score (19.83) was higher than the pretest mean score (9.31). The paired "t" value was 25.64 which was significance at $p<0.05$ level, The results that revealed V.A.T.P on selected respiratory problems was effective in improve the level of knowledge among workers in a group. Hypothesis (H_1) was accepted.

The mean pretest score of level of respiratory symptoms on respiratory problems in a group was 10.59(S.D ± 3.03) and mean posttest score was 2.16.(S.D ± 2.98) respectively. The mean difference was 8.43. The posttest mean score (2.16) was lower than the pretest mean score (10.59). The paired 't'value was 25.13 which was significance at $p <0.05$ level, which showed that teaching on respiratory problems and breathing exercise was effective in reducing the level of respiratory symptoms among a group of workers. Hypothesis (H_2) was accepted.

The mean pretest score of level of peak expiratory flow value in a group is 51.21 (S.D±14.29)and posttest mean score was 80.49 (S.D.±13.60)respectively. The mean difference is 29.28.The posttest mean score (80.49) was higher than the pretest mean score(51.21).The paired "t" value was 31.71 which was significance at $p<0.05$, which shows that teaching and breathing exercise was effective in improve the peak expiratory flow value.Hence H_3 was accepted.

Thiruvengadam Nanthini and Karaline Karunagari ,(2016) to evaluate the effectiveness of video assisted teaching program on safety measures among the workers in the silica based industry in Puducherry , India. A total 105 employees were selected by using convenience sampling technique. Results of the study the mean knowledge score of the subjects in pretest was found to be 21.06 with SD of 4.96 . But after VATP , the mean knowledge score on safety measures was increased to 34.38 with SD of 2.33 , which was statistically significant at $P<0.001$ level. The mean attitude score on safety measures in pretest was found to be 45 with SD of 4.43 and after VATP the mean attitude score on safety measures was increased to 54.48 with SD of 3 , which was also found to be statistically significant at $P<0.001$ level. The mean practice score on safety measures before

VATP was 25.06 with SD of 0.92, and post test mean practice score was found to be increased to 27.43 with the SD of 0.5 which it was statistically significantly at $P < 0.001$ level, from which it was evident that video assisted teaching teaching programme was effective in improve the knowledge,attitude,and practice of the workers. Periodical reorientation on safety measures are needed for all the workers as it is essential for promoting the well being of employees working in any industry.

Conclusion :

One of the first duties of the professional is to educate the masses not to take medicine . - William Osler.

The results of the study concluded that video – assisted teaching programme on selected respiratory problems was effective in improving the knowledge and respiratory status, reducing the symptoms of respiratory problems among workers in the spinning mill .

References:

Brunner et.al., (2010) , Textbook of Medical Surgical Nursing , 10th edition , Lippincott Williams Wilkins , Pp 412-450.

.Kumar and clark ,(2002) Clinical medicine , Respiratory diseases , W.B. Saunders company , Toronto , Pp 910-920.

Olga Dreeben ,(2008) Physical Therapy clinical Handbook for PTAs , (1st edition) Jones and Bartlet publishers ,Sudbury, Boston .Pp 97-103.

Lai.PS, Christian .DC,(2013) Long term respiratory health effects in textile workers ,current opin pulm med,19(2),Pp.152-157.

Jayaraman ,(2016) A study on quality of work life of spinning mill employees in Dindigul district ,Tamilnadu ,India, International Journal of commerce and management Research , 2(12) Pp.82-87.

Ahasan.MR, Ahmad .SA,Khan.TP,(2010) Occupational exposure and respiratory illness symptoms among textile industry workers in a developing country . Appl.Occup.Environmental Hygine, Pubmed,12-18.

Ling cui ,et.al., (2016) Unexpected excessive COPD mortality among female silk textile workers in Shanghai ,China, Occupational Environmental medicine ,12,Pp.883-887.

Aloke Gopal Ghoshal et.al., (2016) The burden of segregated respiratory disease in India and the quality of care in these patients results from the Asia –Pacific burden of Respiratory diseases study,Lung India,33(6),Pp.611-619.

Altin .R. et.al., (2002) Prevalence of byssinosis and respiratory symptoms among cotton mill workers , Respiratory diseases, 69(1) , Pp. 52-56.

Saliu Tosho Abdulsalam .et.al., (2015) Occupational health works in a flour mill in Ilori,North Central ,Nigeria , International Journal of Research and Review (IJRR), 2(3), Pp. 67-70.

Aneeta Khoso , Assad Ahmed Nafees, (2015) Knowledge ,attitude and practice regarding respiratory symptoms among textile workers of Karachi ,Pakistan, Journal of Pakistan medical Association ,8(13), Pp. 56-60.