International Journal of Advance Research in Community Health Nursing

E-ISSN: 2664-1666
P-ISSN: 2664-1658
www.communitynursing.net
IJARCHN 2024; 6(1): 40-49
Received: 05-12-2023
Accepted: 08-01-2023

R Karpagavalli
Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry, India

J Jasmine
Department of Medical Surgical Nursing, Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry, India

Jalajarani
Department of Obstetrics and Gynaecology Nursing, College of Nursing, Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry, India

A Felicia Chitra
College of Nursing, Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry, India

Corresponding Author:
R Karpagavalli
Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry, India

Effectiveness of video assisted teaching programmea regarding knowledge on milk borne diseases and milking practice among milk haulers at selected village in Puducherry

R Karpagavalli, J Jasmine, Jalajarani and A Felicia Chitra

DOI: https://doi.org/10.33545/26641658.2024.v6.i1a.166

Abstract
Background: Food is the basic essential need for man. It contains a variety of nutrients, including carbs, proteins, fats, vitamins, and minerals. Milk is the main product of the dairy farm industry, and it is primarily produced for human consumption. Milk is ranked first among foods because it is an essential choice for humans from birth to senility. Milk born disease is a disease that is transmitted through contaminated milk and can be spread directly by humans or indirectly through air polluted water. It can come from any animal. Raw milk can carry dangerous germs such as *Brucella*, *Campylobacter*, *Cryptosporidium*, *E. Coli*, *Listeria*, and *Salmonella*. The most common sources of milk contamination are excrement from soiled animals, bacteria from poor milking practises, failure to detect milk mastitis pathogens, and foreign bodies, particularly from departed components from milking machines and bulk tanks used to transport milk.
Aim: The study was to evaluate the effectiveness of Video Assisted Teaching Programme regarding knowledge on milk borne diseases and milking practice among milk haulers in selected villages in Puducherry.
Methodology: Quantitative research approach was used. Pre-Experimental with one group pre-test and post-test research design was adopted to the study. Purposive sampling technique was used to select the samples. Pre-test was conducted to assess the level of knowledge by using the semi-structured questionnaires and observed practice by using checklist. On the same day Video Assisted Teaching Programme regarding knowledge on Milk Borne Diseases and milking practice. After seventh day of the intervention post test was conducted by using same semi-structured questionnaires and observed practice by checklist.
Result: The study scores revealed that the pre-test mean score of knowledge regarding milk borne diseases was 8.50±4.83 and the post-test mean score of knowledge was 14.60±1.43. The mean difference score was 6.10(30.5%). The calculated paired 't' test value of t = 6.407 found to be statistically significant at $p<0.0001$ level. The study shows that the pre-test mean score of milking practice was 11.77±2.74 and the post-test mean score of milking practice was 14.37±1.16. The mean difference score was 2.60(13%). The calculated paired 't' test value of t = 4.819 found to be statistically significant at $p<0.0001$ level.
Conclusion: The study result proved that the effectiveness of video assisted teaching among milk haulers had improved the level of knowledge on milk borne diseases and milking practice.

Keywords: Video assisted teaching, milk borne diseases, milking practice, clean milk production

Introduction
Food is the basic essential need for man. It contains a variety of nutrients, including carbs, proteins, fats, vitamins, and minerals. These nutrients are necessary for healthy development, growth, and lifelong maintenance. They are crucial in addressing the unique requirements of patients recovering from illness as well as pregnant and lactating mothers [1].
Milk is high in protein, with 30 ml containing 1g. Protein is essential for many vital bodily functions, including growth and development, cellular repair, and immune system regulation. Milk is a "complete protein," which means it contains all nine essential amino acids required for body to function properly by formation of enzyme. Casein and whey protein are the two main forms of protein found in milk. Both are regarded as premium proteins [2].

Milk has high nutritional moisture content and serves as a favorable environment for the development of microorganisms. For the manufacturing of dairy products that are of high quality, have a pleasing favour and are pathogen-free and long-lasting, good quality milk is a necessity. Clean milk production is defined as milk produced from healthy milk animals with typical flavors, free of dirt and filth, including just the allowed amount of germs, and essentially devoid of adulterants, pathogens, different toxins, aberrant residues, pollutants, and metabolites [3].

Global milk production is predicted to increase across the board, with North America and Asia experiencing the largest output increases, reaching 928 million tonnes in 2021, 1.5 percent more than in 2020 Asia, particularly India, China, and Pakistan, is experiencing a rise due to increasing dairy cattle numbers, improvements in agricultural productivity, and investments [4].

India is the top milk producer in the world, accounting for 23% of all milk produced worldwide. Milk production has developed into a significant secondary source of income for millions of rural people, and it now plays a critical role in creating job and income opportunities, particularly for women and small-scale farmers. In the years 2020 and 2021, the amount of milk consumed per person reached a level of 427 g per day, which is higher than the global average of 321 g per day in 2020. However, tiny, marginal farmers and labourers without access to land produce the majority of the milk in the nation [5].

About 21 core metric tonnes of milk would be produced in the nation in 2020- 21, representing an increase of 6.2% per year over the previous five years. In 2020- 21, milk will be available to each person at a rate of 427 g per day. According to a National Institution for Transforming India Aayog research, milk production is anticipated to reach over 30 core tonnes by 2030. In order to serve the nation's expanding dairy industry, infrastructure for processing dairy products must be strengthened [6].

Statement of Problem

A study to evaluate the effectiveness of Video Assisted Teaching Programme regarding knowledge on Milk Borne Diseases and Milking Practice among Milk Haulers at selected villages in Puducherry.

Objectives

1. To assess the pre-test and post-test level of knowledge on milk borne diseases among milk haulers.
2. To assess the pre-test and post-test level on milking Practice among milk haulers.
3. To evaluate the Effectiveness of video assisted teaching programme regarding knowledge on milk borne diseases and milking Practice among milk haulers.
4. To correlate the post-test level of knowledge on milk borne diseases with milking Practice among milk haulers.
5. To associate the post-test level of knowledge on milk borne diseases and milking Practice among milk haulers with their selected demographic variables.

Methodology

Quantitative research approach Pre experimental one group pre-test and post-test research design was adapted. Total 30 sample (Milk haulers) were selected for study by purposive sampling technique.

The tool consists of 3 sections: SECTION A: Socio Demographic variables.

Section B: Semi-structured Questionnaire on Knowledge towards Milk Borne Diseases among Milk Haulers.

Section C: Checklist on Observed Milking Practices among Milk Haulers.

Tools section-B and section-C. Section-B was assessed by semi - structured questionnaire on knowledge of milk borne diseases. It has totally 20 multiple choice questions and one mark is awarded for correct answer and incorrect answer marked as zero.

Grade	Score	Percentage
Adequate knowledge	>15	>75%
Moderate knowledge	10-15	50 - 75%
Inadequate knowledge	0-10	<50%

Section C: Checklist is used to observe the milking practice, which consists of twenty items and each appropriate practice (yes) carried one mark and inappropriate practice (No) carried zero mark. The total score is 20.

Grade	Score	Percentage
Good practice	>15	>75%
Moderate practice	10-15	50 - 75%
Poor practice	0-10	<50%

Result and Discussion

Table 1: Section A: Frequency and percentage distribution of demographic variables of milk haulers. n = 30

Demographic Variables	Frequency (n)	Percentage (%)
Age		
<25 years	2	6.7
26 - 50 years	7	23.3
51 - 75 years	12	40
>75 years	9	30
Gender		
Male	23	76.7
Female	6	20
Others	1	3.3
Residence		
Rural	26	86.7
Semi urban	4	13.3
Urban	-	-

Religion		
Hindu	30	100
Christian	-	-
Muslim	-	-
Others	-	-
Type of residence		
Kutcha	14	46.7
Semi - Kutcha	12	40
Pucca	4	13.3
Type of family		
Nuclear family	20	66.7
Joint family	7	23.3
Extended family	-	-
Single family	3	10
Educational status		
Illiterate	16	53.4
Secondary	10	33.3
High school	3	10
Graduate	1	3.3
Housing system for cow?		
Conventional barns	11	36.7
Loose housing barn system	10	33.3
Free - range system	9	30
How many animals do you have?		
1 - 3 cows	8	26.7
4 - 6 cows	15	50
>6 cows	7	23.3
Among them how many cows are GIVI ng milk?		
1 - 3 cows	17	56.7
4 - 6 cows	9	30
>6 cows	4	13.3
Years of experience in dairy farming ?		
<5 years	13	43.3
6 - 10 years	10	33.4
>10 years	7	23.3
System of dairy farming		
Small holder dairy farming system	19	63.3
Pastoral dairy farming system	9	30
Landless Peri-urban dairy farming system	2	6.7

Table 2: Frequency and percentage distribution of pretest and post test level of knowledge on milk borne diseases among milk haulers. n = 30

Level of Knowledge	Pretest		Post Test	
	No	%	No	%
Inadequate (≤50%)	19	63.33	0	0
Moderately Adequate (51 - 75%)	9	30	18	60
Adequate (>75%)	2	6.7	12	40

The table 2 shows that in the pre test, 19(63.33%) had inadequate knowledge, 9(30%) had moderately adequate and 2(6.7%) had adequate knowledge.

Whereas in the post test after the administration of video assisted teaching 18(60%) had moderately adequate knowledge and 12(40%) had adequate knowledge among milk haulers.

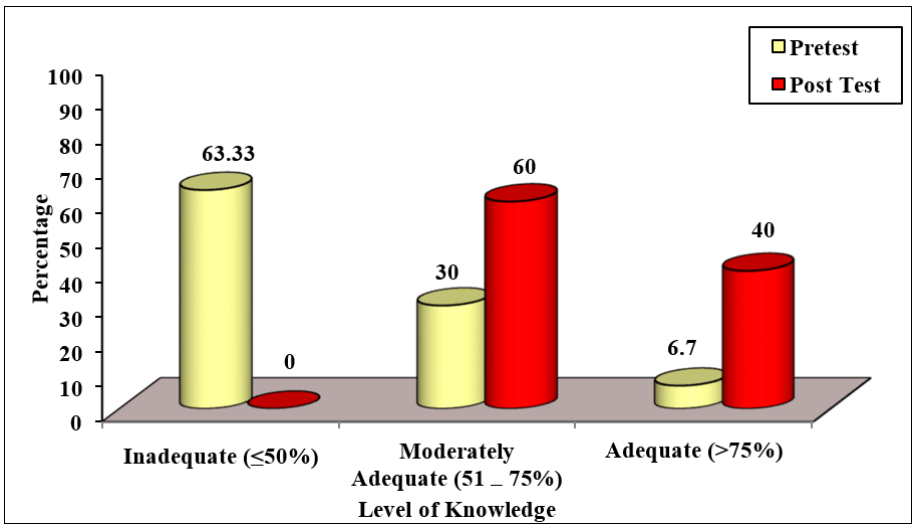

Fig 1: Percentage distribution of pretest and post test level of milking practice among milk haulers

Table 3: Frequency and percentage distribution of pretest and post test level of milking practice among milk haulers. n=30

Level of Milking Practice	Pretest		Post Test	
	No.	%	No.	%
Poor (≤50%)	7	23.33	0	0
Moderate (51 - 75%)	22	73.34	23	76.67
Good (>75%)	1	3.33	7	23.33

The table 3 shows that in the pretest, 22(73.34%) had moderate milking practice, 7(23.33%) had poor milking practice and 1(3.33%) had good milking practice.
Whereas in the post test after the administration of video assisted teaching 23(76.67%) had moderate milking practice and 7(23.33%) had good milking practice among milk haulers.

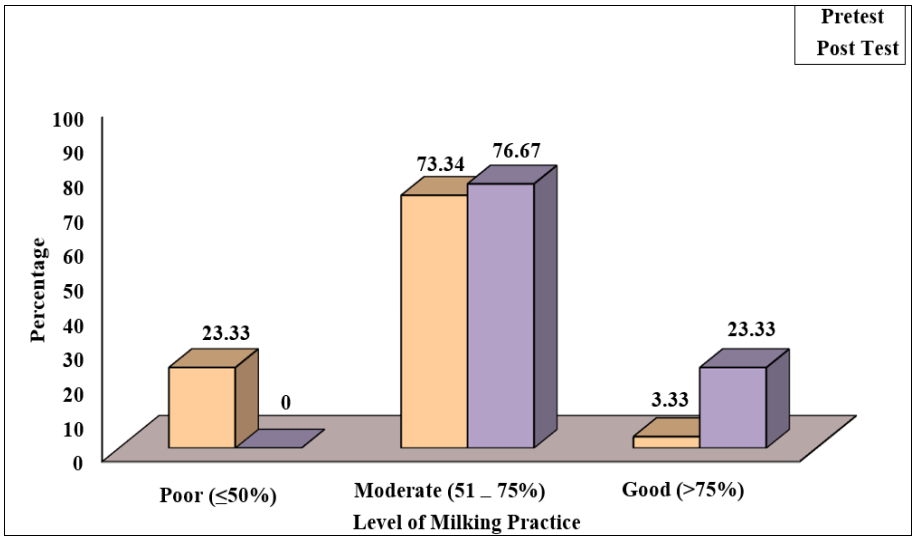

Fig 2: Percentage distribution of pretest and post test level of milking practice among milk haulers

Table 4: Effectiveness of video assisted teaching regarding knowledge on milk borne diseases among milk haulers. n=30

Knowledge	Mean	S.D	Mean Difference & %	Paired 't' test Value
Pretest	8.50	4.83	6.10 (30.5%)	t = 6.407 p=0.0001, S***
Post Test	14.60	1.43		

***p*<0.001, S - Significant

The table 4 shows that the pretest mean score of knowledge regarding milk borne diseases was 8.50±4.83 and the post test mean score of knowledge was 14.60±1.43. The mean difference score was 6.10(30.5%).
The calculated paired 't' test value of t = 6.407 found to be statistically significant at *p*<0.0001 level. This clearly infers that Video Assisted Teaching regarding knowledge regarding milk borne diseases imparted among milk haulers was found to be effective in improving the post test level of knowledge among milk haulers.

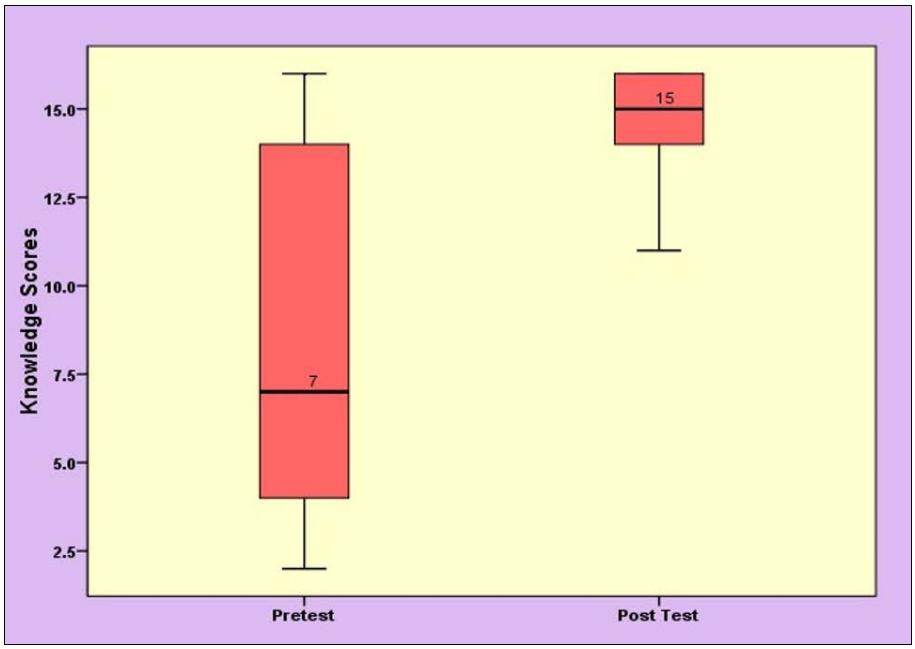

Fig 3: Boxplot showing the effectiveness of video assisted teaching regarding knowledge on milk borne diseases among milk haulers (Median: Pretest - 7.0, Post Test - 15.0)

Table 5: Effectiveness of video assisted teaching regarding milking practice among milk haulers. n = 30

Milking Practice	Mean	S.D	Mean Difference & %	Paired 't' test Value
Pretest	11.77	2.74	2.60 (13%)	t = 4.819 p=0.0001, S***
Post Test	14.37	1.16		

The table 5 shows that the pretest mean score of milking practice was 11.77±2.74 and the post test mean score of milking practice was 14.37±1.16. The mean difference score was 2.60(13%). The calculated paired 't' test value of t = 4.819 found to be statistically significant at $p<0.0001$ level. This clearly infers that Video Assisted Teaching regarding milking practice imparted among milk haulers was found to be effective in improving the post test level of milking practice among milk haulers.

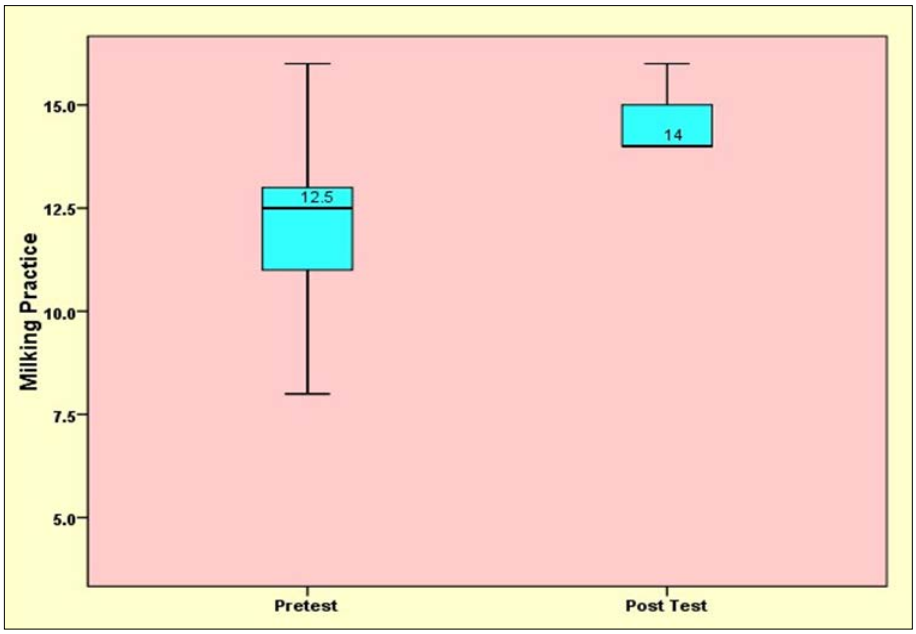

Fig 4: Boxplot showing the effectiveness of video assisted teaching regarding milking practice among milk haulers (Median: Pretest - 12.5, Post Test - 14.0)

Table 6: Correlation between post test knowledge on milk borne disease with milking practice among milk haulers.

Variables	Mean	S.D	Karl Pearson's Correlation 'r' Value
Knowledge	14.60	1.43	r = 0.529 p=0.003, S**
Milking Practice	14.37	1.16	

The table 6 shows that the post test mean score of knowledge regarding milk borne disease among milk haulers was 14.60±1.43 and the post test milking practice mean score was 14.37±1.16. The calculated Karl Pearson's Correlation value of r = 0.529 shows a moderate positive correlation which was found to be statistically significant at $p<0.003$ level. This clearly infers that when knowledge regarding milk borne disease among milk haulers increases their milking practice also increases.

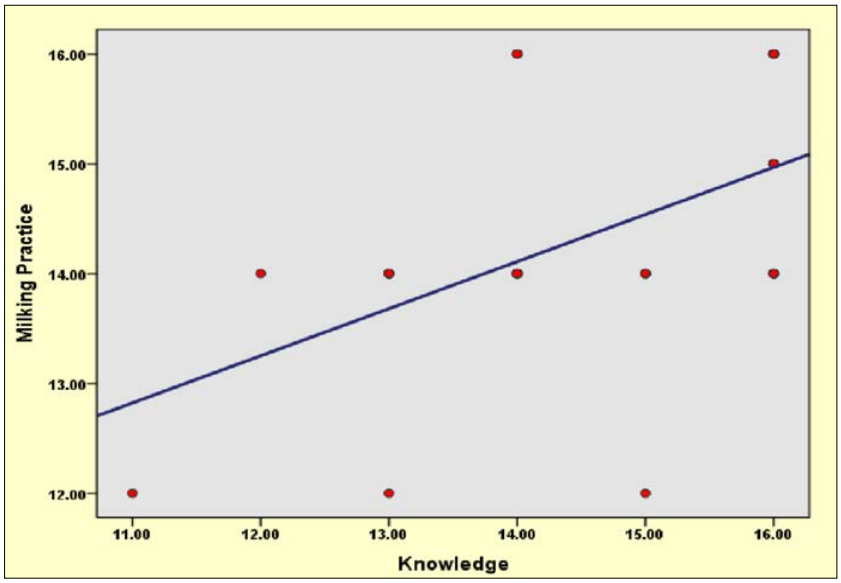

Fig 5: Scatter Dot diagram showing the correlation between post test knowledge regarding milk borne disease and milking practice among milk haulers (r = 0.529)

Table 7: Association of post test level of knowledge regarding milk borne diseases among milk haulers with selected demographic variables
n = 30

Demographic Variables	Level of knowledge				Chi-Square & p-value
	Moderately Adequate		Adequate		
	No.	%	No.	%	
Age					χ^2=1.329 d.f=3 p=0.722 N.S
<25 years	1	3.3	1	3.3	
26 - 50 years	3	10	4	13.3	
51 - 75 years	8	26.7	4	13.3	
>75 years	6	20	3	10	
Gender					χ^2=6.087 d.f=2 p=0.048 S*
Male	11	36.7	12	40	
Female	6	20	0	0	
Others	1	3.3	0	0	
Residence					χ^2=0.192 d.f=1 p=0.661 N.S
Rural	16	53.3	10	33.3	
Semi urban	2	6.7	2	6.7	
Urban	-	-	-	-	
Religion					-
Hindu	18	60	12	40	
Christian	-	-	-	-	
Muslim	-	-	-	-	
Others	-	-	-	-	
Type of residence					χ^2=2.371 d.f=2 p=0.306 N.S
Kutcha	9	30	5	16.7	
Semi - Kutcha	8	26.7	4	13.3	
Pucca	1	3.3	3	10	
Type of family					χ^2=1.121 d.f=2 p=0.571 N.S
Nuclear family	13	43.3	7	23.3	
Joint family	4	13.3	3	10	
Extended family	-	-	-	-	
Single family	1	3.3	2	6.7	
Educational status					χ^2=7.847 d.f=3 p=0.049 S*
Illiterate	6	20	10	33.3	
Secondary	9	30	1	3.3	
High school	2	6.7	1	3.3	
Graduate	1	3.3	0	0	
Housing system for cow?					χ^2=0.627 d.f=2 p=0.731 N.S
Conventional barns	6	20	5	16.7	
Loose housing barn system	7	23.3	3	10	
Free - range system	5	16.7	4	13.3	
How many animals do you h ave?					χ^2=1.156 d.f=2 p=0.561 N.S
1 - 3 cows	5	16.7	3	10	
4 - 6 cows	10	33.3	5	16.7	
>6 cows	3	10	4	13.3	
Among them how many cows are giving milk?					χ^2=0.459 d.f=2 p=0.795 N.S
1 - 3 cows	10	33.3	7	23.3	
4 - 6 cows	5	16.7	4	13.3	
>6 cows	3	10	1	3.3	
Years of experience in dairy farming?					χ^2=0.810 d.f=2 p=0.667 N.S
<5 years	8	26.7	5	16.7	
6 - 10 years	5	16.7	5	16.7	
>10 years	5	16.7	2	6.7	
System of dairy far ming					χ^2=1.552 d.f=2 p=0.460 N.S
Small holder dairy farming system	13	43.3	6	20	
Pastoral dairy farming system	4	13.3	5	16.7	
Landless peri-urban					
Dairy farming system	1	3.3	1	3.3	

*p<0.05, S - Significant, N.S - Not Significant

The table 7 shows that the demographic variables gender (χ^2= 6.087, p=0.048) and educational status (χ^2= 7.847, p=0.049) had shown statistically significant association with post test level of knowledge regarding milk borne diseases among milk haulers at p<0.05 level respectively and the other demographic variables had not shown statistically significant association with post test level of knowledge regarding milk borne diseases among milk haulers.

Table 8: Association of posttest level of milking practice among milk haulers with selected demographic variables. n = 30

Demographic Variables	Level of knowledge				Chi-Square &p-value
	Moderately Adequate		Adequate		
	No.	%	No.	%	
Age					χ^2=2.405 d.f=3 p=0.493 N.S
<25 years	2	6.7	0	0	
26 - 50 years	4	13.3	3	10	
51 - 75 years	10	33.3	2	6.7	
>75 years	7	23.3	2	6.7	
Gender					χ^2=0.551 d.f=2 p=0.759 N.S
Male	17	56.7	6	20	
Female	5	16.7	1	3.3	
Others	1	3.3	0	0	
Residence					χ^2=1.835 d.f=1 p=0.176 N.S
Rural	21	70	5	16.6	
Semi urban	2	6.7	2	6.7	
Urban	-	-	-	-	
Religion					-
Hindu	23	76.7	7	23.3	
Christian	-	-	-	-	
Muslim	-	-	-	-	
Others	-	-	-	-	
Type of residence					**χ^2=7.507** d.f=2 p=0.023 S*
Kutcha	11	36.7	3	10	
Semi - Kutcha	11	36.7	1	3.3	
Pucca	1	3.3	3	10	
Type of family					χ^2=0.399 d.f=2 p=0.819 N.S
Nuclear family	16	53.3	4	13.3	
Joint family	5	16.7	2	6.7	
Extended family	-	-	-	-	
Single family	2	6.7	1	3.3	
Educational status					χ^2=1.840 d.f=3 p=0.606 N.S
Illiterate	11	36.7	5	16.7	
Secondary	8	26.7	2	6.7	
High school	3	10	0	0	
Graduate	1	3.3	0	0	
Housing system for cow?					χ^2=0.728 d.f=2 p=0.695 N.S
Conventional barns	9	30	2	6.7	
Loose housing barn system	8	26.7	2	6.7	
Free - range system	6	20	3	10	
How many animals do you have?					χ^2=2.110 d.f=2 p=0.348 N.S
1 - 3 cows	7	23.3	1	3.3	
4 - 6 cows	12	40	3	10	
>6 cows	4	13.3	3	10	
Among them how many cows are giving mil k?					χ^2=0.013 d.f=2 p=0.994 N.S
1 - 3 cows	13	43.3	4	13.3	
4 - 6 cows	7	23.3	2	6.7	
>6 cows	3	10	1	3.3	
Years of experience in dairy far ming?					χ^2=0.569 d.f=2 p=0.752 N.S
<5 years	10	33.3	3	10	
6 - 10 years	7	23.3	3	10	
>10 years	6	20	1	3.3	
System of dairy far ming					χ^2=2.082 d.f=2 p=0.353 N.S
Small holder dairy farming system	13	43.3	6	20	
Pastoral dairy farming system	8	26.7	1	3.3	
Landless peri-					
urban dairy farming system	2	6.7	0	0	

*p<0.05, S - Significant, N.S - Not Significant

The table 8 shows that the demographic variable type of residence (χ^2= 7.507, p=0.023) had shown statistically significant association with post test level of milking practice among milk haulers at p<0.05 level and the other demographic variables had not shown statistically significant association with post test level of milking practice among milk haulers.

Distribution of Demographic Variables

Considering the distribution of demographic variables with respect to age of the subjects on the study, majority 12(40%) were aged between 51 - 75 years, 9(30%) were aged >75 years, 7(23.3%) were aged between 26 - 50 years and 2(6.7%) were aged <25 years.

Regarding the gender, majority 23(76.7%) were male,

6(20%) were female and only 1(3.3%) belonged to Transgender.

With respect to residence, 26(86.7%) were residing in rural area and 4(13.3%) were residing in urban area.

With reference to religion, all 30(100%) were Hindus. Concerning the type of residence, 14(46.7%) were residing in Kutcha house, 12(40%) were residing in Semi - Kutcha house and 4(13.3%) were residing in Pucca house.

As per the type of family, 20(66.7%) belonged to nuclear family and 7(23.3%) belonged to joint family.

Regarding the educational status, 16(53.4%) were illiterates, 10(33.3%) had secondary education, 3(10%) had high school education and 1(3.3%) were graduates.

Considering the housing system for cow, 11(36.7%) had conventional barns as housing system for cow, 10(33.3%) had loose housing barn system and 9(30%) had free - range system as housing system for cow.

In relation to how many animals do you have, 15(50%) had 4 - 6 cows, 8(26.7%) had 1 - 3 cows and 7(23.3%) had more than 6 cows.

With reference to number of cows giving milk, 17(56.7%) had 1 - 3 milk giving cows, 9(30%) had 4 - 6 cows and 4(13.3%) had more than 6 cows.

With regard to years of experience in dairy farming, 13(43.3%) had less than 5 years of experience, 10(33.4%) had 6 - 10 years of experience and 7(23.3%) had more than 10 years of experience in dairy farming.

Regarding the system of dairy farming, 19(63.3%) had small holder dairy farming system, 9(30%) had pastoral dairy farming system and 2(6.7%) had landless peri-urban dairy farming system.

The data was analyzed as per objectives stated

The first objective of the study was to assess the pretest and posttest level of knowledge on milk borne diseases among milk haulers.

The findings of the analysis revealed that in the pretest, 19(63.33%) had inadequate knowledge, 9(30%) had moderately adequate and 2(6.7%) had adequate knowledge whereas in the post test after the administration of video assisted teaching 18(60%) had moderately adequate knowledge and 12(40%) had adequate knowledge among milk haulers.

The findings of the study was supported by Elisabeth Lindahl, Nosirjon Sattorov *et al*. 2014, found a cross-sectional study of Knowledge, Attitudes and Practices Relating to Brucellosis among Small-Scale Dairy Farmers in an Urban and Peri-Urban Area of Tajikistan, was conducted during six weeks in 2011. The study subjects were small-scale dairy farmers living in the urban and peri-urban area of the capital Dushanbe in Tajikistan. In total, 441 farmers were interviewed using a questionnaire with questions about demographic characteristics, knowledge, attitudes and practices relating to brucellosis. A majority of the respondents did not use any protective measure when handling cows having an abortion or when dealing with aborted materials. Poor knowledge, high-risk behaviours and a willingness to learn more strengthens the logic for including health education as part of control programmes [7].

The Second objective of the study was to assess the pretest and posttest level on milking Practice among milk haulers.

The findings revealed that in the pretest, 22(73.34%) had moderate milking practice, 7(23.33%) had poor milking practice and 1(3.33%) had good milking practice whereas in the post test after the administration of video assisted teaching 23(76.67%) had moderate milking practice and 7(23.33%) had good milking practice among milk haulers

The findings of the study supported by Kebede Amenu, Getahun E. Agga *et al* 2020, conducted a quantitative study on Community-tailored training to improve the knowledge, attitudes, and practices of women regarding hygienic milk production and handling in Borana pastoral area of southern Ethiopia . Data were collected from 120 women were trained and their KAP assessed at baseline (pre-training), immediately after training, and 6 month after training. Overall, training increased the knowledge score of the participants from 75.6 to 91.4% in the immediate post-training assessment, and to 90.0% at 6 month post training. Compared with pre-training (58.8%), we found a statistically significant difference in the overall attitude score at the immediate post-training evaluation (64.7%) but not 6 month after (61.4%). We observed a similar increase in the understanding of correct practices from 49.5% at pre-training to 64.7% 6 month following the training [8].

The Third objective of the study was to evaluate the effectiveness of video assisted teaching regarding knowledge on milk borne diseases and milking Practice among milk haulers.

The findings of the comparison between the pretest and post test knowledge scores revealed that the pretest mean score of knowledge regarding milk borne diseases was 8.50±4.83 and the post test mean score of knowledge was 14.60±1.43. The mean difference score was 6.10(30.5%). The calculated paired 't' test value of t = 6.407 found to be statistically significant at $p<0.0001$ level. This clearly infers that Video Assisted Teaching regarding knowledge regarding milk borne diseases imparted among milk haulers was found to be effective in improving the post test level of knowledge among milk haulers.

The analysis also revealed that the pretest mean score of milking practice was 11.77±2.74 and the post test mean score of milking practice was 14.37±1.16. The mean difference score was 2.60(13%). The calculated paired 't' test value of t = 4.819 found to be statistically significant at $p<0.0001$ level. This clearly infers that Video Assisted Teaching regarding milking practice imparted among milk haulers was found to be effective in improving the post test level of milking practice among milk haulers.

The findings of the study is also supported by another study conducted by Shibu K Jacob Anu George 2013, conducted a cross sectional study on analysis of the Clean Milk Production Practices of Dairy Farmers of Kerala The vandazhy gram panchayat was selected randomly. Sixty dairy farmers of Mangalam Dam APCOS were selected and the data were collected during the focus group discussion method. Knowledge and adoption of dairy farmers on clean milk production practices were analysed using a semi-structured interview schedule it was revealed that more than half of the respondents 77% had medium knowledge of CMP practices and the 23% rest were in the low knowledge of CMP practices. For adoption of CMP practices, majority of the respondents were in the low category 60% followed by medium 33% and high categories (1%) [9].

The first hypotheses H_1: From the above findings it was proven that, there was a significant difference between the pretest and posttest level of knowledge and milking practice

on Milk Borne Disease among milk haulers. Hence the hypotheses (H1) were accepted. Therefore it implies that video assisted teaching is improve the knowledge and milking practice among milk haulers and found to be statistically significant.

The Fourth objective of the study was to correlate the post-test level of knowledge on milk borne diseases with milking Practice among milk haulers.

Analyzing the relationship between the knowledge and practice the findings revealed that the post test mean score of knowledge regarding milk borne disease among milk haulers was 14.60±1.43 and the post test milking practice mean score was 14.37±1.16. The calculated Karl Pearson's Correlation value of r = 0.529 shows a moderate positive correlation which was found to be statistically significant at $p<0.003$ level. This clearly infers that when knowledge regarding milk borne disease among milk haulers improves then their milking practice also improves.

Second hypotheses H_2

From the findings of the study it was clearly statedthat there was a significant correlation between knowledge and milking practice among milk haulers. Hence the hypotheses (H2) wereaccepted. Therefore, it was concluded that the practice improves withgood knowledge.

The Fifth objective of the study was to associate the post-test level of knowledge and milking Practice on milk borne diseases among milk haulers with their selected demographic variables.

The present study result revealed that the demographic variables, gender and educational status had shown statistically significant association with post test level of knowledge regarding milk borne diseases among milk haulers at $p<0.05$ level and the other demographic variables had not shown statistically significant association with post test level of knowledge regarding milk borne diseases among milk haulers.

The present study result revealed that the demographic variable type of residence had shown statistically significant association with post test level of milking practice among milk haulers at $p<0.05$ level and the other demographic variables had not shown statistically significant association with post test level of milking practice among milk haulers.

The third hypotheses H3

There was a significant association between post-test level of knowledge and milking practice on milk borne diseases among milk haulers with their selected demographic variables such as gender, educational status and type of residence. Hence, the hypotheses (H3) were accepted.

Conclusion

The study result proved that the effectiveness of video assisted teaching among milk haulers had improved the level of knowledge on milk borne diseases and milking practice. It was evident that Video Assisted Teaching Programme was effectively in improving the knowledge on milk borne disease and effective and hygienic way of milk protection among milk haulers. It also enhances the community to get the quality milk and prevent the milk borne diseases.

Therefore, the video assisted teaching intervention can be used at the community level among milk haulers in various urban contexts to improve understanding of milk related diseases and milking practice.

Conflict of Interest

Not available

Financial Support

Not available

References

1. John S. Essentials of Nutrition and Dietetics for Nursing. Wolters kluwer india Pvt. Ltd; c2016.
2. Dudek SG, Dudek SG. Nutrition Essentials for Nursing Practice. Lippincott Williams&Wilkins; c2013.
3. Gangadharan .S, Hemamalini M. Community Health Nursing: Framework for Practice: Vol 2-E-Book. Elsevier India; c2021.
4. Emerging trends and outlook Highlights [Internet]; c2021 Dec. Available from: https://www.fao.org/3/cb7982en/cb7982en.p df
5. Milk Production in India [Internet]. pib.gov.in; c2021. Available from: https://pib.gov.in/FeaturesDeatils.aspx?NoteI d=151137&ModuleId%20=%202
6. Piyush. India's Milk Production Registers Significant Growth by 83 MT in last 8 years [Internet]. adda247; c2022. [cited 2022 Dec 16]. Available from:
7. Department of Animal Husbandry and Dairying Ministry of Fisheries, Animal Husbandry and Dairying Government of India [Internet]; c2022. Available from:
8. García-Yuste S. Sustainable and Environmentally Friendly Dairy Farms. Springer Nature; c2020.
9. Food Safety & Production Standards | Dairy Farmers of Canada [Internet]. Dairy farmers of canada.ca. Available from:
10. National Animal Disease Control Programme (NADCP) | Department of Animal Husbandry & Dairying [Internet]. dahd.nic.in. Available from:
11. Donkor ES, Aning KG, Quaye J. Bacterial contaminations of informally marketed raw milk in Ghana. Ghana Medical Journal; c2010 Jun 8, 41(2).
12. Berge AC, Baars T. Raw milk producers with high levels of hygiene and safety. Epidemiology and Infection; c2020, 148.
13. Jayarao BM, Donaldson SC, Straley BA, Sawant AA, Hegde NV, Brown JL. A Survey of Foodborne Pathogens in Bulk Tank Milk and Raw Milk Consumption among Farm Families in Pennsylvania. Journal of Dairy Science. 2006 Jul;89(7):2451-8.
14. Lindahl E, Sattorov N, Boqvist S, Magnusson U. A Study of Knowledge, Attitudes and Practices Relating to Brucellosis among Small-Scale Dairy Farmers in an Urban and Peri-Urban Area of Tajikistan. Selvey LA, editor. PLOS ONE. 2015 Feb 10;10(2):e0117318.
15. Amenu K, Agga GE, Kumbe A, Shibiru A, Desta H, Tiki W, *et al*. MILK Symposium review: Community-tailored training to improve the knowledge, attitudes, and practices of women regarding hygienic milk production and handling in Borana pastoral area of southern Ethiopia. Journal of Dairy Science. 2020 Nov;103(11):9748-57. Farmers of Kerala. Indian Journal of Applied Research. 2011 Oct 1;3(7):604-6.
16. Jacob SK, George A. Analysis of the clean milk

production practices of dairy farmers of Kerala. Indian Journal of Applied Research. 2013;3(7):604-6.

How to Cite This Article
Karpagavalli R, Jasmine J, Jalajarani Chitra AF. Effectiveness of video assisted teaching programmea regarding knowledge on milk borne diseases and milking practice among milk haulers at selected village in Puducherry. International Journal of Advance Research in Community Health Nursing. 2024;6(1):40-49.