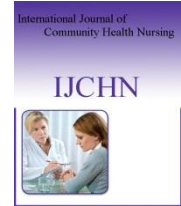




International Journal of Community Health Nursing

Journal homepage: www.mcmed.us/journal/ijchn



IMPACT OF A VIDEO ASSISTED TEACHING PROGRAM ON KNOWLEDGE AND ATTITUDE REGARDING THE ILL EFFECTS OF SUBSTANCE USE AMONG RURAL POPULATION

Wajidabegum Tangadgi¹, Laxmibai Biradar², Madhu M P^{3*}

¹Lecturer, Department of Community Health Nursing, Shri GESS College of Nursing Ankali, Belagavi, Karnataka, India

²Assistant Professor, Department Gynecological Nursing (OBG), Shri GESS College of Nursing Ankali, Belagavi, Karnataka, India

³Assistant Professor Dept of Child Health Nursing, Shri GESS College of Nursing Ankali, Karnataka, India.

Corresponding Author
Wajidabegum Tangadgi

Email: - wajeedamirajakar@gmail.com

Article Info

Received: 29/06/2026; **Revised:** 25/07/2026

Accepted: 01/08/2026

ABSTRACT

Background: Substance use is a major public health concern that adversely affects the physical, psychological, social, and economic well-being of individuals and communities. Improving awareness through educational interventions is essential, particularly among rural populations where access to health information is often limited. **Objectives:** To evaluate the effectiveness of a video assisted teaching program on knowledge and attitude regarding the ill effects of substance use among the rural population in selected rural areas area of Kalaburagi district, Karnataka. **Methods:** A pre-experimental one group pre-test and post-test design was adopted. A total of 50 rural adults were selected using convenience sampling. Data was collected using a structured knowledge questionnaire and structured attitude scale. Following the pre-test, participants received video assisted teaching program on the ill effects of substance use. Post test assessment was conducted after the interventions. Data was analyzed using descriptive and inferential statistics, including paired pre-test. **Results:** the finding revealed that before the intervention, 64% of participants had moderate knowledge, 32% had poor knowledge and only 4% had good knowledge regarding ill effects of substance use. After the intervention, 84% demonstrated moderate knowledge and 16% showed good knowledge. Regarding attitude, 62% of participants had a favorable attitude during the pre- test, which increased to 74% in the post test. The paired pre-test showed statistically significant improvement in both knowledge ($t = 11.67, p < 0.05$) and attitude ($t = 11.09, p < 0.05$) score following the interventions. **Conclusion:** The study concluded that the video assisted teaching program was effective in improving knowledge and attitude regarding the ill effects of substance use among rural populations.

Key Words: Substance Use, Video Assisted Teaching, Knowledge, Attitude, Rural Population, Health Education, Community Health Nursing.

INTRODUCTION

Substance use remains one of the leading preventable causes of morbidity and mortality worldwide and continues to pose a major public health challenge. Psychoactive substances such as alcohol, tobacco, cannabis, opioids, and other addictive drugs adversely affect physical, psychological, social, and economic well-being. The harmful use of these substances contributes to non-communicable diseases, mental health disorders, injuries,

road traffic accidents, domestic violence, reduced productivity, and premature deaths. Despite ongoing national and international control measures, the prevalence of substance use continues to increase, particularly among adolescents and young adults, making prevention strategies an important public health priority.

In India, substance use has become an emerging health concern affecting both urban and rural populations. Rural communities are especially vulnerable because of



limited access to health information, inadequate awareness regarding the harmful effects of substance use, cultural acceptance of certain substances, and insufficient preventive health services. Tobacco and alcohol remain the most consumed psychoactive substances, while the use of cannabis and other illicit drugs has also shown an increasing trend. Lack of adequate knowledge and unfavorable attitudes toward substance use contribute to delayed recognition of health hazards and poor utilization of preventive services.

Health education is recognized as one of the most effective strategies for preventing substance use and promoting healthy lifestyles. Educational interventions improve awareness, correct misconceptions, encourage behavioral change, and empower individuals to make informed decisions regarding their health. With advances in educational technology, video-assisted teaching has emerged as an effective learning method by combining audiovisual stimulation with structured educational content. Compared with conventional health education methods, video-assisted teaching enhances attention, improves comprehension, facilitates retention of information, and promotes positive attitudes toward health-related behaviors.

Nurses play a pivotal role in community-based health promotion and disease prevention. As frontline healthcare professionals, they are responsible for educating individuals, families, and communities regarding healthy lifestyle practices and the prevention of substance-related disorders. Community-based educational programs conducted by nurses have demonstrated positive outcomes in improving public awareness and encouraging behavioral modifications related to substance use prevention.

Although several awareness programs have been implemented, evidence regarding the effectiveness of structured video-assisted teaching among rural populations remains limited. Evaluating educational interventions is essential to determine their impact on improving knowledge and attitudes, thereby guiding future community health programs and policy decisions. Assessing these outcomes among rural populations can provide valuable evidence for strengthening health education initiatives and enhancing the role of nurses in substance use prevention.

Therefore, the present study was undertaken to evaluate the effectiveness of a video-assisted teaching program on knowledge and attitude regarding the ill effects of substance use among the rural population in selected rural areas of Kalaburagi District, Karnataka. The findings are expected to contribute to evidence-based nursing practice and support the development of effective community-based health education strategies aimed at reducing the burden of substance use.

MATERIAL AND METHODS

A quantitative research approach with a pre-experimental one-group pre-test and post-test design was adopted to evaluate the effectiveness of a video-assisted teaching program on knowledge and attitude regarding the

ill effects of substance use among the rural population in selected rural areas of Kalaburagi District, Karnataka.

A total of 50 participants were selected using a non-probability purposive sampling technique. Data was collected using a structured questionnaire consisting of demographic variables, a 30-item knowledge questionnaire, and a 35-item attitude scale. The research instruments and video-assisted teaching program were validated by experts, and the reliability of the instruments was established before data collection.

Following informed consent, participants completed the pre-test. A structured video-assisted teaching program was then administered, and the post-test was conducted seven days later using the same questionnaire.

Descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (paired *t*-test, Pearson's correlation coefficient, and Chi-square test) were used for data analysis. Statistical significance was considered at $p < 0.05$.

Ethical approval was obtained from the Institutional Ethics Committee, and written informed consent was obtained from all participants before data collection.

RESULTS

A total of 50 rural participants completed both the pre-test and post-test assessments. The majority were aged 26–35 years (34%), male (68%), illiterate (36%), engaged in agriculture/coolie work (40%), belonged to the Hindu religion (54%), lived in nuclear families (52%), and had a family history of substance use (60%).

The mean knowledge score increased from 12.44 ± 3.64 to 17.06 ± 3.21 , while the mean attitude score improved from 92.20 ± 20.55 to 101.20 ± 19.73 following the intervention. Paired *t*-test demonstrated statistically significant improvements in both knowledge and attitude ($p < 0.001$).

Mean pre-test and post-test scores

Comparison of knowledge and attitude scores before and after the video-assisted teaching program

Following the intervention, the proportion of participants with poor knowledge decreased to zero, while the proportion with good knowledge increased from 4% to 16%. Similarly, positive attitude increased from 6% to 14%, and non-favorable attitude declined from 32% to 12%.

Knowledge level before and after intervention

Distribution of participants by knowledge category. Pearson's correlation analysis showed no significant correlation between knowledge and attitude scores ($r = -0.079$). Chi-square analysis also revealed no statistically significant association between pre-test knowledge or attitude scores and the selected demographic variables ($p > 0.05$).



Table 1: Comparison of pre-test and post-test knowledge and attitude scores

Variable	Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD	Paired <i>t</i>	<i>p</i> value
Knowledge	12.44 $\pm$ 3.64	17.06 $\pm$ 3.21	11.67	<0.001
Attitude	92.20 $\pm$ 20.55	101.20 $\pm$ 19.73	11.09	<0.001

Table 2: Baseline demographic characteristics of participants (N = 50)

Variable	n (%)
Age (years)	
18–25	13 (26)
26–35	15 (34)
36–45	7 (14)
46–55	6 (12)
>55	7 (14)
Gender	
Male	34 (68)
Female	16 (32)
Education	
Illiterate	18 (36)
Primary	7 (14)
High school	12 (24)
PUC	7 (14)
Graduate & above	6 (12)

Table 3: Distribution of participants according to knowledge and attitude levels.

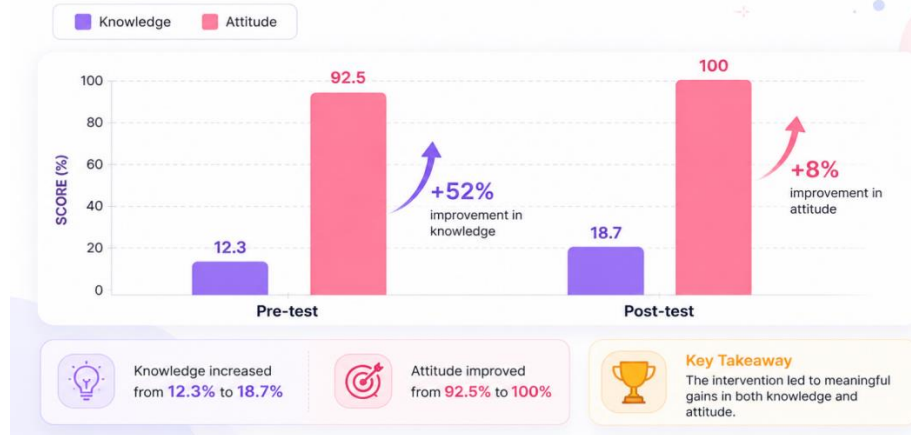
Category	Pre-test n (%)	Post-test n (%)
Knowledge		
Poor	16 (32)	0 (0)
Moderate	32 (64)	42 (84)
Good	2 (4)	8 (16)
Attitude		
Non-favorable	16 (32)	6 (12)
Favorable	31 (62)	37 (74)
Positive	3 (6)	7 (14)

Table 4: Correlation and association analysis.

ANALYSIS	RESULT
Correlation between knowledge and attitude	$r = -0.079, p > 0.05$
Association of knowledge with demographic variables	Not significant
Association of attitude with demographic variables	Not significant

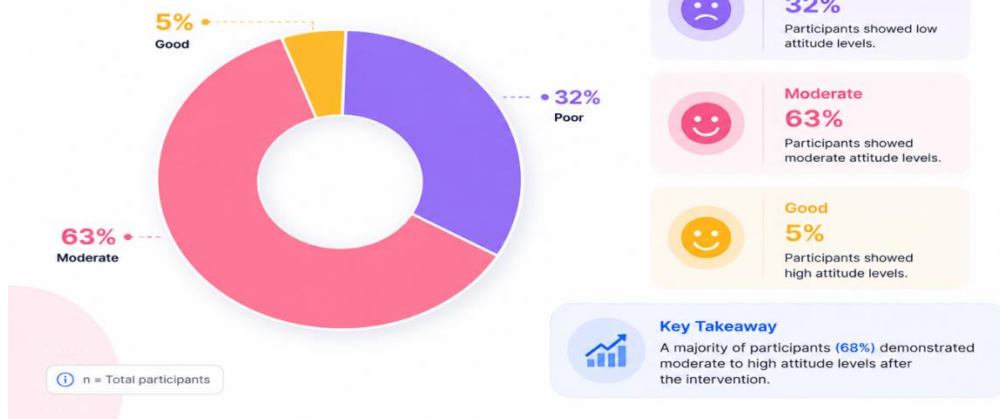
Knowledge and Attitude Scores Before vs. After the Intervention

Significant improvement observed in both knowledge and attitude after the intervention.



Attitude Levels After the Intervention

Most participants reported a positive attitude following the intervention.



DISCUSSION

The present study demonstrated that the video-assisted teaching program significantly improved knowledge and attitude regarding the ill effects of substance use among the rural population. The post-test knowledge and attitude scores were significantly higher than the pre-test scores ($p < 0.001$), indicating the effectiveness of the intervention.

The findings are consistent with previous studies reporting that structured educational programs effectively enhance awareness and promote positive attitudes toward substance use prevention. No significant association was found between pre-test knowledge or attitude scores and the selected demographic variables, suggesting that the

intervention was beneficial across different participant groups.

Overall, the study supports the use of video-assisted teaching as an effective community health education strategy for improving awareness regarding the harmful effects of substance use.

CONCLUSION

The study concluded that the video-assisted teaching program was effective in improving the knowledge and attitude of the rural population regarding the ill effects of substance use. Significant improvements were observed in post-test knowledge and attitude scores compared with pre-test scores. Therefore, video-assisted teaching can be recommended as an effective health



education strategy for community-based substance use prevention programs.

RECOMANDATIONS

- 1) Similar studies may be conducted with a larger sample size to improve the generalizability of the findings.

- 2) A randomized controlled study may be undertaken to compare the effectiveness of different educational interventions
- 3) Long-term follow-up studies are recommended to assess the retention of knowledge and attitude over time.

CONFLICT OF INTEREST – NON

REFERENCES

1. Kapoor, B. (2008). *Textbook of psychiatric nursing*. Kumar Publishing House.
2. National Drug Dependence Treatment Centre, All India Institute of Medical Sciences. (2007). *Substance use disorder manual for nursing personnel*. SRP Print-O-Pack Private Limited.
3. Townsend, M. C. (2005). *Essentials of psychiatric mental health nursing* (3rd ed.). F. A. Davis Company.
4. Stuart, G. W., & Laraia, M. T. (2008). *Principles and practice of psychiatric nursing* (8th ed.). Elsevier India Private Limited.
5. National Institute of Mental Health and Neurosciences. (2002). *Model district program for prevention of alcohol and drug problems in the community (Project report)*. NIMHANS.
6. Dube, K. C., & Handa, S. K. (1971). Drug use in health and mental illness in an Indian population. *British Journal of Psychiatry*, 118, 345–346.
7. Deb, P. C., & Jindal, R. B. (1974). *Drinking in rural areas: A study in selected villages of Punjab* (Monograph). Punjab Agricultural University.
8. Reddy, M. V., & Chandrashekhar, C. R. (1998). Prevalence of mental and behavioral disorders in India: A meta-analysis. *Indian Journal of Psychiatry*, 40, 149–157.
9. Ray, R., Mondal, A. B., Gupta, K., Chatterjee, A., & Bajaj, P. (n.d.). *The extent, pattern and trends of drug abuse in India: National survey*. United Nations Office on Drugs and Crime & Ministry of Social Justice and Empowerment, Government of India.
10. Fullilove, M. T., Fullilove, R. E., Smith, M., Winkler, K., Michael, C., Panzer, P. G., et al. (1993). Violence, trauma, and post-traumatic stress disorder among women drug users. *Journal of Traumatic Stress*, 6(4), 533–543.
11. Drummer, O. H., Gerostamoulos, D., Batziris, H., Chu, M., Caplehorn, J. R. M., et al. (2003). The incidence of drugs in drivers killed in Australian road traffic crashes. *Forensic Science International*, 134(2–3), 154–162.
12. Diane, B. M., Loeble, K., Tatafy, E., Matsunaga, D. S., & Cassel, K. (2008). Using drama to prevent teen smoking: Development, implementation and evaluation of Crossroads in Hawaii. *Health Promotion Practice*, 10, 117–127.
13. Janis, I. L., & Mann, L. (1965). Effectiveness of emotional role-playing in modifying smoking habits and attitudes. *Journal of Experimental Research in Personality*, 1(2), 84–90.
14. Polit, D. F., & Beck, C. T. (2006). *Nursing research: Principles and methods* (7th ed.). Lippincott Publications.
15. Fávero, J. L., Meucci, R. D., Faria, N. M. X., Fiori, N. S., & Fassa, A. G. (2018). Alcohol consumption among tobacco farmers: Prevalence and associated factors. *Ciência & Saúde Coletiva*, 23(3), 871–882.
16. Barik, A., et al. (2016). Alcohol use-related problems among a rural Indian population of West Bengal: An application of the Alcohol Use Disorders Identification Test (AUDIT). *Alcohol and Alcoholism*, 51(2), 215–223.
17. Cheadle, A., Pearson, D., Wagner, E., Psaty, B. M., Diehr, P., & Koepsell, T. (1995). A community-based approach to prevention of alcohol use among adolescents on an American Indian reservation. *Public Health Reports*, 110(4), 439–447.
18. World Health Organization Country Office for India. (2008). *Report on tobacco control in India*. World Health Organization Country Office for India.
19. Biglan, A., Ary, D. V., Smolkowski, K., et al. (2000). A randomized controlled trial of a community intervention to prevent adolescent tobacco use. *British Medical Journal*, 9(1), 24–32.
20. Chih, P. C., Montgomery, S., Pentz, M. A., Rohrbach, L. A., Johnson, A., Flay, B. R., et al. (1998). Effects of a community-based prevention program on decreasing drug use in high-risk adolescents. *American Journal of Public Health*, 88, 944–948.

