Impact of Peer-prepared Video Clip on the Knowledge and Extent of Practice of Healthy Food Choices among Young Adult

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ABSTRACT

Nutrition is vital for health and development, influencing bodily needs and reducing non-communicable diseases risk. This study examined the impact of peer-prepared video clips on young adults' knowledge and practice of healthy food choices. Objectives included assessing the knowledge and practice levels pre and post-test and evaluating the effectiveness of the video. Additionally, it aimed to correlate post-test results with demographic variables. A pre-experimental quantitative approach and one-group pretest-posttest design were utilized. Purposive sampling selected 31 young adults. A structured pretest questionnaire was administered via Google Forms, followed by a peer-prepared video on healthy food choices. The post-test was conducted five days later. Results showed that, in the pretest, 4 participants (12.91%) had inadequate knowledge and 27 (87.09%) had moderately adequate knowledge. Post-test, 22 participants (70.96%) had moderately adequate knowledge, while 9 (29.03%) achieved adequate knowledge. Regarding practice, 4 participants (12.91%) had inadequate practice levels pretest, and 26 (83.87%) had moderately adequate practice. The study demonstrated the peer-prepared video's effectiveness in improving knowledge and practice regarding healthy food choices among young adults. This highlights the potential of peer-created educational content in promoting better nutritional habits.

Keywords: Nutrition; Diseases; Young adults.

INTRODUCTION

Food choice refers to how people decide what to buy and eat, influenced by culture, heritage, and upbringing. It provides vital nutrients needed for our bodies to function. Good food choices are especially important for young adults' growth. Smart choices have immediate and long-lasting benefits. Dr. Adam Drewnowski of the University of Washington says healthier diets don't have to be expensive with the right attitude and home cooking.

Nearly half of U.S. adults (46%) have poor diets lacking fish, whole grains, fruits, vegetables, nuts, and beans while consuming too much salt, sugary drinks, and processed meats. Globally, 42% can't afford a healthy diet with 71% in India having insufficient fruits, vegetables, legumes, nuts, and whole grains in their diet. Understanding food choice is crucial for effective health promotion to combat morbidity and mortality in India. Besides physiological, environmental, and social

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influences, routine decisions like food choice significantly impact health. Behavioral scientists see these decisions as key opportunities to enhance population health. Young adults in India are gaining weight faster than previous generations, with a rise in consumption of high-fat, sugar, and salt foods linked to non-communicable diseases.

The food processing sector has grown, with packaged food sales increasing by 11%, often containing unhealthy levels of fat, salt, and sugar. Changes in lifestyle, family structure, income, and health awareness influence food purchase behaviors in India. Food choices are influenced by taste, price, convenience, health, and social environment. People with long working hours consume more packaged food for convenience. A Delhi study found that children in the family influence the purchase of ready-to-eat packaged food. Media and TV also impact consumer decisions. Young adults, transitioning from adolescence to adulthood, are particularly affected by factors like time constraints, price, mood, convenience, and taste preferences.

Need for the study

Early adulthood brings significant changes like moving away for education or work, entering college or the workforce, and marriage. Young adults' food choices are influenced by factors such as taste, price, familiarity, mood, and health. As people age, factors affecting food choices become more stable and less varied. Barriers to healthy eating, like food cost and lack of time, decrease with age. Understanding these food choice factors in young adults is crucial for public health strategies.

India has over 135 million obese individuals. While BMI has been the standard for assessing obesity, central body fat is a more reliable predictor of metabolic diseases, leading to the concept of normal-weight obesity (NWO). Targeting diet and physical activity in young adults can prevent many non-communicable diseases.

A 2020 study by Oxford University Press for the American Society for Nutrition highlighted the relative importance of factors affecting young adults' meal choices, suggesting tailored meal-based interventions based on demographics and health. In 2022, a study in Singapore found that both virtual and real-life social influences affect Asian young adults' behaviors in a complex way. The research recommends regulating digital marketing of unhealthy food and enhancing healthier food options' availability, accessibility, and affordability in the foodservice sector for effective interventions.

Statement

A study to assess the impact of peer-prepared video clip on the Knowledge and extent of practice of healthy food choices among young adults in a selected college.

OBJECTIVES

- To assess the pre and post test level of knowledge and extent of practice regarding healthy food choice among young adults.

- To assess the effectiveness of peer-prepared video clip on knowledge and extent of practice regarding healthy food choices among young adults.

- To associate the post test level of knowledge and extent of practice regarding healthy food choices among young adults with their selected demographic variables.

Null hypothesis

NH$_1$: There is no significant difference between the pre test and post test level of knowledge regarding healthy food choices among young adults.

NH$_2$: There is no significant association between the post test level of knowledge and extent of practice regarding healthy food choices among young adult with their selected demographic variable.

Assumption

1. Young adults may need adequate information regarding healthy food choices.

2. Young adults may need healthy practice of food choice.

Delimitations

The study was delimited:

- To a period of one week of data collection.

- To students who are present during data collection.

Sampling Selection Criteria

Inclusion Criteria

1. Young adults between the age group of 17-25 years.

2. Young adults who are willing to participate in the study.

3. Young adults who are studying 2nd year B.Sc. Operation Theatre and Anesthesia

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Exclusion Criteria

1. Young adults who are not present at the time of the study.

METHODOLOGY

Research methodology involves systematic procedure in which the research starts from initial identification of the problem to its conclusion. A quantitative research approach was used for this study to assess the impact of peer-prepared video clips on the knowledge and extent of practice of healthy food choices among young adults. The role of methodology consists of procedures and techniques for conducting the study. This samples were selected using purposive sampling technique. The pre-test level of knowledge and extent of practice was assessed by structured questionnaire. The video clip regarding the knowledge and extent of practice of healthy food choices was given for 8 minutes and post test data was collected using the same tool. The data collected have been analyzed using appropriate technique. Both descriptive and inferential statistics were used.

RESULTS

Table 1: Frequency and percentage distribution of demographic variables of the young adults.

(N=31)

Demographic variables	Frequency	Percentage
Age		
17-19 years	26	83.87%
20-22 years	5	16.13%
23-25 years	0	0%
Gender		
Male	10	32.26%
Female	21	67.74%
Religion		
Hindu	16	51.61%
Islam	4	12.90%
Christianity	11	35.49%
Marital status		
Single	31	100%
Married	0	0%
Course of studying		
OTAT	13	42%
MLT	18	58%
Year of studying		
First year	0	0%
Second year	31	100%
Third year	0	0%
Fourth year	0	0%
Height		
130-150 cm	5	16.13%
151-170 cm	20	64.51%
171-190 cm	6	19.36%
Weight		
30-50 kg	13	41.93%
51-70 kg	15	48.39%
71-90 kg	3	9.68%
BMI		
Underweight	6	19.36%
Normal	23	74.19%
Overweight	2	6.45%

With regard to age 26 (83.87%) were in the age group of 17-19 years, 5 (16.13%) were in the age group of 20-22 years. With regard to gender 10 (32.26%) were male, 21 (67.74%) were females. With regard to religion, 16 (51.61%) were Hindus, 4 (12.90%) were Islam, 11 (35.49%) were Christians. With regard to the marital status 31 (100%) were singles. With regard to course of studying 13 (42.0%) were operation theatre and anesthesia technology, 18 (58.0%) were medical laboratory technology. With regard to height 5 (16.13%) were in the 130-150cm, 20 (64.51%) were in the 151-170cm, 6 (19.36%) were in the 171-190cm. With regard to weight 13 (41.93%) were in 30-50kg, 15 (48.39%) were in the 51-70kg, 3 (9.68%) were in the 71-90kg. With regard to BMI 6 (19.36%) were underweight, 23 (74.19%) were normal, 2 (6.45%) were underweight

Table 2: Frequency and percentage distribution of pretest and posttest knowledge related to healthy food choices among young adults.

(N=31)

Level of knowledge	Pre-test		Post-test	
	No.	%	No.	%
Inadequate	4	12.91	0	0
Moderately adequate	27	87.09	22	70.96
Adequate	0	0	9	29.03

The findings revealed that in pretest with regard to knowledge, 4 (12.91%) had inadequate level of knowledge, 27 (87.09%) had moderately adequate level of knowledge and 0 (0%) had adequate level of knowledge and in post test with regard to level of knowledge 0 (0%) had inadequate level of

knowledge, 22 (70.96%) had moderately adequate level of knowledge and 9 (29.03%) had adequate level of knowledge.

Table 3: Frequency and percentage distribution of pretest and posttest on extent of practice related to healthy food choices among young adults.

(N=31)

Level of Practice	Pre-test		Post-test	
	No.	**%**	**No.**	**%**
Inadequate	4	12.91	0	0
Moderately adequate	26	83.87	11	35.48
Adequate	1	3.22	20	64.52

The findings revealed that in pretest with regards to level of practice, 4 (12.91%) had inadequate level of practice, 26 (83.87%) had moderately adequate level of practice and 1 (3.22%) had adequate level of practice and in post-test with regards to level of practice 0 (0%) had inadequate level of practice, 11 (35.48%) had moderately adequate level of practice and 20 (64.52%) had adequate level of practice.

Table 4: Assessment of effectiveness of peer-prepared Video Clip on the Knowledge and extent of practice on healthy food choices among young adults.

N=31

Test	Mean	Standard deviation	Mean difference	Paired 't' Test value
Pre-test	12.5	2.60	2.5	Paired 't' test value = 4.23
Post-test	15	2.54		S P value = 2.042

NS=Not significant, S=Significant, *p > 0.05 level

The tables shows that the comparison of pre-test and post-test mean knowledge and extent of practice of healthy food choices among young adults. In pre-test mean knowledge score was 12.5 with the standard deviation of 2.6 and the post-test mean knowledge score was 15 with the standard deviation of 2.54. The paired 't' test value, t=4.23, p>0.05.The mean difference of pre test and post test is 2.5. This clearly showing a high statistically significant difference between pre-test and post-test level of knowledge regarded healthy food choices among young adults.

Table 5: Shows the assessment of association of post-test level of knowledge on healthy food choices among young adults.

Demographic Variables	Inadequate		Moderately adequate		Adequate		Chi Square Value
	(0-4)		(5-9)		(10-13)		
	(n)	**%**	**(n)**	**%**	**(n)**	**%**	
Age							
17-19 years	0	0	19	0.613	7	0.226	
20-22 years	0	0	3	0.097	2	0.065	c^2 = 0.29, d.f = 4, P = 9.488, NS
23-25 years	0	0	0	0	0	0	
Gender							
Male	0	0	8	0.258	0	0	c^2 = 0.69, d.f = 2, P = 5.991, NS
Female	0	0	14	0.452	9	0.290	
Religion							
Hindu	0	0	11	0.355	5	0.161	
Islam	0	0	4	0.129	1	0.032	c^2= 0.248, d.f = 4, P = 9.488, NS
Christianity	0	0	7	0.226	3	0.097	
Marital status							
Single	0	0	22	0.710	9	0.290	c^2= 0, d.f = 2, P = 5.991, NS
Married	0	0	0	0	0	0	
Course of studying							
OTAT	0	0	11	0.355	2	0.065	c^2 = 2.01, d.f = 2, P = 5.991, NS
MLT	0	0	11	0.355	7	0.226	

table cont....

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Year of studying

First year	0	0%	0	0%	0	0%	
Second year	0	0%	0	0%	0	0%	$\chi^2 = 0$, d.f = 6
Third year	0	0%	22	70.97%	9	29.03%	P = 12.592 NS
Forth year	0	0%	0	0%	0	0%	

Height

130-15 cm	0	0%	5	16.13%	0	0%	$\chi^2 = 3.66$,
151–170 cm	0	0%	12	38.71%	8	25.81%	d.f = 4
171-190 cm	0	0%	5	16.13%	1	3.22%	P = 9.488, NS

Weight

30-50 Kg	0	0%	7	22.58%	6	19.35%	$\chi^{22} = 3.64$
51-70 Kg	0	0%	12	38.71%	3	9.68%	d.f = 4
71-90 Kg	0	0%	3	9.68%	0	0%	P = 9.488, NS

BMI

Underweight	0	0%	4	13%	2	6.45%	$\chi^2 = 0.883$
Normal	0	0%	16	51.61%	7	22.58%	d.f = 4
Overweight	0	0%	2	6.45%	0	0%	P = 9.488, NS

The findings revealed that the demographic variable of age, gender, religion, marital status, course of studying, year of studying, height, weight and BMI has shown statistically non-significant association of post-test level of knowledge on healthy food choices among young adults ($\chi^2 = 0.29$, $\chi^2 = 0.69$, $\chi^2 = 0.248$, $\chi^2 = 2.01$, $\chi^2 = 0$, $\chi^2 = 3.66$, $\chi^2 = 3.64$, $\chi^2 = 0.883$) p > 0.05.

Table 6: Shows the assessment of association of post-test level on extent of practice on healthy food choices among young adults with their demographic variables

Demographic Variables	Inadequate (0-4)		Moderately adequate (4-8)		Adequate (9-12)		Chi Square Value
	(n)	%	(n)	%	(n)	%	
Age							
17-19 yrs	0	0%	9	29.03%	17	54.84%	$\chi^2 = 0.051$, d.f = 4
20-22 yrs	0	0%	2	6.45%	3	9.68%	P>0.05, NS
23-25 yrs	0	0%	0	0%	0	0%	
Gender							
Male	0	0%	5	16.13%	5	16.13%	$\chi^2 = 1.355$, d.f = 2
Female	0	0%	6	19.35%	15	48.39%	P >0.05, NS
Religion							
Hindu	0	0%	5	16.13%	11	35.48%	$\chi^2 = 0.243$, d.f = 4
Islam	0	0%	2	6.45%	3	9.68%	P >0.05, NS
Christianity	0	0%	4	12.90%	6	19.35%	
Marital status							
Single	0	0%	11	35.48%	20	64.52%	$\chi^2 = 0$, d.f = 2
Married	0	0%	0	0%	0	0%	P >0.05, NS
Course of studying							
OTAT	0	0%	1	3.22%	12	38.71%	$\chi^2 = 7.55$, d.f = 2
MLT	0	0%	10	32.26%	8	25.81%	P >0.05, NS
Year of studying							
First year	0	0%	0	0%	0	0%	
Second year	0	0%	11	35.48%	20	64.52%	$\chi^2 = 0$, d.f = 6
Third year	0	0%	0	0%	0	0%	P >0.05, NS
Fourth year	0	0%	0	0%	0	0%	

Table Cont...

Height

130 – 15 cm	0	0%	0	0%	5	16.13%	χ^2 = 3.24, d.f = 4
151 – 170 cm	0	0%	8	25.81%	11	35.48%	P >0.05, NS
171 - 190 cm	0	0%	3	9.68%	4	12.90%	

Weight

30-50 Kg	0	0%	4	12.90%	9	29.03%	χ^2 = 5.47, d.f = 4
51-70 Kg	0	0%	9	29.03%	6	19.36%	P >0.05, NS
71-90 Kg	0	0%	3	9.68%	0	0%	

BMI

Underweight	0	0%	3	9.68%	3	9.68%	χ^2 = 0.994, d.f = 4
Normal	0	0%	7	22.58%	16	51.61%	P >0.05, NS
Overweight	0	0%	1	3.22%	1	3.22%	

The findings revealed that the demographic variable of age, gender, religion, marital status, level of studying, height, weight and BMI has shown statistically non significant association of posttest level of extent of practice on healthy food choices among young adults (χ^2 =0.051, χ^2 = 1.35, χ^2 = 0.243, χ^2 = 0, χ_2^2 = 0, χ^2= 3.24, χ^2= 5.47, χ^2= 0.994) p<0.05. The findings revealed that the demographic variable of course of study has shown statistically significant association at the level of p <0.05 with posttest extent of practice on healthy food choices among young adults (χ^2= 7.55).

DISCUSSION

The present study was executed to assess the impact of peer-prepared Video Clip on the Knowledge and practice of healthy food choice among young adults. The findings of the study revealed that there was a significant difference in the levels of knowledge and extent of practice on healthy food choices among young adults.

The first objective of the findings revealed that in pretest with regards to knowledge, 4 (12.91%) had inadequate level of knowledge, 27 (87.09%) had moderately adequate level of knowledge and 0(0%) had adequate level of knowledge and in posttest with regards to level of knowledge 0 (0%) had inadequate level of knowledge, 22 (70.96%) had moderately adequate level of knowledge and 9 (29.03%) had adequate level of knowledge.

The second objective of the findings revealed in pre-test mean knowledge score was 12.5 with the standard deviation of 2.6 and the post-test mean knowledge score was 15 with the standard deviation of 2.54. The paired 't' test value, t=4.23, p>0.05. The mean difference of pretest and posttest is 2.5. This clearly shows a high statistically significant difference between pre-test and post-test level of knowledge regarding healthy food choices among young adults.

The third objective of the findings revealed that the demographic variable of age, gender, religion, marital status, course of studying, year of studying, height, weight and BMI has shown statistically non-significant association of post-test level of knowledge on healthy food choices among young adults (χ^2= 0.29, χ^2 = 0.69, χ^2= 0.248, χ^2 = 2.01, χ^2= 0, χ^2= 3.66, χ^2= 3.64, χ^2 = 0.883) p > 0.05.

SUMMARY & CONCLUSION

The research study titled "Impact of Peer-prepared Video Clip on the Knowledge and Extent of Practice of Healthy Food Choices among Young Adults" demonstrated a significant positive impact on both the knowledge and practice of healthy food choices among young adults. Pretest data indicated a predominance of moderately adequate knowledge levels, with a notable absence of individuals possessing adequate knowledge. Post-test results, however, showcased a marked improvement; no participants exhibited inadequate knowledge, while a significant portion of the sample attained adequate knowledge levels. Quantitatively, the mean knowledge score significantly improved from 12.5 in the pretest to 15 in the post-test, further substantiated by a statistically significant paired 't' test value. Crucially, the study's findings underscore the effectiveness of peer-prepared video interventions in enhancing dietary knowledge among young adults. The improvement in their knowledge was significant and consistent, indicating the potential of such peer-driven educational tools in promoting healthier lifestyle choices. Additionally, demographic factors such as age, gender, religion, marital status, course and year of study, height, weight, and BMI did not significantly influence the outcomes, suggesting that the video intervention's efficacy was consistent across these variables. This uniformity highlights the broad applicability

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of peer-prepared educational videos as a tool for dietary education across diverse young adult populations. Overall, this study reinforces the importance of innovative, peer-engaging educational methods in public health campaigns, particularly those aimed at young adults. Future initiatives could build on these findings, exploring the long-term effects of such interventions and their potential integration into broader health education frameworks.

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