

“Effectiveness of structured teaching programme on knowledge regarding impact of unhealthy life style among adolescents”

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Abstract:

Background: A pre-experimental study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding impact of unhealthy life style among adolescents in selected Colleges, Doda, Jammu and Kashmir. A total sample of 60, adolescents were selected using Simple random sampling technique. The objectives of the study were to assess the knowledge level among adolescents regarding impact of unhealthy life style before and after structured teaching programme and to find out the effectiveness of structured teaching programme on knowledge regarding unhealthy life style among adolescents. The final objective was to determine the association between pre-test level of knowledge and selected demographic variables.

Materials and Methods: A one-group pre-test post-test design was used to conduct the study. A sample comprising of 60 adolescents were enrolled using simple random sampling technique. The conceptual framework of the study was based on General System Model. Tools used for data collection were demographic Performa and structured knowledge questionnaire.

Results: Data analysis was done using descriptive and inferential statistics. Findings of the study revealed that the mean post-test knowledge score 25.12 ± 2.41 was significantly higher than the mean pre-test knowledge score 14.36 ± 3.47 ($p < 0.01$). Paired t value computed at 21.56^{**} was statistically significant at $p < 0.01$. which revealed that, there is significant increase in the mean post-test knowledge score. Significant association at 0.05 level was observed between knowledge with regard to their previous knowledge and area of living.

Conclusion: The findings of the study confirmed that the structured teaching programme was significantly effective in improving the knowledge on impact of unhealthy life style among adolescents.

Key Word: Structured teaching programme, Knowledge, unhealthy life style, adolescents.

I. Introduction

Adolescence is a developmental period marked by rapid physical, cognitive, and social change. It is also a period when lifestyle choices—such as diet, physical activity, sleep, screen time, and substance use—can solidify and have long-term health implications. Many adolescents engage in behaviors considered unhealthy, increasing their risk for obesity, chronic diseases, and mental health problems¹.

Engaging in regular physical activity is widely accepted as an effective preventative measure for a variety of health risk factors across all age, gender, ethnic and socioeconomic subgroups. However, across all age groups, levels of physical activity remain low and obesity rates continue to rise; collectively threatening the persistent increase in life expectancy enjoyed over the past century and efforts to counteract the inactivity and obesity crisis.²

A study was conducted to find out the unhealthy dietary patterns is associated with other unhealthy lifestyle factors such as smoking and physical inactivity. Whether these associations are similar in high- and low-educated individuals is currently unknown. They used information of the EPIC-NL cohort, a prospective cohort of 39 393 men and women, aged 20–70 years at recruitment. A lifestyle questionnaire and a validated food frequency questionnaire were administered at recruitment (1993–97). Low adherence to a Mediterranean-style diet was used to determine an unhealthy dietary pattern. Lifestyle-related factors included body mass index, waist circumference, smoking status, physical activity level, dietary supplement use and daily breakfast consumption. Multivariate logistic regression analyses were performed for the total population and by strata of educational level. Results: In total 30% of the study population had an unhealthy dietary pattern: 39% in the lowest educated group and 20% in the highest educated group. Physical inactivity, a large waist circumference, no dietary supplement use and skipping breakfast were associated with an unhealthy dietary pattern in both low and high educated participants. Among low educated participants, current smokers had a greater odd of an unhealthy diet compared with never smokers: OR 1.42 (95% CI: 1.25; 1.61). This association was not observed in the high educated group³.

Objectives of the study

1. To assess the level of knowledge regarding impact of unhealthy life style among adolescents before and after structured teaching programme.
2. To find out the effectiveness of structured teaching programme on knowledge regarding impact of unhealthy life style among adolescents.
3. To determine the association between level of knowledge with selected demographic variables.

Hypotheses

- H₁- The mean post-test knowledge score of adolescents will be significantly higher than mean pre-test knowledge
- H₂- There will be significant association between knowledge of adolescents with selected demographic variables.

II. Material and Methods

Research Approach: Pre- experimental approach.

Research Design: One group pre-test – post-test design.

Population: adolescents.

Settings: selected colleges, Doda district, Jammu and Kashmir.

Sampling Technique: Simple random sampling technique.

Sample size: 60 adolescents.

Tools and Technique

I) A Demographic Performa was used to collect socio demographic data such as age, gender, religion, parent's education status, previous knowledge, source of information, type of family and area of living.

II) A Structured Knowledge Questionnaire was used to assess the Knowledge regarding impact of unhealthy life style which consisted of 30 items divided in to seven areas (Introduction & definition, healthy life style, unhealthy life style, factors affecting healthy life style, problems related to unhealthy life style, complications related to unhealthy life style, remedial measures)

III) A structured teaching programme (STP) was administered for a duration of 45 minutes for 60 samples. Lecture cum discussion was used as a teaching methodology along with a variety of AV aids including LCD/PowerPoint presentation, Charts, Flash Cards and video assisted modules.

Method of Data collection: Data was collected for a period of one month [15th July 2017 to 15th August 2017].

After explaining the purpose and obtaining an informed consent, the pre-test was administered for the samples followed by a structured teaching programme. After a period of 07 days a post test was carried out for the samples.

Inclusion criteria:

adolescents who were willing to participate in the study

adolescents who were available at the time of data collection

Exclusion criteria:

adolescents who were sensitized to any research study on unhealthy life style for three months

adolescents who were psychologically and physically unfit during the time of data collection

Statistical analysis:

Both Descriptive and Inferential statistics were used to analyse the data. Descriptive statistics such as Frequency distribution and percentage were used to describe the socio demographic data and Inferential statistics such as student t test was used to find out the effectiveness of STP by comparing the mean knowledge scores, paired *t*-test was used to determine the difference between mean knowledge scores before and after the intervention. Chi-square was performed find out the association between knowledge and selected demographic variables. The level $P < 0.05$ was considered as the minimum accepted level of significance.

III. Results

Table 01: Frequency distribution and percentage of sample characteristics

(N=60)

Demographic variables		Frequency	Percent
Age	Below 18 years	14	23.3
	18-20 years	32	53.3
	20 above	14	23.3
Sex	Male	40	66.7
	Female	20	33.3
Religion	Hindu	34	56.7
	Muslim	10	16.7
	Sikh	14	23.3
	Others	2	3.3
Previous knowledge regarding unhealthy life style	Yes	15	25.0
	No	45	75.0
Source of information	Family and friends	52	86.7
	TV	2	3.3
	News paper	3	5.0
	Other mass medias	3	5.0
Type of family	Nuclear family	52	86.7
	Joint family	5	8.3
	Extended family	3	5.0
Order of the child	1	14	23.3
	2	27	45.0
	3 or above	19	31.7

Area of living	Rural	20	33.33
	Urban	40	66.7

Table 02: Frequency distribution and percentage of pre-test and post-test knowledge level regarding impact of unhealthy life style among adolescents

Levels		Pre-test		Post-test	
		Frequency	Percent	Frequency	Percent
Knowledge	Adequate	0	0	30	50.0
	Moderate	16	26.7	30	50.0
	Inadequate	44	73.3	0	0
	Total	60	100.0	60	100.0

Figure 01: Bar Diagram showing frequency distribution and percentage of pre-test and post-test knowledge level regarding impact of unhealthy life style among adolescents.

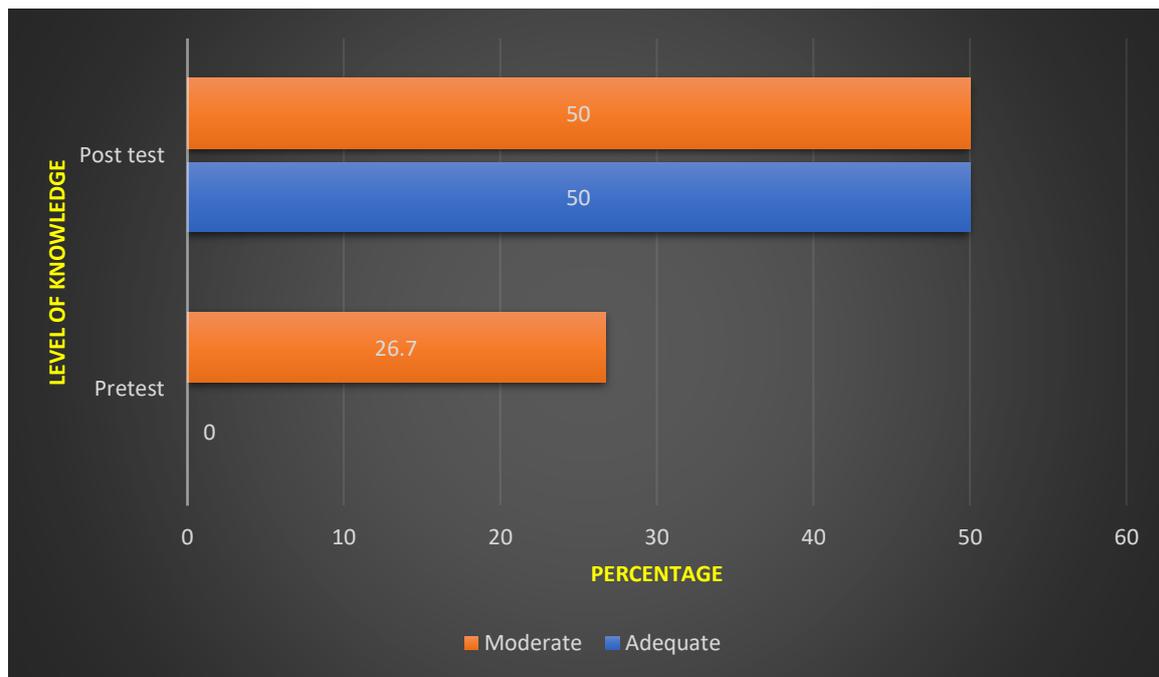


Table 03: Mean, Standard deviation and paired 't' value of knowledge level among adolescents before and after STP. (N=60)

Stage	Mean	SD	Mean Difference	Df	Paired t	p
Pre-test	9.33	2.796	10.70	59	23.85**	3.46
Post-test	20.03	4.18				

** Significant at 0.01 level

Table 03 shows that mean knowledge score before the structured teaching programme was 9.33±2.796 and After the Intervention (Structured teaching programme), the mean knowledge score increased to 20.03±4.18. Increase in knowledge score after structured teaching programme was statistically significant (p<0.01). Mean knowledge score on post-test was 20.03 ±4.18. Change in knowledge score at post-test was not statistically significant. Hence research hypothesis (H₁) was accepted.

Table 04: Association between knowledge level among adolescents and selected demographic variables. (N=60)

Demographic Variables	Knowledge level		df	χ ²	p
	Inadequate %	Moderate %			
Previous knowledge	f	F			
Yes	09	10	01	5.87 **	3.84
No	30	11			

** Significant at 0.01 level, *Significant at 0.05 level.

The above table depicts that the calculated χ^2 value for previous knowledge is significantly higher than the table value ($p < 0.01$ level). So, there is association between previous knowledge and knowledge level of impact of unhealthy life style; Also, there is association between area of living and knowledge level ($P < 0.05$ level of significance). Hence the research hypothesis H_2 was accepted. The score changes also reflect the effectiveness of the intervention.

IV. Discussion

The findings in the present study revealed that the mean post-test knowledge score 25.12 ± 2.41 was significantly higher than the mean pre-test knowledge score 14.36 ± 3.47 ($p < 0.01$). Paired t value computed at 21.56^{**} was statistically significant at $p < 0.01$. The paired t value [21.56^{**} $df=59$] computed by comparison of the mean pre-test and post-test knowledge scores was statistically significant at $P < 0.01$ level. Therefore, it is interpreted that Structured teaching programme was significant in improving the knowledge regarding impact of unhealthy life style among adolescents.

This result is supported by various studies. A study was conducted to find out the association between screen time and average changes in adolescent body mass index (BMI). Participants ($n = 1,336$) were adolescents who were followed from age 14 to age 18 and surveyed every 6 months. Time spent watching television/videos and playing video games was self-reported (< 1 h day⁻¹, 1 h day⁻¹, 2 h day⁻¹, 3 h day⁻¹, 4 h day⁻¹, or $5+$ h day⁻¹). BMI (kg m^{-2}) was calculated from self-reported height and weight. Longitudinal quantile regression was used to model the 10th, 25th, 50th, 75th, and 90th BMI percentiles as dependent variables. Study wave and screen time were the main predictors, and adjustment was made for gender, race, maternal education, hours of sleep, and physical activity. Results: Increases at all the BMI percentiles over time were observed, with the greatest increase observed at the 90th BMI percentile. Screen time was positively associated with changes in BMI at the 50th (0.17, 95% CI: 0.06, 0.27), 75th (0.31, 95% CI: 0.10, 0.52), and 90th BMI percentiles (0.56, 95% CI: 0.27, 0.82). No associations were observed between screen time and changes at the 10th and 25th BMI percentiles⁴.

V. Conclusion

The study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding impact of unhealthy life style among adolescents. The results of the study undoubtedly confirm that the post-test knowledge score is significantly higher than the pre-test knowledge score. Therefore, it is concluded that STP is significantly effective in enhancing the knowledge level regarding impact of unhealthy life style among adolescents.

limitations

- The study was confined to specific geographical area, which imposed limits on generalization
- The limited sample size caused limit on generalization of the study findings
- The findings could be generalized only to that population, which fulfilled the criteria in the study
- No follow-up was made to measure the retention of knowledge.

Recommendations

- A descriptive study can be conducted to identify the level of knowledge among adolescents
- The study can be repeated on a larger sample to generalize the findings
- A comparative study can be conducted to assess the knowledge regarding unhealthy life style among adolescents of two colleges

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