

## **Effectiveness of Planned Teaching Program Regarding Healthy Lifestyle on Level of Knowledge Among Adolescents in Selected Urban Area, Coimbatore**

Karthigai Deepa K

Nursing Tutor, Community Health Nursing Department

PSG College of Nursing, Coimbatore

Maheshwari.B, Tutor,

Thilagavathi.M , Registered Nurse,

Obstetrical and Gynaecological Nursing

### **ABSTRACT**

During adolescence, cognitive, physical, psychological, and emotional changes take place that can affect health and well-being of adolescent. Healthy lifestyle includes set of activities that a person does on a regular basis to keep and improve mental or physical health. The aim of the study is to assess the effectiveness of planned teaching program regarding healthy lifestyle among adolescents. Methodology: Quantitative research, Pre-experimental one group pre-test post-test design was adopted. 30 study participants were selected by non-probability convenient sampling technique. Demographic variables and self- structured questionnaires were used to collect the data. Planned teaching program was given for 20 minutes using flashcards and PPT on various aspects such as purpose of healthy lifestyle, diet, daily exercise, sleep, leading happy and being optimistic. At the end of session pamphlets were distributed. Results & Discussion: The results revealed that, the mean and standard deviation of pretest level of knowledge was  $7.133 \pm 1.657$  whereas in post-test  $17.67 \pm 1.11$  with the calculated 't' value was 29.7 which is greater than the table value 3.29 at  $P < 0.001$ . Therefore, the research hypothesis (H1) was retained. It is also found that there was a significant association between pre-test knowledge score with only one selected demographic variables that is occupation of parents. Conclusion: The study concluded that the planned teaching program was effective in enhancement of knowledge regarding healthy lifestyle among adolescents.

Key words: Effectiveness of planned teaching program, Healthy lifestyle, level of knowledge, adolescents.

*“A Healthy lifestyle not only changes your body, it changes your mind, your attitude and mood”*  
-Gurudevi Sri

## BACKGROUND OF THE STUDY

Health is a state of complete physical, mental, social and spiritual wellbeing, not merely absence of disease or infirmity. Healthy lifestyles refers to eating healthy diet, maintains a healthy weight, keep up with vaccination, getting regular exercise, get enough sleep, reducing stress, brush and floss teeth, wear sunscreen, doesn't listen to loud music. Many factor haven impacts on the wellbeing and mental health of adolescents violence, poverty, stigma and living in humanitarian and fragile settings can increase the risk of developing mental health problems. **Who,(2021).**

Adolescents correspond to the period between the ages of 10 to 19 years. This is a critical period for individuals to establish enduring healthy behaviors. Important health-related behaviors initiate at this period and track into adult life, thereby playing an important role for vulnerability in later life. For example, higher amounts of alcohol consumption in adolescence increased the odds of being a heavy drinker in the early years of adulthood. The World Health Organization puts out that the four major risk factors for chronic disease during adulthood are alcohol consumption, poor nutrition and diet, physical inactivity and tobacco consumption. This could mean that a healthy lifestyle in adolescence can minimize chronic disease in adulthood. **Priscila Marconcin,(2021)**

The World Health Organization estimates that 35 million children in developing countries are overweight or obese. Compared to healthy weight children and adolescents, those who are obese are more likely to develop several chronic diseases, such as an unhealthy lipid profile, insulin resistance and metabolic syndrome. **José J. Muroset. al.,(2022)**

Drinking alcohol among adolescents is a major concern in many countries. Worldwide, more than a quarter of all people aged 15-19 years are current drinkers.

Cannabis is the most widely used psychoactive drug among young people with the about 4.7% of people aged 15-16 years using it at least once in 2018. Alcohol and drug use in children and adolescents is associate with neuro-cognitive alterations which can lead to behavioral, emotional, social and academic problems in later life. **WHO, (2022)**

## NEED FOR THE STUDY:

Nearly one-sixth of the world populations are constituted by adolescents. Adolescents health is therefore important component of global health. A "Healthy lifestyle" is a way of living that keeps a person's body fit and healthy and keeps them from getting sick. It allows the body to enjoy the benefits of healthy living. Healthy lifestyle includes set of activities that a person does on a regular basis to keep and improve mental or physical health.

Healthy lifestyle promotes good nutrition, including by providing counseling and other services that support healthy eating and physical activities. Prevent and respond to non-communicable diseases by promoting healthy behaviors, the prevention of substance use, increase physical activity, and youth –lead policy action. **UNICEF,(2017)**

Over 1.5 million adolescents and young adults ageing 10-24 years died in the year 2019, nearly 5000 every day. Young adolescents between 10-14 years have reduced risk of mortality of all age groups. Accidents like road traffic accidents and drowning, violence, self-harm and mental conditions are the leading causes of death among adolescents and young adult. Majority of all mental health disorder in adulthood starts by age 14, but most cases are undiagnosed and untreated. Early onset of substance abuse is associated with higher risks to

develop dependence and others problems during adult life, and adolescents are disproportionately affected by substance use compared with adults and old age. **WHO,(2021)**

About 1.3million adolescents died from prevalence or treatable cause during 2012 as per WHO report. Road traffic injuries were the leading causes of death occurs among adolescents. About fifteen percentages of global maternal deaths occurs among Adolescents girls. The major causes for disability adjusted life years (DALY) in adolescent Injuries and neuropsychiatric disorder compute major problems in adolescents. There is an increasing trend in adolescent obesity due to great influence in diet and exercise pattern. Around 35% of the world wide burden of such ailments has roots in adolescents. **Maghida Sridhar,(2017)**

Government of India launched its first comprehensive programme for adolescents, ‘Rashtriya kishor swasthya karyakaram’, during January 2014 which has focused on adolescents’ health.

### **STATEMENT OF THE PROBLEM:**

A study to assess the effectiveness of planned teaching program regarding healthy lifestyle on level of knowledge amongadolescents in selected urban area, Coimbatore.

### **OBJECTIVES:**

- To assess the level of knowledge regarding healthy lifestyle among adolescents.
- To assess the effectiveness of planned teaching program regarding healthy lifestyle among adolescents.
- To associate the pretest level of knowledge regarding healthy lifestyle with their selected demographic variables among adolescents.

### **HYPOTHESES:**

**H<sub>1</sub>:** There will be a significant difference between the pre-test and post-test level of knowledge regarding healthy lifestyle among adolescents.

**H<sub>2</sub>:** There will be a significant association between the pretest level of knowledge regarding healthy lifestyle with selected demographic variables of adolescents.

### **DELIMITATIONS**

- The study is limited to adolescents in a selected urban area.
- Adolescents who are absent at the time of data collection.

### **OPERATIONAL DEFINITION:**

#### **Knowledge:**

It refers to the level of understanding of adolescents regarding healthy lifestyle that was measured by self-structured knowledge questionnaire.

questionnaires.

#### **Planned teaching program:**

It refers to a teaching program on healthy lifestyle which includes purpose of healthy lifestyle, diet, daily exercise, sleep, leading happy and being optimistic among adolescents using flashcards, pamphlet and power point presentation.

**Healthy lifestyles:**

It refers to adopting all the healthy activity in daily life, In order to become habituated to it. It involves purpose of healthy lifestyle, diet, daily exercise, sleep, leading happy and being optimistic.

**Adolescents:**

It refers to both male and female who are in the age group between 10-19 years.

**PROJECT OUTCOME:**

Planned teaching program will increase the level knowledge regarding healthy lifestyle among adolescents.

**LITERATURE REVIEW**

**The literature review regarding healthy lifestyle is organized under the following heading.**

Literature related to healthy behavior

Literature related to unhealthy behavior

**LITERATURE RELATED TO HEALTHY BEHAVIOR**

A cross-sectional study was done on 3,363 Iranian adults, “Healthy lifestyle score” was calculated for each participant by summing up the binary score for 5 lifestyle factors, including dietary habits, dietary intakes, psychological distress, smoking, and physical activity. This study aimed to examine how combinations of several lifestyle factors were associated with functional dyspepsia (FD), its symptoms, and gastroesophageal reflux disease (GERD) in a large group of Iranian adults. After adjustment for potential confounders, it was found that individuals with the highest score of healthy lifestyle had 79 and 74% lower odds of FD (OR: 0.21; 95% CI: 0.05-0.092) and GERD (OR: 0.26; 95% CI: 0.09-0.69), respectively, compared with those with the lowest score. They were also less likely to have early satiation (OR: 0.28; 95% CI: 0.11-0.73), postprandial fullness (OR: 0.22; 95% CI: 0.09-0.50), and epigastric pain (OR: 0.44; 95% CI: 0.21-0.92). It was found that adherence to a healthy lifestyle was associated with lower odds of GERD, FD, and its symptoms in this group of Iranian adults, in a dose response manner. Individual lifestyle-related factors were also associated with these conditions. **Parvanesaneei et al., (2021)**

A cross-sectional study was conducted to elevated blood pressure and its associated risk factors among adolescents. Total study participants are 1041. Blood pressure, height and weight were measured following standard protocols, and oral questionnaire for assessing lifestyle risk factor were used. Result revealed that elevated BP was prevalent in 24.2%. On regression, factors like obesity (adjusted odds ratio [A=5.8, 95% confidence interval 6-[CI] =3.9.4), low fruit diet (A=3.3, 95% CI=2.1 -5.4), and frequent junk food conception (A=1.9, 95% CI =1.3-2.8) raised the odds of elevated Blood pressure while it was lowered by being physically active (a = 0.67, 95% CI =0.46-0.97). Researcher concluded that strenuous efforts targeting detrimental behaviors and imparting the sense of healthy lifestyle changing practices are vital to control this epidemic. **Sweta Prasad (2021)**

Cross sectional study was conducted in ten colleges involving adolescent girl pursuing preuniversity and university studies at Dharwad city, India. The study included 314 randomly selected adolescent girls aged

between 16 and 19 years. Data were collected by employing random sampling technique. The aim of the study understanding of educational stress factors among adolescent girls and consider them while developing stress preventing programs. Means educational stress was  $50.04 \pm 10.82$  (range 16-80). There was a significant association between educational stress and religion, father education, number of siblings, combination of subjects, type of personality, and IQ. Regression analysis revealed that number of siblings and extrovert neuroticism personality negatively predicted stress ( $\beta = 0.160$ ,  $P = 0.026$ ;  $\beta = 0.119$ ,  $P = 0.028$ ;  $\beta = 0.125$ ,  $P = 0.017$ ; and  $\beta = 0.278$ ,  $P < 0.001$ ) and considered as risk factors. Findings help in better understanding of educational stress factors among adolescent girls and consider them while developing stress prevention program. **Sreevani Rentala (2019).**

## LITERATURES RELATED TO UNHEALTHY BHHAVIOUR

A cross- sectional study was carried out in school going children adolescent children. Totally 1000 students were participated. This study was planned to estimate the body mass index (BMI) among adolescent children in Medchal Mandal of rural Telangana and to study the impact of physical activity, sleep duration, and duration of hours spent on recreational activity. Prevalence of undernutrition was 48.5%. This study result was Prevalence of overweight and obesity was 4.6% (3.8% and 0.8% respectively). There was statistically significant ( $P = \text{physical activity of } < 1\text{h/day}$ , sleep  $< 8\text{h/day}$  and recreation screen time  $> 2\text{h/day}$  were significant ( $p < 0.05$ ) associated with overweight and obesity. physical activity of  $< 1\text{h/day}$ ; sleep duration  $< 8\text{ h/day}$  and screen time  $> 2\text{h/day}$  have a significant association in contributing towards obsogenic tendencies in adolescent children. **Preethi Subramanian (2022)**

A cross sectional study was conducted to identify obesity, risk factors of hypertension and overweight among children age between 10 to 14 years. Totally 544 school children were participated. Anthropometric measurements were recorded using equipment and methodology. The mean age of the respondents was  $11.81 \pm 0.41$  years and 343 were male and 21 were female students. A total of 49(9%) children were overweight and 5(.915%) were obese. Stage 1 hypertension was observed among 74(13.60%) children and 15(2.75%) children were having stage 2 hypertension in urban area. Higher body mass index (BMI) ( $p = 0.001$ ,  $OR = 1.113$ ), consumption of snack and junk foods ( $p = 0.011$ ,  $OR = 1.255$ ) and watching TV more than 2 hours ( $p = 0.003$ ,  $OR = 1.870$ ) were significant predictors for hypertension, overweight and obesity. Study concluded that Regular screening, care of children in NCDs and early identification of its risk factors followed by health education is need of the hour to make them adopt healthy life style. **Trupti bodhare(2021)**

Descriptive study was conducted to assess the prevalence of overweight and obesity among school going children attending paediatric out- patient department of a tertiary health care facility of eastern India. A total of 601 study subjects participated in the study. All statistical study 2-tailed and a P- value of  $< 0.05$  was considered significant. Prevalence of overweight and obesity was found to be 14.0% and 7.3% respectively. This study concluded that there is high prevalence of childhood overweight and obesity among school going children which call for an urgent intervention and inter-sectoral coordination between different stakeholder and policy makers. **Swetha Agarwal(2021)**

A cross sectional observational study was conducted to assess risk factors of smart phone addiction. Nearly 1043 participants aged between 18 to 30 were participated from January 21<sup>st</sup> and February 30<sup>th</sup> 2019. The aim of the study to assess risk factor for smartphone addiction the association between smartphone addiction and poor sleep. The study concluded that 763(73.2%) disclosed poor sleep (61.6%), and in those with smartphone addiction, 68.7% had poor sleep quality, compared to 57.1% of those without. Smartphone addiction with poor sleep ( $aOR = 1.41$ , 95% CI: 1.06-1.87,  $p = 0.018$ ). **Sonshy (2021)**



A crosssectional study of US adolescents used the National Comorbidity Survey–Adolescent Supplement, a nationally representative cross-sectional survey conducted from February 2001 through January 2004. A probability sample of adolescents aged 13 to 18 years was included. Analyses were conducted between February 2019 and April 2020. To estimate associations of outdoor artificial light at night (ALAN) with sleep patterns and past-year mental disorder among US adolescent. Among 10 123 adolescents (4953 boys [51.3%]; mean [SE] age, 15.2 [0.06] years [weighted]; 6483 for behavior disorder outcomes), ALAN was positively associated with indicators of social disadvantage, such as racial/ethnic minority status (median [IQR] ALAN: white adolescents, 12.96 [30.51] nW/cm<sup>2</sup>/sr; Hispanic adolescents: 38.54 [47.84] nW/cm<sup>2</sup>/sr; non-Hispanic black adolescents: 37.39 [51.88] nW/cm<sup>2</sup>/sr; adolescents of other races/ethnicities: 30.94 [49.93] nW/cm<sup>2</sup>/sr;  $P < .001$ ) and lower family income (median [IQR] ALAN by family income-to-poverty ratio  $\leq 1.5$ : 26.76 [52.48] nW/cm<sup>2</sup>/sr;  $> 6$ : 21.46 [34.38] nW/cm<sup>2</sup>/sr;  $P = .005$ ). In this study, area-level outdoor ALAN was associated with less favorable sleep patterns and mood and anxiety disorder in adolescents. Future studies should elucidate whether interventions to reduce exposure to ALAN may positively affect mental and sleep health. **Ronald C. Kessler (2020)**

A crosssectional study was done among 1425 adolescents to assess the eating habits of adolescents. Under nutrition was seen among 23% and overweight/ obesity among 8% significant association was found between eating habits and BMI. Furthermore, late adolescents had better eating habits, and significant gender difference was seen in certain eating habits. The study shows that it is possible to understand the gaps in eating habits of adolescents, and this can be used to plan tailor made nutritional intervention to adolescents group as their eating habits were different and had long term nutritional and health implication. **Subhasini Ganesan (2019)**

Descriptive cross sectional study was conducted among student aged 13 to 17 years. Schools were selected randomly in Ranipet, Vellore district, between June and September 2018. The aim of the study was to evaluate unhealthy lifestyle risk factors among adolescent school students in an industrial area of Vellore district, Tamilnadu. A total of 932 students participated. Males reported better dietary and physical activity practice compared to females ( $p < 0.05$ ). 20% of adolescent were overweight and 17.4% had overweight and elevated BP ( $< 0.5P$ ). Parents, teachers and student were sensitized to the impact of behavioral and physical risk factor on long-term morbidity and equipped with knowledge and training to prevent or modify these risk factors. **Geetha mani (2019)**

Cross-sectional study was conducted in Pathanamthitta district, Kerala, from January to December 2017. To assess sleep duration and associated factors among adolescent children studying in different types of schools in an urban area of Kerala. In this study, 657 students were enrolled. The mean age of the participants was  $15.09 \pm 1.33$  years. 201 students (30.6%) were from government school, 242 (36.8%) from aided, and 214 (32.6%) were from private school. The mean sleep duration among the students was  $7.2 \pm 1.26$  h. Sleep duration was found to be inadequate in 60% of the children. The sleep duration was found to be longer during weekends compared to weekdays. Nearly 92% of students take a daytime nap of  $> 1$  h during weekends. Private school students had inadequate sleep duration, late bedtime, and early wake-up time compared to other students. Higher age, class, education of parents, family income, distance travelled to school, and female gender were the other factors associated with inadequate sleep among adolescents. Inadequate sleep duration and difference in sleep schedule during weekends were observed among adolescents, especially among private school students. Primary prevention approach aimed at spreading adequate awareness regarding the importance of sleep among students, parents, and teachers should be practiced. **Geethu Mathew (2019)**

A cross sectional study was conducted to examine the association between frequency of social media use physical activity and sleep adequacy among adolescents. A sample are 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> students ( $N = 43,994$ ) Health behaviours examined were frequency of getting 7 hours of sleep (never / seldom, sometimes, and

everyday/ nearly every day ). We measured frequency of social media usage a likert-like scale ( never, a few times a year, 1-2 times a month, once a week, or every day). The study population comprised 51.13% (21,276/42,067) female students, 37.48% (17,160/994) from the south, and 80.07(34,953/43,994) from the metropolitan area, with 76.90% reporting social media using every day. Among physically active students, frequent social media use was associated with higher daily exercise (ME 50.1, 95% CL 49.2%-51.0%). Among sedentary students, frequent social media use was associated with lower daily exercise (ME 15.8%, 95% CL 15.1%-16.4%). Among those who normally adequate sleep, daily social media users were least report adequate sleep (ME 41.3%, 95% CL 40.4%-42.1%). Among those who are sleep deprived, daily media users were report adequate sleep (ME 18.3% 95% CL 17.6%-19.0%). Findings an optimal level of social media use that is beneficial to a variety of health behavior would be most beneficial to adolescents who are in middle of the health behavior spectrum. **Sandhya V Shimoga et al (2019)**

A descriptive study was conducted to how sleep is importance for the growth, development and good health of adolescents. 538 school-going adolescent between the ages of 10-17 years were selected for the study. About 48% of adolescents suffered from prolonged sleep –onset latency and about 43% had interrupted use of mobile phone in bed. About 64% of adolescents had at least one from of poor sleep hygiene behavior. Decreasing age (0.7; 95% CI 0.582-0.843), studying while lying in bed (1.73; 95% CI 1.009-2.942), greater time gap between dinner and bedtime (0.795; 95% CI 0.650-0.972), Staying awake late in the night and chatting on mobile phone (2.24; 95% CI 1.266-3.978) and watching TV (3.41; 95% CI 2.037-5.722) significantly influenced watched television (4) in bed and >23% reported use of mobile phone in bed. About 64% of adolescent had at least one from of sleep hygiene behavior. This study revealed that a Large proportion of adolescent students have abnormal sleep patterns and sleep hygiene behaviors. There is a need for concerted sleep-related education at the school level. **Gowtham Murugesan (2018)**

The cross sectional study was conducted among 483 randomly selected undergraduate students from randomly selected colleges in Chennai between March and September 2016 by two stage stratified sampling method using semi structural questionnaire. The participant age was between 17 and 20 years. The aim of the study is to assess the prevalence of behavioral risk factors of lifestyle diseases among late adolescents in chennai. 78% students had unhealthy lifestyle habits factor in them. Boy had significantly better habits then girls and students who were overweight significantly had unhealthy lifestyle habits. The study reflect the poor lifestyle habits of all college age individual which can be effectively improved by health education and behavior change communication. **A Evangeline Mary (2017)**

## **METHODOLOGY**

### **RESEARCH APPROACH AND DESIGN:**

The research design selected for this study is pre experimental one group pretest-posttest design.

### **VARIABLES FOR THE STUDY:**

#### **Independent variable:**

- Planned teaching program on Healthy Lifestyle

#### **Dependent variable:**

- Level of knowledge on Healthy Lifestyle

## SETTING FOR THE STUDY:

The study was conducted among adolescent at Gandhimanagar urban area, Coimbatore. This area is 4 km away from PSG College of Nursing and 5316 people reside in this area, among them, the adolescent population is around 516.

## DATA ANALYSIS AND INTERPRETATION

### Section: A Distribution of study participants based on demographic variables

#### 4.1 Frequency and percentage distribution of study participants according to demographic variable among adolescents.

The present study shows that 67% (20) were in the age group between 16 to 19 years, half of the study participants 53% (17) were female, 57% (17) were Hindu, 50% (15) were studying 11<sup>th</sup>-12<sup>th</sup> standard, 63% (19) were studying in English medium, 50% (15) were nuclear family, 23% (7) parents had primary education, 23% (7) of parents had high school education, 47% (14) were daily wage workers, 44% (14) were income was Rs. 10,000-20,000 per month and 67% (20) were consuming mixed type of food.

### SECTION B:

**Table: 4.2. Frequency and percentage distribution of study participants according to pretest and posttest level of knowledge on Healthy Lifestyle.**

n=30

Healthy lifestyle											
Pre-test level of Knowledge						Post-test level of Knowledge					
Inadequate knowledge (1-7)		Moderately adequate Knowledge (8-15)		Adequate Knowledge (16-20)		Inadequate knowledge (1-7)		Moderately adequate Knowledge (8-15)		Adequate Knowledge (16-20)	
f	%	f	%	f	%	f	F	f	%	f	%
17	56.7	13	43.3	0	0	0	0	1	3.3	29	96.7

Table;4.2.1 reveals that in pretest level of knowledge 56.7% (17) had inadequate knowledge, 43.3% (13) had moderately adequate knowledge. Where as in post -test most of them 96.7% (29) had adequate knowledge, 3.3% (1) had moderate adequate knowledge.



## SECTION C: Assessment of Effectiveness of planned teaching program regarding healthy lifestyle among adolescents.

### 4.3 Effectiveness of planned teaching program regarding healthy lifestyle among study participants.

**H<sub>1</sub>:** There will be significant difference between the pre-test and post-test knowledge score on healthy lifestyle among study participants.

**Table.4.3. Mean, standard deviation and paired 't' value of healthy lifestyle before and after the planned teaching program**

n=30

Healthy lifestyle		
Pre test	Post test	Calculated "t" value
Mean +_SD	Mean +_SD	
7.133+_1.657	17.67+_1.11	29.7** P<0.001 S***

**Note:** \*\*\*p<0.001, S-Significant, N.S- Non significant

Table 4.3 shows that the effectiveness of Post-test level of knowledge after Planned teaching program among adolescents, the calculated "t" value of knowledge is 29.7 which is greater than table value 3.29 significant at p<0.001 respectively.

Hence it is proved the planned teaching program on healthy lifestyle among adolescent was effective and H<sub>1</sub> was retained.

## Section D : Association of the pretest knowledge score on healthy lifestyle with selected demographic variables among adolescents.

### 4.4 Association of pretest level of knowledge on healthy lifestyle with selected demographic variables among study participants.

**H<sub>2</sub>:** There will be a significant association between the pretest level of knowledge regarding healthy lifestyle with selected demographic variables of adolescents.

n=30

S.No	Demographic data	Inadequate knowledge (1-7)		Moderately adequate knowledge (8-15)		Adequate knowledge (16-20)		$\chi^2$ value
		f	%	f	%	f	%	
1.	<b>Age</b>							$\chi^2$ -18.47
	10-12 years	2	6.67	1	3.33	-	-	d.f-1.993
	13-15 years	4	13.33	3	10	-	-	P<0.001
	16-19 years	10	33.33	10	33.33	-	-	NS
2.	<b>Sex</b>							$\chi^2$ -13.82
	Male	8	26.67	5	16.67	-	-	d.f-0.705
	Female	9	30	8	26.67	-	-	P<0.001
3.	<b>Religion</b>							NS
	Hindu	9	30	8	26.6	-	-	$\chi^2$ -22.46
	Christian	3	10	3	10	-	-	d.f-3.054
	Muslim	5	16.6	2	6.6	-	-	P<0.001
	Others	0	0	0		-	-	NS
4	<b>Education</b>							$\chi^2$ -22.46
	6th-8th standard	3	10	2	6.6	-	-	d.f-3.094
	9th-10th standard	3	10	2	6.6	-	-	P<0.001
	11th-12th standard	6	20	9	30	-	-	NS
	Under graduate	4	13.3	1	3.3	-	-	
5.	<b>Medium of study</b>							$\chi^2$ - 13.82
	English	5	16.6	6	20	-	-	d.f-0.96
	Tamil	12	40	7	23.3	-	-	P<0.001
6.	<b>Type of family</b>							NS
	Nuclear family	8	26.6	7	23.3	-	-	$\chi^2$ -18.47
	Joint family	7	23.3	5	16.6	-	-	d.f-0.167
	Extended family	2	6.6	1	3.3	-	-	P<0.001
7.	<b>Education of parents</b>							NS
	Primary education	4	13.3	3	10	-	-	$\chi^2$ -16.13
	Higher school	3	10	4	13.3	-	-	d.f-1.28
	Higher secondary	4	13.3	2	6.6	-	-	P<0.001
	Graduate and above	2	6.6	2	6.6	-	-	NS
	No formal education	4	13.3	2	6.6	-	-	
8.	<b>Occupation of parents</b>							$\chi^2$ -16.13
	Government employee	2	6.6	1	3.33	-	-	d.f-22.008
	Private employee	4	13.3	5	16.6	-	-	P<0.001
	Business	3	10	0	0	-	-	S***
	Daily wage worker	8	26.6	6	20	-	-	
	Homemaker	0	0	0	0	-	-	
9.	<b>Family income per month</b>							$\chi^2$ -18.47

	Rs.5,000-Rs.10,000	8	26.6	5	16.6	-	-	d.f-1.246
	Rs.10,000-Rs.20,000	6	20	7	23.3	-	-	P<0.001
	>Rs.20,000	3	10	1	3.3	-	-	NS
<b>10.</b>	<b>Type of food consumption</b>							$\chi^2$ -18.47
	Vegetarian	4	13.3	3	10	-	-	d.f-1.37
	No vegetarian	3	10	0	0	-	-	P<0.001
	Mixed type	10	33.3	10	33.3	-	-	NS

Note: \***p<0.001, S-Significant, NS-Not significant.**

Table 4.4 Interpret that, there was a significant association between pretest knowledge score with selected demographic variables like occupation of parents.

Thus, the  $H_2$  was retained only for the variable occupation.

### MAJOR FINDING OF THE STUDY:

- Most of the study participants 67% (20) were in the age range between 16 to 19 years.
- Based on gender distribution half of the study participants 53% (16) were female and 47% (14) were male.
- In view of education 50% (15) study participants were studying 11<sup>th</sup> -12<sup>th</sup> standard, 17% (5) were studying 6<sup>th</sup>-8<sup>th</sup> standard, 17% (5) were studying 9<sup>th</sup>-10<sup>th</sup> standard and 17% (5) were studying under graduate.
- Most of the study participants 63% (19) were studying through English medium, 37% (11) were studying through Tamil medium.
- According to the type of family distribution half of the study participants 50% (15) belong to the nuclear family.
- Based on the parents education 23% (7) have studied the primary education and 23% (7) were studied the high school.
- In accordance with, their occupations of parents 47% (14) were daily wage worker.
- As mentioned by, their family income per month 44% (13) of the study participant parents/ guardian earns between Rs.10,000 per month.
- According to the type of food consumption. Majority of the study participants 67% (20) were consuming mixed type of foods.
- Considering the pre-test and post-test level of knowledge on healthy lifestyle in Pre-test level of knowledge 56.7% (17) had inadequate knowledge 43.3% (13) had moderately adequate knowledge. Where as in post-test 96.7% (29) had adequate knowledge, 3.3% (1) had moderately adequate knowledge and 0% (0) had inadequate knowledge.
- Calculated 't' value in level of knowledge is 29.7 which is greater than table value 3.29 significant at  $p<0.001$  respectively. Therefore the research hypothesis was accepted.
- There was a notable association between pre-test level of knowledge with demographic variables like occupation of parents.

**CONCLUSION:**

The benefits of evolving healthy eating and lifestyle routine from an early age onwards can optimistically effects on peoples nutrition and healthy throughout their lives, and enhance the productivity of individuals and nations. Nutrition education is an important elements in an overall strategy aimed at improving food security and preventing all of nutrition. Schools are ideal setting for promoting lifelong healthy eating habits and lifestyle..

**NURSING IMPLICATION:**

According to Tolima, (1995) this section of the research report that focuses on nursing implication usually includes specific suggestion for nursing practice, nursing education, nursing administration and nursing research

**LIMITATION:**

- There was no difficulty faced at the time of data gathering.

**RECOMMENDATION:**

- The study could be identified the strong lifestyle among adolescents using planned teaching.
- A quantitative study could be done among adolescents as research participants.
- Study could be assess on the knowledge of adolescents in healthy lifestyle
- The study could be done on larger sample of different regions to generalize the effectiveness of healthy lifestyle for among adolescents.

## REFERENCES

### Book and Journal Reference

1. Suchert, V., Hanewinkel, R., & Isensee, B. (2016). Longitudinal relationships of fitness, physical activity, and weight status with academic achievement in adolescents. *Journal of School Health*, 86(10), 734–741.
2. Krebs, N. F., Himes, J. H., Jacobson, D., Nicklas, T. A., Guilday, P., & Styne, D. (2007). Assessment of child and adolescent overweight and obesity. *Pediatrics*, 120,S193–S228.
3. Greene, G. W., Rossi, S. R., Rossi, J. S., Velicer, W. F., Fava, J. L., & Prochaska, J. (1999). Dietary applications of the stages of change model. *Journal of the American Dietetic Association*, 99(6), 673–678.
4. Fleming, S., Pierson, M. R., & Howell, E. J. (2016). The effects of exercise on academic performance for boys and girls. *Journal of Gender and Power*, 6(2), 89.
5. Fahlman, M. M., McCaughy, N., Martin, J., & Shen, B. (2010). Racial and socioeconomic disparities in nutrition behaviors: Targeted interventions needed. *Journal of Nutrition Education and Behavior*, 42(1), 10–16.
6. Bustamante, E. E., Williams, C. F., & Davis, C. L. (2016). Physical activity interventions for neurocognitive and academic performance in overweight and obese youth: A systematic review. *Pediatric Clinics of North America*, 63(3), 459–480.
7. Basch, C. E. (2011). Breakfast and the achievement gap among urban youth. *Journal of School Health*, 81(10), 635–40.
8. Lowry, R. Galuska DA, Fulton JE, Wechsler H, Kann L, Collins JL. 2000, Physical Activity, Food Choice and Weight Management Goals and Practices Among U.S. College Students. *American Journal of Preventive Medicine*,18(1),18-27.
9. Rodriguez, VG. Libersa C. Maria IM. Laurent B. Catalina I. Luis AMA. Jean D. Frédéric G. 2007, Healthy Lifestyle by Nutrition in Adolesce (HELENA). A New EU Funded Project .*Therapie*, 62(3), 259-270.
10. Sivrikaya, A. H. Sivrikaya S.K. Altun Ö.Ş. 2013, Examination of healthy lifestyle attitudes of physical education and sports teaching department students. *Balıkesir Health Science Journal*. 2(3): 133-138.
11. Kafkas, M. E. Kafkas A.Ş, Acet M. 2012, Analysis Of Physical Education Teachers' Level Of Healthy Life Style Behaviours, *Dumlupinar University Journal of Social Science*, 2,47-55.
12. Stark, M. A. Manning-Walsh J, Vliem S. 2005, Caring for Self While Learning to Care for Others: A Challenge for Nursing Students, *The Journal of Nursing Education*, 44(6), 266-270.
13. Wei, C. N. Harada K, Ueda K, Fukumoto K, Minamoto K, Ueda A. 2012, Assessment of Health-Promoting Lifestyle Profile in Japanese University Students, *Environmental Health and Preventive Medicine*,17(3), 222-227.
14. Lee, R.L.T. and Alice J.T.L., 2005, Health- Promoting Behaviors and Psychosocial Well-being of University Students in Hong Kong, *Public Health Nursing*, 22(3),209-220.
15. Udo, T. Grilo CM, McKee SA. 2014, Gender Differences in The Impact of Stressful Life Events on Changes in Body Mass Index, *Preventive Medicine*, 69, 49-53.

16. Craig, C. L., Marshall, A. L., Sjoström, M., Bauman, A. E., Booth, M. L., Ainsworth, B. E., oerksen, S. E. (2013). International Physical Activity Questionnaire--Short Format. *Health Psychology*, 32(11), 1149–1157.
17. De Mello, M. T., Lemos, V. A., Antunes, H. M., Bittencourt, L., Santos-Silva, R., & Tufik, S. (2013). Relationship between physical activity and depression and anxiety symptoms: A population study. *Journal of Affective Disorders*, 149(1-3), 241-246.
18. Rebar, A. L., Duncan, M. J., Short, C., & Vandelandotte, C. (2014). Differences in healthrelated quality of life between three clusters of physical activity, sitting time, depression, anxiety, and stress. *BMC Public Health*, 14, 1088.
19. Zhang, J., & Yen, S. T. (2015). Physical Activity, Gender Difference, and Depressive Symptoms. *Health Services Research*, 50(5), 1550-1573.
20. Chu, C. H., Chen, F. T., Pontifex, M. B., Sun, Y., & Chang, Y. K. (2016). Health-related physical fitness, academic achievement, and neuroelectric measures in children and adolescents. *International Journal of Sport and Exercisssse Psychology*, 1–16.

**Net References:**

- [www.medline.com](http://www.medline.com)
- [www.ncbi.com](http://www.ncbi.com)
- [www.pubmed.com](http://www.pubmed.com)
- [www.books.google.co.in/](http://www.books.google.co.in/) Diet&nutrition/Food content guides
- [www://en.wikipedia.org/wiki/Junk\\_food](http://www.wikipedia.org/wiki/Junk_food)
- [www.goggle.com](http://www.goggle.com)
- [www.researchgate.net](http://www.researchgate.net)
- <https://scholar.google.com>
- <https://www.medicalnewstoday.com>
- [www.webcrawler.com](http://www.webcrawler.com)
- [www.livestrong.com](http://www.livestrong.com)
- [www.yahoo.com](http://www.yahoo.com)
- [www.academic.edu](http://www.academic.edu)
- [www.ask.com](http://www.ask.com)
- [www.cdc.gov](http://www.cdc.gov)