



A Study to Assess the Self Reported Weight Control Behavior among Early Adolescents (12 to 14) in Selected Urban Schools

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Abstract

Adolescence is the period of transition from childhood to adulthood. It is a period of immense change. During this period they are physically more active and have greater metabolic rates with many changes in the body viz., physical, biochemical, emotional and sexual growth under the influence of different hormones. Most of the habits regarding daily living will form in this period and persists into adult period. It is a period of greatly enhanced awareness and attention for changing body image. Modernization has brought changes in dietary pattern and leisure activities. Sedentary behaviors, consumption of fatty and sweetened food, beverages have been recognized as the most favorite activities.

Objectives To assess the self- reported weight control behavior among adolescents and to correlate self- reported weight control behavior with selected demographic variables.

Design: Descriptive (Exploratory) study with one group was adopted for the study

Setting: New Prakash English Medium School, Pune.

Participants: The group consists of student of class 8th and 9th. The total numbers of students selected for the study were 300. The sample was chosen according to non -probability purposive sampling.

Methods: The tool, questionnaire was prepared to collect the data related to self-reported weight control behavior. The tool consists of questionnaire which had 3 sections. After obtaining the informed consent, All participants were given a questionnaire related to demographic data, questionnaire about general opinion regarding body weight & life style behaviors and the third section is the opinion about diet, exercise, social habits, & family meals.

Results: Out of 300 students 63% of early adolescents have weight control problems and 37% of early adolescents have no problems in their weight. Thirty percent adolescents check their weight regularly and 70% of adolescents are not checking their weight regularly. Fifty one percentage of them skip meals and eat irregular meals, 66% of adolescents were feeling full after eating and 40% of adolescents are doing daily exercise. They preferred to take deep fried foods and 23% of them preferred to take junk foods and raw vegetables and fruits and 15% of them liked boiled foods.

Forty eight percent of adolescents gave the opinion that there is a good amount of nutritional content in their current diet and 6% of them only reported that they have poor nutritional content in their diet. Majority of adolescents eat baked foods or sweets 3 or 4 times a week and only few of them are eating 5 or more times a week 63% of adolescents are engaged in regular physical activity for 10 to 25 minutes and only 1% of them are involved in more than 1 hour. Twenty eight percent of them are involved in running and walking and 25% of them are in cycling, only 18% of these adolescents are going to gym for controlling their weight. Three percent of adolescents reported that they have sleep disturbances; they sleep less than 4 hours in a day.

General opinion regarding demographic characteristics of adolescents correlated with age, gender, height, weight, number of family members, type of family diet of the adolescents. Statically no significant correlation was found though clinically weight has significant correlation with diet pattern. Dietary pattern and exercises have clinical correlation with weight and height. Statistically no significance was noted.

Conclusion: The major findings were; 63% of early adolescents have weight control problems. Majority of adolescents eat baked foods or sweets 3 to 4 times in a day. General opinion regarding weight control behaviors of adolescents are not having statistically significant correlation though clinically body weight has significant correlation with diet pattern and exercises have clinical correlation with weight and height.

Keywords

Adolescents, Self - reported, Weight control behavior, Life style, Sleep disturbance

INTRODUCTION

Adolescence is the period of transition from childhood to adulthood. It is a period of immense change. During this period they are physically more active and have greater metabolic rates, and also many changes take place in the body, like physical, biochemical and emotional and sexual growth due to the influence of different hormones. Formation of habits of daily living takes place in this period and persists into adult period. It is a period of greatly enhanced awareness and attention for changing body image¹.

Modernization has brought changes in dietary pattern and leisure activities. Sedentary behaviors and consumption of fatty and sweetened food and beverages have been recognized. Dianne Neumark, et al conducted a study on weight control behaviors among adolescent, to examine the relationships between body weight perceptions, estimated body mass index, gender, and weight control behaviors, done by using Cross-sectional survey of 1132 secondary school forms 1 and 3 students².

the findings conclusions were Body weight perceptions are not in agreement with actual weight in adolescents. This discrepancy is more marked in females who use a variety of weight control behaviors. These behaviors are motivated by perceived weight rather than actual (estimated) body mass index. Overweight adolescents should be encouraged to adopt appropriate weight control behaviors for their health needs². Similarly another study was conducted by the Department of Adolescent Medicine, Children's Hospital at West mead, Sydney, Australia H Bobby, M Psychology (Clinical), Weight as causative factors for overweight and obesity. In addition to physical complications, negative social and emotional associations of overweight and obesity such as low self-esteem, being bullied, depression, behavioral and learning problems have been well studied.⁴⁻⁷ Cognitive development in adolescents is linked to weight perception and body image. Little is known about the relationship between weight, weight



perception, and weight modification behaviors' among local adolescents³.

Adolescents experience a second large growth spurt before reaching adulthood. These rapid growth involves sexual maturation and physical growth. During this period, girls increase their body proportion of fat, whereas boys increase their body proportion of muscles, reaching peak bone mass is an important milestone for both sexes during this period of development⁴.

Physical and psychosocial pressures influence adolescent eating behaviour. By and large, boys fair better than girls. Their large appetites and the sheer volumes of food they consume usually ensure generally adequate nutrient intakes, but the adolescent girl may be less fortunate⁵.

Americans were busily engaged in trying to lose weight, primarily through diet and exercise but also through surgery, jaw wiring, pills, hypnosis, acupuncture, sweating devices, and other systems. Actually, the number of people who describe themselves as being "on a diet" increased somewhat in past 10 years or so. Since 180 million Americans regularly use low calorie or sugar-free foods and beverages, it becomes clear that restricting one's intake has become an accepted way of life. Unquestionably, a high level of weight loss activity occurs, yet the

incidence of obesity continues at an all-time high⁶.

Because of sexual maturation in girls brings about increased fat deposition during the adolescent growth period and because many teenage girls are relatively inactive, it is easy for them to gain weight. Social pressures dictating thinness sometimes cause adolescent girls to follow unwise and self-imposed diets for weight lose. Adolescent boys trying to increase their muscle mass or bulk up may resort to unproven and potentially dangerous supplements or eat high -fat foods in an effort to obtain more kilo calories⁷.

In some cases actual self - starvation regimens lead to complex and far- reaching eating disorders such as anorexia nervosa and bulimia nervosa. These problems, which can assume severe proportions, usually involve a distorted self- image and an irrational pursuit of thinness, even when actual body weight is normal or even less than age norms. For some adolescents, dieting means drastically reducing their food intake or choosing foods erroneously believed to have special effects on appearance⁸.

Dieting changes the act of eating from a simple, enjoyable process in to something complicated and laden with guilt and other moral overtones. Hunger is interpreted as temptation, and responding to it becomes



evidence of weakness or even sin. After repeatedly denying the call of hunger, most dieters lose touch with the sensation of hunger. Hunger become confused with being tired, bored, sad, or other feelings. Rather than increasing the ability to regulate food intake to meet body needs, dieting makes this regulation more precarious⁹.

A study reported that prevalence rates of weight control behavior in western countries are higher than they are in other parts of the world. Rates in women in western countries ranged from 0.1% to 5.7%. In non-western countries, the range was 0.46% to 3.2%. But the prevalence in non-western countries seems to be on the rise¹⁰.

The average age of onset of weight control behavior is 17 years. It is reported that 40% of newly identified cases of weight control behavioral girls 12-14 years old. (National Eating Disorders Association, 2006). But over the past forty years, incidence in young women has tripled, while incidence in teenagers has remained unchanged (University of Maryland Medical Centre, 2004). Gender Differences of those with weight control behavior are girls and women--approximately 90-95%. The adolescent girls are dangerously thin and anorexic person may still perceive themselves to be overweight because they

have a distorted view of their body image. They are likely to be in denial of the fact they are underweight¹¹. An average prevalence rate of anorexia nervosa of 0.3% was found for adolescent girls, the estimated prevalence of binge eating disorder is at least 1%. The incidence of anorexia nervosa is 8 cases per 1 lack population per year and the incidence of anorexia nervosa increased over the past century, until the 1970's⁸.

The most effective way to prevent anorexia is to develop healthy eating habits and a strong body image from an early age. Don't accept cultural values that place a premium on thin, perfect bodies. Make sure you and your children are educated about the life-threatening nature of anorexia¹².

Now a day's more adolescent girls i.e. age group between 12-14 years more concerned towards the physical maintenance of the body. Due to the inadequate knowledge they are following wrong techniques such as over dieting, misuse of laxatives and over exercising that may results in other somatoform disorders like malnutrition, anemia. Weight control behavior is thought to originate from feelings of fatness and unattractiveness and is maintained by various cognitive biases that alter how the affected individual evaluates and thinks about their body, food and eating¹³.

The investigators from his personal experience had seen more adolescent girls i.e. age group between 12-14 years are more concerned towards the physical maintenance of the body. Due to the inadequate knowledge they are following wrong techniques such as over dieting, misuse of laxatives and over exercising that may results in other somatoform disorders like malnutrition, anemia and anorexia nervosa disorders. So, the investigators felt that it is important to create awareness and provide adequate knowledge regarding anorexia nervosa in adolescent girls. It will prevent complication of eating disorders and improve their physical and psychological health.

LITERATURE REVIEW

Dianne Neumark, etal conducted a study on weight control behaviors among adolescent, to examine the relationships between body weight perceptions, estimated body mass index, gender, and weight control behaviors, done by using Cross-sectional survey of 1132 secondary school forms 1 and 3 students². Main outcome measures are the strength of agreement between perceived weight and estimated body mass index, and the association between perceived weight, estimated body mass index, and weight control behaviors. Results A total of 14%

of students were estimated to be overweight or obese. The agreement between actual (estimated) body mass index and perceived weight was poor in females and fair in males (Kappa 0.137 and 0.225, respectively). In females, there was no evidence of a relationship between body mass index and weight control behaviors. However, there was a relationship between perceived weight and weight control behaviors such that females who perceived themselves as overweight were more likely to exercise, restrict caloric intake, self medicate with diet pills, purge, or use laxatives. In males, there was evidence of a relationship between perceived weight, body mass index, and weight control behaviors. Males, who perceived them as overweight, were more likely to exercise or restrict caloric intake. Conclusions Body weight perceptions are not in agreement with actual weight in adolescents. This discrepancy is more marked in females who use a variety of weight control behaviors .These behaviors are motivated by perceived weight rather than actual (estimated) body mass index. Overweight adolescents should be encouraged to adopt appropriate weight control behaviors for their health needs².

Darshini Devi Bhurtun and Rajesh Jeewon (2013) conducted a study on weight control practices Half of the surveyed population



were engaged in weight control practices: 43.3% of the respondents reported trying to lose weight while 6.7% reported that they were engaged in weight gain activities. More than twice as many girls participants (61.1%) were involved in weight loss practices compared to boys (25.6%). Based on BMI 80.8% of those who were involved in weight loss behaviours had a BMI < 85th percentile (47.8% boys versus 94.5% girls). There was a considerable correlation between body weight perception and weight control activities such that 88.5% of those involved in weight loss behaviours overestimate their body weight. Body weight perception is a strong determinant of weight control practices (chi test value— 3.1×10^{-44}). The result of the study showed that “appearance” and “health” were the two most cited weight concerns (55.6% respondents reported “appearance” and 43.3% reported “health”). No gender difference was observed in weight concern (chi-test value = 0.17)¹⁴.

Geraldine M. Budd, PhD, RN, FNP-BC, EAANP, and Jane Anthony Peterson, PhD, RN, ARN, FAANP conducted study on The Obesity Epidemic, Understanding their origins Obesity occurs over time when more kilocalories are consumed than are expended, creating a position energy balance. Research indicate that high food

intake is the greatest factor fueling the obesity epidemic. Short-term energy balance is based on the hour-to-hour need for homeostasis, which depends on energy stored in liver (glycogen), adipose tissue(fat),and blood (glucose) and on the interaction between these storage units the central nervous system(CNS), mediated through the following hormones cholecystokinin and glucagon-like peptide-1 from the small intestine the adipose hormones leptin, which can induce satiety the hormones ghrelin, which is secreted primarily by the stomach and acts as a potent appetite stimulator insulin and several other hormones from the pancreas All work together to stimulation appetite and satiation through a complex system of neural pathways and regular modulators in the brain’s hypothalamus. In humans, appetite is also influenced by habit, social factors, and stress¹⁵.

Leptin and insulin are secreted in proportion to body fat Increases in the body’s store of adipose tissue generally cause levels to rise, these hormones single neurons in the hypothalamus that the body excess fat, and brain responds by directing the body to reduce food intake; as levels fall, the brain instructs the body to increase consumption. According, humans with leptin deficiency have an insatiable appetite and tend to obese. Even if leptin



levels are normal, however, over the long term, signals to the CNS may “drop out.” As with insulin resistance is associated with obesity. To date, research attempting to control weight by altering leptin levels has had limited success.

Kristiina Ojala, Jorma Tynjälä, Raili Välimäki, Jari Villberg and Lasse Kannas

(2012) The proportions of overweight adolescents engaged in weight control behavior at the time of filling in the survey surged from 3% in 1994 to 18% in 2006 in 15-year-old overweight boys and from 19% in 1994 to 39% in 2010 in 15-year-old overweight girls. The prevalence's of current weight controlling for non-overweight adolescents varied from 2 to 4% in boys and from 5 to 14% in girls during 1994–2010. There was no statistically significant difference between years 2002, 2006, and 2010 in the prevalence rates of using specific weight control practices among overweight adolescents who had tried to control their weight. The most common indicated weight control practices were exercising (>85%), eating fewer sweets (>84%) and less fat (>75%), and drinking fewer soft drinks (>74%). Throughout the study, a higher proportion of overweight girls than boys, who have tried to control their weight, indicated to have used all the specific weight control practices with

exception of skipping meals and eating fewer sweets in 2006. However, statistically significant differences between genders were found only in eating smaller portions in 2002 and 2010, and smoking more in 2006¹⁸.

STATEMENT OF PROBLEM

“A study to assess the self-reported weight control behavior among early adolescents (12 to 14) in selected urban schools”

OBJECTIVES OF THE STUDY

1. To assess the self-reported weight control behavior among adolescents.
2. To correlate self-reported weight control behaviour with selected demographic variables

Assumption: The study assumes that

- Weight gain is common in early adolescence period
- Adolescents of this age group are more conscious about weight control activities
- Weight control behaviors have an impact on health and social activities of adolescents

Delimitations : The study is limited to,

- Study was limited to 300 samples
- Data were collected from only one school
- Students below 12 and above 15 years are excluded

MATERIALS AND METHODS

Research approach:

This study is descriptive in nature, which aims at finding out the self weight controlled behaviour in adolescents.

Research design:

Variables:

Dependent variable: weight control

Independent variable self- reported behaviours.

Associate variables: Selected demographic factors

Research setting:

The study was conducted in New Prakash English medium School , Pune.

Population

The population for the present study is all the students of 8th 10th standard who are attending New Prakash English medium School , Pune .

Sample:

The sample consisted of 300 students , aged between 12-14 years of age.

Sampling technique:

Non- probability purposive sampling technique is used for the study.

Development of tool:

Semi- structured questionnaire was prepared to collect the data related to self - reported behaviour of adolescents regarding body weight. The tool was constructed by the investigator in the light of the literature reviewed and her experience in the clinical field to ensure the adequacy and validity of the content

Students were selected and their height and weight was checked. BMI calculated, and categorized subjects in to groups. The questionnaire was explained, all the doubts in the students regarding the questionnaire were clarified. Informed consent was taken.

Description of the tool:

Study instruments used by the researcher consisted of three sections:

Section I: demographic data: It contains six items for obtaining information regarding age, gender, weight, height , members of family and type of family diet.

Section II A: Semi structured questionnaire. It consisted of 10 questions on general opinions regarding , Diet, Exercise, social habits, & family meals

Section II B: Questionnaire to assess the Self reported behaviours regarding body weight control. It contains 15 items such as are you considering weight to be problem, checking your weight regularly ,eat between meals , skip meals? eat outside food regularly , feel to restrict yourself not to eat in between meals, feel full after eating? doing daily exercises? any problem regarding sleep, weight caused problems for social interactions, feel about your weight? what contributes excess weight? attempted any time to lose

weight Tools are prepared in English and translated into Marathi ,.

Data collection procedure:

The formal permission was obtained from the principal. The study was conducted on 25th march 2015. The principle investigator and the assistant investigators approached the study subjects, explained to them the purposes of the study and obtained the consent after assuring the subjects about the confidentiality of the data. The data was collected in 2 hours during the school hours. The average time taken to fill the questionnaire was 30 minutes.

Plan for data analysis

Data analysis was planned to include descriptive and inferential statistics in terms of frequency percentage chi-square test for association are used. Data presented in the form of tables and graphs based on the objectives of the study. Demographic data of the samples were described by frequency and percentage. General opinion regarding body weight & life style by frequency and percentage.

Questionnaire to assess the Self reported behaviors regarding body weight control by frequency and percentage.

Co-relation of self- reported weight control behavior with selected demographic variables were analyzed by non parametric statistical test such as chi-square.

RESULTS

Section I Description of Demographic Variables

Present study was conducted in the New Prakash school where majority of the age group (38%) are in 14 years and only 12 (25%) in the age group of 12-13 yrs. Gender based participation of the student where equal weight distribution were 18% of them are having 30-50kg and only 82% where having above 50 kg of weight. Height distribution wise 50% were in the height of 130-140cm and 14% were having the height above 151cm. As per the family preference for diet, majority of them 68% were preferred mix diet. Family member distribution was heterogenic only 45% were having 4 members in the family.

Section II: Opinion of Adolescents Regarding Body Weight & Life Style N-300

S. No	Items in the Questionnaire	Yes		NO	
		Freq	%	Freq	%
1	Are you considering weight to be problem for you?	108	36%	192	63%
2	Are you checking your weight regularly?	90	30%	210	70%
3	Are you checking your weight regularly?	153	51%	147	49%
	Do you skip meals?	153	51%	147	49%
4	Do you eat outside food regularly?	90	30%	210	70%
5	Do you feel to restrict yourself not to eat in between meals?	90	30%	210	70%
6	Do you feel full after eating?	198	66%	102	34%
7	Are you doing daily exercises?	120	40%	180	60%
8	Do you have any problem regarding sleep?	60	20%	240	80%
9	Have your weight caused problems for social interactions?	123	41%	177	59%

Present study shows 36% of early adolescents have weight control problems and 63% of early adolescents have no problems in their weight. In that 30% adolescents checking their weight regularly and 70% of adolescents are not checking their weight regularly. 51% of early adolescents, they are eat between meals and they skip meals. 48% are not eat between meals and they are not skip meals.

Most of the adolescents are not eat foods from outside. 30% adolescents are restrict themselves by not eat in between meals and 70% are not restrict themselves. 66% of adolescents were feeling full after eating and 40% of adolescents are doing daily exercise. Out of 100% adolescents 20% have sleep disturbances and in 41% adolescents, their weight causes problems for their social interaction.

Adolescents opinion regarding Diet pattern N-300

Items in the Questionnaire	A		B		C		D	
	F	%	F	%	F	%	F	%
What are your favorite foods?	69	23%	114	38%	69	23%	45	15%
How many meals per day you eat?	18	6%		18%	99	33%	123	41%
How do you rate nutritional content of your current diet?	18	6%	144	48%	114	38%	18	6%
How often do you eat sweets (pies, cookies, candy, chocolate, ice cream)?	39	13%	114	38%	78	26%	63	21%
How many glasses of water do you consume per day?	39	13%	138	46%	75	25%	45	15%
What are your favorite foods?	69	23%	114	38%	69	23%	45	15%

Study shows that 38% of adolescents are prefer to take deep fried foods and 23% of them prefer equally to take junk foods and row vegetables and fruits, and 15% of them like boiled foods. Forty eight percent of adolescents gave the opinion that there is a good amount of nutritional content in their current diet and 6% of them only reported that they have poor nutritional content in their diet .Majority of adolescents eat baked foods or sweets 3 or 4 times a week and only few of them are eating 5 or more times a week. Majority (46%) of adolescents consume 4 to 6 glasses of water per day.

Family Members Data Regarding Weight Control Problems N-300

Item	A	B	C	D
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	F	%	F	%	F	%	F	%
Family Members Data Regarding Weight Control Problems	7	11%	6	1%	18	3%	29	48%

Study shows that 48% of adolescents responded that maternal/paternal relatives have weight control problems in their family.

Eleven percent reported that parents are having weight control problems in their family and 3% of them reported that brother/sister are having problems in their weight and only 1% of them had



grandparents, who are having weight control problems in their family.

Adolescents Opinion Regarding Exercise N-300

Items in the Question naire	A		B		C		D	
	F	%	F	%	F	%	F	%
How many hours of regular physical activity You do?	12	63	3	13	6	23	3	1
Type of physical activity involved?	84	28	8	28	7	26	5	18
Hours of sleep per day?	14	49	8	28	5	17	1	6
How many hours of regular physical activity You do?	9	%	9	%	9	%		%

According to the present study 63% of adolescents are engaged in regular physical activity for 10 to 25 minutes and only 1% of them are involved in more than 1 hour. Twenty eight percent of them are involved in running and walking and 25% of them are in cycling, only 18% of these adolescents are going to gym for controlling their weight. Three percentage of adolescents reported that they have sleep disturbances; they do sleep less than 4 hours in a day.

Adolescents Response on body weight & its impact on life N-300

Items in the Question	A		B		C		D	
	F	%	F	%	F	%	F	%

naire								
How do you feel about your weight?	15	51	3	11	7	25	39	13
In your opinion what contributes excess weight?	3	%	3	%	5	%		%
Have you attempted any time to lose weight	75	25	9	31	5	18	78	26
		%	3	%	4	%		%
	48	16	1	6	6	2	22	76
		%	8	%		%	8	%

On the basis of data collection, 25% of adolescents responded that they are comfortable with their present body weight and 51% of adolescents are interested to lose significant amount of weight where as 11% of them are interested to gain weight. Thirty one percentage of them gave their opinion, for excess body weight are lack of exercise and 26% of students gave hereditary as the reason for excess body weight. Majority of students lose their weight by not eating and 16% of them are losing their weight by vomiting and none of them are using laxatives to lose weight.

Adolescents opinion regarding Diet pattern N-300

Items in the Question naire	A		B		C		D	
	F	%	F	%	F	%	F	%
What are your favorite foods?	6	23	11	38	69	23	48	16
How many	9	%	4	%		%		%
	2	8	54	18	99	33	12	41
	4	%		%		%	3	%



meals per day you eat?								
How do you rate nutritional content of your current diet?	1	6	14	48	11	38	24	8
	8	%	4	%	4	%		%
How often do you eat sweets (pies, cookies, candy, chocolate, ice cream)?	4	15	11	38	78	26	63	21
	5	%	4	%		%		%
How many glasses of water do you consume per day?	4	14	13	46	75	25	45	15
	2	%	8	%		%		%

Adolescents Opinion Regarding Exercise N-300

Items in the Questionnaire	A		B		C		D	
	F	%	F	%	F	%	F	%
How many hours of regular physical activity You do?	189	63%	69	23%	39	13%	3	1%
Type of physical activity involved?	69	23%	93	31%	84	28%	54	18%
Hours of sleep per day?	9	3%	192	64%	51	17%	18	6%

According to the present study 63% of adolescents are engaged in regular physical activity for 10 to 25 minutes and only 1% of them are involved in more than 1 hour. Twenty eight percent of them are involved in running and walking and 25% of them are in cycling, only 18% of these adolescents are going to gym for controlling their weight. Three percentage of adolescents

What are your favorite foods?	6	23	11	38	72	24	45	15
	9	%	4	%		%		%

Study shows that 38% of adolescents are prefer to take deep fried foods and 23% of them prefer equally to take junk foods and row vegetables and fruits, and 15% of them like boiled foods. Forty eight percent of adolescents gave the opinion that there is a good amount of nutritional content in their current diet and 6% of them only reported that they have poor nutritional content in their diet. Majority of adolescents eat baked foods or sweets 3 or 4 times a week and only few of them are eating 5 or more times a week. Majority (46%) of adolescents consume 4 to 6 glasses of water per day.

reported that they have sleep disturbances; they do sleep less than 4 hours in a day.

Section 3 : To correlate self reported weight control behaviour with selected demographic variables

1. General opinion regarding weight control behaviors of adolescents correlated with age, gender, height, weight, number of family members, type of family diet of the adolescents. Statistically no significant



correlation found though clinically body weight has significant correlation with diet pattern.

2. Correlation to demographical variable with General opinion of adolescents regarding body weight & life style also done. Dietary pattern and exercises have clinical correlation with weight and height. Statistically no significance noted

DISCUSSION

Weight controlling behavior are a common problem among adolescents there are multiple reasons out of which life style changes, junk foods, less physical exercise; hormonal changes and some of them. The self-reported weight control behavior among early adolescents (12 to 14) has been founded that there is significant association between demographical variables, gender, height, weight, type of diet, number of family members. Adolescent is more prone to ill eating habits life style changes which puts them at risk for overweight in and obesity this will lead to many health problems. This group needs to be given attention.

Kristiina Ojala, Jorma Tynjälä, Raili Välimaa, Jari Villberg, and

Lasse Kannas (2012) conducted a study on weight control behavior. The proportions of overweight adolescents engaged in weight control behavior at the time of filling in the

survey surged from 3% in 1994 to 18% in 2006 in 15-year-old overweight boys and from 19% in 1994 to 39% in 2010 in 15-year-old overweight girls. The prevalence's of current weight controlling for non-overweight adolescents varied from 2 to 4% in boys and from 5 to 14% in girls during 1994–2010. There was no statistically significant difference between years 2002, 2006, and 2010 in the prevalence rates of using specific weight control practices among overweight adolescents who had tried to control their weight. The most common indicated weight control practices were exercising, eating fewer sweets, and less fat, and drinking fewer soft drinks. Throughout the study, a higher proportion of overweight girls than boys, who have tried to control their weight, indicated to have used all the specific weight control practices with exception of skipping meals and eating fewer sweets in 2006. However, statistically significant differences between genders were found only in eating smaller portions in 2002 and 2010, and smoking more in 2006¹⁸

present study also shows that 51% of adolescents are interested to lose significant amount of weight where as 11% of them are interested to gain weight. Thirty one percentage of them gave their opinion, that excess body weight is due to lack of



exercise and 26% of students gave hereditary as the reason for excess body weight. Majority of students lose their weight by not eating and 16% of them are losing their weight by vomiting and none of them are using laxatives to lose weight.

According to the present study 63% of adolescents are engaged in regular physical activity for 10 to 25 minutes and only 1% of them are involved in more than 1 hour. Twenty eight percent of them are involved in running and walking and 25% of them are in cycling, only 18% of these adolescents are going to gym for controlling their weight. Three percentage of adolescents reported that they have sleep disturbances; they do sleep less than 4 hours in a day.

CONCLUSION

From this study researchers came to a conclusion that social activities and life during this period is more emphasized on appearance. Where girls are more conscious and involve in unhealthy practices of weight control. adolescents who are having facilities for physical exercise are able to maintain body weight proportional to their physic. adolescents prefer to take deep fried foods and junk foods. adolescents responded that maternal/paternal relatives have weight control problems in their family. Dietary pattern and exercises have clinical correlation with weight and height. Indian

scenario regarding adolescents behaviours on weight control are not much available

Recommendation:

Based on the finding of the study the investigator wants to recommend for the studies

- It is suggested that the study may be replicated using larger population of adolescents.
- It is suggested that the study may be replicated on students having hereditary problems
- The study may be done in different schools



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