Life Style Habits among Female Physiotherapy College Students of Chennai - A Cross Sectional Analytical Study

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Abstract:

An increasing life style disorders are reported globally, especially among adolescent children. Obesity, junk food habits, lowered physical activities, excessive usage of electronic gadgets usage were mainly influencing on health and quality of life among professional college students. Aims & Objective of this original research were to 1. Evaluate level of physical activities, food habits, prevalence of obesity, usage of electronic communication gadgets 2. To promote and prepare future pupil physiotherapists towards life style related health issues. Material & Methodology: 200 physiotherapy UG students were given with 11 questionnaires on a 3 point scale during January 2017 in Chennai wherethis study was conducted. Results: 20% of the participants were obese, 88% do no exercises, 35% had family history of systemic illness 28% subject have reported regular eating habitswith junk food and more than 42% use communication gadgets for more than 6 hours. Conclusion: The major findings of this original study gives an insight and awareness for due life style modification required professional students. among health care

Keywords: Life Style Habits, Female Physiotherapy

Introduction:

Human lifestyle changes are more in the recent years with fast track communication technologies, availability and accessibility of global food with decreased physical activity. With changes in diet, types of food, cooking time etc., processed foods are rapidly replacing organic food (1) with rapid increase in the number of restaurants and people tendency to eat fast food (2) studies have shown that not keeping a healthy diet and not having sufficient nutrition knowledge lead to health issues including overweight and obesity (3). Sharma et al 2008 have reported that nutritional knowledge is related to dietary habits among college students (4). WHO has defined adolescent as a period between 10 – 19 years⁽⁵⁾ and India with 253.2 million adolescent population ⁽⁶⁾ adolescence is period of transition from childhood to adulthood where maximum amount of physical, psychological and behavioral changes takes place, making them more vulnerable with poor eating habits that fail to meet essential dietary requirements⁽⁷⁾. A randomized control trial targeting middle aged men reported, lifestyle changes were followed by reduction in mortality from Ischemic Heart Disease⁽⁸⁾. Also lifestyle and dietary habits has more positive effects on reduction of mortality from IHD by lowering serum cholesterol levels than by means of pharmaceutical drugs. Sedentary lifestyle presents a major public health challenge that must be met in order to prevent obesity, enhance health and wellbeing⁽⁹⁾, A study conducted in 2007 among 83 medical students in Lahore(Pakistan) and found 21% were under weight , 61% were obese , 52% were normal, 20.5% were overweight (10). In a study conducted among Nursing students of Ludhiana (India), 66% of the subjects were consuming junk food s and 51% have regular use of soft drinks⁽¹¹⁾ Among obese subjects 54% were consuming junk foods and 64% were consuming soft drinks. Environmental influence on eating behaviors with changing nature of food supply, increased reliance on foods consumed away from home (10) and changes in fast food and soft drink consumption correlate with increasing prevalence of overweight in adolescents (12) which is associated with adulthood obesity poor nutritional intake can have adverse effects on educational performance, productivity and well being (13). WHO 1998 estimates 605 of deaths globally are due to unhealthy diets and physical inactivity with 79% of these deaths in developing countries (14). India with rising prevalence of obesity with sedentary lifestyle, unhealthy food habits, cultural practices and increasing affluence of middle class population (15) but with obesity and its associated multiple comorbidities such as type

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2 diabetes mellitus , dyslipidemia , PCOD , hypertension and metabolic syndrome which are increasingly common among children and adolescents $^{(16)}$

An alarming rise in global obesity, erratic food habits and disordered lifestyle necessitates an insight into prophylactic means with physical fitness and diet . With an increase in non- communicable diseases mostly influenced by lifestyle changes in the last two decades with huge health are cost and infliction on quality of forth coming pupil physiotherapist.

Key Words:

WHO – World Health Organization, PCOD - Polycystic ovarian disease,

IHD – Ischemic Heart Disease, BMI – Body Mass Index

Aims and Objectives:

- a. This original Analytical survey among student physiotherapists aims to evaluate perception of fitness, their social habits, obesity and usage of electronic gadgets.
- b. Also major objective of this study was to promote awareness of physical fitness and habits among future physiotherapists

Inclusion criteria:

Undergraduate Girl students of Physiotherapy colleges at Chennai

Exclusion criteria:

Male students of Physiotherapy College

Materials and methodology:

This original Analytical cross sectional study was conducted after obtaining due consent of the participants and was conducted during December 2016 among 200 Chennai based girls pupil physiotherapists of age group between 17 - 23 years. We have used 10 questionnaires on a 3 point scale to obtain relevant data related to subjects BMI, level of physical activity, habits, usage of electronic communication gadgets, social background, perception of fitness, family history for systemic illness.

The results of the obtained data were analysed and displayed as below:

Results:

Table of results of all the subjects on distribution of percentage wise of 11 items from participants on a 3 point scale:

| S.No | Questions | Results in percentage | | |
|------|----------------------------|-----------------------|----------|------|
| 1 | Level of physical activity | Sedentary | Moderate | High |
| | | 8 % | 74 % | 18% |
| | | | | |

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|----------------------------------------------------------------------------------------|----------------------------------------|---------------------------------|------------------------|----------------|--|--|
| 2 | Body Mass Index (BMI) | Under weight | Normal | Obese | | |
| | | 22 % | 74 % | 4% | | |
| | | | | | | |
| 3 | Waist circumference | >85 | 86-90 | >90 | | |
| | | 80 % | 10 % | 10 % | | |
| 4 | Regularity with exercises | Regular | Occasional | Rare | | |
| | | 12 % | 20 % | 68 % | | |
| 5 | Perception of fitness | Over all | To Be | Remain | | |
| | | development | Aesthetic | Healthy | | |
| | | 8 % | | 92 % | | |
| 6 | Family history of systemic illness | Diabetes Mellitus | Hypertension | Obesity | | |
| | | 32 % | 40 % | 28% | | |
| 7 | Means of food habits | Occasional junk food 72 % | Regular junk food 26 % | Aerated drinks | | |
| 0 | | | | | | |
| 8 | Food Habits | Vegetarian | Non- vegetarian | Vegan | | |
| | | 14 % | 76 % | 22 % | | |
| 9 | Sleeping Pattern | 6 hrs | Less than 4 hrs | More than | | |
| | | 36 % | 2% | 6 hrs | | |
| | | | | 62% | | |
| 10 | Electronic communication gadgets usage | Less than 6 hrs | 6 hrs | 6-8hrs | | |
| | | 58 % | 6% | 36% | | |
| 11 | Hailed from | Rural | Urban | Semi urban | | |
| | | 14 % | 68 % | 14 % | | |

Major findings of this study were:

- ❖ The Level of physical activity was found high level at 18% Moderate among 74% of the subjects and the remaining 8% showed sedentary activity
- ❖ The Body Mass Index (BMI) indicates the fitness level of the individual which was found to be Normal for 74% of the students and remaining 22% showed Under weight
- ❖ The waist circumference as measured was identified >85 cm among 80% of girls and 86-90 cm among 10 % and the remaining were >90 cm
- ❖ These students were found to be doing exercises very rarely (i.e.) around 66% of the students and only 12 % were regular with exercises
- ❖ In Perception of fitness among these girls it showed that 92% of the students are doing exercises to remain healthy and only 8% were doing it for their Overall development.
- ❖ Around 60 % of the students has a Family history of systemic illness among which 32% has a history of Diabetes Mellitus and 40 % Hypertension
- ❖ The Means of food habits is changing in day today life among which 72 % of the people were eating Occasional junk food which we have found and 26% were Regular junk food eaters
- ❖ When coming to Food Habits 76% of them are Non- vegetarian
- ❖ Their sleep pattern More than 6 hrs for about 62% of the students and 58% of them use their electronic communication gadgets for less than 6-8 hrs and 68% of them hailed from urban area.

Discussion:

Food habits:

Indian based study on dietary pattern and bio physical profile among nursing students has revealed 66% to be consuming junk foods ⁽¹¹⁾ and another, study among Chandigarh nursing students has recorded 94% to be consuming junk food. 95% of the adolescent girls consume junk food ⁽¹⁷⁾. Above studies support, findings of this study with 72% of the subjects with junk food habits

Among India 51% subjects in a medical college students were vegetarian (10) Chandigarh based Nursing students 35% were non vegetarian (18), whereas>6% of this study subjects were non-vegetarians

Obesity:

➤ 31% were obese 11% were overweight 20% underweight when college students BMI was calculated in Ludhiana based Nursing college students ^(10,11) have studied among medical and dental students at Lahore and recorded 21% to be overweight 6% were obese and 21% underweight Varanasi based rural study among adolescent girls⁽¹⁹⁾ has 17% to be obese 27% to be underweight among 650 girl students, where as 4% of this study subjects were obese while 22% were underweight the due reasoning for this needs further study. It is worthy that 28% of the participants in this study hail from rural and semi urban background

Exercises and physical fitness:

47% of the nursing subjects in an Indian study reported with regular habits of exercises. An US based study among 3,310 college students 20% had a habit of regular exercises⁽²⁰⁾, whereas 82% of this study subjects have regular physical exercise

Rural / Urban:

➤ West Bengal based study conducted have been reported as Rural school children were better with health related physical fitness and psychomotor ability (21)

Sleep Pattern:

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➤ 35% had sleeplessness, 39% had anxiety while using phone, 35% lacks academic performance 255 had differences with parents with excessive usage (22), while 42% of this study subjects were using more than 6 hours of cell phone

Limitations of this Study: Physiotherapy students were only were studies and only Chennai metropolitan students were included was only a survey with no interventions were used for therapy for problems found. Further recommendations of this study were to include larger sample size of both sex, students from other professions and rural colleges. Also to analyse few therapy including life style modifications could be continued as further extension of this study.

Critical Appraisal of this Study:

- > Outcome of this study emphasis on the life style modifications with diet, exercises, psychological counseling among professional college students.
- ➤ No effort was put in this research as measures of remedy, being only an observational analytical study.
- ➤ With global alarming on increasing prevalence of non communicable diseases awareness on consumption of proper food, regular physical activities and proper usage of electronic communication gadgets are need of the hour by health care professional planners, and government.
- ➤ With an increased tobacco and alcohol consumption among female population, through was not analyzed in this study requires further preventive means of their usage helps a lot towards prophylactic as well economy of our country.
- > Similar analysis among rural population colleges of various professions shall give for to combat life style related diseases and disorders.

Conclusion:

An alarming rise in obesity among Asian Indian Adolescents could be due to sedentary life style, unhealthy, food habits, cultural practical's decreased physical activity increasing affluence of middle class population. As obesity linked with Diabetes and Cardio Vascular Diseases in India. This can lead to a huge burden on Nations economy and growth. An improved awareness on physical activity and diet among school &college .students along with due promoting and encouragement to achieve better physical fitness of each adolescent hence assuring for a health stronger future India is sowed is the key aim of this presentation

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