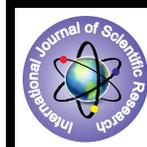


Health Status of Commerce Junior College Students in a Metropolitan City



Medical Science

KEYWORDS : Health Status, Commerce Junior College Students, Metropolitan City

**DR RAVINDRA
BALARAM GURAV**

Asst.Professor, Department of Community Medicine, Rajiv Gandhi Medical College, Kalwa, Thane – 400605, Maharashtra

ABSTRACT

This cross sectional study was conducted to know the health status of the students studying in a randomly selected Commerce Junior College in a Metropolitan city. 263 students present took part in the study. Of these 134(50.95%) were males and 129 (49.05%) were females. The mean age of the whole group was 16.75 years with standard deviation of 1.00 year. The mean weight of the whole group, boys, girls was 48.31, 51.10, 45.41 kg with standard deviation of 6.82, 5.43, 6.92 kg respectively. Similarly the mean height was 152.79, 155.70, 149.77 cm with standard deviation of 6.80, 6.85, 5.29 cm respectively. Also, the mean BMI was 20.68, 21.12, 20.21 kg/m² with standard deviation of 2.80, 2.58, 2.96 kg/m² respectively. The mean weight, mean height and mean BMI of boys and girls are compared; the difference is statistically significant ($p < 0.05$). 109(81.34%) boys and 92(71.32%) girls were having BMI within normal range i.e.18.50 to 24.99 kg/m². The BMI of 19(14.18%) boys and 33(25.58%) girls was below 18.50 kg/m² ($p < 0.05$). 06 (04.48%) boys and 04 (03.10%) girls were overweight (i.e. BMI ≥ 25 kg/m²). One girl was obese (i.e. BMI ≥ 30 kg/m²). Of the 263 students, 71 (27.00 %) were having a health problem. Of the 71, 20(28.17%) were boys and 51(71.83%) were girls ($p < 0.05$). 08(05.97%) boys and 27(20.93%) girls were having pallor. The difference is statistically significant ($p < 0.05$). 04(03.10%) girls were having menstrual problems like dysmenorrhoea, irregular menses, pain in abdomen. 01(0.77%) girl was a known case of pulmonary tuberculosis and was under regular treatment. Periodic medical examination and regular health education sessions are essential to reduce morbidity among this group. Additional health care services should be provided to the girls. Ultimately this will improve student's academic performance.

INTRODUCTION

Junior college students belong to middle and late adolescence stage. ⁽¹⁾ This period is the healthiest period of life in one's life cycle. The morbidity and mortality is least. ⁽¹⁾ But due to various reasons, this group is at risk of having various health problems. Health needs of this group are tremendous. Their prime need is correct and complete information on adolescent health, adequate diet for growth and development, healthy life styles, education and health supportive environment and counseling. To meet their needs, it is necessary to have comprehensive organized programme. To plan such programme, it is necessary to have baseline morbidity data related to this important group whose members are future citizens and leaders of the community. Welfare of these adolescents while at junior college is an important fact of the comprehensive health service.

MATERIALS AND METHODS

This observational study was conducted among the students studying in a randomly selected commerce junior college in a Metropolitan City. Before conducting the study necessary permissions were obtained. The participants were made aware of the purpose of the study. All the 263 students present took part in the study. Age, sex, height, weight, symptoms and findings of physical examination of each participant were recorded in the pretested proforma. The data was analyzed using Microsoft Excel. Standard Error of difference between two means and two proportions tests were applied. The results were interpreted at 5% level of significance.

RESULTS AND DISCUSSION

263 Commerce Junior College students present took part in the study. Of these 134 (50.95%) were males and 129 (49.05%) were females. The mean age of the whole group, boys, girls was 16.75, 17.00, 16.48 years with standard deviation of 1.00, 1.05, 0.89 year respectively. The mean weight of the whole group, boys, girls was 48.31, 51.10, 45.41 kg with standard deviation of 6.82, 5.43, 6.92 kg respectively. Similarly the mean height was 152.79, 155.70, 149.77 cm with standard deviation of 6.80, 6.85, 5.29 cm respectively. Also, the mean BMI was 20.68, 21.12, 20.21 kg/m² with standard deviation of 2.80, 2.58, 2.96 kg/m² respectively. (Table-1) 109(81.34%) boys and 92(71.32%) girls were having BMI within normal range i.e.18.50 to 24.99 kg/m². ⁽¹⁾ The BMI of 19(14.18%) boys and 33(25.58%) girls was below 18.50 kg/m² ($p < 0.05$). 06 (04.48%) boys and 04 (03.10%) girls were overweight (i.e. BMI ≥ 25 kg/m²). ⁽¹⁾ One girl was obese (i.e. BMI ≥ 30 kg/m²). ⁽¹⁾ The

mean weight, mean height and mean BMI of Boys and Girls are compared; the difference is statistically significant ($p < 0.05$).

71(27.00 %) students were having a health problem mentioned in the Table-2. Of these, 20(28.17%) were boys and 51(71.83%) were girls ($p < 0.05$). 08(05.97%) boys and 27(20.93%) girls were having pallor. The difference is statistically significant ($p < 0.05$). 02(01.49%) boys and 05(03.87%) girls were having ophthalmic problems like decreased vision, watering, burning sensation or redness of eyes. 05(3.73%) boys were suffering from ENT problems like decreased hearing and wax in one or both ears. 04 (2.98%) males and 03(2.32%) girls were suffering from skin problems like ringworm, acne, hyper-pigmentation. 05(03.87%) girls were suffering from musculo-skeletal problems like joints pain, backache or headache. 04(03.10%) girls were having menstrual problems like dysmenorrhoea, irregular menses, pain in abdomen. 01(0.77%) girl was a known case of pulmonary tuberculosis and was under regular treatment.

R Altaf Hussain ^{et al} ⁽²⁾ in their study among adolescent students aged 14 to 18 years studying in Junior college and High School in Andhra Pradesh observed, 87.3% boys and 96% girls were having one or more morbid conditions. The major prevalent morbid conditions among boys were skin disorders (57.7%), ENT conditions (52.00%), Vitamin A deficiency (47.3%), Vitamin B deficiency (24.7%), and Dental caries (24.00%). The major morbid conditions among girls were skin disorders (67.7%), ENT conditions (45.3%), Vitamin A deficiency (38.00%), Pediculosis / scabies (25.00%), Anemia(22.7%), Dental caries (21.00%) and Refractive errors(08.00%). Vivek B. Waghachavre ^{et al} ⁽³⁾ in their study of menstrual problems among the female junior college students in rural area of Sangli District observed, 119(64.00%) students were suffering from some menstrual problem. Dysmenorrhoea was commonest menstrual problem and was present in 42.5% students. The morbidity among junior college students was high at above two rural places, compared to present study in metropolitan city.

To promote, protect, and maintain the health of this group and to expect better academic performance from them, periodic examination, ⁽²⁾ implementation of health insurance scheme as well as health education and counseling sessions ⁽³⁾ should be organized regularly. More efforts should be taken to improve health status of the girls. The junior college students during this period undergo rapid physical and biological changes. It is a period

in which foundations can be laid for a long and healthy life. It is a prime time for health promotion and for establishment of healthy behavior that will influence health in later years.⁽⁴⁾

Table-1 Mean and Standard Deviation of Age, Weight, Height and BMI

Parameters		Boys (n=134)	Girls (n=129)
Age(yr)	Mean	17.00	16.48
	Standard Deviation	1.05	0.89
Weight (kg)	Mean	51.10	45.41
	Standard Deviation	5.43	6.92
Height (cm)	Mean	155.70	149.77
	Standard Deviation	6.85	5.29
BMI (kg/m ²)	Mean	21.12	20.21
	Standard Deviation	2.58	2.96

Table-2 Distribution of morbid conditions

Type of morbidity	Boys (n=134)	Girls (n=129)
Pallor	08(05.97%)	27(20.93%)
Ophthalmic problems	02(01.49%)	05(03.87%)
ENT	05(03.73%)	00(00.00%)
Musculoskeletal problems	01(00.75%)	05(03.87%)
Skin	04(02.98%)	03(02.32%)
Weakness	00(00.00%)	02(01.55%)
Mild fever	00(00.00%)	01(00.77%)
Stomatitis	00(00.00%)	02(01.55%)
Known case of pulmonary T.B.	00(00.00%)	01(00.77%)
Gastrointestinal symptoms	00(00.00%)	01(00.77%)
Menstrual Problems	Not Applicable	04(03.10%)

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