Assessment of Body Mass Index of B.Ed & D.El.Ed Students of Bhavan's Tripura Teacher Training College in Tripura

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Abstract

To know the body fat percentage of B.Ed & D.El.Ed students of Tripura, the present study was carried out on 220 male & female B.Ed & D.El.Ed students belonging to Tripura and falling in the age range of 18 to 40 years. Stature, body mass and BMI were taken to the standard procedure. Participants body mass was measured without shoes and with light clothing to the nearest 0.1 kg, using a digital weighing machine. Their stature was measured to the nearest 0.1 cm using a stadiometer. BMI were measured by weight (kg)/height (cm.) X height (cm). Body mass index was calculated by using the BMI charts. Data on anthropometry revealed that out of total 220 B.Ed students screened (N=160) & D.El.Ed students screened (N=60), mean height and weight in all the age group was significantly increasing due to the amount of body fat changes with their age. BMI of 18 to 40 years B.Ed & D.El.Ed students of Tripura was maximum fallen in healthy weight category due to shows within 18.5 to 24.9 ranges. The purpose of the study is to find out the current body fat percentage of B.Ed & D.El.Ed male and female students of Tripura.

KEYWORDS: Height, Weight, Body mass index, B.Ed & D.El.Ed Students.

Introduction

Body Mass Index (BMI) is a measurement of a person's weight with respect to his or her height. It is more of an indicator than a direct measurement of a person's total body fat. BMI is an indicator of total body fat in many individuals. BMI is used by healthcare professionals to screen for overweight and obese individuals. The BMI is used to assess a person's health risks associated with obesity and overweight. BMI, however, is one of the tools that are used to calculate healthy risk. Other factors such as blood pressure, cholesterol level, blood sugar level, family history of heart disease, age, gender, waist circumference, level of physical activity, menopause status, smoking status etc. are also taken into consideration while assessing health risk.

Anthropometry is the measurement of body height, weight and proportions. It is an essential component of clinical examination of infants, children, adults and pregnant women. To know the current body fat percentage of B.Ed & D.El.Ed students, the present study was carried out on 220 male & female B.Ed & D.El.Ed students belonging to Tripura and falling in the age range of 18 to 40 years. For the study researcher has applied body fat assessment by Anthropometric methods that is Body mass index. The criteria used to interpret the meaning of the BMI number for children and teens are different from those used for adults. For children, teens and adults BMI age and sex specific percentiles are used for two reasons these are the amount of body fat changes with age and the amount of body fat differs between girls

and boys. The purpose of the study is to find out the current body fat percentage of B.Ed & D.El.Ed students of Tripura.

Objective of the study

i. To find out the current body fat percentage of B.Ed & D.El.Ed students of Tripura.
ii. The study will assess the body fat percentage of B.Ed & D.El.Ed students of Tripura.

Methodology

Selection of the Subjects

For the purpose of the study two hundred twenty (N=220) male & female B.Ed & D.El.Ed students were selected from Bhavans Tripura Teacher Training College in Tripura and their aged range in between 18-40 years.

Selection of the Variables

Keeping in mind the feasibility criteria, availability of equipments and the purpose of the investigation the following variables were selected.

Body fat percentage:

a) Body fat percentage was measured by Anthropometric methods of B.Ed & D.El.Ed male and female students.
i. Height (cm.)
ii. Weight (kg.)
b) The study was further delimited to the following indices to assess the body fat percentage of B.Ed & D.El.Ed male and female students of Tripura.
i. BMI (Body mass index).

Selection of Tools

Weighing machine, calculator and stadiometer were used for the study.

Collection of Data

The data of the study was collected by using following method:-

i. Body fat percentage was determined by BMI (Body mass index).

Procedure

The right BMI calculation requires getting the accurate height and weight measurements. Participants body weight was measured without shoes and with light clothing to the nearest 0.1 kg, using a digital weighing machine. Their stature or height was measured to the nearest 0.1 cm using a stadiometer.

Statistical Technique

For the purpose of the study to verify the current body fat percentage of B.Ed & D.El.Ed male and female students in Tripura, descriptive statistics and BMI (Body mass index) was employed.

Results and Discussion
Table: I Mean values of body fat percentage of B.Ed & D.El.Ed Students in Tripura

		B.Ed	D.El.Ed
	Total no. of Students	**160**	**60**
Height (cm.)	Mean	158.34	155.34
	SD	7.21	6.86
Weight (kg.)	Mean	57.42	56.63
	SD	9.83	9.57
BMI	Level	**22.9**	**23.5**

Table-I shows the mean and SD of Height from 18 to 40 years aged B.Ed students was 158.34±7.21& 18 to 40 years aged D.El.Ed students was 155.34±6.86

The mean and SD of Weight from 18 to 40 years aged B.Ed students was 57.42±9.83, & 18 to 40 years aged D.El.Ed students was 58.29±9.57
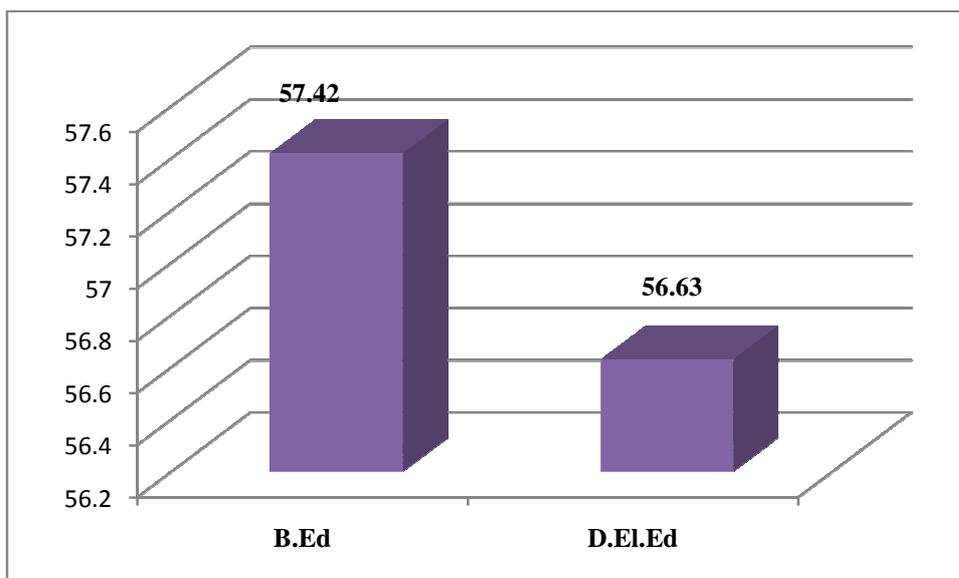
Fig- I Height of B.Ed and D.El.Ed students in Tripura
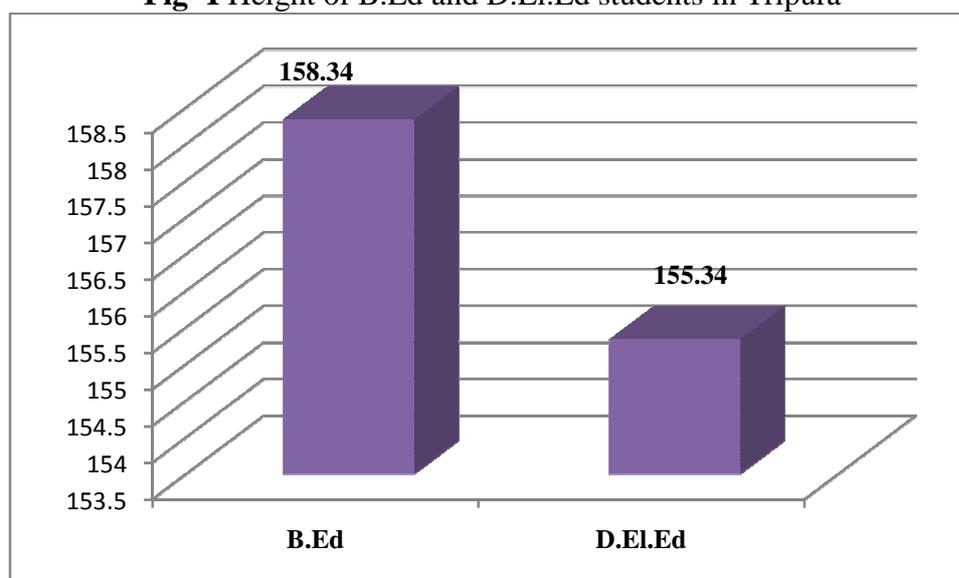
Source: Primary Survey, 2019-20

Fig-I Shows the mean value of height on B.Ed and D.El.Ed students of Tripura. The figure shows that the frequency of height was increasing due to their age and nutritional food habit etc.
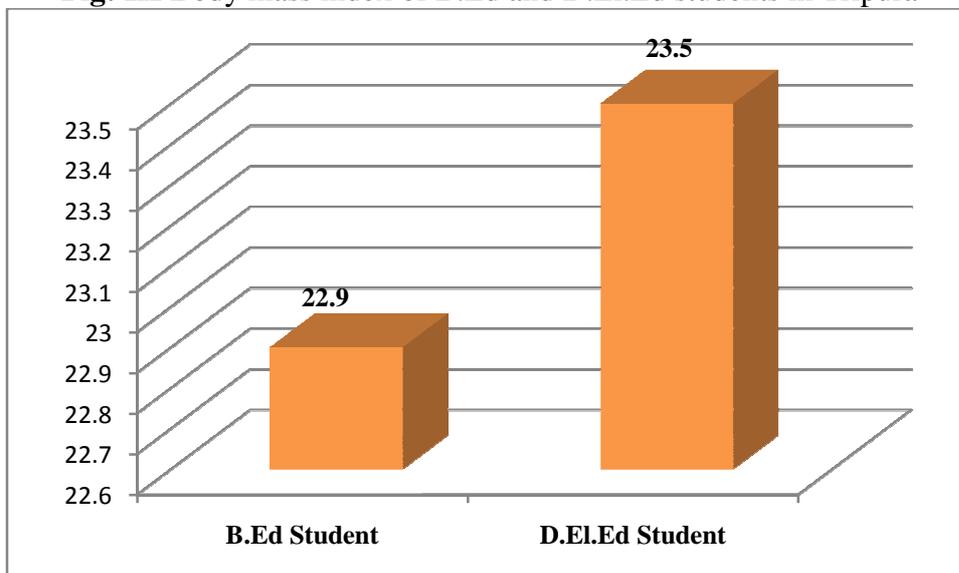
Fig- II Weight of B.Ed and D.El.Ed students in Tripura

Source: Primary Survey, 2019-20

Fig-II Shows the mean value of weight on B.Ed and D.El.Ed students of Tripura. The figure was increasing frequently due to their age, physical exercise and nutritional food habit etc.

Fig: III Body mass index of B.Ed and D.El.Ed students in Tripura

Fig-III Shows the body mass index of B.Ed and D.El.Ed students in Tripura. The figure was increasing frequently due to the amount of body fat changes with their age, height, weight and nutrition etc. The level of BMI shows that all B.Ed and D.El.Ed students were laid down in healthy weight category due to shows within 18.5 to 24.9 range.

Conclusion

Base on the study we can conclude that the:

- Height that were increasing with their age.

- The weight also increasing due to the amount of body fat changes with their age.
- BMI of B.Ed and D.El.Ed students of Tripura was placed in healthy weight category due to range lay down within 18.5 to 24.9.

References

O, A. (1999). Body composition assessment in American Indian children. *Am J Clin Nutri*, 764S-766S.

PYB, R. (1995). Nutritional status of pre-school children: Sugali community in Cuddapah district. *Health care service management. Hyderabad: Delta Publishing House*, 59-68.

Q, Z. (2012). Percent body fat is a better predictor of cardiovascular risk factors than body mass index. *Braz J Med BiolRes* , 591-600.

SA, J. (1993). Techniques for the measurement of body composition: a practical guide. *Int J Obes Relat Metab Disord*, 17: 611-21.

SR, D. (2000). Utility of different measures of body fat distribution in children and adolescents. *Am J Epidemiol*, 1179-84.

Maynard, L. M. (2001). Childhood Body Composition in Relation to Body Mass Index. *Pediatrics 107*, 344–350.

Somawar, B. N. (2015). Assessment of nutritional status amongst bihor tribe childrens residing in Dharamjaigarh block of Raigarh district. *International Journal of Research in Medical Sciences*.

P., K. (1997). Health status of primitive kamar tribe children of Gariaband block. *A thesis for MD (Paediatrics). Pt. RSS University, Raipur*.