ABSTRACT

RELATIONSHIP AMONG BODY MASS INDEX AND HEMOGLOBIN RATE WITH LEARNING ACHIEVEMENT OF STUDENTS IN SMP NEGERI 22 BANDAR LAMPUNG

By

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The quality of human resources is a necessary condition of development in all fields. Quality of human resources can be seen through the learning achievement that affected by Body Mass Index (BMI) and hemoglobin rate. The purpose of this research was to determine the relationship among BMI and hemoglobin levels with learning achievement.

This research constitute observational research type analytic with cross sectional approaching to students in SMP Negeri 22 Bandar Lampung. The number of samples is 78 person that was taken by disproportionated stratified random sampling. BMI is formulated by weight and height. Hemoglobin rate is obtained from venous blood. Learning achievement is obtained by the value of Indonesian, English, science, math and the average value of mid semester. Data were analyzed using univariate and bivariate with Pearson and Spearman correlation test.

The majority of the sample were female (52,6%) and average of age was 13.5 years. Average of BMI was 19,3 kg/m², hemoglobin rate was 13,7 g/dL, value of Indonesian was 72,2, value of English was 72,4, value of IPA was 66,8, value of math value was 52,9 and average value of mid semester was 72,2. The results of the bivariate analysis showed BMI had a significant positive relationship to the Indonesian value (r=0,233, p=0,05), the value of English (r=0,565, p<0,05), the value of the IPA (r=0,370, p<0,05) and the average value of mid semester (r=0,534, p<0,05). Hemoglobin rate had a significant positive relationship to the Indonesian value (r=0,453, p<0,05), the value of English (r=0,534, p<0,05), the value of the IPA (r=0,380, p<0,05), the value of math (r=0,415, p<0,05) and the average value of mid semester (r=0,672, p<0,05). Thus, it can be concluded that BMI and hemoglobin rate had a significant positive relationship to learning achievement.

Key word: BMI, hemoglobin rate, learning achievement junior high school student