

ABSTRACT

The Difference in Age at Menarche among Bugis urban and rural Female Students in South Sulawesi (A Physical Anthropological Approach Viewed from Biological and Environmental Aspects)

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This study was aimed to disclose: (1) the difference in the age at menarche, body weight, nutritional status, physical activity, and socio-economic level of the parents of urban and rural Bugis female students in the Districts of Maros, Soppeng, Sidenreng Rappang, and Enrekang in South Sulawesi, (2) predominant variables affecting age at menarche, and (3) variables directly and indirectly affecting age at menarche.

This study used cross-sectional design. Population was Bugis female students in the Districts of Maros, Soppeng, Sidenreng Rappang, and Enrekang in South Sulawesi. Total samples were 400 respondents, divided into: (1) Urban group, consisting of 200 respondents, and (2) Rural group, comprising 200 respondents. Samples from each district consisted of 100 respondents, from which 50 respondents were from urban area, and the remaining was from rural area. Data were analyzed using (1) t-test with significance level of 0.05, (2) Discriminant test, and (3) path test with significance level of 0.05.

Results showed that (1) age at menarche in urban group was significantly different from that of rural group, in which the age in urban group was lower than that of rural group. (2) The body weight of both groups was different, where the body weight in urban group was better than that in rural group. (3) Nutritional status in those groups was also different. Urban group had a better nutritional status than the rural group. (4) Physical activity of both groups showed difference, in which rural group had higher physical activity compared to urban group. (5) Indexed socioeconomic status of the parents of rural and urban students showed difference. (6) Discriminant analysis revealed the most predominant differential parameter of body weight. The parameter of body weight had relations to the accelerated age at menarche among Bugis female students. (7) Results of Path analysis showed that (a) factors having direct effect on the age at menarche were body weight, nutritional status, and socioeconomic status of the parents, and (b) factor having indirect effect not the age at menarche was respondent's physical activities

Key words: *age at menarche, body weight, nutritional status, physical activity, and socioeconomic status, Bugis urban and rural in South Sulawesi, (physical anthropology, biology and environmen).*