

Mean Age at Menarche among Four Endogamous Populations of Coastal Andhra Pradesh

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ABSTRACT The age at menarche varies across the populations of the world and depends on various socio-economic, biological and genetic factors. In the present paper an attempt is made to present the distribution of age at menarche of girls belonging to four different endogamous populations of Andhra Pradesh namely, Kapu (peasant caste), Settibalija (toddy-drawing caste), Paki (scavenging caste), and Yerukula (plain area scheduled tribe). Data were collected from women living in rural area of Narasapuram mandal of West Godavari District of Andhra Pradesh, through personal interviewing. A majority of girls of former three populations attained puberty during 13th year of their age, while among Yerukula tribe, a majority reported the attaining of menarche at the age of 12th year.

INTRODUCTION

Menarche is the symbolic start of womanhood (Peller 1967). The age at menarche is defined as the occurrence of the first menstrual cycle. And, it is initial stage of reproductive cycle. It is the age at which girls can become physiologically capable to bear offspring (pregnancy) and give birth to the child. The literature reveals that the age at menarche varied across the populations of different regions of the world (Chumlea et al. 2003, Malina and Bouchard 1991, Raji et al. 2006, Uche-Nwachi et al. 2007, Whincup et al. 2001). The age at menarche depends upon several environmental and intrinsic factors such as physiological strength, hormonal activation, nutrition, race, geographical location, etc. (Eveleth and Tanner 1990, Kralj-Cercek 1956, Richardson et al. 1983, Wilson and Sutherland 1953). In this context, the present paper reports the distribution of age at menarche among four endogamous populations. The four endogamous groups included in the present investigation are Kapu, Settibalija, Paki and Yerukula. Kapu is a peasant community and predominantly depends on agriculture and other related activities. Settibalija is a toddy-drawing community and however, some of them depend on agriculture-related activities. Traditionally, Paki was a scavenging community and presently most of them are involved in sanitary and other labour works. Yerukula is a tribe living in plain areas. Their traditional occupations include pig breeding, basket making, sooth saying, etc.; however, they mostly depend on daily-wage labouring.

MATERIAL AND METHODS

The sample for the present study was drawn from rural areas of Narasapuram mandal of West Godavari district of Andhra Pradesh. For each endogamous population, households were sampled randomly. Also, care had been taken not to include related people within the sample of each community. Thus, a total of 400 households, 100 each from each endogamous group were selected from the same ecological niche so that the environmental influences if at all are present, will be uniform for all of the populations. The women were interviewed by using a pre-tested schedule. The age at menarche was collected along with other demographic information. The age at menarche was indicated as the age at onset of menses. The ages and dates were cross-checked with other elders and by tallying with other important events in the study area.

RESULTS AND DISCUSSION

The distribution of girls according to the age at menarche is presented in table 1. A majority of Kapu girls attained puberty during the age of 13th year (34%), followed by 14th year (28%) and 12th year (22%). Among Settibalija, majority of girls recorded the menarche at the age of 13th year (55%), followed by 12th year (32%) and 14th year (9%). About one-third of Paki girls attained puberty at the age of 13th year, and followed by 12th year (30%). Majority of Yerukula girls reported to attain puberty at the age of 12th year

Table 1: Distribution of age at menarche among four endogamous populations of Andhra Pradesh

Age at menarche	Kapu	Setti-balija	Paki	Yerukula
11 th year	6 (6.0)	4 (4.0)	2 (2.0)	14 (14.0)
12 th year	22 (22.0)	32 (32.0)	30 (30.0)	73 (73.0)
13 th year	34 (34.0)	55 (55.0)	62 (62.0)	13 (13.0)
14 th Year	28 (28.0)	9 (9.0)	6 (6.0)	0 (0.0)
15 th Year	7 (7.0)	0 (0.0)	0 (0.0)	0 (0.0)
16 th Year	3 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)
Mean $\pm$	13.19 $\pm$	12.69 $\pm$	12.72 $\pm$	11.99 $\pm$
standard deviation (in years)	1.19	0.69	0.60	0.52

(73%) and some attained-at the age of 11th year (14%). The data reveal that a small number of girls attained puberty as early as 11 years of age. However, a few Kapu girls reported a highest age at menarche, which is at the age of 16 years. The mean age of menarche is highest among Kapu (13.19 years), followed by Paki (12.72 years), Settibalija (12.69 years) and Yerukula (11.99 years).

The present paper reports the age at menarche of girls belong to four endogamous populations, who belong to middle to low socio-economic strata. Though, the socio-economic status varies across these four populations, they share a common geography and environment. The present reported mean ages of menarche are relatively low. There is evidence in the literature to show that the trend towards earlier puberty among adolescents is fast becoming a global phenomenon (Lee et al. 2001 and Raji et al. 2006). Also, studies indicated that the age at which females attain menarche has been suggested as an indicator of their nutritional status (Leary 1969; Frisch 1972). However, Marshall and Tanner (1969) and Eveleth and Tanner (1990) suggested that the variations in the age at menarche across populations could not be due to improved nutrition only, and may also may be due to other factors. Menarche is an important predictor of the timing of marriage thereby affecting age at first birth. Moreover, in Indian rural areas they

are married as early as possible after attaining menarche leading to future problems relating to reproductive health.

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