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## Short Communication

# Age at menarche in two tribal groups of Dharwad and Bijarpur Districts in Karnataka State

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The aim of this study was to find the mean age at menarche in two different tribal groups namely Kanjarbhat and Lamani. This study was to assess the level of knowledge regarding rituals, taboos, food pattern, social restrictions, health problems and nutrition observed during the menstrual period. The sample for the research comprised of 310 Kanjarbhat girls and 310 Lamani girls in the age groups of 11 to 18 years from Dharwad and Bijapur Districts of Karnataka State. The results reveal that the mean age at menarche among the Kanjarbhat girl's is13.0516 and Lamani girl's is 13.129 and total is 13.0903.

Key words: Menarche, girls, physical growth, taboos, nutrition, Lamani and Kanjarbhat.

### INTRODUCTION

Age of menarche is associated with physical growth. Menarche is the marker of puberty. It has been observed that menarcheal age varies in different populations and is dependent on factors like environment, nutrition and heredity. This phenomenon can be studied in two ways. One is the prospective method where trained persons keep close observation on the subjects and mark the onset. But as this type of study cannot be applied to a large population, the retrospective method of recording the menarcheal age depending on recall is generally used. This method has also limitations. Human memory is 'unreliable scientific instrument' and also recall may vary according to the cultural and educational background of the population (Frisancho et al., 1969). First report on age at menarche dates back to 1895 when Robertson made an investigation of puberty of women.

Later, Curjel (1920) also made a study. In India, age at menarche has been studied by Das and Das in 1966. They have studied the age at menarche of Assamese girls and found that it increases among the rural population (Rakshit, 1960). Dr. Sarkar in 1951 found that the average age at menarche of the Calcutta girls has gone down. These findings were contested by Banerjee and Mukherjee (1961). But data presented by these two

authors are not homogeneous. The present study is based on investigation among 310 Kanjarbhat girls and 310 Lamani girls in the age group of 11 to 18 years from Dharwad and Bijapur Districts of Karnataka State. The subjects selected are inhabitants of four talukas, namely, Dharwad, Hubli, Navalgund and Basavan-Bagewadi. They have resided in these towns for more than 60 to 70 years.

#### **METHODOLOGY**

For determining the age at menarche the sample comprising of 620 girls were taken, of them 310 girls belonged to Kanjarbhat and 310 girls belonged to Lamani families. These girls were between the age group 11 to 18 years. For taking other pertinent information 200 girls, (who had experienced menarche) from the above 620 girls were selected (150 Kanjarbhat and 150 Lamani girls). Random sampling technique was used. Sample was drawn from among the middle socio-economic strata. Statuesque methods was used to obtain the age at menarche, and interview schedule for gathering the information regarding the rituals, taboos, social restrictions, health problems, nutrition, hygiene were observed during menarche.

#### **RESULTS AND DISCUSSION**

The results of the present investigation on age at menarche of Kanjarbhat and Lamani females of Dharwad and Bijapur Districts have been presented in Table 1. 310

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Table 1. Frequency distribution of women by age at menarche among Kanjarbhat and Lamani.

Age (in years)	TRIBAL GROUPS				Total	Doroontogo
	Kanjarbhat (N)	Percentage	Lamani(N)	Percentage	Total	Percentage
11	036	11.63	028	09.03	064	10.32
12	072	23.22	089	28.72	161	25.97
13	102	32.90	098	31.63	200	32.25
14	054	17.41	045	14.52	099	15.97
15	036	11.63	022	07.09	058	09.36
16	007	02.25	019	06.12	026	04.19
17	002	00.64	006	01.93	800	01.29
18	001	00.32	003	00.96	004	00.65
Total	310	100.0	310	100.0	620	100.0
Mean	13.0516		13.129		13.0903	
SD	01.3115		01.4710		01.3941	
SE	00.0745		00.0856		00.0810	

Table 2. Social and health problems during menarche (in percentage).

Response		Kanjarbhat	Lamani
Feelings during menstruation	Negative	98	89
Family reaction	Positive	100	100
Painful Periods	Yes	67	49
Location of the pain			
a) Abdomen	Positive	73	53
b) Legs	Positive	23	17
c) Head	Positive	14	28
Whether weakness or fainting	Positive	13	11
Do you consult Doctor	Positive	03	21
Do you do house hold work	Yes	69	28
Regular periods	Yes	83	81
Do you remember period date	Yes	96	99
Do You take bath on first day	Yes	100	100
What kind of Material used (Pad / Cloth)	Yes	100	100
Nutrition			
a) Do you eat whatever you like	Yes	100	096
b) Do you Avoid hot food	No	79	096
Avoid going to Kitchen	Yes	11	09
Whether live in separate Room	Yes	03	09
Whether utensils are Separated	Yes	08	03
Prohibition from social interactions	Yes	78	63
Avoid going to temple	Yes	100	100

menarche samples were collected from each tribal group in different taluks of Dharwad and Bijapur Districts and analyzed. The percentile frequency distribution of Menarcheal ages of the Kanjarbhat and Lamani women is presented in Table 1. The menarcheal ages in these

populations range from 11 to 18 years. Among Kanjarbhat, majority of the girls (32.90%) menstruate at the age of 13 years and the lowest percentage is found (0.32 and 0.64%) at the age of 17 and 18 years. The mean menarcheal age in the girls of Kanjarbhat is 13.516

 $\pm$  0.0856 years. In case of Lamani group, the menarcheal age 13 years wherein maximum (31.63%) number of girls are found, whereas, the age 18 years shows the lowest percentage (0.96%) of girls with a mean menarcheal age of 13.129  $\pm$  0.0856 years. Similar trend was found in both group as the highest percentage (32.25%) at 13 years of age and the lowest at the age group of 18 years (0.65). The mean menarcheal age of both groups is 13.0903  $\pm$  0.810 years, respectively.

Table 2 reveals that 98% girls of Kanjarbhat and 89% of Lamani girls felt badly during menstruation but their family's (100%) attitude was positive. Majority of the Kanjarbhat girls (73%) and the Lamani girls 53% faced pain in abdomen. Whereas most of the Kanjarbhat girls 23% faced pain in Leg and Lamani girls 17%. Also, a majority had headache in Lamani girls 28% and in Kanjarbhat girls 14%, only 21% of the Lamani and 3% of Kanjarbhat girls consulted doctors at the time of pain. 83% of the Kaniarbhat and 81% of Lamani girls had their regular menstruation period. 99% of Lamani girls and 96% of Kanjarbhat girls remember their menstrual dates. At the time of menarche both the group of girls used cloth pads. 100% of the Kanjarbhat girls and 96% of the Lamani girls eat whatever is cooked at home, but 96% of Lamani girls and 79% of Kanjarbhat girls avoid eating sesame seed, jaggery, sour food and sweets during menstual periods. 25% (both group) of the girls preferred lemon juice, coconut water and ice-cream as it reduces stomach pain. 11% of Kanjarbhat and 09% of Lamani girls avoid going to kitchen at the time of menarche. 08% of Kanjarbhat and 03% of Lamani girls keep their utensils separate during menstruation. 78% of the Kanjarbhat and 63% of Lamani girls were prohibited from social interactions at the time of menstruation. Both groups' girls avoid going to temple during their period.

It has been observed by a number of researchers that there is a wide variation in the age at menarche. Basavanagouda (2002) indicates that the impact of menarche on their daily activities disturb their productivity at their work place. Bhattacharyya et al. (1991) observed

that a menstruating woman is not allowed to enter into the living room, cattle shed and kitchen. It is also a taboo for them to collect drinking water for herself and for the household and to visit religious place. Rao and Aruna (1976) stated that respondents from high and middle income groups were found to be normal and moderately nourished, whereas respondents from low income groups were moderate and undernourished. Sena (1972) has reached similar conclusion that the majority of the girls belongs to both cast groups (Nayar) felt uneasy at the time of menarche and they faced painful menstrual periods. There are no restrictions in eating but they avoid sour foods. Early in her menstrual life a young girl is conditioned to the idea of dysmenorrheal.

This study observed that some girls who had painful periods absented themselves for the first two or three days. The main point achieved in this study was the necessity of broad knowledge regarding the menstrual period and personal hygiene. Psychological interventions and counselling regarding menarche should be highlighted.

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