

## A Profile of Families of Girls Studying in a Government School in Jaipur City

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**ABSTRACT** This study was conducted to determine the profile of girls studying in a government school in Jaipur city. An interview schedule was used to elicit information on the families and the girls. The results revealed that the slum where the girls resided had all the basic amenities. The mean family size was  $6.59 \pm 1.345$  members per family. Most of the families (77.0%) had nuclear family structure. A majority of adults were illiterate. Almost all the children were sent to school. Most of the fathers (37.1%) worked as construction workers. Some worked as tailors, vegetable vendors, drivers of their own auto rickshaws or taxis, hair dressers, mechanics or were engaged in gems work, making of coolers and in such other jobs. In about 54.7% of the families, women contributed to family's income. On physical examination by the doctor, it was found that about 79% of the girls had pale conjunctiva, 35% had pale nails and 4% had koilonychia. Three girls (2.2%) had palpable goitre and 5 girls (4.0%) had visible goitre.

### INTRODUCTION

Slums have been a part of urban life since many years. Residents of the slum seek employment either within the slum or in close vicinity. Hence, the income generating activities mostly center around construction work, the most common activity in the cities. Women either work as construction labourers or seek employment in small factories. Educational status of adults in slums is rather poor. However, there is awareness to such an extent that parents have started sending their children to school, even though the environment at home may not be conducive for the education of the children. The girls are undernourished and most often suffer from anaemia.

The structure of families is gradually changing from joint to nuclear families. Ghosh (2006) had reported that 78.6% of the slum dwellers of Delhi had nuclear families. The average family size was noted to be 5.3, where 44.3% of the families had 6 and more members. Upreti (2004) had stated that 34.5% of the slum families of six major cities of Rajasthan had more than 6 family members. A majority of households of urban slums of Ajmer city, too, had more than 5 family members (Kulhari 2000). This points out to the fact that quite a

substantial percentage of families has a large family size even today when 2 children family norm is advocated.

The educational status of adults and children residing in slums is quite poor. Veeramatha (2007) had observed that 49% of the women of 5 randomly selected slums of Bangalore city were illiterate. Earlier, Ramachandran and Subramanian (2001) had recorded that an equal percentage (49%) of the slum population of 17 slums of Bangalore city had received no education. In Delhi, 45.1% of the slum population was found to be illiterate, too (Ghosh 2006). However, a higher percentage of about 60% of the slum dwellers of six major cities of Rajasthan were noted to be illiterate (Upreti 2004).

Most of the residents of urban slums do not constitute a skilled working class. They engage themselves as construction labourers, rickshaw pullers, drivers, coolies, tailors, sweepers, or work in small cottage industries or factories, or as class four employees or run petty business (Kulhari 2000; Pandey 2001; Ramachandran and Subramanian 2001; Upreti 2004; Ghosh 2006; Veeramatha 2007). These jobs are low income generating activities.

Anaemia is highly prevalent in adolescent girls (Jood et al. 2001; Chakravarty and Sinha 2002; Toteja et al. 2006; Srihari et al. 2007). Other micronutrient deficiencies present in this age group are vitamin A, iodine and B complex deficiencies.

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The present study was conducted to gain an insight into the lives of the families of girls who were studying in a government school in Jaipur city and resided in a slum with regards their family structure, composition and occupation.

## STUDY AREA AND METHODOLOGY

**Selection of Subjects:** This paper is a part of a bigger intervention case control study where biscuits fortified with vitamin A, iron, folic acid, ascorbic acid and iodine were fed to the young girls studying in a government school in Jaipur city for all working days over a period of 4 months. A government school where the number of girls enrolled was high and the school being close to the University for logistical convenience was selected for the study. Girls (n=148) in the age group of 10-16 years studying in classes VI to VIII were included in the study.

**Data Collection:** A map of Jhalana Kacchi basti was obtained from Town Planning office, Jaipur. The kacchi basti was visited a number of times to obtain a profile of the area. An interview schedule was prepared for the collection of data. The interview schedule contained questions on the family structure, family composition and occupation. The data were collected from October 2004 to January 2005. Another proforma was developed for conducting medical checkup of the students. A gynaecologist accompanied by a nurse conducted the physical examination of the girl students. The physical examination included presence of symptoms of any disease, past medical history, systems inventory and clinical symptoms for nutritional deficiencies. The health data were collected in August 2004.

## RESULTS

**Profile of the Study Area:** The school was situated in the Jhalana Kacchi Basti, Jaipur. Jhalana Kacchi Basti is surrounded by roads on three sides and by Aravali hills on one side. The kacchi basti had a Government Dispensary, developed and many undeveloped parks, temples, housing board houses, government and private schools, clinics and Anganwadi centres. The basti also had a well developed shopping area. It had general stores, stationery shops, grocery stores, flour mill, Saras dairy booth and many other small shops. There were small grocery shops which people had opened in the rooms of their

houses or as separate structures. These small shops were interspersed in the entire area. Vegetable and fruit vendors stood in the market place to sell vegetables and fruits. There were some Bhattas, too, where stones were broken and fired. Some of the basti residents worked in these Bhattas.

In Jhalana Kacchi basti most of the one to three room houses were *pacca* and had been given '*pattas*' while some had been given survey numbers. These houses had common walls, and irregular rows of houses were separated by narrow lanes. Most of the houses had taps in their homes but women fetched water from taps located in the lanes. Bathing places were either separately built or were located in the corner of the verandahs. The cooking area was usually located in the verandah so that smoke would not enter the house. They even collected firewood and stacked them in their houses. Some of the families kept goats as milch animals. Most of the houses had basic amenities like electricity and water. However, some of the areas in the basti were very unhygienic.

**Profile of the Families and Their Children:** The school was located in the slum. The children attending the school resided in the slum and in the outskirts areas of the slum, which were still undeveloped.

As regards the family structure, out of the total of 148 families covered, 77.0% were nuclear in nature; 13.5% had married brothers living with them and 4.7% families had grand parents staying with them (table 1). Only 7 (4.7%) families had a joint family structure where married uncles with families and grand parents lived together and shared a common kitchen. Parents of some of the children lived with their married brothers in the same building but had separate room/s to themselves and had a separate kitchen.

The family size was  $6.59 \pm 1.345$  members per family (Table 1) considering the nuclear nature of the families. About 2 adults and five children constituted a nuclear family. The proportion of male children was lower than that of the female children per family (1.7: 2.9).

**Educational Status of the Parents of the Girls:** The educational status of the parents of the girls is displayed in table 2. About 37% of the fathers of the children were illiterate, 17% had studied up to I-V standard, 44% had cleared classes between VI and XII, and 2% were graduates. The results pointed out to the fact

**Table 1: Type of family and number of family members per family**

|                | <i>Nuclear</i> | <i>Extended with married brothers</i> | <i>Extended with grand parents</i> | <i>Joint with married uncles and grand parents</i> | <i>Joint with married uncles</i> | <i>No. of family members in a nuclear set up</i> |                |                |                |
|----------------|----------------|---------------------------------------|------------------------------------|----------------------------------------------------|----------------------------------|--------------------------------------------------|----------------|----------------|----------------|
|                |                |                                       |                                    |                                                    |                                  | <i>Children</i>                                  |                |                |                |
|                |                |                                       |                                    |                                                    |                                  | <i>Adults</i>                                    | <i>Male</i>    | <i>Female</i>  | <i>Total</i>   |
| Total<br>n=148 | 114<br>(77.0)  | 20<br>(13.5)                          | 7<br>(4.7)                         | 4<br>(2.7)                                         | 3<br>(2.0)                       | 1.93<br>±0.301                                   | 1.72<br>±0.902 | 2.93<br>±1.378 | 6.59<br>±1.345 |

Figures in parentheses denote percentages.  
Mean ± SD.

that illiteracy is still rampant amongst men of low income groups. It was observed while conversing with the parents during the home visits that if the father was well educated and well employed he always wanted his daughters to study. Some of the fathers even expressed their dissatisfaction at their daughter's performance in the school.

About 85% of the mothers were illiterate while 15% of the women had some education (Table 2). Here again, it was noticed that mothers who were educated, though their number was small, were more concerned about their daughters' education. The others wanted their daughters to study but also expected their daughters to help in household tasks, look after younger siblings and participate in income generating activities.

***Educational Status of the Children:***

Educational status of all the children (n=689) of all the families is presented in table 3. More women than men were illiterate. These men and women belonged to the older age group of children. These men and women did not get an opportunity to study when they were young and

were now married and/or engaged in income generating activities. In the younger age group, 5.6% of the children had not joined school as yet while 3.1% children were in lower kindergarten, upper kindergarten and such classes. In classes I-VIII, the percentage of girls studying in school was higher than that of boys (49.9% vs 21.7%) this may probably be due to the fact that there were more number of girls in the sample as compared to boys. In upper classes, the percentage of boys was higher than that of the girls, as the government school in the slum was only till VIII standard, then the girls are usually pulled out of school after VIII standard. In the present study, it was heartening to note that the children of the school going age were being sent to school, though their interest in studies as well as their knowledge and performance needed much to be desired for. At the time of visits to their homes only a handful of children were found studying, the rest were playing, engaged in household tasks or in income generating activities.

**Table 2: Educational status of parents of girls**

|              | Father (n=140) |               |              |            | Mother (n=144) |             |               |             |
|--------------|----------------|---------------|--------------|------------|----------------|-------------|---------------|-------------|
| Illiterate   | Class I-V      | Class VI-VIII | Class IX-XII | Grad       | Illiterate     | Class I-V   | Class VI-VIII | Class IX-XI |
| 52<br>(37.1) | 24<br>(17.1)   | 26<br>(18.6)  | 35<br>(25)   | 3<br>(2.1) | 122<br>(84.7)  | 12<br>(8.3) | 8<br>(5.6)    | 2<br>(1.4)  |

Figures in parentheses denote percentages.  
8 fathers and 4 mothers were not alive.  
Grad: Graduate

**Table 3: Educational status of the children**

|                | <i>Education status of children</i> |             |                     |             |                    |             |                  |              |                      |               |                     |             |             |            |                  |            |
|----------------|-------------------------------------|-------------|---------------------|-------------|--------------------|-------------|------------------|--------------|----------------------|---------------|---------------------|-------------|-------------|------------|------------------|------------|
|                | <i>Illiterate</i>                   |             | <i>Not studying</i> |             | <i>&lt;I class</i> |             | <i>I-V class</i> |              | <i>VI-VIII class</i> |               | <i>IX-XII class</i> |             | <i>Grad</i> |            | <i>Post Grad</i> |            |
|                | <i>M</i>                            | <i>F</i>    | <i>M</i>            | <i>F</i>    | <i>M</i>           | <i>F</i>    | <i>M</i>         | <i>F</i>     | <i>M</i>             | <i>F</i>      | <i>M</i>            | <i>F</i>    | <i>M</i>    | <i>F</i>   | <i>M</i>         | <i>F</i>   |
| Total<br>n=689 | 7<br>(1.0)                          | 24<br>(3.5) | 21<br>(3.1)         | 17<br>(2.5) | 11<br>(1.6)        | 10<br>(1.5) | 68<br>(9.9)      | 95<br>(13.8) | 81<br>(11.8)         | 249<br>(36.1) | 63<br>(9.2)         | 35<br>(5.1) | 4<br>(0.6)  | 3<br>(0.4) | 1<br>(0.1)       | 0<br>(0.0) |

Figures in parentheses denote percentages.  
Grad: Graduate. Post Grad: Post graduate.

**Occupation of the Parents:** Almost all the fathers of the subjects worked to earn a livelihood and sustained their families. Most of the fathers (37.1%) worked as construction workers (Table 4). Men got work for the entire month whenever a building was under construction as then they were hired by contractors for a long period. In other cases, men got work for only 20-25 days in a month and sometimes for even less number of days. Some of the men worked as peons in government offices and drew a good salary in a month. The rest of the men were engaged in petty jobs where the income might be quite inconsistent during a month. The men worked as tailors, vegetable vendors, drivers of their own auto rickshaws or taxis (or might be hired as drivers by others), hair dressers or mechanics. They were also engaged in gems work, making of coolers and in other such jobs as outlined in table 4.

The mothers of the children of 54.7% families

**Table 4: Occupational data of the fathers of the girls**

| S. No. | Occupation                                      | (n=140) | %    |
|--------|-------------------------------------------------|---------|------|
| 1      | Construction work                               | 52      | 37.1 |
| 2      | Government service                              | 18      | 12.9 |
| 3      | Tailor, stitches export material                | 7       | 5.0  |
| 4      | Drives auto rickshaw, taxi driver, hired driver | 7       | 5.0  |
| 5      | Vegetable vendor                                | 5       | 3.6  |
| 6      | Gems Work, fixes <i>nagina</i> in jewelry       | 3       | 2.1  |
| 7      | Hair dresser                                    | 3       | 2.1  |
| 8      | Mechanic, truck mechanic                        | 3       | 2.1  |
| 9      | Aryurvedic doctor                               | 2       | 1.4  |
| 10     | Court service                                   | 2       | 1.4  |
| 11     | Making of coolers                               | 2       | 1.4  |
| 12     | Peon in court                                   | 2       | 1.4  |
| 13     | Sells shoes and slippers on footpath            | 2       | 1.4  |
| 14     | Stitches the mouth of sacks                     | 2       | 1.4  |
| 15     | Works at shoe and <i>chappal</i> shop           | 2       | 1.4  |
| 16     | Book binding                                    | 1       | 0.7  |
| 17     | Works at cycle stand in <i>mandi</i>            | 1       | 0.7  |
| 18     | Export business                                 | 1       | 0.7  |
| 19     | Grocery shop                                    | 1       | 0.7  |
| 20     | <i>Halwai</i>                                   | 1       | 0.7  |
| 21     | Home guard (private)                            | 1       | 0.7  |
| 22     | Iron work in garage                             | 1       | 0.7  |
| 23     | Makes <i>chappals</i> in factory                | 1       | 0.7  |
| 24     | Makes <i>kalai</i> in <i>bhatti</i>             | 1       | 0.7  |
| 25     | Makes school bags                               | 1       | 0.7  |
| 26     | Retired, draws pension                          | 1       | 0.7  |
| 27     | Supplies things through <i>thela</i>            | 1       | 0.7  |
| 28     | Tap and pipe fitting                            | 1       | 0.7  |
| 29     | Tea stall                                       | 1       | 0.7  |
| 30     | Welding work                                    | 1       | 0.7  |
| 31     | Works at bakery shop                            | 1       | 0.7  |
| 32     | Unemployed                                      | 12      | 8.6  |

Not alive= 8 fathers.

were engaged in some income generating activities. About 25% of the women did applique, embroidery, *moti* or maxi work. In this area, small articles of clothing were distributed to a number of households where women were interested in doing this kind of work. The women either embroidered or put *moti/sitara* or did applique work on these articles and got about Rs.3-Rs.10 per piece. Women preferred to do this work because they could handle this work together with household chores. About 15% women worked as construction labourers and found work for 15-20 days in a month. Some even worked in the vegetable market and lifted sacks of vegetables and fruits in the market. Some sought employment at the export and *agarbatti* factories which were situated in their own slum. A few also undertook *nagina* work on machines they had installed in their houses. The others were engaged in some other activities as has been disclosed in table 5. In winters, the women even peeled green bengal gram pods.

Grandparents, uncles, aunts and even children worked to augment a family's income. Boys usually assisted fathers in their work while girls helped in the maxi work which was undertaken by the women of the households.

**Table 5: Occupational data of the mothers of the girls**

| S. No. | Occupation                                                                    | (n=81) | %    |
|--------|-------------------------------------------------------------------------------|--------|------|
| 1      | Applique work, embroidery work, <i>moti</i> work, maxi work                   | 20     | 24.7 |
| 2      | Construction work                                                             | 12     | 14.8 |
| 3      | Elastic fitting in clothes, export factory, thread cutting                    | 9      | 11.1 |
| 4      | Lifts vegetable/weight in market                                              | 7      | 8.6  |
| 5      | Peon in a girls' college and works in the parlour, peon, school <i>bai ji</i> | 5      | 6.2  |
| 6      | <i>Nagina</i> work                                                            | 4      | 4.9  |
| 7      | <i>Agarbatti</i> factory                                                      | 3      | 3.7  |
| 8      | Gardening, works in nursery                                                   | 3      | 3.7  |
| 9      | Works in hospital                                                             | 3      | 3.7  |
| 10     | Breaks stones in <i>bhatti</i>                                                | 2      | 2.5  |
| 11     | Looks after patients                                                          | 2      | 2.5  |
| 12     | Sells vegetables in <i>mandi</i> , vegetable vendor                           | 2      | 2.5  |
| 13     | Anganwadi helper                                                              | 1      | 1.2  |
| 14     | Cleans house                                                                  | 1      | 1.2  |
| 15     | Goes to leave children to school                                              | 1      | 1.2  |
| 16     | Grocery shop                                                                  | 1      | 1.2  |
| 17     | Makes <i>papad</i> and <i>mangodi</i>                                         | 1      | 1.2  |
| 18     | Peeling of <i>chhole</i>                                                      | 1      | 1.2  |
| 19     | Takes out sheep for grazing                                                   | 1      | 1.2  |
| 20     | Works at toy shop                                                             | 1      | 1.2  |
| 21     | Works in a girls' hostel                                                      | 1      | 1.2  |

The income of families with one kitchen was calculated where the contribution of all the family members was taken into account. The mean monthly income of the families came to be about Rs. 3,647 with the range from Rs.525 to Rs.10,130 per month.

**Physical Examination of the Girls:** The girls were examined for the presence of clinical symptoms for nutritional deficiencies. Seventy nine percent of the girls had pale conjunctiva, 35% had pale nails and 4% had koilonychia (Table 6). Anaemia was the most prevalent problem observed in the girls. None of the girls reported to have suffered from night blindness, maybe because they did not understand the phenomenon properly. As per the doctor's examination, 3 girls (2.2%) had palpable goitre and 5 girls (4.0%) had visible goitre. Mottled teeth were observed in none.

**Table 6: Health information on the girls**

| <i>Clinical symptoms for nutritional deficiencies</i> | <i>Total (n=138)</i> |
|-------------------------------------------------------|----------------------|
| <i>Iron</i>                                           |                      |
| Eyes                                                  |                      |
| Pale conjunctiva                                      | 109 (79.0)           |
| <i>Nails</i>                                          |                      |
| Pale nails                                            | 49 (35.0)            |
| Koilonychia                                           | 5 (4.0)              |
| <i>Iodine</i>                                         |                      |
| Palpable goitre                                       | 3 (2.2)              |
| Visible goitre                                        | 5 (4.0)              |
| <i>Fluorine Excess</i>                                |                      |
| Mottled teeth                                         | -                    |

Figures in parentheses denote percentages.

**Age of Attainment of Menarche:** Girls had attained menarche after the age of 12 years as reported by them. The girls could not recall the exact age of attaining menarche but could give the answer in intervals of six months. About 40% of the total girls (n=148) had attained menarche. Of those who had attained menarche, 78.8% had attained menarche between 12 and 13 years and the rest (21.2%) had attained menarche between 13 and 14 years.

## DISCUSSION

Ghosh (2006) had reported that the percentage of joint families was 21.4% and that of nuclear families was 78.6% in slum dwellers of Delhi. However, the average household size was 5.3; the percentage of households having 3 or less members was 20.0%, 4 - 5 members was 35.7% and

6 and more members was 44.3%. Amongst the slum dwellers of six major cities of Rajasthan, 24% respondents had upto 4 members in the family, 43% families had between 5 and 6 members, while another one-fourth (24%) of the families had between 7 and 8 members and remaining 9% of the families had more than 9 members in the family (Upreti 2004). In 119 urban slums of Ajmer city, about 18% of the households had 1-4 members, 54% had 5-7 members, 20% had 8-10 members and 8% had 11 and more members in the family (Kulhari 2000). In the present study, the family size was about 7 members per family, a size much larger than that observed by Ghosh (2006) in his study.

Veeramatha (2007) had observed that 49% of the women of 5 randomly selected slums of Bangalore city were illiterate, 13% had education from 1<sup>st</sup> to 7<sup>th</sup> standard, 22% had education from 8<sup>th</sup> to 10<sup>th</sup> standard, 14% had completed education upto 10<sup>th</sup> class and 2% had education above 10<sup>th</sup> class; the percentage of their spouses was 29%, 14%, 21% 29% and 7% for the same categories, respectively. Earlier, Ramachandran and Subramanian (2001) had recorded the educational status of 17 slum dwellers of Bangalore city. It was noted that 49% of the population had received no education, 22% had primary, 17% middle, 11% secondary, 1% graduate and other levels of education. Ghosh (2006) had reported on the level of education of slum dwellers (above 6 years) in Delhi that 45.1% of the slum population was illiterate, 34.6% had primary, 13.5% had middle, 5.2% had secondary and senior secondary and 1.6% had education upto graduate level. About 60% of the slum dwellers of six major cities of Rajasthan were found to be illiterate (Upreti 2004). In urban slums of Ajmer city, 8.0% of the children in the age group of 6-14 years were illiterate, 34.2% had education upto Ist and IInd standards, 34.7% upto IIIrd and Vth standards, 23.1% had education from VIth to VIIth standards and above; in the population above 14 years, the corresponding figures were 34.1%, 17.8%, 14.3%, 10.9% while the rest had received higher education or some technical training etc. (Kulhari 2000). In the present study, about 37% of the men, 85% of the women and 4.5% of the children were found to be illiterate. Lower rates of illiteracy in adults have been reported in the studies cited above.

The men and women of 5 randomly selected slums of Bangalore city were engaged in corporation work (66 and 39%), private factory (9

and 10%), government factory (3 and 1%), business (17 and 10%), and the rest were not working/housewives (5 and 40%) (Veeramatha 2007). The nature of employment of population of 17 slums of Bangalore city in a study conducted earlier (Ramachandran and Subramanian, 2001) revealed that 38% were construction workers or coolies, 19% were service workers or domestic servants, 11% were in clerical and sales jobs, 9% worked as mechanics and machine operators, 4% were in *beedi/agarbathi* making, 7% worked as cartmen/drivers and 12% in some other jobs. With regards the occupational data of slum dwellers in Delhi, Ghosh (2006) had reported that slum dwellers were engaged as *safai karamcharis* (sweepers) in municipality (20.6%), casual labourers (29.9%), factory workers (16.8%), domestic maids (16.8%), sweepers (private) (4.7%), cycle repairing mechanics (0.9%), rickshaw pullers (0.9%), drivers (1.9%), tailors (2.8%) and in petty business (4.7%). Pandey (2001) had reported that the majority of tribal people of Sonbhadra district of Uttar Pradesh were working in the unorganized sector like stone breaking, crushers, lime manufacturing and extraction, etc. Young people were engaged in the urban areas as rickshaw pullers, construction workers or casual labourers. Some worked in small and cottage industries like *bidi* making, carpet weaving, collection of *tendu* leaves, manufacturing of bamboo goods, collection of some ethno-medicinal plants and fruits, *lac*, etc. Upreti (2004) analysed the socio-cultural determinants of slum dwellers in six major cities of Rajasthan. It was found that the respondents were engaged in unskilled daily wage menial jobs followed by those who were self employed as vendors, cycle repairers, rickshaw pullers and petty shop keepers, etc. A substantial number of respondents were engaged in private and government jobs, also. There were very few entrepreneurs like contractors and artisans among the respondents. The rag pickers were confined to Kota and Bikaner. A very negligible number of respondents were found engaged in skilled /prestigious jobs. Those engaged in government jobs were in class four jobs. The main occupation of urban slum dwellers of Ajmer city was labour work (28.3%), service in private (17.5%) and government sector (18.4%), self employment (25.8%) and agriculture (2.0%) while the subsidiary occupations included *bidi* making (3.7%) and *chatai/ mudha* making (1.8%) and some others (2.4%) (Kulhari 2000). In

the present study, too, most of the men and women were engaged in small jobs which did not require much skilled work.

Srihari et al. (2007) had reviewed available literature of Indian school going children (6-18 years) from five different cities in India and reported that anaemia prevalence ranged between 19 to 88%. Other micronutrient deficiencies in these children included folate, riboflavin, niacin, vitamin C, vitamin A and vitamin B<sub>12</sub> deficiencies. Toteja et al. (2006) had observed that among the adolescent girls (n=4,337) from 16 districts of India, the overall prevalence of anaemia was 90.1% with 7.1% having severe anaemia. Chakravarty and Sinha (2002) had reported that in the age group of 6-12 years, mild and moderate anaemia was present in about 53-87% of males and 67-87% of females. The prevalence of goiter in children of 6-14 years of age varied from 0.3-2.4%. The sample was drawn from one district of five states- Assam, Bihar, Orissa, West Bengal and Tripura. A community based, cross-sectional study was conducted on 143 adolescent girls (10-19 years) in West Bengal by Das and Biswas (2005). Common nutritional deficiency disorders were anaemia (44.8%), dental caries (25.9%) and angular stomatitis (15.4%). Jood et al. (2001) had noted that in the deficient group, 6.1% of children (10-12 years) of Northern India exhibited deficiency signs of vitamin A, 66.7% of iron and 9.1% of B complex deficiency.

In another study conducted by Chaturvedi et al. (1994) to determine the nutritional status of 93 married adolescent girls aged 10-18 years belonging to scheduled caste communities in rural Rajasthan, it was found that 78% of the subjects suffered from various grades of anaemia, and 40% of the subjects had B complex deficiency. In the present study, too, anaemia (79%) was predominantly present in school going girls as evident from pale conjunctiva, however, a few (6.2%) had palpable and visible goitre.

Gupta et al. (2007) had reported that the percentage of adolescent girls of selected urban slums (Delhi and Vellore) and rural areas (Chandigarh, Hyderabad, Jabalpur, Varanasi and Vellore) who had attained menarche by the age 15, ranged between 30-100% in different centers. Socio-cultural aspects of menstruation in an urban slum in Delhi was studied by Garg et al. (2001). There were 380 respondents. Mean age at menarche was found to be 13.5 years. Menstruation was associated with taboos and restrictions

on work, sex, food, bathing and participation in religious practices. In the present study, most of the girls (79%) had attained menarche between 12-13 years of age.

### CONCLUSION

The slum where the girls resided had all the basic amenities. It had schools, dispensaries, parks, anganwadi centres and shopping area. Despite these facilities, some of the areas were very unhygienic. In the present study, most of the girls were suffering from clinical signs and symptoms of iron deficiency anaemia. A few even had palpable and visible goitre. The nutritional status of these girls needs to be improved, may be, by targeting them in the school system itself.

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