



SOCIO-DEMOGRAPHIC PROFILE OF ADOLESCENT GIRLS ATTENDING AFHS CLINICS IN AHMEDABAD CITY

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Article Received on 06/07/2015

Article Revised on 30/07/2015

Article Accepted on 24/08/2015

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ABSTRACT

In India, it is estimated that adolescents constitute 21.8% of the population, i.e. 207 million in number. Adolescence proves to be the most vulnerable phase in the path of human life cycle after infancy, characterized by rapid growth and development with a transition from childhood to adulthood. This study was done with the objective to study socio-demographic profile of adolescent girls attending

Adolescent Family Health Services (AFHS) clinics in Ahmedabad city, Gujarat. Methodology: This was a cross sectional study done in all ten Adolescent Friendly Health Services (AFHS) clinics in Ahmedabad city during May 2011 – August – 2012 and a total of 467 Adolescent girls were studied.. Results: A total of 467 adolescent girls from ten AFHS clinics from urban slum-like and slum population were enrolled in the study after they fulfilled the inclusion criteria. Age of Adolescent girls ranged from 10-19 years. Mean age of girls was 14.5±2.4 years. Maximum (42%) girls belonged to the age group 13-15 years [mid adolescence], 23.4% girls were in early adolescence (10-12 years) and 34.6% girls were in late adolescence (16-19 years). Majority of the girls belonged to SEC IV while less than one third belonged to SECV according to Modified Prasad's classification. Nutritional status of girls revealed that 150 (32.1%) girls were under-nourished, 40 (8.6%) girls were overweight and 2(0.4%) girls were obese. According to JNC 7 classification, blood pressure of 3096.2%) girls was in Pre-hypertensive phase. Blood pressure of none of the girls was in hypertensive phase. Conclusion: The present study suggests empowering girls yield undeniable returns for all not only in the community but also for the country. This can be brought about by creating awareness by involving local self-help groups and NGO's.

KEYWORDS: Adolescent, Girls, AFHS, Socio-demographic profile.

INTRODUCTION

One in every five people in the world is an adolescent, defined by WHO as a person between 10-19 years of age. Out of 1.2 billion adolescent worldwide, more than 90% live in the industrialized world.^[1] In India, it is estimated that adolescents constitute 21.8% of the population, i.e. 207 million in number.^[1] According to the Census 2001, of the total adolescent population, 12 percent belong to the 10-14 years age group and nearly 10 percent are in the 15-19 years age group. Females comprise almost 47 percent and males 53 percent of the total population.^[2]

Adolescence proves to be the most vulnerable phase in the path of human life cycle after infancy, characterized by rapid growth and development with a transition from childhood to adulthood.^[2] Transition from total socio-economic dependence to relative independence. Adolescence is the pivotal time in the life of the child, for it is the gateway to adulthood.^[3] It is a journey from the world of the child to the world of the adult. It is a time of physical and emotional change as the body matures and the mind becomes more questioning. The second decade of life is a period of personal development almost as rapid as the first.^[4]

Adolescence can be divided in three phases depending on the differences in the characteristics acquired during these phases. They are **Early adolescence** (10-13 years) which is characterized by a spurt of growth, and the beginnings of sexual maturation. **Mid-adolescence** (14-15 years) when the main physical changes are completed, while the individual develops a stronger sense of identity, and relates more strongly to his or her peer group, although families usually remain important. **Late adolescence** (16-19 years) when the body fills out and takes its adult form, while the individual now has a distinct identity and more settled ideas and opinions.^[4]

Lifestyle of adolescents differs according to their place of residence. Urban adolescents have greater access to good education and less responsibilities according to their age whereas adolescents residing in slums have poor access to education, their routine is demanding – cooking, washing clothes, bathing younger siblings, etc. They rarely pursue education beyond primary school level. Early marriage is a trend very common among them.^[5]

This study was done with the objective to study socio-demographic profile of adolescent girls attending Adolescent Family Health Services (AFHS) clinics in Ahmedabad city, Gujarat.

METHODOLOGY

This was a cross sectional study done in all Adolescent Friendly Health Services [AFHS] clinics in Ahmedabad city. AFHS clinics are a newer initiative taken by Government of Gujarat in order to provide quality services to adolescents at their doorstep ensuring privacy and confidentiality. There are in total ten AFHS clinics functional and they mainly cater urban slum-like, and slum population in Ahmedabad city. The study was done on adolescents aged 10-19 years during May 2011 to August 2012. In total 467 adolescent girls were studied. In a view to get better information, we included all the girls who came to the centre on the day of interview.

Inclusion criteria

All the apparently normal girls who gave consent, who were present on the day of interview and registered at the AFHS clinic were included in the study sample.

Exclusion criteria

All the girls who didn't give consent, suffered from any moribund diseases or apparent mental illness were excluded.

Data collection instrument

A semi-structured pre-tested questionnaire was used which contained information pertaining to socio-demographic information, family structure, personal characteristics, etc. Data was collected by two trained Investigators.

Ethical consideration

Ethical clearance for the study was obtained from Institutional Review Board of Smt. NHL Municipal Medical College, Ahmedabad. Written Informed consent was obtained from all the participants ensuring confidentiality. Permissions were also obtained from RCH society, Ahmedabad Municipal Corporation; MoH, Ahmedabad Municipal Corporation and all the Medical Officers of AFHS clinics.

Statistical analysis

All the data was entered in MS Excel and analysis was done using SPSS software version 19.0. Outcome variables included their education status, dropout rate, occupation, nutritional

status etc. Socio-economic classification [SEC] was done according to Modified Prasad's classification for socio-economic class.

RESULTS

A total of 467 adolescent girls from ten AFHS clinics from urban slum-like and slum population were enrolled in the study after they fulfilled the inclusion criteria. Age of Adolescent girls ranged from 10-19 years. Mean age of girls was 14.5 ± 2.4 years. Maximum (42%) girls belonged to the age group 13-15 years (mid adolescence), 23.4% girls were in early adolescence (10-12 years) and 34.6% girls were in late adolescence (16-19 years).

Along with studies, around 23 (4.8%) girls had dual responsibilities of studies as well as earning. Ten girls were working as tailors, seven girls as housemaids, four girls were casual labourers and two girls were employed as cooks. Out of 23 (4.8%) girls who were gainfully employed, 6 (1.3%) were currently studying as well and the rest were school drop-out.

Maximum numbers of girls were studying in primary school followed by secondary school. As the educational level increases number of girls studying were decreasing. Only 13 girls were currently studying after 12th standard. Around 6 (1.3%) adolescents were illiterate. In the present study, school dropout rate was 19.1%. Majority of them dropped out after Primary school. (Table 1)

Around 3 (0.6%) girls were married. Age of these girls was between 15-17 years, which is still below the legal age of marriage in India. When asked about the reason for early marriage, they told that it was a custom in their caste to get married early. Out of them, one girl even had a child one year old and another had an abortion. When asked about the reason, they replied that it was because of pressure from elders.

There were 89.9% Hindus and the rest were Muslims. Majority of the girls (43.7%) were of 1st birth order, 34.3% were of 2nd birth order and 3.9% girls were of birth order 3 and above. Most of the parents of the girls were semi-skilled workers. Majority of the girls belonged to SEC IV while less than one third belonged to SEC V according to Modified Prasad's classification.

When asked about the vaccination, Tetanus Toxoid was given to 212 (45.4%) girls and only one girl had taken MMR vaccine. When asked about the reason for low vaccination, majority of them were unaware about the schedule and importance of vaccination in adolescents.

Nutritional status of girls revealed that 150 (32.1%) girls were under-nourished, 40 [8.6%] girls were overweight and 2[0.4%] girls were obese. Mean systolic blood pressure (SBP) was 112.8 ± 13.7 mmHg and mean diastolic blood pressure (DBP) was 74.9 ± 9.8 mmHg. According to JNC 7 classification, blood pressure of 30(6.2%) girls was in Pre-hypertensive phase. Blood pressure of none of the girls was in hypertensive phase. (Table 1)

DISCUSSION

Nature and nurture are two important factors in the flowering of an individual's personality.^[6] Schooling has innumerable benefits for the child. But the irony of the fact is that even after 62 years of independence, girls are deprived of its independence.^[7]

Undoubtedly, due to special measures adopted by several state governments in the past decade, the rate of growth of enrolment of girls at the national level have been higher than that of boys, but disparities still persist in regards to retention aspect of schooling. The dropout rate of girls of the primary and upperprimary stage is higher than that of boys.^[7]

In the present study, school dropout rate was 19.1%. According to Choudhary 2006, the reason for high school dropout is financial problems and familial duties like taking care of younger siblings, cooking, washing, etc.^[7] In this study it was observed that 4.8% girls had dual responsibility of earning as well as studying and 4.9% girls were working as tailor, cook, housemaid and casual labourer. In a study conducted by Venna et al, dropout rate was observed as 46.4% among adolescent girls.^[8]

Seventy percent of the mortality in adulthood is linked to habits picked up during adolescence. Prevailing malnutrition and lack of immunization have adverse impact on MMR (maternal mortality rate), IMR (infant mortality rate), and morbidity and have intergenerational effects.^[5] In the present study, Undernutrition was observed in 32.1% girls and more than half of the girls had not taken TT vaccination. In a study conducted by Kotecha et al in Vadodara district of Gujarat, proportion of Undernutrition among adolescent girls was observed as 33.1%.^[9] Vaishnav et al reported 27.7% adolescent girls been unimmunized against TT in Surat district of Gujarat state.^[5] In the present study, obesity was also observed in 10% girls that reflect the fact that obesity is no more a rich man's disease.

Age at marriage is an important determinant of the health of young people as well as for future opportunities for education and employment. A large number of girls from poor

households are pushed into early marriage, almost immediately after menarche. Out of 4.5 million marriages that take place in India, three million marriages involve girls in 15-19 years age group (Majumdar & Ganguly, 2000).^[10] In the current study, 0.6% girls were married and age of these girls were between 15-17 years. In a study conducted by Pankaj et al 22, 1.5% adolescent girls were married.^[11] The reason for early marriage in our study was traditional customs. In India, there are laws which prevent marriage before legal age which is 18 years for girls and 21 years for boys. Hence state government should ensure strict implication of legislation as well as repeated IEC activities should be done regarding adverse events associated with early marriage and pregnancy.

Recommendations

The present study suggests empowering girls yield undeniable returns for all not only in the community but also for the country. This can be brought about by creating awareness by involving local self-help groups and NGO's regarding impact of health education, adverse effects of early marriage on health and link between education and prosperity especially in slums of India.

Table 1. Socio-demographic Profile of Adolescents [n=467]

No.	Variables	Number	Percent	
1	Age of adolescent	10-12	109	23
		13-15	197	42
		16-19	162	35
2	Education	Illiterate	6	1.3
3	Education [Currently studying, n=366]	Primary	183	50.0
		Secondary	95	26.0
		Higher sec & above	88	24.0
4.	School dropout[n=467]	Yes	89	19.1
5	Year of school dropout [n=89]	Primary	48	53.9
		Secondary	24	26.9
		Higher secondary	17	19.2
6.	Religion	Hindu	420	89.9
		Muslim	47	10.1
7.	Type of family	Nuclear	358	76.7
		Joint	109	23.3
8.	Birth order	1	204	43.7
		2	160	34.3
		3 and above	103	22.0
9.	Education of parents	Illiterate	49	10.5
		Primary	110	23.6
		Secondary	109	23.3
		Higher sec and above	199	42.6

10	Immunization : TT	Taken	212	45.4
		Not taken	255	54.6
	MMR	Taken	1	0.2
		Not taken	466	99.8
11	BMI	Normal	275	58.9
		Under-nutrition	150	32.1
		Overweight	40	8.6
		Obese	2	0.4
12	Systolic Blood Pressure	<120	423	90.6
		121-139	29	6.2
		140-159	15	3.2
		>160	0	0
13	Diastolic Blood Pressure	<80	421	90.1
		81-89	16	3.4
		90-99	30	6.4
		>100	0	0

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