

Education status, school dropouts and its reasons, determinants and perspectives among young girls of a city of Western India

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ABSTRACT


Background: Education status is the major social factor among the young girls that affects health and social status of these girls. **Objectives:** This study was conducted to find out the magnitude of the problem of school dropouts, reasons, determinants, and perspectives of the dropping out of school among young girls of Surat city. **Materials and Methods:** It was a cross-sectional study carried out at Anganwadi centers of urban slums of Surat city among the young girls of 15-24 years. Sample size was 653 (total population 30520, anticipated frequency 39.4%, absolute precision 5%, and design effect 1.8). Sampling was done in two stages: In the first stage, 30 slums were selected by probability proportional to size sampling and in the second stage, 22 participants from each slum were selected by consecutive sampling. Data entry and analysis were done using MS Excel 2007 and SPSS 17. 14 key informant interviews of stakeholders were transcribed and translated, and content analysis was done. **Results:** Half of the girls (49.5%) could complete only their primary education, 26.2% had completed their secondary education, and only 14.2% of girls had completed up to higher secondary education. Two out of three girls were dropped out from the school. Majority of the girls (74.8%) had already left the school before or at completion of primary schooling. While most common reason of dropping out of the school was financial constraint (29.1%), marital status ($\text{Exp}(B) = 9.360$, confidence interval [CI] = 5.725-15.302, $P = 0.000$), and earning status of the participants ($\text{Exp}(B) = 8.631$, CI = 5.042-14.774, $P = 0.000$) were found as the most influential variables on applying backward regression model. On asking further, 55.9% of girls expressed their willingness to join for further study. Desire for further education was found significantly higher among unmarried than married ($\chi^2 = 120.4$, $P = 0.0001$) and among non-earning than earning girls ($\chi^2 = 8.49$, $P = 0.0017$). **Conclusion:** Early marriages and financial constraint leading compulsory earning draw the girls out of the school and kills their desire for further education. Hence, new avenues for further education and vocational training should be built up.

KEY WORDS: Young Girls; Education; Financial Constraint; Early Marriages

INTRODUCTION

Girls' education, particularly participation and schooling during adolescence, is the best "development" investment in terms of:

(a) Gaining the skills and knowledge necessary for working productively, (b) economic returns, and (c) social justice. Educated girls are more likely to avoid child marriage and have better maternal and child health outcomes. They are also more able and inclined to invest in the health and education of their sons and daughters - particularly increasing the chances that their daughters will be educated.^[1] Education is a major factor influencing health, too. The world map of illiteracy coincides with map of poverty, malnutrition, ill health, and high child mortality rates. It also leads to better utilization of health care and greater community and political participation.^[2] During

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the past two decades, a considerable amount of information has become available from developing countries showing that maternal education has a strong impact on infant and child mortality. On average, each 1-year increment in mother's education corresponds with a 7-9% decline in under-5s' mortality.^[3] Hence, educating girls is one of the important agenda to achieve Millennium Development Goals.

In Surat city, the hub of industries and resultant migration, girls' education is one of the compromises that have to make in urban slums. As per public health point of view, it is necessary to study important indirect determinants of health such as school dropouts and reasons, determinants, and perspectives of the dropping out of school among young girls.

This study was therefore undertaken to find out the magnitude of the problem of school dropouts, reasons, determinants, and perspectives of the dropping out of school among young girls.

MATERIALS AND METHODS

This was a community-based, cross-sectional study done among young women aged 15-24 years living in urban slums of Surat city. This study was conducted between December 2013 and July 2014.

Sampling

There were 399 slums in 7 zones of Surat city according to the list of slums provided by the slum upgradation cell of Surat Municipal Corporation (SMC). The participants of the study were selected from 30 slums (clusters) by population proportional to size sampling out of the 399 slums.

To derive sampling frame, the total slum population of 3,53,915 in Surat city was considered (as per list of slums). Then, taking the proportion of youth aged between 15 and 24 as 20% of the total population, the population in the age group 15-24 years was calculated as 70,783. As per census 2011, sex ratio of Surat city is 758/1000. Hence, out of the total population in this young age group, total girls were 30,520.

Sample size was calculated by OpenEpi software taking total population size 30520, anticipated frequency 39.4% (girls who have already begun child bearing in 15-24 years as per the National Family Health Survey III (NFHS III), absolute precision 5%, and design effect as 1.8. The sample size calculated by OpenEpi was 653. A total of 22 participants were interviewed from each of the 30 clusters. To select participants in the field, the first house from the cluster was selected randomly and then the houses were selected consecutively from that cluster till 22 participants were selected. Following selection, a mutually convenient time was selected to conduct the interview. In 1 day, 10-11 participants were interviewed. In case, a participant could not be contacted even after three attempts, she was excluded, and the next participant was

selected by extending the consecutive sampling after the last house.

The pre-tested, semi-structured questionnaire was used for data collection. The questionnaire had domains covering sociodemographic profile, level of education, age, reasons, determinants of dropping out, and rejoining of schooling again.

In this study, young girls aged between 15 and 24 years, residing in the urban slums in Surat city and those who gave consent were included in the study. The girls who were not fulfilling the inclusion criteria or could not be contacted after three attempts were excluded from the study.

Ethical clearance from the Human Research Ethics Committee, Government Medical College, Surat, India, had been obtained. Prior permission from Deputy Commissioner, Health and Hospitals, SMC, was taken to collect data and to use the Anganwadi center for interviewing. Informed verbal consent of participants was obtained. To ensure confidentiality and privacy of the participants, interview of each participant was taken at the Anganwadi center in strict privacy. All the forms were given unique ID number for identification, thereby reducing the threat of participant identification. All the data were maintained in strict confidentiality with access to only the researcher and guide.

Data Entry and Analysis

Data entry for quantitative component was done in MS Excel 2007. Quantitative data analysis was done by Epi Info 7 and SPSS 17. Content analysis was done for qualitative data.

RESULTS

Out of all the girls in this study, 6.7% have never attended school. Around half of the girls (49.5%) had completed their primary education, 26.2% had completed their up to secondary education, and 14.2% of girls had completed up to higher secondary education. Only few of the girls (3.6%) were either graduate (3.3%) or postgraduate (0.3%) (Table 1). Two out of three girls were dropped out from the school. Mean age of dropping out of school was 13.18 (standard deviation [SD] \pm 2.17) (Table 2). Majority of the girls (74.8%) had already left the school before or at completion of primary schooling. Rest one-fourth had left the school before or at completion of secondary schooling (24.7%) or higher secondary schooling (0.5%) (Table 3).

When participants were asked for the main reason for dropping out of the school, most common reason found was financial, either financial constrain (24.0%) or to earn (5.1%). Lack of interest in studies or not good at studies (18.4%) was found as the second common reason in the slums. Other important reasons were parental refusal (15.3%), parental illness/death

(4.6%) or personal reasons such as marriage/pregnancy (9.7%), and migration (5.4%). Some girls reported that the school was far away (6.9%) or the school was not good (1%) (Table 4).

Most of the girls (93.8%) felt that education is useful to make life better (Table 5). On asking about desire for getting further education, 55.9% of girls expressed their willingness to join. Out of them, majority girls (72.4%) wanted to go for

Table 1: Education status of study participants

Education	Number of participants (n=660) (%)
Illiterate	42 (6.7)
Primary	327 (49.5)
Secondary	173 (26.2)
Higher secondary	94 (14.2)
Graduate	20 (3.3)
Postgraduate	4 (0.3)

Table 2: School dropout rate of the participants

School dropout	Number of participants (n=618) (%)
Yes	392 (63.4)
No	226 (36.6)

Table 3: Level of school dropout

Level of school dropout	Number of participants (n=392) (%)
Primary	293 (74.8)
Secondary	97 (24.7)
Higher secondary	2 (0.5)

Table 4: Reasons for dropping out of school

Reasons for dropping out of school	Number of participants (n=392) (%)
Family related	
Family members/parents refusal	60 (15.3)
Parental illness/death	18 (4.6)
Family/household responsibility	29 (7.4)
Financial	
Financial constrain	94 (24.0)
To earn	20 (5.1)
Personal	
Marriage/pregnancy	38 (9.7)
Illness	4 (1.0)
Lack of interest in studies/not good at studies	72 (18.4)
Migration	21 (5.4)
School related	
School was far away	27 (6.9)
School was not good	4 (1.0)
Other	
Religion, social, cultural	5 (1.3)

formal education by joining school. 11.1% of girls wanted to get non-formal education by distance learning and 16.5% of girls wanted vocational training so they can earn (Table 6). Desire for further education was found statistically highly significant with marital status ($P < 0.001$) and earning ($P < 0.001$) (Table 7).

Out of all the independent variables tested in this statistical model, marital status and earning status of participants were found as the most influential variables. Dropouts among married were 9.36/1 unmarried girl. When girl starts earning, the odds of dropping out of the school become 8.63. For every unit decrease in the level of education of father and mother, odds in favor to dropping out of school become 1.43 and 1.28, respectively. Odds of dropping out of the school increase by 26.8% with socioeconomic classification (SEC) goes down by one unit and increase by 87.4% with religion changing from Hindu to Muslim or Muslim to others. With increase in number of siblings by one, chances of dropping out of school increase by 15% (Table 8).

DISCUSSION

Education Level of Participants

In this study, 6.7% of girls were illiterate who have never attended school. According to the NFHS III, 31% of young women are illiterate.^[4] As per the population census 2011 in

Table 5: Perception toward utility of education

Perception toward utility of education	Number of participants (n=660) (%)
Useful	619 (93.8)
Not useful	41 (6.2)

Table 6: Desire for further education

Type of education	Number of participants (n=369) (%)
Formal	267 (72.4)
Non-formal	41 (11.1)
Vocational	61 (16.5)

Table 7: Desire for further education according to their marital status and occupation

Variables	Desire for further education		Chi-square
	Yes (n=369)	No (n=291)	
Marital status			
Married (n=262)	78	184	120.4
Unmarried (n=398)	291	107	df=1 (P=0.0001)
Occupation			
Earning (n=193)	91	102	8.49
Non-earning (n=467)	278	189	df=1 (P=0.0017)

Table 8: Determinants of dropping out of school among study participants using logistic regression enter method ($n=618$)

Variables in model	B	Exp(B)	P value	95% CI	
				Lower	Upper
Religion	0.628	1.874	0.011	1.153	3.045
Marital status	2.236	9.360	0.000	5.725	15.302
Earning status of participant	2.155	8.631	0.000	5.042	14.774
SEC	0.237	1.268	0.037	1.015	1.584
Father's education	0.358	1.431	0.000	1.208	1.695
Mother's education	0.251	1.285	0.008	1.067	1.549
Total sibling	0.141	1.152	0.049	1.001	1.326

Wald=43.479, df=1, $P=0.000$ Chi-square 257.301, df=7, $P=0.000$ Neglekar $R^2=46.6$

CI: Confidence interval, SEC: Socioeconomic classification

Gujarat, India, female literacy rate worked out 70.73%.^[5] As per the Industry Institute Partnership Cell 2006-07, total illiteracy in girls was 27.8% and 7.2% in rural and urban in 15-19 years of age, whereas 41.7% and 12.2% in rural and urban in 20-24 years of age. Median years of schooling for females were 7 in urban area.^[6] At present, literacy rate among young girls of Surat slums is showing improving trend.

In current study, half of the girls (49.5%) had completed their primary education followed by 26.2% had completed their secondary education and 14.2% girls had completed up to higher secondary education. Only 3.3% of girls were graduate and 4 girls were postgraduate.

Consistent finding was shown by Prashant and Shaw where 6.7% participants were illiterate, 36.8% completed their primary, 43.9% their completed secondary, 6.3% their completed higher secondary education, and 6.3% studied up to graduation or above.^[7]

School Dropout among the Participants

In this study, majority of the girls (63.4%) dropped out from the school. Mali and Patil have shown school dropouts among females was 51.2%,^[2] whereas in Rani, 60.35% girls were dropped out of the schools.^[8]

Mean age of school dropout was 13.18 (SD \pm 2.17) in this study.

Among the girls who had left school in this study, majority of the girls (74.75%) had already left the school before or at completion of primary schooling. Rest one-fourth (24.74%) had left the school before or at completion of secondary schooling or higher secondary schooling (0.51%). In Rani, out of a total of 174 school dropouts, maximum (38%) had dropped out after finishing primary school. None of the subjects who were more than 14 years of age had studied beyond high school.^[8]

Findings of key informant interviews also confirmed the scenario of leaving school after primary schooling. On asking about school dropouts of girls, Anganwadi Worker 2 from East Zone mentioned that "The girls study only up to seventh standard, primary schooling. They do not go for further studies."

Girls reported that at the time of completion of primary schooling, parents start thinking of marriage as most of the girls start having periods. Hence, they leave schools.

Sometimes migratory populations do not have any birth proof to get into the school. One girl from the Southeast Zone, the area dominated by migratory population, revealed the reason of not joining school here at the time of quantitative interview. "We went to school for admission after coming from village, they asked for school leaving certificate or birth certificate. I do have none of them. So i did not go to school."

Reasons for School Dropout

In this study, most common reason for dropping out of school was financial, either financial constrain (24.0%) or to earn (5.1%). Lack of interest in studies or not good at studies (18.4%) was found as the second common reason. Other important reasons were parental refusal (15.3%), parental illness/death (4.6%) or personal reasons such as marriage/pregnancy (9.7%), and migration (5.4%). Some girls reported that school was far away (6.9%) or school was not good (1%).

Financial constraint remained the issue to avail education across the globe. In Kibera slums, Nairobi, majority of young girls (51%) described that their families could not afford the fees. It is noteworthy that more girls left school due to marriage (14%) than due to pregnancy (9%).^[9]

In Mali and Patil, the most common reason as perceived by dropouts for dropping out of school was cited as poverty by 41.8% of respondents. About 32.7% of parents perceived poverty as the reason for dropping out of the school.^[2]

In Rani, the main reason for dropping out was financial difficulties for both girls and boys. 13% of girls reported that they are just not interested in further studies. A total of 28% of girls said that their family and relatives did not approve their further continuation of the studies. Higher proportion of girls 42.85% were pulled out of schools by their parent's as compared to boys 15.10%, mainly done so that girls could look after their siblings (53.33%). It was the perception of the parents that too much of education could lead to problems at the time of marriage in 33.33% of the instances; also completion of education was not thought to be essential by some 13.33%. A total of 9% of girls reported lack of education facility in the nearby village as the reason for dropping out. Lack of quality education, imposition of parents choices on adolescents, lack of privacy, and toilet facilities for girls in school and security reasons were few other reasons cited by adolescent for dropping out.^[8]

In Chugh, about 18% of the respondents reported that the most significant factor of dropout is their inability to meet the cost of schooling. In addition, a few children dropped out (about 18%) as they found the curriculum too heavy and difficult to comprehend the content, especially mathematics and science leading to failure and repetition. Around 20% of children left due to failure in a particular grade.^[10]

Desire for Further Education

Mali and Patil have revealed, out of 1,372 adolescents who dropped their studies, 73% of adolescents expressed their wish for continuation of studies in Salem district of Tamil Nadu, India.^[2] In Rani, majority (81%) head of the households had expressed the desire to educate their children, mainly (72%) to find a good job.^[8]

Population council report 2006-2007 has shown that, youth were clearly interested in acquiring skills that would enable employment generation; over half of young men and two-thirds of young women reported interest in vocational skills training. However, far fewer – just 21% of young men and 25% of young women – had attended at least one vocational training program.^[6]

Determinants of School Dropout

In this study, backward linear regression was used to study determinants of dropping out of school among girls. Wald statistics is significant for this model (Wald = 43.479, df = 1, $P = 0.000$). Classification table shows overall model gives 77.7% correct predictions. Chi-square value is 257.301 and associated significance level is <0.05 , so the present model shows decrease deviance from the base model. Hence, this model is better fit compared to base model. Neglekar R^2 value is 46.6 which indicate that 46.6% variability in school dropouts is explained by this model. This model can be explained by following model equation:

$$\text{School dropout} = B_0 + 0.628 (\text{religion}) + 2.236 (\text{marital status}) + 2.155 (\text{earning status}) + 0.237 (\text{SEC}) + 0.358 (\text{father's education}) + 0.251 (\text{mother's education}) + 0.141 (\text{total siblings})$$

As per above model, out of all the independent variables tested in this statistical model, marital status, and earning status of participants were found as the most influential variables. Dropouts among married were 9.36 per 1 unmarried girl. When girl starts earning, the odds of dropping out of the school become 8.63. For every unit decrease in the level of education of father and mother, odds in favor to dropping out of school become 1.43 and 1.28, respectively. Odds of dropping out of the school increased by 26.8% with SEC went down by one unit and increased by 87.4% with religion changed from Hindu to Muslim or Muslim to others. With increase in number of siblings by one, chances of dropping out of school increased by 15%.

In Mali and Patil, higher age group (15.6-21) and marital status are significant factors for school dropouts. This may be due to the reason that any of them might be withdrawn from school after 15 years of age as they were needed for work and support family economically. Difference in dropouts as per age, sex, and religion were not found significant.^[2] In Eloundou-Enyegue, having a large number of siblings (six+children) was associated with a 36% increase in the odds of dropping out of primary school, in comparison to the odds for smaller families. The corresponding increases at the junior and senior secondary levels were 41% and 68%, respectively.^[11]

In Hati, among the factors which are having positive effect on chances of school going for girls, mother's educational qualification has the strongest positive influence on the children's school going chances. For unit increase in mother's educational level, the odds in favor of school going increases by 1.18 or about 18%. Other important factors were household size ($B = -0.270, P = 0.005, \text{Exp}(B) = 0.76$), father's education ($B = 0.173, P = 0.046, \text{Exp}(B) = 1.14$), family income ($B = -0.088, P = 0.785, \text{Exp}(B) = 0.92$), and distance from school ($B = -0.227, P = 0.045, \text{Exp}(B) = 0.80$).^[12]

CONCLUSION

Educating girls are the first step to women empowerment and healthy future. Financial constraint leads to compulsory involvement in earning and ultimately losing interest in formal education. Early marriages are still common in this part of the city that hampers not only education but also desire for further education. Hence, new avenues for further education and vocational training should be built up.

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