

Study of Socio Demographic And Health Profile Of Child Labourers

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Abstracts: Background and Objectives: Child labour is a critical problem, which in turn leads to many other problems like illiteracy, poverty, malnutrition etc. So detailed study is carried out with objectives of 1) To study the socio- demographic and health characteristics of child labourers and their relationship. 2) To identify the causal factors of child labour. Methods: a Cross sectional study in 30 slum areas of Rajkot city is carried out from May 2005 to July 2005. 372 child labourers were taken by cluster methodology. Data were collected using a pretested semi structured questionnaire from each child labourer during house-to-house visit. Statistical analysis was done by Z test, Chi – square test etc. Results: 95.03% of the child labourers belonged to social class 3 and 4. 9.1% never attended the school. Mean family size was 5.67. 35.7% child labourers suffered from some kind of morbidity in the last 15 days and 23.7% had harmful addiction. Conclusion and Interpretation: Poverty and dropouts are the important causes of child labour. There was no medical care facility at workplace in most cases. Harmful addiction was significantly associated with male child labourers, illiteracy of fathers and higher age group. [Sanghavi M M NJIRM 2012; 3(5) : 102-108]

Key Words: Addiction, Child labourer, Illiterate

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Introduction: Child labour is both a worldwide and nationwide scourge. Child labour is a critical problem, which in turn leads to many other problems like illiteracy, poverty, population, malnutrition etc. All these problems linked together by one bond. It is estimated that there were some 306 million children ages 5 to 17 in employment in the world in 2008 and this accounts for almost one-fifth of all children in this age group (19.3 per cent)¹. India has the largest child labour force in the world. Out of the total population, aged 5-14 years, 126.67 lakhs (5.00 per cent) are Workers in India and the share of workers aged 5-14 years in the total work force of the country works out to be 3.15 per cent². While in Gujarat, Out of the total population aged 5-14 years, 4.85 lakhs (4.28 per cent) are workers and the share of workers aged 5-14 years in the total work force of the state works out to be 2.28 per cent².

What are the causes of child labour in India? How does government polices affect it? What is the health status of child labourers? A critical analysis of the answers to these questions may lead in the directions of a possible solution. These questions will be answered through an analysis of the problem of child labour as it is now.

Material and Methods: All the children in the age group of 5 to 14 years were selected for this study.

The study group was selected based on the definition given by Operation Research Group, Baroda i.e. children of 5 –14 years, must be on remunerative work (paid or unpaid)³.

The cross sectional study was carried out in the urban slum areas of Rajkot City from May 2005 to July 2005. Cluster Sampling Methodology was used for the selection of the sample.

Total urban slum population in Rajkot city: 86,169. According to the Census of 2001, child population between 5 to 14 years was 25 % of the total population². So the estimated child population in the urban slum areas of Rajkot City is 25 % of 86,169 = 21,542.

According to various references estimated prevalence of child labourer in India is around 16% of the children between the age group of 5 to 14 years. So estimated child labourers in urban slum areas of Rajkot City were 16% of 21,542 = 3446. It was decided that 10% of this child labourer population would be studied. This figure is 344. 344 child labourers had to be studied from the selected 30-slum area. So from each slum area $344/30 = 11.46$ (12) child labourers were to be studied. Hence it was decided to study 12 child labourers from each slum area. Out of the total 30 slum areas, in some slum areas, some parents and child labourers were requisite to participate in the

study though required sample size of 12 child labourers in one slum area were already interviewed. Out of the total 30 slum areas, total 12 child labourers were interviewed in this manner. So instead of 360 child labourers, 372 child labourers were studied.

Out of the total 30 slum areas, 372 child labourers were studied. Data were collected using a pretested semi structured questionnaire from each child labourer during house-to-house visit. Informed consent was taken prior to study. The child labourer was personally interviewed. For certain questions (e.g. pertaining to education of parents, occupation of parents, family income etc.) where the child labourer failed to give any reliable answer (especially on account of ignorance due to young age), the mother of child labour (if present) or any other elderly or responsible family member was interviewed. The questionnaire contains information regarding social and demographic characteristics of the child labourers.

Modified Prasad's classification was used for socioeconomic class. For analyzing the education status of the child labourers, those child labourers who did not attend the school were considered as "illiterate". The information of any "addiction" well known to detrimental to health and general wellbeing was also obtained from the child labourers.

Data regarding morbidity was collected by asking about episode of morbidity in the last 15 days like fever, diarrhoea, cold, cough, pain in body or any other etc. and then classified morbidity according to affected body system. Treatment for this morbidity taken or not was also inquired. If the child labourers did not take any treatment, then the reasons for not taking treatment was also asked. Data regarding major illnesses necessitating hospitalization in the past was recorded. Duration of hospitalization for the major illnesses was also recorded. After asking these questions to the child labourer, examination of child labourer was done. Whole body of the child labourer was examined.

Result: 372 child labourers were included in study.
Table – 1: Some Socio demographic characteristics Of child labourers

Determinants	Child labourers (n=372)	
	No.	Percentage
Age group (in years)		
≤ 10	22	5.90%
10 – 12	83	22.30%
12 – 14	267	71.80%
Sex		
Male	322	86.55%
Female	50	13.45%
Religion		
Hindu	307	82.50%
Muslim	65	17.50%
Type of family		
Nuclear	305	82%
Joint	19	5.10%
Three generation	48	12.90%
No of family members		
< 4	11	3%
4 – 6	278	74.70%
7 – 8	69	18.50%
> 8	14	3.80%
Socioeconomic status		
Didn't know family income	70	18.80%
Social class 2	12	3.20%
Social class 3	140	37.20%
Social class 4	147	39.50%
Social class 5	3	0.80%
Parental literacy		
Father illiterate	135	38.50%
Mother illiterate	244	66.80%
Parental abandonment		
Both parents alive	341	91.70%
Father dead	25	6.70%
Mother dead	6	1.60%
Birth Order		
1	121	32.50%
2	158	42.50%
3	70	18.80%
4	19	5.10%
5	4	1.10%

Mean age of child labourers were found to be 13.03 ± 1.27 years. Child labourers with lower birth order (1 and 2) were higher than child labourers with higher birth order (3 to 5) and this difference is statistically significant ($\chi^2 = 93$, $df = 1$, $P < 0.01$). Mean birth order was 2.00. Mean size of family was 5.67. 9.1% (34) never attended the school. Out of the 338 (91.9%) child labourers who had attended the school, 56.21% (190) had dropped out from school. 86.11% (292) had attended the standard 1 to 7 ("Primary education") and 13.89% (46) had attended the standard 8th and above. Proportion of female child labourers who did not have education up to primary level was 82% as compared to male child labourers (63.1%). This difference was statistically significant ($Z = 3.11$, $P < 0.01$). More female child labourers (12%) did not attend the school than male child labourers (8.7%). School dropouts were higher among male child labourers (57.8%) as compared to the female child labourers (45.4%).

Half of the child labourers initiated work by the age of 12 years or above. 38.2% initiate work as a child labourer between 10 and 12 years of age and 11% initiated work below the age of 10 years. Mean age of starting work was 12.30 ± 1.42 years.

Parental illiteracy was found to be an important cause of child labour (Table – 1). 53.31% of the fathers and 31.6% mothers had studied up to "Primary Education". It was also observed that most of the fathers of child labourers who never attended the school were "illiterate".

The majority of child labourers (56.2%) stated "inadequate family income or poverty" as the chief cause followed by 11.3% felt "compulsion by parents" as the main reason. It is noteworthy that though about 13% of the male child labourers felt this as the principle cause, none of the female child labourers opined likewise! Whereas 14.2% stated their "personal desire" as a reason, 5.9% stated that "death of father", 4.8% stated "participation in family work" as a reason work and only 1.9% stated that they worked due to their "father's addiction". 5.6% told "other reasons" like not being interested in study, learning, avoidance

of playing, father's retirement, due to heart attack of father or due to vacation etc.

It was observed that the majority of child labourers 50% (186) were engaged in "manufacturing sector" (e.g. work in industries, factories, in silver industries, in clock industries, in house hold industries etc). 27.2% (101) of the child labourers were "employed in shops, hotels or in handcarts" and they were all male child labourers. 4.6% (17) were "labourers" (e.g. they worked in market yard as labourers or other labour work. 6.2% (23) were engaged in "household work" (e.g. filling work at home, as a cook, preparing bangles at home or sewing etc), 4% (15) were "self employed" in activities (e.g. as a hawker, had own vegetable hand cart or 'pan' shop, hair cutter etc), 5.1% (19) were doing "service" (as a peon, in office or washing clothes or vessels etc) and only 3% (11) were engaged in "construction work" (e.g. as masonry or in brick making etc). More male child labourers employed in "manufacturing sector" (52.8%) and more female child labourers engaged in "household work" (42%).

It was observed that out of the total 372 child labourers, 132 child labourers were suffering from some morbidity during the last 15 days. The distribution of morbidity pattern was given in Table – 2. While Table – 3 shows the positive findings in general examination of all child labourers.

78% of 132 morbid children had taken treatment for morbidity. Out of those who did not take treatment, Majority of them stated relieves itself (9) followed by morbidity was not severe (7), waiting for sometime (4), no money (3), no time (1), fear (1) and others like not take drug, remedial measure, initial time of illness etc. Out of the total child labourers, 9.4% stated that they had major illness with hospitalization in the past. 94.3% stated that there was no medical care facility at work place.

Majority (76.3%) said that they did not have harmful addiction. No female child labourers had any kind of harmful addiction. More proportion of

child labourers having addiction of “tobacco” chewing products (50%) as compare to “non tobacco” chewing products (35.22%). Though harmful addiction was seen more in the child labourers of “illiterate” fathers but there was no significance association between them ($\chi^2 = 6.391$, $df = 3$, $P > 0.05$).

Table – 2 : Distribution of the child labourers according to the type of morbidity present in the last 15 days

Morbidity related with following system	Gender		Total (n= 132)
	Male (n = 115)	Female (n =17)	
	No. (%)	No. (%)	No. (%)
Respiratory disorder	27 (23.5)	5 (29.4)	32(24.2)
Gastrointestinal disorder	19 (16.5)	4 (23.5)	23(17.4)
Musculoskeletal disorder	21 (18.3)	4 (23.5)	25(18.9)
Undiagnosed fever	24 (20.9)	1 (5.9)	25(18.9)
Injury	13 (11.3)	0 (0.0)	13 (9.8)
Eye diseases/infection	4 (3.5)	0 (0.0)	4 (3)
Skin diseases	1 (0.9)	1 (5.9)	2 (1.5)
Ear, nose and throat diseases	4 (3.5)	0 (0.0)	4 (3)
Dental problems	2 (1.7)	1 (5.9)	3 (2.3)
Genitourinary system disease	0 (0.0)	1 (5.9)	1 (0.8)

Harmful addiction was significantly more observed in age group 12 years or more. No harmful addiction was found in the age of less than 10 years. It was also found that as age advanced, the numbers of child laborers with some type of “harmful addiction” increased. Harmful addiction of smoking was seen only in the age group 12 years or more. Addiction of “tobacco” chewing products was more in proportion in the age between 10 to 12 years.

Discussion: The present study shows that 94.1% of child labourers were above 10 years. Similar result was observed by Sarmila Malik et al ⁴ (2002) in

Kolkata and Ch. Koteswaramma, G. Nagaiah , M. Ramprasad ⁵ (2004) in Hyderabad. Sarmila Malik et al found that most of them (92.7%) belonged to the age group of 10 – 14 years⁴. Ch. Koteswaramma, G. Nagaiah, M. Ramprasad observed that 92.5% were in 10 – 14 years age groups ⁵.

Table – 3: Distribution of the child labourers according to positive findings in general examination

Positive findings of general examination		Sex		Total (n=372)
		Male (n=322)	Female (n = 50)	
		No. (%)	No. (%)	No. (%)
Anemia	Severe pallor	48 (14.9)	15 (30)	63 (16.9)
Vitamin A deficiency	Dry eye present	46 (12.4)	4 (8)	50 (13.4)
Protein deficiency	Lack of luster in hairs	16 (5)	3 (6)	19(5.1)
Vitamin B complex deficiency	Cheilosis in lips	3 (0.8)	1 (2)	4 (1.1)
	Angular stomatitis	0 (0.0)	1 (2)	1 (0.3)
Other Findings	Caries of teeth	2 (0.5)	0 (0.0)	2 (0.5)
	Dry and scaly skin	24 (7.5)	4 (8)	28(7.5)
	Red eye	4 (1.1)	0 (0.0)	4(1.07)
	Oedema feet	2 (0.5)	0 (0.0)	2 (0.5)
	Thyroid enlargement	0 (0.0)	1 (2)	1 (0.3)
	Parotid enlargement	1(0.3)	0 (0.0)	1 (0.3)

Half of the child labourers initiate work at 12 years or above in the present study. Sarmila Malik et al⁴ (2002) in Kolkata found that 45.3% of the working children started work between 11 – 13 years and 54.7% below 10 years. Mehta MN, Prabhu SV, Mistry HN ⁶ (1985) in Bombay observed that 22% of the child labourers had started working before their tenth birthday.

In the present study, 82% of the child workers had originated from nuclear families. Same finding was

observed by Sarmila Malik et al⁴ (2002) in Kolkata in the study that 85.3% of child workers had originated from nuclear families and 14.7% were from joint family. D. K. Lal Das et al⁷ (1992) and Kanungo⁸ (1991) also showed similar findings. In present study it was observed that mean family size was 5.67. This finding is consistent with Sarmila Malik et al⁴ (2002) who observed in their study that mean size of family being 5.7. But Nitin N Ambedkar, Shirin N Wahab, Nayantara D Vasudeo⁹ (1998) in Nagpur observed that mean family size was 7.5 and Tabassum F, Baig LA¹⁰ (2002) in Bhutta village, Pakistan found that the average family size 7.4 members.

Lower Socioeconomic status was significantly associated with child labour in the present study. Nitin N Ambedkar, Shirin N Wahab, Nayantara D Vasudeo⁹ (1998) observed that 79.8% were from Socioeconomic class 4, 19.7% were from class 3 and 0.5% from class 5. Sarmila Malik et al⁴ (2002) observed in a study that the majority of child labourers belonged to social class 4(45.4%) and class 5(43.4%).

It was found from the present study that illiteracy, high dropout and lower education was associated with child labour. Similar findings were observed by other authors. Nitin N Ambedkar, Shirin N Wahab, Nayantara D Vasudeo⁹ (1998) observed that majority (78.3%) were school dropouts. 0.9% were illiterate, 31.8% up to primary education, 52.5% up to middle education and 10.8% up to secondary education. Sarmila Malik et al⁴ (2002) in Kolkata revealed that out of the total 150 studied child labourers, 60.7% of working children were almost illiterate. 33.3% of working children had received some form of primary education and 6% had gone up to the middle school.

Considering the reasons of work, Nitin N Ambedkar, Shirin N Wahab, and Nayantara D Vasudeo⁹ (1998) who observed that majority (74.4%) of child labourers stated inadequate family income as a cause of child labour. They also observed the other reasons for job given were compulsion by parents-20.6%, death of father-4%, father's addiction-0.9%, child's desire-12.6%,

participation in family work-11.2%, separated parents-0.9%, others-14.4%. T Nivethida, G Roy¹¹ (2005) in Pondicherry found 85.2% of the child labourers said that they worked due to poverty in the family. Tabassum F, Baig LA¹⁰ (2002) in Bhutta village, Pakistan observed that besides majority (89%) gave the reason to support the family as a reason of child labour other reasons given by child labourers were parents pressure (5%), fond of work (4%), learning the skill (1%) and self support (1%).

Other authors showed variation in the morbidity pattern. It may be due to different occupation of child labourers, different working places, different study area etc. V. Bihari et al¹² (1992) had been studied 57 male child labourers between 10 to 16 years of age engaged in brassware industries at Moradabad was studied. The high respiratory morbidity attributed to chronic exposure to fumes and dust of metals e.g. nickel, chromium and cadmium. It was also found that the children employed in the ancillary as well as in the main units showed high prevalence of musculoskeletal disorders (27.6% and 22.8%) which was due to sustained faulty posture adopted during work and physical stress. A survey by PSM Dept of RMC, Loni¹³ (2002) found that 41.53% child labourers had fever, 30.76% had myalgia, 20% had injuries (cuts, wounds etc), 9.23% had pain in joints and 16.92% were not ill. Ch. Koteswaramma, G. Nagaiah, M. Ramprasad⁵ (2004) studied 200 children between 5 to 14 years of age working in vegetable and fruit market of Hyderabad observed higher percentage of pallor as compared to present study that was about 45% of lower SE strata and 40% of middle SE strata. S. Malik et al⁴ (2004) in slums of Kolkata observed that most (88%) of the child labourers had some type of morbidity. Most prevalent morbidities among child labourers were seen as pallor (49.3%) followed by pediculosis (48%), dental caries (28.6%), malnutrition (22.6%), worm infestation (20.6%) and scabies (16.6%). S. K. Joshi et al¹⁴ (1994) in Jaipur city found that the weavers were more likely to suffer from headaches (34.2%), backaches (18.2%), lower limb pains (15.5%) and acute respiratory infections (26.4%) compared to

controls. They were more likely to have signs of nutritional deficiency. These findings may be due to occupation of child labourers because the authors studied 110 boys of 6 to 13 years working in 3 carpet industries.

In the present study it was observed that out of the total 132 child labourers who were suffering from some morbidity during the last 15 days, 22% had not taken treatment for morbidity. A survey by PSM Deptt of RMC, Loni¹³ (2002) in Pathare village found that 42.59% not taken treatment for ailments.

23.7% of child labourers had some kind of harmful addiction in the present study. Nitin N Ambedkar, Shirin N Wahab, Nayantara D Vasudeo⁹ (1998) in Nagpur found that 25.1% of the child labourers had some type of habits. 5.4% had habit of smoking, 1.4% had habit of alcohol, 14.8% had habit of tobacco chewing and 13% had other habits (e.g. "gutkha", betel nuts etc). Survey by PSM Deptt of RMC, Loni¹³ (2002) found that out of the total child labourers 71.87% had no addiction and this finding is consistent with the present study.

In the present study it is observed that more male child labourers had habit than female child labourers. No female child labourers had any kind of habit. This finding is consistent with Survey by PSM Dept of RMC, Loni¹³ (2002) found that addiction was observed to be high among male child labourers. No addiction was found in female child labourers.

Conclusion: Majority of child labourers (56.2%) stated "inadequate family income or poverty" as the chief cause for their work. High dropout, Parental illiteracy, large family etc are significantly associated with child labour. 35.7% child labourers stated that they had suffered from some kind of morbidity in the last 15 days prior to the survey. Pallor was seen higher among female child labourers than male child labourers. Most of child labourers (94.3%) stated that there was no medical care facility at work place. Harmful addiction was seen more in the child labourers of "illiterate"

fathers. No harmful addiction was found in the age of less than 10 years and in female child labourers. Harmful addiction of smoking was seen only in the age group 12 years or more. It was also found that as age advanced, the numbers of child labourers with some type of "harmful addiction"

References:

1. Yacouba Diallo, Frank Hagemann, Alex Etienne, Yonca Gurbuzer and Farhad Mehran; Global child labour developments: Measuring trends from 2004 to 2008 International Labour Office, International Programme on the Elimination of Child Labour (IPEC) – Geneva: ILO, Printed in Switzerland, 2010 – 1 v: 3.
2. Child labour facts & figures: an analysis of census 2001, INDUS Child labour project, International Labour Office. - Geneva: ILO, Printed in India, 2007: 13, 61.
3. Khatu KK. Working children in India, operational research group, Baroda, 1983, Indian Journal of Community Medicine 2002, vol.27(4): 161-162.
4. Sarmila Malik et al. Some socio economic determinants and working environmental conditions of child labourers in a slum area of Kolkatta, Indian Journal of Community Medicine, Volume 27, No. 4, Oct – Dec 2002: 161 – 166.
5. Ch. Koteswaramma, G. Nagaiah, M. Ramprasad. A study of the morbidity pattern of child labourers working in vegetable markets of urban Hyderabad, Andhra Pradesh, Deptt, of community medicine, Osmania medical college, Hyderabad, 31st Annual National conference of PSM. 2004: 133.
6. Mehta MN, Prabhu SV, Mistry HN. Child labour in Bombay, child abuse negl, 1985; 9(1), 107 – 11.
7. D. K. Lal, Chandrashekhar SF. child worker: an analysis of their terms of employment, Indian journal of social work, Jan 1992; 14: 29 – 37.
8. Kanungo J. The young girls helping in our household works In – rehabilitation of child labourers in India, edited by RN Pati, New Delhi, 1991; 121 – 132.
9. Nitin N Ambedkar, Shirin N Wahab, Nayantara D Vasudeo. Study of some social problems and

- correlates of child labourers in slums of Nagpur. Indian Journal of Community Medicine, April - June 1998; 11: 57 – 60.
10. Tabassum F, Baig LA. Child labour – a reality: results from a study of squatter settlement of Karachi. Journal of Pak Medical Association; 2002 Nov, 52(11) : 507 – 10.
 11. T Nivethida, G Roy. Child labour in school children. Indian Journal of Community Medicine Jan - Mar 2005; 30(1):14 – 15.
 12. V. Bihari et al. Occupational morbidity among children employed in a brassware industry. Indian Paediatrics Feb 1992;29(2):195 – 201
 13. 1999 Batch-B-1 final M.B.B.S. part 2 under the guidance of department of P. and S.M., Rural Medical College: study of various social factors and its correlation with child labour, Loni, Aug 2002.
 14. S. K. Joshi et al. Health status of carpet weaving children. Indian Paediatrics 1994 May; 31 (5): 571 – 4.

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