

The Child Labor Project 2017

Health and Social Assessment of Child Laborers, in and Around Karachi An Area of Urgent Unmet Need for Action



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TABLE OF CONTENTS

Section I INTRODUCTION	1
Section II OBJECTIVES	3
Section III DATA & METHODS	4
➤ Study Design	4
➤ Study Setting	4
➤ Study Population	4
➤ Sample Size	5
➤ Sampling Technique.....	5
➤ Study Duration	5
➤ Data Collection	5
▪ The Quantitative Component	5
▪ The Qualitative Component	5
➤ Data Management & Analysis	6
➤ Monitoring, Supervision And Quality Control	6
Section IV Results of the Quantitative Analysis	7
➤ Socio-Demographic Characteristics.....	7
➤ Nutritional Status	7
➤ Food Intake & Security	7
➤ Occupational Injuries	8
➤ Hygiene Practices	8
➤ Smoking, Tobacco Use and Addictions	8
➤ Depression and Violence	9
Section V Results of the Qualitative Analysis	10
➤ Theme: Effect of Migration	10
➤ Theme: Food Intake & Availability	11
➤ Theme: Relationships	12
➤ Theme: Social Life	13
➤ Theme: Physical Disorders	14
Section VI Discussion	15
Section VII Policy Recommendations	17
Section VIII Annexes	18

INTRODUCTION

Child labor is often defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and mental development. It refers to work that is mentally, physically, socially or morally dangerous and harmful to children; and interferes with their schooling by depriving them of the opportunity to attend school; obliging them to leave school prematurely; or requiring them to attempt to combine school attendance with excessively long and heavy work (1). United Nations defines child labor as work that is prohibited for children of certain age groups. It is work performed by children who are under the minimum age legally specified for that kind of work, or work which, because of its detrimental nature or conditions, is considered unacceptable for children and is prohibited(2).

Latest ILO estimates in 2012 show that 168 million children 5-17 years of age are involved in child labor worldwide, accounting for almost 11 percent of children worldwide (3). Out of these 85 million are involved in hazardous work (4).

The largest proportion of child labor (21.4 %) prevails in Sub-Saharan Africa followed by Asia and the Pacific (9.3%)(4). Although poverty remains the basic underlying cause of child labor worldwide, yet migration is one of its important determinants. Migration is a massive global phenomenon that affects the lives of nearly a billion people yearly; consequently leading to a rise in child labor (5).

The last child labor survey in Pakistan was conducted in 1996 and according to that 3.3 million out of 40 million children were economically active on a full time basis (6). Among the working children, 57.82% are males and 31.78% are females. The Human Rights Commission of Pakistan increased the absolute number of child laborers to 10 million in 2005 (7). Various professions or sectors where child laborers may be found in the country include as shoe-shiners, flower-sellers, rag-pickers, beggars, waiters, farmers, helpers in industries, etc.

In July 2010, Pakistan was hit by the most devastating floods in its history with 10 years' worth of rain falling in the span of a week. The floods episodically continued till September, 2011. All provinces including sixteen districts of Sindh were affected. It is estimated that 1985 people were killed and another 18 million affected. 12 million people's homes were damaged or destroyed. Two million homes and 10,000 schools were destroyed (8). The affectees faced severe economic crisis with their income falling down to 70%. They migrated to neighboring areas in search of shelter. Towns such as Sujawal, Mir PurBatoro and Daro were completely flooded which led to families migrating to safer places including Karachi(9). To cope with the financial situation, children were forced into labor leading to a sharp spike in the child labor force of the country (10). The status of these internally displaced people (IDPs) varies considerably around the country. In Sindh province, nearly 85 percent of the affected population remains displaced. The outskirts of Karachi, a city of 18 million, have served as a refuge for some hundreds of thousands of Sindhi IDPs since the floods hit Sindh province in mid-August, 2010 (11).

Many studies have been conducted on child labor but scanty data is available on the health status of migrant children forced into labor after the floods. A survey done by ILO in 2000 in 26 countries

indicated that a quarter of the children suffer injury or illness while working. Every year as many as 2.7 million healthy years are lost due to child labor specifically in agriculture.

According to the National Labor Survey of Pakistan, 6.6% of the working children (5-14 years) frequently suffer occupational injuries whereas 27.64 % occasionally suffer injuries (6).Regarding Sindh, 38.68% children reported that they occasionally suffered from occupational injuries (6). Another study in Sultanabad, Karachi indicated that 78.4 % of working children were injured in the preceding 3 months during working hours (12).

ILO-IPEC conducted multiple surveys on child laborers working in various industries of Pakistan. According to their data, the estimates of smoking among child laborers in Pakistan vary between 6.5 % to 75% (13-15). The figures for drug abuse are less as compared to smoking, ranging from 1.4 to 6% (13-15). Physical abuse was found to be more common among girls compared to boys, 68.3%versus 31.7 %,respectively(15). There is limited data available on the health status of working children in Pakistan.

Limited recent data is available on the social and health problems of child laborers specifically those who migrated after the floods in Pakistan. Epidemiological assessment needs to be done in this direction in order to identify their issues so that we know where interventions and improvements can be made.

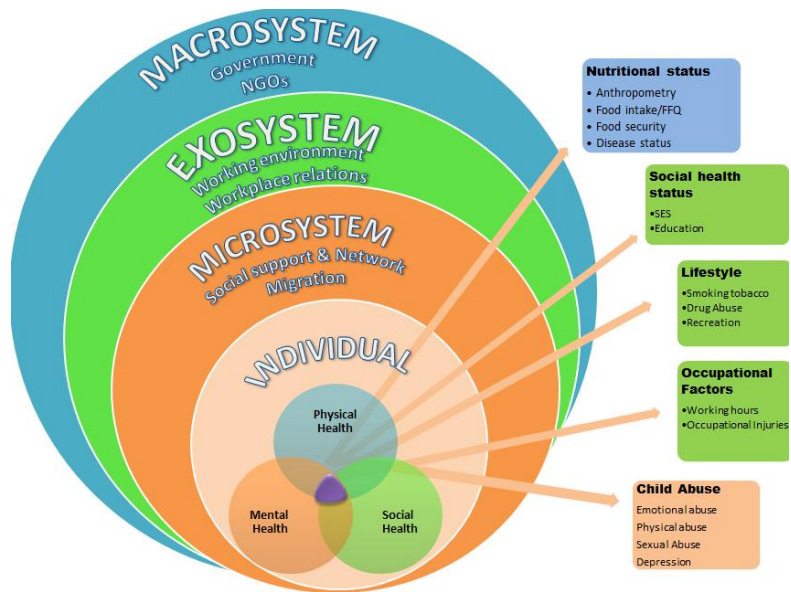
OBJECTIVES:

We developed a conceptual framework for our work based on Bronfenbrenner's ecological model.

The aim of the study was to assess the physical, mental and social health of child laborers at multiple levels according to the framework. The model suggests that a child does not live in isolation and is affected by micro and the macro environment surrounding him.

We specifically wanted to determine the;

1. Nutritional status of working children
2. Proportion of occupational injuries
3. Lifestyle characteristics (smoking, drug abuse) of child laborers
4. Proportion of sexual abuse/violence in working children
5. Social impact of migration among migrant child laborers (affected by the last floods 2010-2011)



Bronfenbrenner's Ecological Model

DATA AND METHODS

STUDY DESIGN

This was a mixed-method study where we assessed the initial four objectives listed above through a cross-sectional survey (individual assessment according to the framework) while we assessed the last objective and perspectives of child laborers as well as relevant stakeholders through qualitative exploratory study (the higher levels of a child's environment according to the framework).

STUDY SETTING

The study team visited each of the pre-defined study sectors including, hotels and restaurants, the manufacturing industry, agricultural sites and children working at homes. The initial assessment of the study sites revealed that none of the child laborers working at these places was a migrant to Karachi as a result of floods that hit in 2010. Further sites in Karachi and neighboring Thatta district were explored and it was found that all the migrants to Karachi were settled along the Super Highway (Sindhbad, Khemabasti, Jamali pull, Hasanabad, and New sabzimandi settlements) forming a well-defined community. In view of these realities, we decided to sample the migrant children separately from the rest of the sectors.

The children working in hotels and restaurants were recruited from Bahadarabad, Manzoor colony and Mehran town. The domestic workers were recruited from Bahadarabad, Manzoor Colony and Karna Basti. To capture the children working in the agricultural fields, our team had to probe the suburbs of Karachi. These children were recruited from Fateh Muhammad Soomro, a village in the outskirts of Thatta. They were also sampled from Haji Sheedi Goth and Mola Baksh Goth, in the outskirts of Karachi. Some of the sample was also taken from Jamal Dahiri, from nearby Hyderabad district.

The manufacturing industry is a huge industry deploying child labor. Children were sampled from Rehrigoth, an urban slum of Karachi, working in the ware-house of second-hand articles. The children of cottage industry of Rehrigoth were also included where children sort out shrimps and prawns (Inland and coastal waters fishery industry). We got to know that a large number of child laborers work in the well-known bangle industry of Tando-jam, Hyderabad. We recruited these children in our study and also the children working in the cottage industry of Hyderabad where they make handicrafts.

STUDY POPULATION

The participants for our study were working children in the age group of 5-14 years. We recruited only those children who had been working for at least nine months in the past one year. Initially our inclusion criteria was to recruit children working either in the agriculture sector, manufacturing industry, working in other peoples' houses or working in hotels and restaurants, who had migrated to Karachi and its

suburbs after the floods of 2010-11. However, as described above we sampled children from the migrant sector separately along with the other sectors.

SAMPLE SIZE

The total sample size achieved was 634 although the required sample size was 318. A total of 200 children were sampled from the migrant sector, 184 from the agriculture, 120 from the manufacturing industry, 63 domestic workers and 67 children working in hotels and restaurants were taken. Oversampling was done in each of the sectors to capture the variability in data. For the qualitative component; 10 FGDs, 9 family ethnographies, 4 in depth interviews and 6 key informant interviews were conducted.

SAMPLING TECHNIQUE

For the quantitative component, the technique of non-probability sampling was applied to draw the sample. Proportional quota sampling according to the numbers given by the Child Labor Survey of Pakistan 1996 was done to draw sample from each of the sectors. Within each sector, the technique of respondent driven sampling was used to draw the sample of children working in the agricultural sector, the manufacturing industry, domestic workers and hotels and restaurants. Since all the migrant children were clustered in their “*basti*”, purposive sampling was used to draw their sample. For the qualitative component we recruited participants based on purposive and snowball sampling.

STUDY DURATION

The study was completed from June 2017 to November 2017.

DATA COLLECTION

The Quantitative Component

Data was collected by means of a structured questionnaire. The questionnaire had the sections of identification, anthropometry and observation checklist, socio-demographic characteristics, lifestyle characteristics (food security, nutrition, hygiene, smoking, drugs of abuse, physical activity), occupational injury and violence.

The Qualitative Component

The qualitative component included the focus group discussions (FGD), family ethnographies (FE), in depth (IDI) and key informant interviews (KII). All data were collected by the co-PI of the project along with the medical officer. We constructed a separate semi-structured interview guide for each of the qualitative

methods. A total of ten FGDs, nine FEs, four IDIs and six KIIs were conducted. All FGDs consisted of 60-120 minutes duration having a minimum of 6 and a maximum of 13 participants in all the sectors.

DATA MANAGEMENT AND ANALYSIS

All quantitative data was field edited followed by coding. The participants were approached again to cater for the missing information. The data was entered on Epidata. The data was exported to SPSS version 23 followed by data cleaning and analysis. Frequencies and proportions for each of the objectives were calculated. Chi-square and one-way ANOVA were applied to determine the differences across the five sectors of our study, p value less than 0.05 was considered statistically significant.

The qualitative data was translated and transcribed. All the data was exported to MAX-QDA. Thematic analysis was done in which themes, sub-themes and codes were generated along with some pre-defined themes. For each theme, data was looked into the FGDs, FEs, IDIs and KIIs.

MONITORING, SUPERVISION AND QUALITY CONTROL

The Co-PI visited the field sites once a week in all the sectors to monitor the data collection. The field editing and coding were counter checked by the Co-PI and the missing information was accounted for.

RESULTS OF THE QUANTITATIVE ANALYSIS

SOCIO-DEMOGRAPHIC CHARACTERISTICS

A total of 43.8 % of the children were in the age group of 5-10 years whereas 56.2 % children were 11-14 years of age. The mean age of our sample was 10.92 years. There was almost an equal representation of girls and boys, 49.2% and 50.8% respectively. Majority of our sample was taken from the rural sector, as the agricultural sector had the highest proportion of the sample (66.6%). Almost all the migrant children (97%) lived in *Kacha* houses built of bamboo whereas the children working in the rest of the sectors mostly lived in *Pakka* or *Semi-pakka* houses. We built a composite variable of socio-economic status (SES) to determine the variation across the sectors and it was known that the children working in the agricultural sector and those doing domestic work had the highest proportion in the lowest tertile of SES (47.9 % and 43.5% respectively). A total of 72.6% of the laborers did not go to any formal or informal school. The children worked at an average of 6.12 days per week with 6.81 hours of work per day. The children working in the hotels and restaurants had the highest hours of work per day [Mean SD: 9.97 (2.5)] (Table 1)

NUTRITIONAL STATUS OF THE CHILD LABORERS

Anthropometric measurements were done to assess the nutritional status of the child laborers. Their height and weight were recorded. Wasting (weight for height) and stunting (height for age) were taken as the variables for acute and chronic malnutrition respectively. These variables were calculated based on the z scores by the WHO Anthro Plus software. If the z score was from -1 to -2, it was considered mild; in between -2 and -3, moderate and less than -3 was considered severe wasting and stunting respectively. 60.2% of the children had acute malnutrition and 46.5% of the children were stunted. (Table 2)

FOOD INTAKE AND SECURITY

We administered a questionnaire adapted and modified from 2016 NHIS Questionnaire to assess food insecurity in the working children. It was estimated that 45.3% of the child laborers reported to have skipped a meal in the last month due to lack of money. 21.5% of these children said that they had not eaten for a least one day in the past month. (Table 3)

We also administered a food frequency questionnaire to understand the intake of food in these children (Table 4). The daily intake of milk, eggs and meat was found to be very low (0.32 glass, 0.35 eggs and 0.21 piece of meat respectively). The mean intake of candies and chocolates was found to be high (0.91/day) along with tea (1.55 cups/day).

OCCUPATIONAL INJURIES

We asked the children about their experience of getting injured during their working hours. We only asked about the injuries in the past six months to minimize the role of recall bias. A total of 19.1% children said that they were injured at least once in the past six months during working. Most of the children (30%) who received injuries were engaged in the manufacturing industries followed by agricultural sector (19.6%) and the migrants sector (16.5%) (Table 5). We asked the children about seeking help for the injury and 58.7% answered in a negative. Most of the children, 39.7% said that they had been hit by a sharp object, severe enough to cause bleeding. 49.6% of the children reported to have a cut due to injury. There was only one child, working in the manufacturing industry who was injured due to heavy weight lifting.

The upper and the lower extremities were the most commonly injured body parts (43 % and 45.5% respectively). In 59.6% of the children, the injuries were severe enough to cause the children to skip their work.

HYGIENE PRACTICES

Almost half of the children used tap water for drinking purposes at home and at work place (42.3 %, 56.9% respectively). Only 53.2% of the children got purified water before drinking with filtration with a cloth being the main source of filtration (70.7%). A total of 33.5% of the migrant children and 25.5% of the children working in the agricultural fields did not have any toilet at home and used the bushes or the fields. 43.7% of the children either did not have any washroom at their workplace or were not allowed to use it. The hygienic practices of the working children were not found to be satisfactory. The mean frequency of taking a bath, changing clothes and brushing teeth per week was 3.23, 2.57 and 3.02 respectively.(Table 6)

SMOKING, TOBACCO USE AND ADDICTIONS

We found out that none of the working children were involved in any drug addictions. Only one child of the agriculture sector reported to have used marijuana once in his lifetime. Only two children ever smoked the cigarettes and four were currently smoking chillum, hukkah and sheesha. 12.1% of the children had ever used smokeless tobacco specially "*paan*". The use of beetlenut (*supari*) was very common among the working children. A total of 281 (44.6%) children were currently using *supari*. The mean age of starting to use it was 6.8 years and on an average the children took 7.29 *suparis* per day.(Table 7)

DEPRESSION AND VIOLENCE

The Childhood Depression Inventory (CDI), which is a validated tool to assess depression in children was used to assess it in our sample of child laborers. 9.1% of the children had clinical depression. It was highest among the domestic workers (11.1%) and lowest in the sector of hotels and restaurants (1.5%). Pictorial representation of emotional, physical and sexual abuse was used to assess violence. The figures of emotional and physical abuse were almost similar, 20.8% and 19.1% respectively. The numbers of sexual abuse came out to be alarming, 8.5%. The sexual abuse was highest in the agricultural sector (19%) and lowest in the children working in hotels and restaurants (3%).(Table 8)

RESULTS OF THE QUALITATIVE ANALYSIS

The focus group discussions, family ethnographies, in depth interviews and key informant interviews were conducted around the following themes for understanding;

1. Effect of migration on children
2. Food intake and availability
3. Relationships
4. Health of working children
5. Social life of working children

We also got seven emerging themes after collecting data.

THEME: EFFECT OF MIGRATION ON CHILDREN

One of our main focus was to identify the effects of migration on these children and their families. The floods hit Pakistan in 2010-2011, around seven years back. The younger kids could thus not recall the situation of the floods. Only the kids who were above 11 years of age could narrate the incidence. We identified three major sub-themes coming out from our main theme of migration.

Future Insecurity

The children narrated that they had to travel for a couple of days before reaching Karachi. There was a lot of unpredictability regarding the future. The whole villages travelled together on buses, trucks, carts etc.

Freedom from Slavery

We found that the current condition of the migrant families was pitiable. They were clustered in small “*bastis*” beside the super highway, there was no electricity or water connection in the area. They lived in houses (jhonpari) of bamboo and reared cattle. However, it was striking that they did not want to go back to their native land. They told us that they used to live in slavery there. The head of the village, “*mazaray*”, controlled their lives. The whole families used to work for the *mazaray* and in return they would get food and shelter but no money was given to them. They were slaves of the *mazaray* and could not take their own decisions. They were not allowed to study there. After migrating to Karachi these started to study in small free of cost schools that have been established by local NGOs, specifically for these children. Although the houses and living conditions were better there, yet none of the children wanted to go back. They enjoyed going to school here and living a life of freedom.

Start of Labor

The children reported that they used to work in the agricultural fields before migration along with their families. After migration, they started working in the formal as well as the informal sector where they would get money for their work. Most of the children worked in the vegetable market where their job was to sort the rotten fruit and vegetables, make cartons and carry them to vehicles. The children said that they felt more independent working here,

*“I like working in the sabzimandi, I get money for my work, I can buy candies and chips for myself”
(Migrant, FGD)*

THEME: FOOD INTAKE AND AVAILABILITY

Our quantitative survey revealed that wasting and stunting were very high in the working children. We wanted to have a deeper insight into the reasons for this specifically food intake and availability. We identified two sub themes, food affordability and diversity.

Affordability

We identified that poverty was a major issue due to which the working children do not get the right quality and quantity of food. Most of the children responded that there are multiple days when they do not get anything to eat. One of the girls said,

“I only eat roti (bread) with green chillies once a day.” (Agriculture, FGD)

We asked the children about their favorite food and they responded that;

“We eat whatever is available to eat.” (Migrant, FE)

The affordability of food varied across the different sectors of child labor. However, the children working in the bangle industry were specifically found to be in a pitiable state;

“Mother gives us a cup of tea in the morning before we leave for work, and at night she gives us roti, we dip the roti in water for dinner” (Bangle industry, FGD)

Diversity

The children had no knowledge regarding food diversity. “Bread” remained the mainstay of survival for most of them. Meat, eggs, milk and fruits were rarely available to these children except for those doing domestic work who said,

“I get food from where I work, BAJI gives me bread, meat and vegetables.” (Domestic worker, FE)

We noticed that these children were fond of eating junk food. They were mostly out of their homes for work and thus a portion of the money that they earned was spent on buying candies, chips and other junk food.

"I buy toffees and suparis daily from ten rupees that I get from the farmer, without telling my parents"
(Agriculture, FE)

THEME: RELATIONSHIPS OF WORKING CHILDREN

We inquired the children about their relationship at work and at home. We tried to understand the type of support system existing for these children. We divided our theme into two sub-themes, relations at work and relations at home.

Relations at Work

It was seen that generally the behavior of the supervisors with the children was not good. Most of the children did not enjoy their work. We identified two codes from this sub-theme; the harsh behavior of the supervisors and fatal violence.

Harsh behavior of the supervisors:

Most of the children did not like their work and their supervisors, typically in the formal sector. The relationship between the children and their supervisors was that of a power relation in which the supervisors had control over the children. The children seemed scared of their bosses.

"I do not like my boss, he curses me and my parents whenever I come late." (Hotels, FE)

Fatal violence:

Verbal abuse was found to be very common. Some children also reported physical abuse by the supervisors that included slapping, kicking, punching etc. One of the stories was typically alarming narrated by the migrant children,

"One child working in the vegetable market was killed by the owner of the shop. He stole some tomatoes from the shop where he worked, the master caught him. He had a gun. He stabbed the child in the chest from the back of the gun, in the middle of the vegetable market. The child shouted for help, but no one helped him and he bled to death." (Migrant, FGD)

The incidence was never reported to the police and no action was taken against the murderer.

Relations at Home

Generally the children loved their homes and had cordial relations at home. They liked spending time at home. We identified two codes from our sub-theme; parental relations and siblings' relations.

Parental relations:

Most of the children had cordial relations at home. All of them reported that they were very close to their mother and enjoyed spending time with her. Children had different reasons for loving their mom.

"I love my mom, because she loves me. Whenever, I am hungry she cooks something for me."(Hotels, FE)

"I love my mom, because paradise lies under her feet." (Domestic, FE)

The children also reported that they were scared of their fathers. Some of them said that they were hit by the fathers.

Siblings' relations:

The relations with the older siblings were also not very pleasant. The children reported that they were hit by their elder brothers and sisters whenever they did not agree to do their work. Some of the children also reported that the older siblings wanted to take the money from them and when they disagreed, it would end in a fight.

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THEME: SOCIAL LIFE OF WORKING CHILDREN

We wanted to understand the social life of the working children; with whom they interact, their recreational activities, their circle of people and their feelings regarding the people in their environment. It was determined that most of these children have a narrow social circle as they spend most of their time in work. We identified the following sub-themes .

Peers and Friends

Contrary to our perception that the working children have a huge friend circle, we found that most of these children had only a few friends. They knew only a few children who work with them. Their life mostly revolved around going to the working place and coming back home.

"No other friends live near me, I don't have any other friends" (Migrants, FE)

Few of the children claimed that they found enough time to play with their friends, the most common game played by them was cricket.

"We often meet each other on Sundays when we do not have to go to work and play cricket" (Hotel & Restaurants, FGD)

The girls had an even smaller circle of friends as compared to boys. In the outskirts of Hyderabad, Tandojaam, we observed that girls are not allowed to go outside to play with their friends. A small girl who made bangles said,

"I am not allowed to go outside to play as there are bad people outside. I play with my younger siblings at home" (Bangle Industry, FE)

The female participants reported that they didn't feel safe going out alone, and that they had to be accompanied by an elder if they had to go outside.

Memorable Day

These children rarely get a chance to go out for the purpose of recreation, partially because they do not have leisure time and partially because of poverty.

“I visited the beach once in my life” (Migrant, FGD)

We inquired the children about one memorable day in their lives that they still cherish. Most of them had to think hard before they could recall any such event. There were others who said that there has been no such event in their lives and they have always been just working.

School Life

It was observed that child laborers had to work at the cost of their education. Only few of the working children were able to attend schools. There were various reasons of the not attending school. Children from the agricultural sector reported that there was no secondary school in their village (Haji Sheedi Goth). Whenever the Government built a school in their area, the local heads of the community did not allow the children to attend it as that put their leadership at stake. We identified the following codes of our sub-theme;

Student’s attitude towards schooling:

It was seen that most of the children had left the school after getting involved into work. But there were some cases where children left the school because of certain reasons and then started working.

*“I am not interested in school. The teacher used to scold me and ultimately kicked me out of the school”
(Hotel and restaurants, FGD)*

Another child from the same sector said,

“I cut the hand of a class fellow with the blade, and teacher kicked me out” (Hotel and restaurants, FGD)

Family reasons for skipping school

A girl from Rehri Goth had never attended the school. Upon asking if she would like to join the school when given a chance, she said,

“I won’t. My mother says I have grown older now, and I should spend time in doing domestic chores instead of going to school”. (Manufacturing industry – Fishery industry; FGD)

THEME: PHYSICAL DISORDERS OF WORKING CHILDREN

We wanted to have an insight regarding the hazards faced by working children. Our qualitative survey revealed that these children were facing a number of hazards at their workplace. We identified the following sub-themes.

Night-blindness

While conducting an in-depth interview from a community leader in Tando Jam, she revealed that night-blindness or blurred vision was common among children involved in bangles' manufacturing. Their work involved precise designing by heating bangles on burning flames.

"These children usually have difficulty seeing at night" (Bangle Industry, IDI)

Musculoskeletal Disorders

Musculoskeletal disorders were common among working children specially those working in hotels and restaurants and doing domestic work.

"I have to move heavy furnitures in order to clean the floor, which makes my muscles fatigue and bones start aching". (Domestic worker, FE)

The children employed in hotels and restaurants had to work non stop from morning till evening, majorly washing the dishes in awkward postures that led to backaches.

Disorders of the Agricultural Group

It is generally considered that children working in the agricultural fields face the hazards of pesticides. However, our findings were contrary to the notion. The pesticide sprays are generally not given to the children as these are expensive items and children spill and waste them. The farmers usually do the pesticide sprays themselves. We did not find a single case of pesticide poisoning.

"I tell them to stay away from the farms for 3 to 4 days after fertilizers have been sprayed, and in case of exposure I advise them to drink a glass of milk" (Farmer, IDI)

Similarly, in the furniture factory, children were likely to get exposed to saw dust which caused chronic respiratory illnesses. However it was observed that children were kept away from this hazard.

Trauma to Hands

The working children were exposed to a number of hazards causing physical damage specifically to their hands. The children working at homes reported burning their hands frequently while working in the kitchen. The children in the bangle industry frequently suffer from cuts to the hands.

"I feel severe pain in hands when I clean shrimps with bare hands". (Fishery, FE)

Scabies

We found that scabies was very common among the child laborers of all sectors. The children do have medical facilities available, but do not utilize them due to lack of awareness treating itching as a disease.

"Itching doesn't go even after scratching" (Agricultural sector; FGD)

DISCUSSION

The mean age of our study sample was 10.92 years with almost an equal representation of boys and girls (50.8% and 49.2% respectively). We found that the children worked at an average of 6.81 hours per day, while the children working in hotels and restaurants worked for 9.97 hours per day. The allowable duration for a fourteen year old child to work is 8 hours a day(16). Our interviews with the children working in restaurants also emphasized that these children work for strenuously long hours leading to musculoskeletal disorders.

Our study assessed the nutritional status of the child laborers revealing 60.2% wasting and 46.5% stunting. Our proportions of stunting were comparable to the results of Pakistan Demographic and Health Survey (PDHS) 2012-13 according to which 45% of children less than five years of age in Pakistan were stunted(17). The figures of wasting given by PDHS were 11% which vary considerably with ours. We presumed that the acute malnutrition was high among the working children, as these children were exposed to the external environment with varied hazards and their diet was dependent on the availability of food at their workplace. Our results differ considerably with a study conducted in Dhaka in 2014 on 100 child laborers, which revealed 15% wasting and 26 % stunting(18). One reason of difference could be the inclusion of migrant child laborers in our study, whom are thought to be a more disadvantaged group as compared to the other sectors. None the less, the statistics of nutritional status estimated by our study were alarming and need to be taken into account. The nutritional status of these children related with their dietary intake which highlighted that the daily intake of all the food groups including vegetables, meat, fruits, eggs, dairy was less than the recommended amount(19).

Our study determined 19.1% occupational injury in children in the past six months. These figures are dissimilar to the estimates of The National Labor Survey of Pakistan, 1996 (NLSP) according to which 38.68% of the working children of Sindh occasionally suffered an injury during work (6). There was no time bracket for occupational injury in the NLSP which explains the higher proportion. With respect to the industrial structure of injuries, the majority of children fell into agricultural activities and manufacturing (29.8% % each) followed by the migrant sector (27.3 %). This may be explained by the enclosed environment offered by hotels, restaurants and homes as compared to other sectors. We found that “cuts” were the most common type of injury occurring in 49.6% of the total injuries. Similar results were witnessed by a study in Iran on child laborers(20). In most of the cases (54.1%), the injuries were severe enough to cause the child to miss work for more than a day and seek medical advice (41.3%). Our qualitative component also revealed that the children were well aware of the near-by hospitals and clinics and were independent enough to seek medical advice when needed.

We sought to ask for the drug abuse among child laborers. High proportions of drug abuse have been estimated by other studies, however none of our participants reported using any drugs(13-15).We assume that drug abuse is more common in older children as compared to our sample that included children only less than 14 years of age. Our participants were more involved in the consumption of candies and chocolates (mean intake per day: 0.91). However, a considerable proportion of children

reported having smokeless tobacco (12.1%) and beetle-nut (45.1%). The use of these tobacco products is cultural, common in Sindh and most of the children consume them by following their elders.

We quantified violence in working children, revealing 20.8 % emotional, 19.1% physical and 8.5% sexual abuse. There is a large variation in the numbers of violence in child laborers across sectors(13-15). The proportions of physical and emotional abuse were almost similar. Our interviews revealed that these children were emotionally strong and mere scolding and shouting did not affect them much unless physical abuse was involved. Sexual abuse was typically common in the agricultural setting (19.1%) followed by the manufacturing industry (5.0%). A significant association was found between sexual abuse and depression (p-value=0.045). Our interviews revealed that no proper channel existed for the victims of sexual abuse to raise their voice and acquire justice. Most of the NGOs working against violence focused on its prevention. We found only one NGO, Sahil that dealt with cases of sexual violence once it had occurred. This was a huge gap in addressing violence in the setting of a developing country where violence is very common.

One of the major strengths of our study was that it quantified the health and social parameters of the child laborers, an area yet not explored. The estimates of the nutritional status can serve as a baseline for the Government and the policy makers to take note of the deteriorating situation of child labor in Pakistan. The working children come under the category of hard-to-reach population and thus it is hard to draw a representative sample of this community. We used the technique of respondent driven sampling which is by far the best known available technique of sampling hidden populations. The external validity of our results is thus high. Furthermore, our study used a mixed methods approach, the interviews and FGDs helped us to understand the perceptions, attitude and lifestyles of the child laborers in depth. However, our study does not come without limitations. We created a pictorial questionnaire to assess violence that was not validated in our setting. Furthermore, we cannot eliminate the chance of recall bias specially when asking about occupational injuries and food intake.

CONCLUSION

All the participants of our study lived in difficult circumstances. Some were exposed to the scorching blaze of flames (bangle industry) while some had to wash dishes for extensively long hours. Child labor has been existent for ages but has not recently been on the agenda of the Government. The health and social indicators of this vulnerable group are distressing. Efforts need to be consorted for alleviating the state of affairs of these children to ensure a better future for them.

POLICY RECOMMENDATIONS

Child labor has been surviving and flourishing since ages and the scenario cannot change over-night. A lot of private organizations have been working towards elimination of child labor, but the picture has remained essentially the same. Based on our findings and experience, we recommend to “regulate” child labor rather than working towards banning it altogether.

By “regulation” of labor, we intend to focus on the WHO definition of health that includes the physical, mental and social well-being of individuals. We recommend to go district by district as models to take a start. It is needless to say that the Government needs to step in and it should be on the agenda of the Government to put a halt to this menace.

For every sector where children work, laws regarding the regulation of labor should be established. The regulation would vary from sector to sector. The hours of work would be defined for children such that they have ample room to go to the “drop-n-centers”. We recommend that the duration of work should not be more than four hours a day for a child with two days off per week. Protective equipment should be given to the children depending on their nature of work; for instance, protective glasses should be given to the children working in the bangle industry to combat night-blindness. The subject experts such as ILO, UNICEF, SPARC etc. should be taken on board to draft these regulations for each sector.

In every district a sufficient number of “drop in centers” should be established having a morning and an evening shift. It should be made compulsory for all the working children to go to the drop in centers once a day, before or after work. One meal should be provided free of cost to every child coming to the drop-in-centers. The meal should be designed carefully by a nutritionist that should meet the age appropriate nutritional requirements of the child. We assume that the physical health of the children would improve in due course of time.

Free education exclusively for working children should be provided in these drop-in-centers. Since these would still be a vulnerable group of working children, a psychiatrist should be on board to deal with all the psychological issues these children face such as depression, anxiety etc.

These “regulations” of labor should only be for the non-hazardous forms of labor such as agriculture, manufacturing industry, domestic work etc. The hazardous forms of labor including trafficking, bonded labor, prostitution cannot be regulated and need to be eliminated altogether. We do not see these forms of labor out in the open thus they need to be mapped out first by the Government, district by district. Once identified, the owners need to be apprehended and the children returned to their homes.

Once a generation of child laborers would be educated, there may be improvement in their social and health determinants which seems the only way we see to put an end to it in addition to ensuring multi-sectorial approach involving all relevant stakeholders.

REFERENCES

1. International Labor Organization. Defining Child Labor [Internet] [cited 2017 Dec 10] Available from: <http://www.ilo.org/ipec/facts/lang--en/index.htm>.
2. United Nations. World Day Against Child Labour 12 June [Internet] [cited 2017 Dec 10] Available from: <http://www.un.org/en/events/childlabourday/background.shtml>.
3. International Labor Organization. International Programme on the Elimination of Child Labour. Marking progress against child labour - Global estimates and trends 2000-2012. Geneva: 2013.
4. International Labor Office. International Programme on the Elimination of Child Labour. Children in Hazardous Work What We Know What We Need To Know. Geneva: 2011.
5. Hans van de Glind. ILO's International Programme on the Elimination of Child Labour. Migration and Child Labour Exploring Child Migrant Vulnerabilities and Those of Children Left-Behind. Geneva: Sept 2010. 27 p.
6. Federal Bureau of Statistics , Statistics Division Ministry of Labour, International Labour Organization and International Programme on the Elimination of Child Labour .Summary results of Child Labour Survey in Pakistan . Islamabad. 1996. 9 p.
7. Human Rights Commission of Pakistan.State of Human Rights in 2005. Islamabad: 2006. 215-35 p.
8. Dixon R.A, Schaffer A.T. Pakistan Floods: Internally Displaced People and the Human Impact. Washington D.C. Centre for Strategic and International Studies; 2010 Nov. Number 147.
9. Summary of news items covering the issues of flood affectees. Dawn.Concern voiced over deteriorating health of rain victims.2010 Jan 19.
10. Waraich O. Child labour in Pakistan on the rise a year after devastating floods. Independent. 2011 Jul 27: Sect. World: 2.
11. Community based management of malnutrition of children under five with integration of IYCF. HELP Newsletter. 2011 Dec 01.
12. Javed S, Shah N, Memon MY. Occupational hazards, illness and injuries faced by child labourers. JPMA. The Journal of the Pakistan Medical Association. 2013 Jan;63(1):139-42.
13. .International Labor Organization International Program For Elimination of Child Labor.Baseline Survey Report On Child Labour In Coal Mines Industry Chakwal, Noshera and Shangla; 2004.
14. International Labor Organization, International Program on Elimination of Child Labor. Baseline Survey Report On Child Labour In Kasur Tanneries. Lahore, Pakistan: 2004. 124 p.
15. International Labor Organization, International Programme on Elimintaion Of Child Labor. Baseline Survey Report On Child Labour In Glass Bangles Industry Hyderabad. Lahore, Pakistan: 2004. 126 p.
16. United States Department of Labor. Work hours [Internet] US [cited Dec 14,2017] Available from: <https://www.dol.gov/general/topic/youthlabor/workhours>.
17. National Institute of Population Studies. Pakistan Demographic and Health Survey 2012-13. Islamabad (Pak): NIPS ,ICF International; 2013 Dec. 366 p.
18. Rahman MN, Mistry SK, Hossain MI. Nutritional Status of Child labourers in Dhaka city of Bangladesh: Findings from a Cross Sectional Study. Bangladesh Journal of Child Health. 2015 Mar 31;38(3):130-6.

19. American heart association. Dietary recommendations for healthy children [Internet] US; 2014 [cited Dec 14,2017] Available from:http://www.heart.org/HEARTORG/HealthyLiving/Dietary-Recommendations-for-Healthy-Children_UCM_303886_Article.jsp#.
20. Hosseinpour M, Mohammadzadeh M, Atoofi M. Work-related injuries with child labor in Iran. European journal of pediatric surgery. 2014 Feb;24(01):117-20.

ANNEXES

ANNEXURE 1: TABLES

Table 1: Socio-demographic characteristics of child laborers by sector (n= 634).

	Total N=634 (%)	Migrants n=200(%)	Agriculture n=184 (%)	Manufacturing Industry n=120 (%)	Hotels & Restaurants n=67 (%)`	Domestic Workers n=63 (%)
Age in years Mean, (S.D)	10.92 (2.06)	10.2 (2.2)	10.8 (1.8)	11.9 (1.7)	11.1 (1.8)	11.1 (1.9)
Gender						
Boys	322 (50.8)	127 (63.5)	74 (40.2)	47 (39.2)	66 (98.5)	8 (12.7)
Girls	312 (49.2)	73 (36.5)	110 (59.8)	73 (60.8)	1 (1.5)	55 (87.3)
Income/month (Rs.) Mean (S.D)	4462.73 (3849.96)	5688.5 (4683.7)	3077.3 (2912.6)	5045.3 (4118.2)	4240.9 (2247.9)	3338.1 (2051.5)
Place of residence						
Rural	421 (66.6)	200 (100)	184 (100)	37 (30.8)	0 (0.0)	0 (0.0)
Urban	213 (33.4)	0 (0.0)	0 (0.0)	83 (69.2)	67 (100)	63 (100)
Type of house						
Pakka	153 (24.1)	3 (1.5)	10 (5.4)	75 (62.5)	27 (40.3)	38 (60.3)
Semi-pakka	190 (30.0)	3 (1.5)	91 (49.5)	39 (32.5)	38 (56.7)	19 (30.2)
Kacha	291 (45.9)	194 (97.0)	83 (45.1)	6 (5.0)	2 (3.0)	6 (9.5)
Socioeconomic Status *						
Low	203 (32.0)	55 (27.6)	78 (47.9)	22 (19.1)	21 (31.3)	27 (43.5)
Middle	201 (31.7)	59 (29.6)	37 (22.7)	49 (42.6)	30 (44.8)	26 (41.9)
High	202 (31.9)	85 (42.7)	48 (29.4)	44 (38.3)	16 (23.9)	9 (14.5)
Number of people living in the house Mean (S.D)	8.28 (3.49)	9.1 (3.3)	7.5 (2.4)	8.5 (4.7)	7.9 (3.6)	7.6 (3.1)
Currently going to school						
Yes	174 (27.4)	59(29.5)	34(18.5)	55(45.8)	7(10.4)	19(30.2)
No	460 (72.6)	141 (70.5)	150(81.5)	65(54.2)	60(89.6)	44(69.8)
Ever attended school						
Yes	286 (45.1)	95 (67.4)	55 (36.7)	61 (93.8)	43 (71.7)	32 (72.7)
No	174 (27.4)	46 (32.6)	95 (63.3)	4 (6.2)	17 (28.3)	12 (27.3)
Father alive						
Yes	585 (92.4)	188(94.0)	172(93.5)	114(95.0)	60(89.6)	52(82.5)
No	48 (7.6)	12(6.0)	12(6.5)	6(5.0)	7(10.4)	11(17.5)
Duration of work (years) Mean (SD)	2.41 (1.75)	2.7(2.0)	2.5(1.7)	2.0(1.3)	1.9(1.7)	2.2(1.2)
Days per week of work Mean (SD)	6.12 (0.98)	5.86(1.0)	6.3(0.9)	6.0(1.1)	6.2(0.7)	6.2(0.4)
Hours per day of work Mean (SD)	6.81 (3.09)	6.9(2.4)	5.9(2.4)	6.3(3.6)	9.97(2.5)	6.2(3.6)

*The variable of SES was constructed by Factor Analysis of ownership of land, ownership of livestock, having a cell phone, number of rooms in the house and monthly income of the child

** p- value for all the variables was less than 0.01 as calculated by Pearson Chi square test and one way ANOVA

Table 2: Nutritional status of the child laborers, by sector (n=634).

	Total N=634 (%)	Migrants n= 200 (%)	Agriculture n=184 (%)	Manufacturing Industry n=120 (%)	Hotels & Restaurants n=67 (%)`	Domestic Workers n=63 (%)
Wasting	382 (60.2)					
<i>Mild</i>		60 (30.0)	75 (40.8)	30 (25.0)	15 (22.4)	12 (19.0)
<i>Moderate</i>		42 (21.0)	40 (21.7)	21 (17.5)	9 (13.4)	13 (20.6)
<i>Severe</i>		28 (14.0)	12 (6.5)	11 (9.2)	9 (13.4)	5 (7.9)
Stunting	295 (46.5)					
<i>Mild</i>		60 (30.0)	72 (39.1)	25 (20.8)	19 (28.4)	21 (33.3)
<i>Moderate</i>		16 (8.0)	36 (19.6)	14 (11.7)	4 (6.0)	7 (11.1)
<i>Severe</i>		2 (1.0)	14 (7.6)	1 (0.8)	3 (4.5)	1 (1.6)

*p –value for all variables was less than 0.001 as calculated by applying Pearson Chi square test

Table 3: Food insecurity in the working children in the last month, by sector (n=634).

	Total n=634(%)	Migrants n= 200 (%)	Agriculture n=184 (%)	Manufacturing Industry n=120 (%)	Hotels & Restaurants n=67 (%)`	Domestic Workers n=63 (%)
Ate less than the appetite	278 (43.8)	79 (39.5)	104 (56.5)	43 (35.8)	22 (32.8)	30 (47.6)
Skipped a meal	287 (45.3)	80 (40.0)	105 (57.1)	38 (31.7)	28 (41.8)	36 (57.1)
Skipped eating for a whole day	136 (21.5)	35 (17.5)	73 (39.7)	12 (10.0)	6 (9.0)	10 (15.9)
Lost weight	152 (24.0)	28 (14.0)	78 (42.4)	29 (24.2)	7 (10.4)	10 (15.7)

*p –value for all variables was less than 0.001 as calculated by applying Pearson Chi-Square test

Table 4: Mean intake of food per day across the child laborers, by sector (n=634).

	Total n=634 Mean (SD)	Migrants n= 200 Mean (SD)	Agriculture n=184 Mean (SD)	Manufacturing Industry n=120 Mean (SD)	Hotels & Restaurants n=67 Mean (SD)	Domestic Workers n=63 Mean (SD)
Beans	0.36 (0.32)	0.43 (0.37)	0.29 (0.27)	0.28 (0.18)	0.39 (0.34)	0.44 (0.41)
Vegetables	0.51 (0.41)	0.53 (0.49)	0.27 (0.02)	0.46 (0.32)	0.49 (0.39)	0.52 (0.24)
Potatoes	0.57 (0.46)	0.47 (0.46)	0.67 (0.42)	0.52 (0.40)	0.56 (0.38)	0.69 (0.63)
Fruits	0.28 (0.56)	0.37 (0.60)	0.13 (0.21)	0.44 (0.90)	0.16 (0.25)	0.30 (0.44)
Eggs	0.35 (0.46)	0.30 (0.44)	0.25 (0.38)	0.42 (0.46)	0.46 (0.48)	0.55 (0.61)
Meat/ chicken/fish	0.21 (0.24)	0.18 (0.18)	0.17 (0.20)	0.34 (0.38)	0.18 (0.18)	0.17 (0.19)
Milk /yogurt/cheese	0.32 (0.50)	0.31 (0.53)	0.30 (0.50)	0.40 (0.53)	0.24 (0.34)	0.36 (0.50)
Cream / butter	0.08 (0.35)	0.08 (0.42)	0.07 (0.25)	0.13 (0.47)	0.07 (0.21)	0.07 (0.24)
Tea	1.55 (1.02)	1.69 (1.23)	1.77 (0.85)	1.28 (0.83)	1.33 (0.81)	1.24 (1.0)
Juices	0.40 (.63)	0.41 (0.55)	0.31 (0.56)	0.53 (0.83)	0.40 (0.65)	0.40 (0.60)
Toffees/chocolate (IQR)	0.91 (0.86)	0.95 (0.81)	1.03 (0.99)	1.00 (1.17)	0.54 (0.55)	0.65 (0.84)
Peanuts/almonds (IQR)	0.21 (0.14)	0.22 (0.48)	1.88 (0.50)	0.40 (0.98)	0.06 (0.14)	0.08 (0.21)

*p –value is less than 0.001 as calculated by applying One-Way ANOVA test

Table 5: Experience of occupational injuries by child laborers by sector (n= 634)

	Total n=634 (%)	Migrants n= 200 (%)	Agriculture n=184 (%)	Manufacturing Industry n=120 (%)	Hotels & Restaurants n=67 (%)`	Domestic Workers n=63 (%)
Occupational Injury	121 (19.1)	33 (16.5)	36 (19.6)	36 (30.0)	8 (11.9)	8 (12.7)
Cause of injury						
<i>Hit by a vehicle</i>	7 (5.8)	5 (15.2)	0 (0)	1 (2.8)	1 (12.5)	0 (0)
<i>Fall</i>	21 (17.4)	13 (39.4)	0 (0)	3 (8.3)	2 (25.0)	3 (37.5)
<i>Burn</i>	13 (10.7)	1 (3.0)	0 (0)	9 (25.0)	2 (25.0)	1 (12.5)
<i>Hit by a blunt object</i>	27 (22.3)	6 (18.2)	16 (54.4)	1 (2.8)	2 (25.0)	2 (25.0)
<i>Hit by sharp object</i>	48 (39.7)	4 (12.1)	20 (45.6)	21 (58.3)	1 (12.5)	2 (25.0)
<i>Animal/insect bite</i>	4 (3.3)	4 (12.1)	0 (0)	0 (0)	0 (0)	0 (0)
<i>Heavy weight lifting</i>	1 (0.2)	0 (0)	0	1 (2.8)	0 (0)	0 (0)
Part of body hurt						
<i>Head</i>	8 (6.6)	4 (12.1)	2 (5.6)	0 (0)	0 (0)	2 (25)
<i>Trunk</i>	6 (5.0)	3 (9.1)	0 (0)	1 (2.8)	1 (12.5)	1 (12.5)
<i>Upper extremities</i>	52 (43.0)	8 (24.2)	12 (33.3)	28 (77.8)	0 (0)	4 (50.0)
<i>Lower extremities</i>	55 (45.5)	18 (54.5)	22 (61.1)	7 (19.4)	7(87.5)	1 (12.5)
Type of injury						
<i>Fracture</i>	7 (5.8)	5 (51.2)	0 (0)	2 (5.6)	0 (0)	0 (0)
<i>Twist/sprain</i>	14 (11.6)	10 (13.3)	0 (0)	3 (8.3)	0 (0)	1 (12.5)
<i>Cut</i>	60 (49.6)	8 (24.2)	31 (86.1)	14 (38.9)	3 (37.5)	4 (50.0)
<i>Scrape</i>	17 (14.0)	4 (12.1)	5 (13.9)	4 (11.1)	3 (37.5)	1 (12.5)
<i>Bruise</i>	3 (2.5)	1 (3.0)	0 (0)	1 (2.8)	0 (0)	1(12.5)
<i>Burn</i>	11 (9.1)	0 (0.0)	0 (0)	8 (22.2)	2 (25.0)	1 (12.5)
<i>Insect/ animal bite</i>	4 (3.3)	4 (12.1)	0 (0)	0(0)	0 (0)	0 (0)
<i>Needle/splinter prick</i>	5 (4.1)	1 (3.0)	0 (0)	4 (11.1)	0 (0)	0 (0)
No. of days of work missed						
<i>None</i>	49 (40.5)	5 (15.2)	11 (30.6)	22 (61.1)	5 (62.5)	6 (75.0)
<i>Less than one day</i>	6 (5.0)	0 (0)	2 (5.6)	4 (11.1)	0 0.0)	0 (0.0)
<i>One to five days</i>	43 (35.5)	14 (42.4)	20 (55.6)	4 (11.1)	3 (37.5)	2 (25.0)
<i>Six or more days</i>	23 (19.0)	14 (42.4)	30 (8.3)	6 (16.7)	0 (0)	0 (0.0)
Sought medical advice						
	50 (41.3)	23 (69.7)	11 (30.6)	9 (25.0)	6 (75.0)	1 (12.5)

*p –value is less than 0.001 as calculated by applying Fisher exact test

Table 6: Hygiene practices of the child laborers by sector (n=634).

	Total n=634 (%)	Migrants n= 200 (%)	Agriculture n=184 (%)	Manufacturing Industry n=120 (%)	Hotels & Restaurants n=67 (%)	Domestic Workers n=63 (%)
Source of drinking water at workplace						
<i>Tap water/ Pipe water</i>	361 (56.9)	166 (83.0)	52 (28.3)	61 (50.8)	43 (64.2)	39 (61.9)
<i>Boring/ hand pump</i>	142 (22.4)	11 (5.5)	99 (53.8)	31 (25.8)	0	1 (1.6)
<i>Well</i>	11 (1.7)	6 (3)	5 (2.7)	0	0	0
<i>Pond/ stream/ river</i>	28 (4.4)	1 (0.5)	27 (14.7)	0	0	0
<i>Tanker/ water filter</i>	92 (14.5)	16 (8)	1 (0.50)	28 (23.3)	24 (35.8)	23 (36.5)
Source of drinking water at home						
<i>Tap water/ Pipe water</i>	268 (42.3)	80 (40.0)	52 (28.3)	63 (52.2)	34 (50.7)	39 (61.9)
<i>Boring/ hand pump</i>	167 (26.3)	29 (14.5)	99 (53.8)	34 (28.3)	2 (3)	3 (4.8)
<i>Well</i>	11 (1.7)	7 (3.5)	4 (2.2)	0 (0)	0	0
<i>Pond/ stream/ river</i>	28 (4.4)	0	28 (15.2)	0	0	0
<i>Tanker/ water filter</i>	160 (25.2)	84 (42)	1 (0.5)	23 (19.2)	31 (46.3)	21 (33.3)
Purification of water	337 (53.2)	122 (61)	55 (29)	64 (53.3)	54 (80.6)	42 (66.7)
Method of purification of drinking water						
<i>Filtration with a cloth</i>	239 (70.7)	118 (96.7)	51 (91.1)	12 (18.80)	38 (78.4)	20 (47.6)
<i>Boiling</i>	53 (15.7)	3 (2.5)	4 (7.1)	26 (40.6)	9 (16.7)	11 (26.2)
<i>Water filter</i>	46 (13.7)	1 (0.8)	1 (1.8)	26 (40.6)	7 (13.0)	11 (26.2)
Type of toilet at home						
<i>Pit hole</i>	232 (36.6)	113(56.5)	88 (47.8)	16 (13.3)	6 (9.0)	9 (14.3)
<i>Flush latrine</i>	282 (44.5)	20 (10.0)	49 (26.6)	104 (86.7)	58 (86.6)	51 (81.0)
<i>Bushes/ fields</i>	120 (19.0)	67 (33.5)	47 (25.5)	0 (0)	3 (4.5)	3 (4.9)
Presence of soap at home	555 (87.4)	167 (83.5)	149 (81.0)	118 (98.3)	63 (94.0)	58 (92.5)
Presence of toilet at workplace	355 (57.0)	103 (51.5)	24 (13.0)	106 (88.3)	61 (91.0)	61 (96.8)
Type of toilet at workplace						
<i>Pit hole</i>	53 (8.4)	25 (12.5)	17 (9.2)	8 (6.7)	3 (4.5)	0 (0)
<i>Flush latrine</i>	304 (47.9)	81 (40.5)	7 (3.8)	98 (81.7)	59 (88.1)	59 (93.7)
<i>Bushes/ fields</i>	277 (43.7)	94 (47.0)	160 (87.0)	14 (11.7)	5 (7.5)	4 (6.3)
Frequency of taking bath/ week	3.23 (2.43)	2.77 (2.35)	3.16 (2.48)	3.90 (2.34)	3.40 (2.64)	3.49 (2.22)
Frequency of nails cutting per week	2.06 (1.53)	1.72 (1.21)	2.01 (1.72)	2.35 (1.43)	2.26 (1.39)	2.50 (1.92)
Frequency of teeth brushing per week	3.02 (3.03)	1.94 (2.62)	1.60 (2.29)	5.70 (2.40)	3.60 (3.13)	4.90 (2.77)
Frequency of changing clothes per week	2.57 (2.0)	1.93 (1.53)	2.35 (1.88)	3.53 (2.20)	2.80 (2.06)	3.22 (2.30)

*p –value is less than 0.001 as calculated by applying Pearson Chi-square test and One-way ANOVA test

Table 7: Smoking and tobacco use among child laborers by sector (n=634).

	Total n=634 (%)	Migrants n= 200 (%)	Agriculture n=184 (%)	Manufacturing Industry n=120 (%)	Hotels & Restaurants n=67 (%)	Domestic Workers n=63 (%)
Ever smoked cigarettes	2 (0.3)					
Current smoker	1 (0.2)					
Age of starting smoking (yrs); Mean (SD)	9					
No of cigarettes smoked/day ;Mean (SD)	1					
Ever smoked Chillum/ Hukkah/ sheesha	5 (0.8)					
Current user	4 (0.6)					
Age of starting Chillum/ Hukkah/ sheesha smoking; Mean (SD)	10.2 (2.2)					
No of Chillum/ Hukkah/ sheesha smoked per day;Mean (SD)	2.2 (0.83)					
Ever used smokeless tobacco	77 (12.1)	21 (10.5)	50 (27.2)	3 (2.5)	1 (1.5)	2 (3.2)
Current user	75 (11.8)	19 (20.5)	50 (100)	3 (100)	1 (100)	2 (100)
Age of starting smokeless tobacco; Mean (SD)	6.4 (3.0)	6.38 (3.07)	6.04 (2.91)	9.67 (1.54)	13.0	9.0 (1.41)
No. of smokeless tobacco per day; Mean (SD)	2.50 (2.77)	4.05 (4.30)	1.60 (0.88)	2.33 (0.57)	5	8.00 (2.82)
Ever takensupari	286 (45.1)	95 (47.5)	101 (54.9)	64 (53.3)	14 (20.9)	12 (19.0)
Current user	281 (44.32)	92 (14.51)	101 (15.93)	62 (9.77)	14 (2.20)	12 (1001.89)
Age of starting supari; Mean (SD)	6.80 (2.95)	6.01 (2.33)	5.66 (2.60)	8.84 (2.93)	8.86 (2.41)	9.25 (2.83)
No. of supari taken per day; Mean (SD)	7.29 (10.62)	7.80 (6.70)	5.23 (2.87)	7.13 (5.90)	8.71 (11.66)	20.17(43.12)

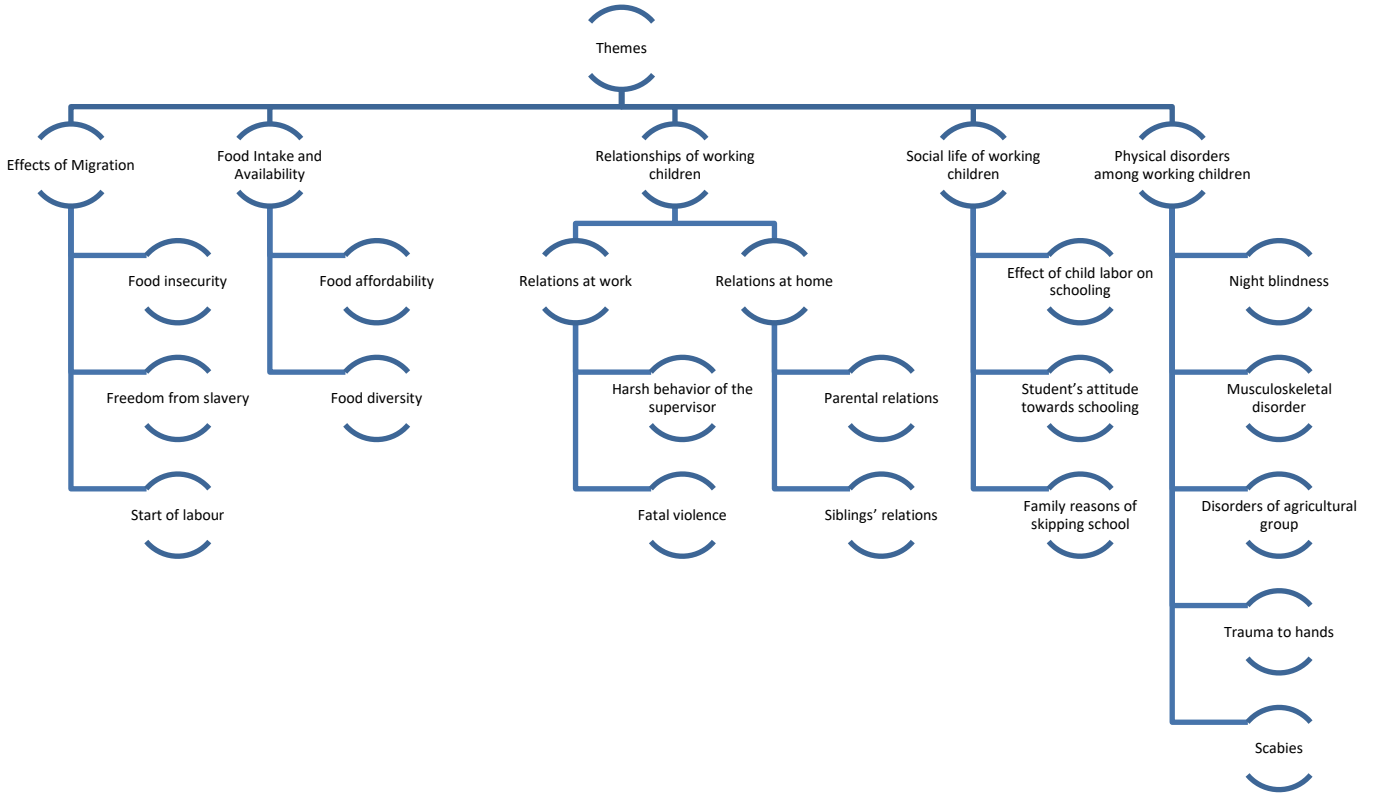
*p –value is less than 0.001 as calculated by applying Pearson Chi-square and One-way ANOVA test

Table 8: Depression and violence experienced by the child laborers, by sector (n=634).

	Total n=634 (%)	Migrants n= 200 (%)	Agriculture n=184 (%)	Manufacturing Industry n=120 (%)	Hotels & Restaurants n=67 (%)`	Domestic Workers n=63 (%)
Depression	58 (9.1)	26 (13.0)	16 (8.7)	8 (6.7)	1 (1.5)	7 (11.1)
Emotional abuse	132 (20.8)	35 (17.5)	52 (28.3)	25 (20.8)	6 (9.0)	14 (22.2)
Physical violence	121 (19.1)	36 (18.0)	50 (27.2)	16 (13.3)	11 (16.4)	8 (12.7)
Sexual violence	54 (8.5)	9 (4.5)	35 (19.0)	6 (5.0)	2 (3.0)	2 (3.2)

*p –value is less than 0.001 as calculated by applying Pearson Chi-square test

ANNEXURE 2: FRAMEWORK OF QUALITATIVE ANALYSIS



ANNEXURE 3: PICTURES

The Migrant Sector



Dr. Neelma & Ms. Yusra conducting FGD



Kitchen at Khema Basti



Pit hole washroom at khema basti



Ms. Kausar and Dr. Meesha conducting family ethnography



Kacha house at jamali pull



A boy carrying a vegetable sack at vegetable market



Project Child laborer team with a community leader



Inside of a house



Children after FGD



A boy standing at his working place (vegetable market)



Storage of drinking water



Kacha house at jamali pull

Agricultural Sector



Skin disease common among agricultural sector children
(Haji sheedi goth)



Dr. Meesha & Dr. Neelma conducting in-depth interview of a
farmer



Dr Neelma with children in a farm



Children harvesting crops in the farms



Children holding RDS coupons in their hands(Mola
Bakhsh Goth)



A girl harvesting crops (Jamal Dahiri Goth)

The Manufacturing Industry



Little girl making bangles



Area where bangles are designed



A girl designing bangles by heating with fire



Project team with district councillor



Ms. Adiyanaa is measuring height of a child



Dr. Meesha with the group of children working in fishery industry



A boy applying formica sheet on the furniture



A boy making polish for furniture



Fishery industry (Rehri Goth)



Fishery industry where shrimps are cleaned with bare hands



A boy working at furniture factory



A boy working at furniture factory

Hotels/ Restaurants and Domestic Workers



Ms. Adiana filling questionnaire at Memon Goth



Dr. Meesha with a group of working kids



Group of working kids



Dr. Meesha and Dr. Neelma conducting Key Informant interview at Aahung



Dr. Meesha with Mr. Irshad Danish, Country director-Nutritional International

