Chapter Five

Implications of Child Labour on Morbidity and Health
5.1 Introduction

The chapter four described that the socio-economic factors like female literacy, fertility rates, family size, adult wage rates, diversification of rural economy and female work participation rates are important determinants of child labour. Demographic factors such as fertility (high birth rate), declining mortality, and child women ratio lead to unemployment, low wages and low per capita income. This in turn results in more and more children being engaged in work for the sustenance of family. On migration trends and household characteristics of child labour, a detailed study, covered socio-economic profile of the surveyed child labour population and their families in some selected brick kiln in Kanpur.

This chapter will look into the relations of child labourer and their health. What are the direct and indirect consequences of working in hazardous conditions? With the description of several hazardous industries and their working conditions, the study will focus more specifically on working in hazardous conditions in brick kiln.

It is often quoted that children are future of a society, a country and the mankind yet millions of children live and work in inhuman conditions compromising their health and well-being. International Labour Organisation (ILO) Convention 182 calls for the prohibition and elimination of the worst forms of child labour which, besides the involvement of children in slavery, prostitution, pornography and drug trafficking, includes work that is likely to jeopardise the health, safety or morals of young persons.1 The United Nations Convention on the Rights of the Child states that children must be protected from all forms of economic exploitation. This includes performing any work "that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development." The Convention also calls for the prevention of the use of children in illicit production and trafficking of drugs; protection against all forms of sexual exploitation; and prevention against abduction, sale of or traffic in children for any purpose.2

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2 Ibid
India has some of the worst indicators of child well-being. About half of all Indian children are undernourished; more than half suffer from anaemia, and a similar proportion escape “full immunisation”. According to the United National Development Programs (UNDP) Human Development Report 2005, India has the highest proportion of undernourished children in the world, along with Bangladesh, Ethiopia and Nepal.\(^3\) If we look deeper into the nutrition level, many more children suffer from hidden hunger. Hidden hunger essentially refers to micronutrient deficiencies, such as inadequate intake of iron, calcium, iodine or Vitamin A. Tara Gopaldas in her paper on “hidden hunger and possible interventions” points that, unlike overt hunger (the pangs of an empty stomach), “hidden hunger is not felt, recognised or voiced by the child or her parents”. The micronutrient deficiencies are widespread: “all members of low income (and even middle-income) families are likely to be deficient in vitamins and minerals”. Further, the deficiencies are large, in relation to the current recommendations of expert bodies such as the Indian Council of Medical Research. For instance, in the age group of four-six years, the ratio of average intake to “recommended daily allowance” is only 16 per cent for Vitamin A, 35 per cent for iron and 45 per cent for calcium\(^4\)

The condition of child labour is much worse. Children engaged in work are exposed to a variety of hazards (e.g. dangerous machinery, falling objects, pesticides, chemicals, abusive employers) that have the potential to seriously damage their health. In addition to such health risks, the sheer exhaustion induced by physical labour can be expected to place stress on the body and provoke illness.\(^5\)

The purpose of this chapter is to review the literature about implications of child labour on morbidity and health and also attempts to assess the same in the select brick kilns. Deciphering the health effects of child labour is not easy given the complexity of the relationships involved. The diversity of potential relationships between child labor and health makes the empirical disentanglement of the causal

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\(^3\) Human Development Report 2005

\(^4\) JEAN DRÈZE, Universalisation with Quality ICDS in a Rights Perspective

relationship a difficult exercise.  

Occupational hazards jeopardize health. Risks faced by working children may be greater than those confronted by adults. As the immune system of children is still developing and in case of child labour malnutrition make it even weaker thus more prone to diseases. From before birth through to young adulthood there are a range of health issues that affect the children. Physiological and psychological immaturities make children more vulnerable to abuse and to given health risks. Children are more prone to injury through accidents and more sensitive to noise, heat and toxicity (Bequele and Myers, 1995; Forastieri, 1997; ILO, 1998; Fassa et al, 2000). The physical strain of work on growing bones and joints can lead to stunting and spinal injury (ILO, 2002, p.12). All these risks are increased for poorly fed children, whose physiology has already been weakened through malnourishment (ibid). Physical work depletes a child’s stock of energy. Over exertive work exhausts the energy stock below the minimum required to sustain physical growth and combat infection (Dasgupta, 1993, pp. 401-36). The Child labour is also prone to substance abuse because of their working and living environment.

The moral, psychological, intellectual and social development of these children is hampered because they are deprived of their basic rights to education, recreation, love, affection and protection. It is believed that repression of the normal impulses and desires may lead to aggression and violence in extreme situations. Neurotic tendencies among working children have been reported due to cumulative fatigue so also delinquency as a phase of adolescent instability is considered as a result of monotony at work. There are ample studies to indicate that these children are subjected to physical punishment, assault, and abuse by their employers. Cases of 8 to 10 year old child workers being severely beaten and virtually held captive have been

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reported in the media\textsuperscript{9}. Girl child workers are subject to sexual harassment and sexual abuse in addition to physical abuse. Child workers are victims of health hazards as well. They are constantly exposed to very high temperatures, molten metals, dangerous chemicals, fumes, dust, etc; causing a variety of health problems, burns, cuts, and injuries. Apart from causing suffering, the working span of their lives also gets curtailed.\textsuperscript{10}

The health of mother also impacts child's health to a very great extent. Child labour often have their mothers also living and working in same harsh conditions in which they are forced to live and work. The indicators of nutritional status of women are their mean height (those below 145 cms in height are seen as undernourished and stunted) and their body mass index (those below 18.5 kg per meter of their height squared are seen as under-weight). The nutritional status of women is of critical concern for the nutritional status of their children. That is because under-nourished, small, under-weight women are more likely to give births to low-weight babies. And low weight babies suffer from a life-long disadvantage, quite apart from suffering from greater probability of dying before the age of one. Similarly, anaemic women are more likely than non-anaemic ones to suffer from complications of pregnancy, and give birth to low weight babies. Iron-deficiency anaemia can be easily redressed through regular intake of iron tablets; yet, half of all UP women suffer from anaemia. South Asia has the worst child malnutrition rates in the world, and UP the worst malnutrition rates in India [Osmani 1997; Smith and Haddad 2000; Mehrotra 2004]\textsuperscript{11}. Child malnutrition can be measured on the basis of three anthropometric indices: weight-for-age (underweight), height-for-age (stunted), and weight-for-height (wasted). Children who have a weight for age below 2 standard deviations from the mean of the reference population are said to be underweight; stunting (an indicator of chronic malnutrition) and wasting (an indicator of acute malnutrition) are similarly defined as characterising those children whose height-for-age and weight-for-height are below 2 standard deviations from the mean of the reference population. Half of. UP's children are underweight, and over half are stunted\textsuperscript{12}. Therefore, this may be assumed that the nutritional status of child labour in UP is even worse.

\textsuperscript{9} The Times of India, 1993 quoted in ibid.
\textsuperscript{10} ibid
\textsuperscript{11} Mehrotra, Santosh Well-being and Caste in Uttar Pradesh Why UP Is Not Like Tamil Nadu, Economic and Political Weekly October 7, 2006. Pg 4263
\textsuperscript{12} ibid. Pg 4265
The various studies conducted by ILO and UNICEF have demonstrated that simple bivariate descriptions of the correlation between child labour and child health do not support fears, possibly well founded, that work is damaging to the health of children. For example, Understanding Child Work Project (2001), Country Statistics covering eighteen countries (Table 5.1) showed that there is no evidence of any consistent correlation between the percentage of children reporting health problems and the type of activity in which they are engaged. In five countries working children are most intensively and likely to report health problems but in another five countries this is actually the healthiest group of children. In seven cases, those children combining work and school are most likely to suffer illness but there are three countries in which children attending school (and not working) are the least healthy.

Table 5.1: Percentage of children with health problems by type of activity

<table>
<thead>
<tr>
<th>Country</th>
<th>Work only</th>
<th>Study only</th>
<th>Work &amp; Study</th>
<th>No activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>8.4</td>
<td>7.5</td>
<td>1.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Bolivia</td>
<td>8.3</td>
<td>8.6</td>
<td>17.6</td>
<td>17.8</td>
</tr>
<tr>
<td>Brazil</td>
<td>18.2</td>
<td>20.8</td>
<td>20.9</td>
<td>12.7</td>
</tr>
<tr>
<td>C.A.R.</td>
<td>3.5</td>
<td>3.7</td>
<td>6.5</td>
<td>3.7</td>
</tr>
<tr>
<td>Cameroon</td>
<td>5.2</td>
<td>14.2</td>
<td>0.3</td>
<td>16.2</td>
</tr>
<tr>
<td>Ecuador</td>
<td>53.8</td>
<td>35.7</td>
<td>39.7</td>
<td>43.9</td>
</tr>
<tr>
<td>El Salvador</td>
<td>26.7</td>
<td>20.5</td>
<td>23</td>
<td>22.2</td>
</tr>
<tr>
<td>Gambia</td>
<td>3</td>
<td>6.8</td>
<td>8.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Ghana</td>
<td>9.3</td>
<td>12.4</td>
<td>7.1</td>
<td>14.9</td>
</tr>
<tr>
<td>Guinea</td>
<td>16.6</td>
<td>18.3</td>
<td>24.1</td>
<td>15.9</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>2</td>
<td>2.2</td>
<td>2</td>
</tr>
<tr>
<td>Madagascar</td>
<td>6.9</td>
<td>10.6</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Mali</td>
<td>1</td>
<td>3.9</td>
<td>3.6</td>
<td>0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>21.4</td>
<td>33.4</td>
<td>30.6</td>
<td>30.4</td>
</tr>
<tr>
<td>Peru</td>
<td>33.2</td>
<td>25.9</td>
<td>30.8</td>
<td>31.8</td>
</tr>
<tr>
<td>Philippines</td>
<td>30.8</td>
<td>40.5</td>
<td>44.9</td>
<td>41.2</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>8.3</td>
<td>4.7</td>
<td>3.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Zambia</td>
<td>19.8</td>
<td>15.2</td>
<td>20.5</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Understanding Child Work Project (2001), Country Statistics, Table 14
Age groups: 5-14 (Paraguay); 6-11 (Zambia); 6-14 (Brazil, CAR, Cameroun, Ghana, Mali, Peru, Philippines); 7-14 (Angola, Bolivia, Gambia, Guinea, India, Madagascar), 10-14 (Ecuador, El Salvador); 11-14 (Tajikistan).

The apparent inconsistency between prior beliefs that work is damaging to the health of children and the lack of a simple relationship between work activity and health might be attributable to a number of factors. Extraneous factors, such as income or region, might confound any relationship. A relationship might also be obscured by proper measurement problems. Child labour is not homogeneous but varies from helping out on the family smallholding to employment in a glass or brick kiln to heavy labour in a quarry or mine. The health consequences of these different types of labour can be expected to vary tremendously and the stronger adverse effects.

A further complicating factor is that much of the relationship between child labour and health is likely to be dynamic. Current health reflects past, more than present, work activity. The child seriously injured in a workplace accident last year is currently not working but has poor health. The child working with asbestos today can expect to experience poor health as an adult. A simple bivariate analysis between work activity and contemporaneous health can not pick up such dynamics. Any negative impact of child labour on health may also be obscured by selection of the healthiest youngsters into work. In this case, simple comparison between the health of working and non-working children can not reveal the impact which work has had on the health of the former. Finally, the impact of work on the health of very poor children need not always be negative. In circumstances of extreme poverty, the employment of a child can be crucial in maintaining a subsistence livelihood and, consequently, health status.

In short, the relationships between child labour and health are complex. They can be multi-dimensional, dynamic, positive and negative, causal or spurious. The diversity of potential relationships makes their empirical disentanglement a difficult exercise. A conceptual framework of analysis is required and important issues of measurement and of estimation must be given careful consideration. However to carry out such careful observation and measurement was beyond the scope of the present Study. The Study depends mainly on secondary sources and general observation of health of Child labour and their Parents (as many of them in the past were themselves child labour in the Brick kilns) and few in depth case study looking in to the subject’s illness history and health problems in the select brick kilns.
5.2 List of hazards

Child labours suffer from the same accidents, ill-health and fatalities as young and adult workers. However, because of their lack of experience, their lack of education on hazards and risks, and the fact that their bodies are still growing, children may be exposed to special risks. Frequent awkward or heavy lifting and repetitive strains; for example, can permanently injure growing spines or limbs, especially if poorly designed equipment is being used. Skin, eye, respiratory or nervous problems often occur in children exposed to hazardous materials and toxic pollution and children are vulnerable to much lower levels of exposure than adults. There may well be chronic long-term health effects from exposure to hazardous materials that will not show up until the child is an adult.

Hazardous child labour is defined by Article 3 (d) of ILO Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, 1999 (No. 182) as:

*work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.*

A report of World Health Organisation (WHO) on child workers cites health hazards such as bony lesions and postural deformity attributable to such work as carpet weaving, embroidery and lifting heavy weights. Children generally work for long hours, which result in excessive fatigue and stunted growth. Poor children are generally malnourished but their work increases their energy requirement and calorie deficit. Malnutrition, anaemia inadequate sleep, lower resistance etc. Once infected at an early age and through constant re-infection it becomes difficult to break the vicious cycle of contact. In many cases, workplaces do not meet hygienic standards. There are often no running water or toilet facilities.14

Child labour has mental repercussions also, since the age at which he/she usually starts to work coincides more or less with a period of profound mental change. The mental consequences of child labour are not just the result of the work situation but the violent change to which the child is exposed. An unfamiliar, often oppressive...

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work situation exacerbates the stresses and leads to socio-cultural disorganisation.\textsuperscript{15}

The hazardous substances used and expelled to nature by the industries which could be fatal to child labour health are as follows:

\textbf{arsenic} - agriculture, phosphate manufacture, fertilizer production, leather tanning;
\textbf{cadmium} - leather tanning, metal plating, phosphate manufacture, stell works, fertilizer production;
\textbf{chromium} - pulp and paper mills, fertilisers, leather tanning, cement works, steel works, glass works;
\textbf{copper} - pulp and paper mills, fertiliser manufacture, chemical works;
\textbf{cyanide} - iron and steel manufacture, electroplating;
\textbf{lead} - paint manufacture, battery manufacture, chemical manufacture, pulp and paper mills, fertiliser manufacture, petroleum refining;
\textbf{mercury} - paint and chemical manufacture, plastic and pharmaceutical manufacture, electrical goods manufacture;
 manganese - fertilisers;
\textbf{nickel} - pulp and paper mills, petroleum refining;
\textbf{titanium} - paint manufacture, textile and paper production;
\textbf{zinc} - pulp and paper mills, fertiliser production, leather tanning

The child works in hazardous, dangerous or unhealthy conditions that could result in a child being killed, or injured and/or fall ill as a consequence of poor safety and health standards and working arrangements. Some injuries or ill health may result in permanent disability. The common occurring accidents, injuries and illness can be summarized as below

\textbf{5.3 Accidents}

The most common causes of fatalities are:

\begin{itemize}
  \item being struck by a moving vehicle;
  \item being trapped by something falling or collapsing or overturning,
  \item fall from a height;
  \item contact with machinery;
  \item contact with electricity
\end{itemize}

\textsuperscript{15} ibid
• contact with dangerous materials

The most common causes of non-fatal injuries are:

• cuts and wounds – including injuries from knives, sharp hand tools etc.
• handling, lifting or carrying;
• slip, trip or fall on the same level;
• contact with machinery;
• being injured by an animal;
• being struck by a moving vehicle.

5.4 Health/Disease

• Musculo-skeletal injury/disorders (aches, sprains or strains), including:
  - repetitive strain injuries (RSI) where workers are doing repetitive tasks
  - vibration
• exposure to hazardous and toxic chemicals - can result in death, poisoning and, in certain cases, work-related cancers and reproductive problems;
• asthma
• Child labours involved in agricultural sector and poultry etc are at risk from zoonoses (diseases passed from animals to humans);
• work-related hearing loss.

5.5 Other Risks/Hazards

• dusts, fibres, mists, fumes, micro-organisms, gases and vapours causing respiratory and/or skin/eye problems;
• livestock handling (risks of being bitten, butted, gored or otherwise attacked).
• poor hygiene conditions – drinking water, washing and toilet facilities;
• thermal stress caused by excessive heat and fatigue
• heat and cold. High temperatures in the tropics. Cold temperatures in fields, working outdoors, poorly heated stores, cold stores;
• poorly designed and maintained personal protective equipment;
- poorly designed tools and machinery (ergonomics);
- electricity and electrocution from poorly maintained handheld equipment, extension cables.

5.6 Child labour and Child health

5.7 Negative effects

Concern about the health consequences of child labour derives primarily from the belief that work increases the child’s exposure to health hazards that threaten to subject the child to illness or injury. The hazards may be obvious and threaten immediate damage to health, such as those risks arising in construction, manufacturing and mining from the use of dangerous tools and machinery and exposure to high temperatures and falling objects. Alternatively, the hazards may be less perceptible and hold longer-term consequences for health such as risks from contact with dust, toxins, chemicals and pesticides, the lifting of heavy loads and the forced adoption of poor posture. Hazards may also threaten psychological health through exposure to abusive relationships with employers, supervisors or clients (ILO, 1998). The health consequences of child labour will vary with the type of hazards to which the child worker is exposed. Variation in the nature of child work across industries and across countries means there is no one relationship between child work and health but a variety of such relationships.

A large scale ILO sponsored survey undertaken in the Philippines, found 60% of all economically active children to be exposed to hazardous working conditions: 19% being exposed to biological hazards, 26% to chemical and 51% to environmental. Of all child workers, 24% were found to suffer work related illness and/or injury, a prevalence rate much higher than that for adult workers. Most common injuries were cuts, wounds or punctures, accounting for 69% of the total. Body aches and pains (59%) and skin diseases (22%) were the most common work related illness.


A number of factors raise the health risks which children face from work relative to adults. First, child labour tends to be concentrated in particularly dangerous industries. A ILO study\(^\text{18}\) showed that in general, agriculture is by far the dominant sector of child employment, accounting for 70% of all child workers, and is an industry with a very poor record of safety, with 1 in 8 child workers suffering illness or injury (see Table-5.2).

**Table-5.2: Distribution of child labour and health hazards by industry for 26 countries**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>percentage of all economically active children in industry</th>
<th>Illnesses / injuries per/100 economically active children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture, hunting, forestry &amp; fishing</td>
<td>70.4%</td>
<td>12.2%</td>
</tr>
<tr>
<td>2. Manufacturing</td>
<td>8.3%</td>
<td>9.3%</td>
</tr>
<tr>
<td>3. Wholesale &amp; retail trade, hotels &amp; restaurants</td>
<td>8.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>4. Community/ social and personal services</td>
<td>6.5%</td>
<td>7.8%</td>
</tr>
<tr>
<td>5. Transport / storage / communications</td>
<td>3.8%</td>
<td>18.1%</td>
</tr>
<tr>
<td>6. Construction</td>
<td>1.9%</td>
<td>25.6%</td>
</tr>
<tr>
<td>7. Mining &amp; quarrying</td>
<td>0.9%</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

*Source: Ashagrie, 1998, Tables 3 & 6*

Relative to agriculture, manufacturing and wholesale/retail trade, which together account for almost 17% of all child workers, are less hazardous but, with 1 child worker in 12 in these industries succumbing to illness or injury, safety levels are far from acceptable. Fewer child workers are located in transport, construction and mining (collectively 6.6% of the total) but extremely poor safety records in these industries - 1/6 to 1/4 child workers become ill or injured - mean that they account for

a substantially disproportionate fraction of all work related child illnesses and injuries. With respect to health hazards, work in transport, construction and mining appear to be the most hazardous forms of child labour. Marginal gains in child health and safety could be realised most easily by measures targeted at these most hazardous industries. However, given the dominance of agriculture in respect of child labour, significant advances in the average level of child health require policies to improve the safety of child work in that sector.

A second factor raising the health risks faced by child labourers relative to adults derives from the fact that children often work in informal, small scale and illegal settings which, by their very nature, are difficult to regulate. Most child labour is undertaken within the family unit. Children working in small scale farming and manufacturing are often not given the protection promised by health and safety regulation. Even when this protection is available, it is likely to be much less effective for children since the measures are usually designed for adult, not for child workers. Hence, safety devices and clothing may not be usable by children and permissible exposure limits are usually established for adults and may not be appropriate for children. The substantial number of children worldwide working in domestic services and the sex industry are left particularly vulnerable to physical and psychological abuse.

Given their physiological and psychological immaturity and the biological process of growth, children may be more vulnerable than adults to abuse and to given health risks. Children are more prone to injury through accidents and have been found to be more sensitive to noise, heat, and lead and silica toxicity, and ionising radiation.

In Bombay, the prevalence of health problems (e.g. muscular, chest and abdominal pains, headaches) among children working primarily in hotels, restaurants

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and construction was found to be greater than that among children in school.\textsuperscript{21}

In addition to any direct negative impact of labour on the working child’s health, there may be an indirect impact on the health of siblings operating through the intra-household allocation of resources. In India, gender bias is most visible in such resource allocation. The female child often gets lesser portion of the share. Consequently, notwithstanding the impact of health hazards confronted in the workplace, siblings especially girls might be expected to experience lower nutritional status and greater morbidity than working male children themselves. In turn, lower calorie intake was associated with higher levels of morbidity. There is a bulk of evidence indicating gender bias in the household allocation of resources.\textsuperscript{22}

\textbf{5.8 Positive effects}

It seems a bit ironical but in some circumstances there is possibility of a positive impact of child labour on child health. Whilst child labourers are exposed to health hazards they would not otherwise encounter, they also generate resources, which help maintain themselves and their families. If a positive impact of a child’s labour market participation on the resources at a household’s disposal is accepted, then empirical support for a positive impact of living standards on health can be cited\textsuperscript{23} to support the argument that child labour potentially affects child health positively.

In conditions of extreme poverty, this is a plausible and persuasive argument. However, several cautions are warranted. First, any positive effect of child labour on health through living standards must be offset against the deleterious effect of occupational health hazards. A child, and its family, might enjoy a few years of fruitful work before suffering an accident and the subsequent loss of both livelihood and health. The second caution is that much of the relationship between child labour

\textsuperscript{21} Naida, U. and Parasuman, S. (1985), Health situation of working children in Greater Bombay, Bombay Unit for Child and Youth Research, Tata Institute of Social Sciences, mimeo.


and health is likely to be dynamic. While child labour may raise family living standards and child health in the short run, the long-term health effects of working, and any corresponding loss of education, need to be considered. A third caution concerns the hypothesis that child labour has a positive impact on household resources. This seems a reasonable proposition when children are used to supplement the labour input of their parents. However, abusive parents might use their children to substitute for their own labour. The final caution to the argument that, child labour may impact positively on child health through a positive contribution to household living standards concerns the distinction between effects at the individual and aggregate level. Whilst a child's work may make a positive contribution to the family's standard of living, it does not necessarily follow that, in the aggregate, child labour raises living standards and consequently health. A large supply of child labour can be expected to reduce market wages and may leave the economy at a low level equilibrium with a large supply of low skilled (child) labour, low wages, low education levels and poor health.24

5.9 Long-run health consequences of child labour

Direct effects

While many of the health risks child labourers are exposed to threaten immediate damage to health, others are likely to develop over many years and might only become manifest in adulthood. Exposures to pesticides, chemicals, dusts and carcinogenic agents in agriculture, mining and quarrying and manufacturing increase the risks of developing bronchial complaints, cancers and a wide variety of diseases.25 In India, industries with large proportions of child labourers also tend to have high rates of TB and silicosis; stonecutters and slate workers, for example, have silicosis rates of 35% and 55% respectively.26 Cancer risks are raised significantly through exposure to asbestos in mining and construction and to aniline dyes in carpet and


garment manufacturing.\textsuperscript{27} Ergonomic factors such as heavy lifting and poor posture raise the chances of musculoskeletal problems developing in later life (Forastieri, 1997; ILO, 1998; Fassa et al, 2000). Individuals who have worked as a child are at particular risk of developing chronic health problems not only because they are exposed to risk factors for longer periods but because the biological process of rapid cell growth reduces the latency period of some diseases (Fassa et al, 2000).

On the other hand, in case of extreme poverty, the possibility of positive impact of child labour on health in adulthood is not implausible. Working as a child provides resources, which may be crucial to the avoidance of under-nourishment in childhood. This would be expected to have a long-run positive impact on the individual’s lifetime health experience.

5.10 An indirect effect through denial of education

It is very obvious that child labour is at the expense of education and even in the absence of any direct effect of child work activity on health, there can be indirect effect through the sacrifice of education. A lower level of educational attainment might impact negatively on health through two mechanisms. First, an individual entering adulthood with a lower level of education has less human capital and, as a result, can expect a lower stream of lifetime earnings. There is close positive association between material living standards and health (Steckel, 1995; Appleton and Song, 1999; Smith, 1999). A second channel for a health effect of education operates directly through the awareness about work related health hazards production. This researcher observed that the precautions observed in the handling of deadly pesticides by agricultural labours is positively related with their education level. The illiterate labours neither can read the warning and user manuals printed on pesticides nor care much for handling it in proper ways. They are ignorant of the fact improper use of the insecticides may lead to slow and long term adverse impact on their health. In contrast, semi literate and literate farmers took more precautions. The educated individuals are likely to be better informed of the factors which impact on health, to be more productive in the use of their own time to generate health and to be more

\textsuperscript{27} International Labour Organisation (1998), Conference Report VI (1) Child labor: Targeting the intolerable. Geneva, ILO. 
responsive to health education materials. It can be presumed that loss of education because of work at childhood has the life long adverse impact on individual's health.

5.11 Working conditions and child labour's health

The working conditions severely tax the child's physical and mental resistance as a result for example, of suffocating heat in enclosed premises or exposure to rain or sun in open-air work. They may be forced to work in an awkward position in badly lit, badly ventilated, noisy or unhealthy premises, in damp and unhygienic surrounding, in an atmosphere contaminated with dust or gases, crammed together with other workers in workshops without adequate safety devices, rest areas, medical and toilet facilities etc all in violation of the principles set forth in international instruments to protect their rights.

Working in the hazardous occupations like carpet, brassware, lock, matches, pottery, gems, fireworks, power loom handloom etc. the children contact various diseases like tuberculosis, acid burns, asthma, acute headaches, breathlessness, silicosis, pneumonia, eye defects, etc. Besides, children who work with dangerous machines and chemicals and furnaces with high temperatures run the risk of getting involved in accident. Sivakasi, an industrial town located in south Tamil Nadu is a classic example of children work in hazardous conditions. In 8,000 match units in Sivakasi region 80,000 children comprise half the number of employees in these factories. These children literally play with fire every minute of their lives. They have to work for 10 to 12 hours for just Rs. 5 to 7 per day. They inhale toxic fumes and suffer from intense heat.

The Labour Investigation Committee has also reported that the working conditions were deplorable in different industries especially in the unorganised industries like 'beedi' making, glass bangles and match industries. In South India, "the most serious evil in the beedi industry is highly insanitary conditions of work places. The workshops are generally low -roofed, dark and ill-ventilated places with

uneven mud floors."\(^{30}\)

The studies conducted by ILO on child labour engaged in sugar cane cutting in El Salvador and in Bolivia reported that the children were suffering during their workdays due to the hot sun, the use of sharp tools, the exposure to insects and uncomfortable positions and excessive loads\(^{31}\).

While there is strong evidence correlating child work to bad health outcome for children working in particular sectors or dealing with dangerous equipment and techniques, the evidence is far from conclusive for the majority of the children working in normal circumstances.\(^{32}\)

5.12 Hazardous industries/work

5.13 Carpet industry:
The Indian carpet-weaving industry is concentrated in the "Carpet Belt" of Uttar Pradesh and employs thousands of children. The working environment to which children in the carpet industry are subjected is detrimental to their physical health and development. They work in cramped positions for long periods of time in poorly-ventilated sheds filled with wool fluff and dust particles. Constant contact with the fluff causes skin ailments such as scabies as well as respiratory problems. Children develop swelling of lower limbs, pain in the joints and spine deformities from crouching for long periods of time as they work on the looms. Poor lighting conditions weaken their eyesight; prolonged contact with chemical dyes and the use of sharp knives during weaving damage their fingers. Many of the children are severely ill by the time they become adults.\(^{33}\)


Similarly, a report from Pakistan found that carpet weaving industry employs children for over 90% of its workforce. Conditions are extremely worse with children working for 11 hours a day with little breaks. Health problems are rampant; wool fibres damage lungs and bone deformations occur as a result of the effects of the hard labour involved. The children sit in a cramped space all day long, inhaling wool fibers and dust. As a result, the carpet weavers are prone to emphysema and tuberculosis; they also suffer frequent cuts to their hands and fingers, which may be "cured" by cauterizing them with burning sulphur. One reporter visiting a carpet factory was confronted with children begging him to take them to hospital as “we all suffer from coughs”. The lack of light in these sweatshops means that many children will also suffer damage to their eyesight. The degree of this can be guessed by looking at a survey in Iran which stated that at least 60% of the children employed in the carpet industry suffered from sight-related problems. The younger children who are not used to sitting for long periods of time will often have their feet tied with chains. Sexual and physical abuse is rife with beatings being the norm. Employers are quoted as saying that they choose factory locations according to “the availability of children”.

Human Rights Watch reports that children work an average of ten to fourteen hours a day, six and a half or seven days a week in the looms. The loom sheds are often poorly ventilated, poorly lighted, and cramped. The long days spent in cramped positions damage the children's backs and legs, causing backaches and severe joint pain. Many of the children suffer from scabies, skin ulcers and other dermatological diseases, a result of the close and crowded conditions and the constant exposure to wool. Respiratory illnesses are rampant and eye damage is common, as are intestinal disorders. The children are also particularly vulnerable to tuberculosis and other lung diseases, which are caused and aggravated by the constant inhalation of tiny wool fibers. Work-caused cuts and wounds are endemic and frequently become infected. When cuts occur, the loom-owners will "treat" the wounds so that the children can continue working without dripping blood on the carpets. This "treatment" consists of scraping the sulphur from match heads into the cuts and then lighting them on fire, thereby sealing the wound. By the time the youngsters reach their mid-teens, their

fingers and hands often are badly damaged from the cuts and nicks of the knives and strings used in knotting, their eyesight has grown weak from long hours of tedious work in dark rooms, and their growth often is stunted by years of sitting in uncomfortable, hunched positions at the looms\textsuperscript{35}.

5.14 Glass Industry

Conditions in glass factories in India concentrated in Ferozabad in UP are very harsh. The intense heat from furnace temperatures reach 1,400 to 1,600 degree Celsius; there is a lack of ventilation, pieces of broken glass everywhere, and dangling electric wires. Adults and children work without protective gear such as shoes, gloves or goggles. Both adult and child workers stand outside furnaces dipping iron rods into molten glass, bringing it out, and throwing it to glass molders or blowers. Boys as young as 11 and 12 sit on the floor for long hours in front of the pot furnaces, melting and fastening glass bangles and beads. Often glass splinters injure the workers, and pieces of glass cut into the children's bare feet. Children have to run very fast with the molten glass before it cools. They often bump into one another, sometimes scorching each other's bodies. The air in the glass factories is full of soot and dust. Workers suffer from asthma, bronchitis, eye problems, liver ailments, skin burns, tuberculosis and chronic anaemia Children in the glass factories have been reported to suffer from mental retardation; one doctor found genetic damage to occur in the body cells of glass factory labourers who work close to the furnace heat for three years or more.\textsuperscript{36}

5.15 Stone Quarries

Child labour is widespread in the quarrying of granite and other stones in India. Children are required to work along with their parents in order to maximize production. Entire families work digging stones out of the earth with their hands and hand-tools, and cutting rocks and boulders into pieces. Children aged 4 to 14 work up to 14 hours a day carrying loads of rocks. They also break stones with hammers as they hold the stones with their feet. Accidents caused by explosions or drilling are


common. One report describes how boys aged ten to twelve were observed using a pneumatic drill, "directing the bit with their bare toes, standing within two feet of the top of a 200 foot rock-face." A twelve year old boy was observed whose face had been disfigured by flying rock from an explosion. Workers also suffer from respiratory illnesses due to inhaling stone dust.37

5.16 Silk Industry
An estimated 5000 children work in the silk thread manufacturing industry in southern Karnataka in south-western India. Children are verbally and physically abused. Some complain of being beaten with rods for making mistakes. They work in poorly ventilated, damp, cramped weaving pits in crouched positions. Constant exposure to dust particles causes respiratory infections, and poor lighting and long working hours damage their eyesight. Some children develop peptic ulcers from ingesting dye when they break off thread with their teeth. They are generally poorly nourished.38 A report from Pakistan also highlighted similar long and short-term hazards39.

5.17 Locks
In the town of Aligarh, 100 miles south-east of Delhi in Uttar Pradesh, a survey of 100 manufacturing units conducted by the Labor Department of Uttar Pradesh indicated that children under the age of 14 make up over 50 percent of the work force engaged in polishing, electroplating and spray-painting of locks and lock parts, all of which are considered to be hazardous jobs. In spray-painting, children inhale large quantities of paints and paint thinners which are harmful to their lungs. Common ailments include cough, fever, breathlessness, tuberculosis and bronchitis. Many children work late into the night.40

37 ibid
38 ibid
5.18 Brassware
Children from 8 to 12 years of age work in the brassware industry of Moradabad in Uttar Pradesh. Children in the brassware industry work in all areas of production, including electroplating, polishing and application of chemicals. They work under hazardous conditions for long hours and low wages. Children wearing no protective gear remove molten metal from molds near furnaces that reach temperatures of 1,100 degree Celsius. Burns are a constant danger. The constant inhalation of fumes from the furnaces and metal dust leads to tuberculosis and respiratory problems. Children engaged in polishing are at risk of injury from pieces of metal that slip and ricochet into the air. Children suffer from eye irritations from fumes that permeate the workshops during acid washing of the brassware.\textsuperscript{41}

5.19 Matches and fireworks
Sivakasi produces 75 percent of India's matches and 90 percent of its firecrackers, and has been described as having one of the largest concentrations of child workers in the world. In the match and fireworks industry; the tasks are repetitive and low-skilled. Girls as young as three fill match boxes, stack boxes for packaging and paste labels to boxes. Older girls make and label boxes. Boys mix chemicals used for match tips, and dip the tips in the chemicals. Children in the fireworks industry dye the outer paper, roll the ground powder and pack finished product. They work in cramped, dark sheds in crouched positions and are exposed to dangerous chemicals such as chlorates, phosphorous and sulphur. There is a constant risk of fire and explosions, yet the children wear no protective gear. Local doctors report that children suffer from chronic bronchitis, broncho-pneumonia, tuberculosis, malnutrition, gastrointestinal disorders, skin disorders, over-exhaustion, burns, water borne diseases and eye infections. Harsh treatment by employers is common, and girls as young as seven and eight are reportedly sexually assaulted by supervisors outside of factory premises.\textsuperscript{42}

5.20 Beedis
Beedis are hand-rolled local cigars. There are thousands of child workers, girls and boys as young as 7-8 years, engaged in the beedi industry in the southern state of Tamil Nadu, India. There are some 300 large beedi companies in Tamil Nadu and

\textsuperscript{41} ibid
\textsuperscript{42} ibid

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between 3000 and 4000 small contractor production units. The tobacco leaves are distributed to the contractors, who oversee the rolling of the leaves into beedis. These units, which usually house ten or more children, are small, dark and poorly ventilated. The children are sometimes beaten or caned for making mistakes. 43

Work conditions are dangerous to the health of the child. In the beedi industry, the long hours spent hunched over the basket of tobacco causes growth deformities, and the constant proximity to tobacco dust causes and exacerbates lung diseases; there is a very high rate of tuberculosis in communities dedicated to the manufacture of beedi. 44

5.21 Silver industry
The silver workers suffer frequent burns on their hands and arms, the leather workers exposed to toxic chemicals long banned in developed countries, and the gemstone polishers are subject to both cuts and toxic contamination. All of these workers, given their cramped and unsanitary work places, suffer a high risk of contracting tuberculosis and other diseases of poverty45.

5.22 Service Sector and Illegal Economy
Largely hidden from public view, forced child labor in the informal service sector is widespread and includes the sex industry and domestic services. Sometimes parents knowingly sell their children into such work, while in other cases children are fraudulently recruited or abducted. In still other cases, children -- often with their parents knowledge and acquiescence are enticed to seek employment as prostitutes or domestics. The children, however, rarely are aware of the conditions and treatment that await them.

43 ibid


45 David Zucchino, Hut schools for India's child laborers, The UUA Holdeen India Program supports schools for child laborers, July/August 2001. http://www.uuworld.org/about/authors/davidzucchino.shtml
5.23 The Sex Industry

Child prostitution is defined by the United Nations as "the sexual exploitation of a child for remuneration in cash or in kind, usually but not always organized by an intermediary (parent, family member, procurer, teacher, etc.)." The sexual exploitation of children is considered to be one of the worst forms of child labour and a form of bonded labour. Children, who are sold, induced, tricked, or enticed into prostitution are too young to fully comprehend or consent to the acts that they are forced to perform. Most countries have penal laws against such activity and consider sexual relations with a minor less than 16 years of age to be statutory rape. 46

These children are in some cases taken far from their homes and held as virtual slaves, forcibly confined and abused into submission. They are exposed to severe health risks, including HIV infection and AIDS, other sexually-transmitted diseases, and drug addiction, as well as sustained physical and psychological abuse. 47

5.24 Child labour and health hazards in brick kilns

There are over 100,000 brick kilns producing more than 140 billion bricks per year in India. 48 Millions of labourers including child labour are employed in these kilns. There are several key child health issues—accident/injuries, illness, and malnutrition—linked with brick production. Brick making is very labour intensive work involving little mechanization. The workers are generally very poor, and they work under appalling conditions. Absence of any form of security, low wages, no health-care facilities, unsanitary conditions, no education for children, unsafe and hard conditions for women—all these characterize the life of the worker and their families, that too in worksites far away from their native village and community.

Child labour in brick kilns has not been recognized as a worst form of child labour in India however our impression was that working conditions in brick kilns are bad and particularly hazardous for children engaged in various tasks continuously lift and carry heavy burdens and squat for long periods at the sancha. In the absence of

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47 Ibid.
48 Sahasrabudhey, Sunil CoSmiLE, (Competence Network for Small and Micro Learning Enterprises), Energy-Environment Technology Division TERI, New Delhi, India VOLUME 2 ISSUE 1 March 2007 pg1
specific medical studies, one can only speculate about damage to knees, lower legs and the spine. Exposure to emissions from burning fuel and dust is another health and safety issue, made worse for children living on-site.

Children participate in several stages of brick production (explained in the previous chapters) however, mainly engaged in moulding the bricks, mixing mud, fetching and giving water. Children also fetch and carry bricks to and from the kilns, load and unload the kilns. Children and their families work long hours, often in the early hours of the morning during the summer.

<table>
<thead>
<tr>
<th>Table-5.3</th>
<th>Percentage of Child labour suffering from various diseases /illness reported in last one month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of disease/illness</td>
<td>Male</td>
</tr>
<tr>
<td>Fever</td>
<td>30%</td>
</tr>
<tr>
<td>Constant Cough</td>
<td>32%</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>18%</td>
</tr>
<tr>
<td>Body Pain</td>
<td>74%</td>
</tr>
<tr>
<td>Eye pain</td>
<td>29%</td>
</tr>
<tr>
<td>Physical injury</td>
<td>12%</td>
</tr>
<tr>
<td>Total cases of illness</td>
<td>42%</td>
</tr>
<tr>
<td>No incidence of sickness reported</td>
<td>58%</td>
</tr>
</tbody>
</table>

It was noticed that the common illness among child workers were headache, body pain, fever, cough, and eye pain, diarrhea and physical injuries. As per table -5.3, 45 percent of child labours complained one or more above mentioned illnesses. The proportion of females was more (48 percent) as compare to boys (42 percent) reported some kind of illness. Both males and females suffered from body pain and incidence reported was as high as 76 percent in Girls and 74 percent in Boys. The wrong posture, long hours of work and exceeding amount of exertion than their young bodies can bear often lead to back pain and pain in feet. The constant exposure to harsh sunlight, dust and smoke causes eye diseases and 25 percent of child labours complained about eye pain. The incidence of constant wheezing and cough was also observed among the child workers more among boys than girls. Boys also suffered more physical injuries mostly because of their careless handling of work than girls. The child labour doing the job of Dhoai and Nikasi (cartage of bricks) suffered more physical injuries due to falling of bricks, tripping and hurt from pack animals. Due to lack of hygiene and safe drinking water the cases of stomach pain and Diarrhea were
common, 21 percent of children (23 percent girls and 18 percent boys) suffered from the Diarrhea.

There are virtually no safeguards for labour in kilns. Jalai walas wear open wooden sandals to reduce heat and use metal rods in handling fire covers; but otherwise remain wholly unprotected. When removing hot bricks, nikasis sometimes wear rubber strips on their hands and occasionally cover their mouth with a strip of cloth. Neither bharai walas nor patheras take any precautionary measures.

For a researcher, it was an eye-opener to find out that these children, who engage in the brick-making activity, have to get started even before sunrise, sieving coal dust. They have to stand for hours in knee-deep water, mud and straw to prepare dough for the bricks, work very close to the fire whilst making the kiln, and their work hours could range from 10 to 14 hours every day. They carry as many as 10 to 12 bricks at a time, each brick weighing as much as two kilograms. These children thus get exposed to health hazards such as diseases that affect the skin, lungs, stomach and also malnutrition and exhaustion, which they have to suffer at a very young age.\(^{49}\)

The working conditions are very hard. Working hours are very long, 12 to 16 hours per day, and partly at night in hard conditions (especially because of the heat). Health-care facilities are also rather bad (even if some brick kiln owners provide a few). There are no toilets and nutrition is also considered of poor quality by the workers.\(^{50}\) Similarly, Concern for Children and Environment-Nepal (CONCERN-Nepal) is in one survey on the child labourers working in brick kilns in Nepal found that the child workers do not have access to proper lodging, electricity, drinking water and proper sanitation and they also face frequent health problems due to poor working condition.\(^{51}\)

A recent study conducted by the People's forum for children's rights has revealed that prolonged exposure to sand, dust and heat of the kilns led to dermatological problems apart from wheezing, asthma and among adolescent girls


\(^{50}\) Guérin Isabelle, Bhukuth Augendra, Parthasarthy, Venkatasubramanian G, Labour in Brick Kilns: A Case Study in Chennai Economic and Political Weekly February 17, 2007 pg 601

there can be menstrual dysfunction. This is in addition to a number of accidents in the kilns in which the children sustain fractures and other injuries.52

A NGO working for welfare of mules in brick kilns, reports that the poor workers and their animals work very hard in blisteringly hot temperatures, which can often hit 50 degrees Centigrade (122 degrees Fahrenheit), with little obvious water or shade. There is relentless pressure to over-work and overload animals. Life expectancy for these animals can be short: in England, a donkey can comfortably live for 30 years. In the brick kilns, it may only last 18 months.53

David Zucchino of UUA Holdeen India Program supports schools for child labourers reports his visit to brick kilns and his observation about one girl child labour in these words, “the girl was perhaps eight or nine years old. Her face was smeared with grime and sweat. Her slender shoulders seemed to sink under the weight of four heavy bricks balanced on her head as she made her way to the edge of a brick kiln in the Thane district of western India. She hoisted the bricks to a man who stood atop an enormous mountain of dun-colored bricks. Then, she turned and walked back, barefoot, to collect another load of bricks. All around the girl, other children worked under a punishing sun, hauling bricks or chipping away with hammers at massive chunks of coal, their faces black with coal dust. Some were as young as five years old.54

A study by the Pasumai Trust, Tiruvallur, and the Peoples Forum for Human Rights in Chennai in 2005 found that children working in brick kilns in Tamil Nadu suffered prolonged exposure to sand, dust and heat, leading to skin and stomach problems. They also experienced wheezing, asthma and stunted development, as well as menstrual dysfunction among adolescent girls. Accidents were also common, leading to face fractures and other major injuries.55


53 http://www.thebrooke.org/content.asp?id=610

54 David Zucchino, Hut schools for India's child laborers, The UUA Holdeen India Program supports schools for child laborers, July/August 2001. http://www.uuworld.org/about/authors/davidzucchino.shtml

U.S. Department of Labor, in its recent report on brick kilns in Pakistan state that the mortality rate of children working in the brick kilns of Pakistan is high. Children work barefoot, unprotected from the sun in summer and the cold in winter. They constantly inhale fine quartz dust from the clay. Common illnesses include tuberculosis, chronic chest infections and silicosis. Children often suffer from injuries to their eyes and fingers. Deteriorating eyesight and even blindness are common among children.  

Children are often psychologically traumatized. Sexual and physical abuse is often used by employers to punish workers. Several cases were reported in 1994 where the wives and children of bonded workers were kept in captivity or in chains by brick-kiln owners wanting to intimidate or punish the employee. "The children... grow up in a climate of insecurity and fear, being daily witnesses of their parents being humiliated, insulted or worse."  

Shahida Jabeen of Pakistan Trade Union Defence Campaign reports that the Brick Kiln industry in Pakistan has appalling conditions of heat and dirt with skin and lung diseases common. The heat will be over 100 degrees Fahrenheit with dust and dangerous gasses everywhere. She reported that children here suffered 50% more chronic illness than other children. Cuts and burns are common.

5.25 Brick kilns Pollution and its likely impact on health

Indian brick industry with an estimated coal consumption of 15 - 20 million tons per year is the third largest consumer of coal in the country after power plants and steel industry. Burning of coal, results in the release of several air pollutants in atmosphere such as, carbon dioxide (CO2), carbon monoxide (CO), sulphur dioxide (SO2), nitrogen oxides (NOx) and particulate matter. At local level (in the vicinity of a brick kiln) some of these pollutants are injurious to human health, animal and plant life. The interview with some farmers owning mango orchards in the study area revealed


58 Sameer Maithel, R Uma, Anil Kumar and N Vasudevan, “Energy Conservation and Pollution Control in Brick Kilns”, Tata Energy Research Institute, Habitat Place, Lodhi Road, New Delhi
that the pollution from nearby brick kilns has adversely affected their flowering and fruit production. A study conducted in west Dinapur district assessed the effect of various gaseous and particulate pollutants emanating from brick kilns on the surrounding vegetation and found out that a definite decrease in relative densities of different herbs in the vicinity of brick as compared to control. Children are uniquely vulnerable to environmental health problems.

Some kilns add toxic oil refinery waste to fuel in order to reduce fuel costs. Stench from the burning waste is noxious even for adjacent villages and can release lethal pollutants, of particular risk to jalai walas.

5.26 Health Facility and Medical Treatment:
Treatment for injuries at work or illness caused by work is mainly the responsibility of labour. In case of dhoaiwala (carrier), they also have to bear the cost of upkeep and illness of their animals (Mules). Over the counter drugs for pain, fever, cough and eyes are taken without any precaution. When asked about the medicines and where they go for treatment, the one semi literate-labour told the names of medicines and eye drop (with wrong pronunciations even wrong names but the local medical stores who often works without proper degree or fake degree understand what they want or they themselves prescribe the medicine) they use. It was found that in surveyed brick kilns few owners keep these medicines and distribute free of cost. In case of accident, they also take injured labours to nearby hospitals. It was reported that the children are given polio drops on site. The government health workers and nurses come to give polio drops to children. However, other vaccinations are not given and labours are mainly ignorant about them. The case of Polio vaccination shows that massive health campaigns do increase awareness and similar campaigns for overall children health awareness and well being are needed.

*Frontline* reported that workers in the brick kiln near Faridkot, southern Punjab told that each family spent upwards of Rs.1,200 a month to treat fevers and diarrhoea. Workers have to use the services of the plethora of quacks operating in rural Punjab, for there are no government-run health facilities nearby. Access to clean drinking
water is minimal, and there are no sanitation facilities at all. Most children appear severely malnourished. No families carry ration cards, and they must buy food in the market. Sugar sells at Rs.17 a kg, and flour at Rs.8. No family can afford vegetables or milk.60

5.27 Conclusion
India stands one of the worst indicators of child well-being where half of all Indian children are undernourished; more than half suffer from anaemia, and a similar proportion escape “full immunisation” scheme. According to the United National Development Programs (UNDP) Human Development Report 2005, India has the highest proportion of undernourished children in the world, along with Bangladesh, Ethiopia and Nepal. Children engaged in work are exposed to a variety of hazards (e.g. dangerous machinery, falling objects, pesticides, chemicals, abusive employers) that have the potential to seriously damage to their health. Thus, the condition of child labour is much worse. Physical work depletes a child’s stock of energy and their physiology gets weakened due to malnourishment. The children are subjected to physical punishment, assault, and abuse by their employers. The girl child workers are subject to sexual harassment and sexual abuse in addition to physical abuse. The act of heavy lifting and repetitive strains can permanently injure growing spines or limbs. Child labour has mental repercussions also, since the age at which he/she usually starts to work coincides more or less with a period of profound mental change. The mental consequences of child labour are not just the result of the work situation but the violent change to which the child is exposed. The oppressive work situation exacerbates the stresses and leads to socio-cultural disorganization.

The hazards may be obvious and threaten immediate damage to health, hold longer-term consequences for health such as risks from contact with dust, toxins, chemicals and pesticides, the lifting of heavy loads and the forced adoption of poor posture. The health consequences of child labour will vary with the type of hazards to which the child worker is exposed. Given their physiological and psychological immaturity and the biological process of growth, children may be more vulnerable than adults to abuse and to given health risks. The child workers are exposed to

60Swami, Praveen “Down and out in Punjab: Punjab’s Dalits get a raw deal; and this is deepening caste fissures in the State” Frontline, Volume 16 - Issue 26, Dec. 11 - 24, 1999
different hazards in carpet industry, glass industry, stone queries, silk, locks, brassware, matches and fireworks, beedi's and silver (industries). It is also seen that these small children are used to do prostitution.

In brick kiln, a millions of labourers are employed including child labour. There are several key child health issues – accident/injuries, illness, and malnutrition – linked with brick production. Child labour in brick kilns has not been recognized as a worst form of child labour in India however our impression was that working conditions in brick kilns are bad and particularly hazardous for children engaged in various tasks continuously lift and carry heavy burdens and squat for long periods at the sancha. In the absence of specific medical studies, one can only speculate about damage to knees, lower legs and the spine. Exposure to emissions from burning fuel and dust is another health and safety issue, made worse for children living on-site. It was noticed that the common illness among child workers were headache, body pain, fever, cough, and eye pain, diarrhea and physical injuries. Due to lack of hygiene and safe drinking water the cases of stomach pain and Diarrhea were common, 21 percent of children (23 percent girls and 18 percent boys) suffered from the Diarrhea.

The worst effect to the environment is burning of coal results in the release of several air pollutants in atmosphere such as, carbon dioxide (CO2), carbon monoxide (CO), sulphur dioxide (SO2), nitrogen oxides (NOx) and particulate matter. At local level (in the vicinity of a brick kiln) some of these pollutants are injurious to human health, animal and plant life.

The most harmful forms of child labour certainly include those that damage the short and long run health prospects of the working child. To an extent, identification of the forms of child labour that are potentially most damaging to health is not difficult. Children working under appalling conditions in brick kilns, construction, mining, manufacturing and agriculture face immediate threats to their health. However, there is need of more in depth analysis of various variables which affects working child’s health. There is no one effect of child labour on health but a multitude of effects that vary with the nature of the work undertaken. At present, the studies on the health consequences of child work activity are limited and there is need of more detailed studies.

The present study is limited in its nature and scope. It provides only general picture of health implications of work on child labour. But, it can be convincingly said that the work in brick kilns is hampering the children’s health and growth in both
direct and indirect ways. The adverse living conditions, strenuous work, exposure to
dust, smoke and pollution are damaging the children health. The deprivation of
education because of work at brick kilns will result in to the inability of acquiring
better skills or develop better earning capacity in future. This will have life long
adverse impact on Child labourer's health because of low income and non
affordability of proper diet and health care.

New international Child Growth Standards for infants and young children
released by the World Health Organisation (WHO) confirm that children born
anywhere in the world and given the optimum start in life have the potential to
develop to within the same range of height and weight. Children's growth is
influenced more by environmental factors than genetics up to the age of five. The
WHO found that, despite natural differences among individual children, the average
potential size of youngsters, across large populations, regionally and globally, is
remarkably similar. According to WHO, “Children from India, Norway and Brazil all
show similar growth patterns when provided healthy growth conditions early in
life”.61 It is sad that millions of children are deprive of actualization of their optimum
health and growth potential due to work.

The effective policy formulation and implementation requires better
understanding of the relationships between work activity in childhood and health;
both in childhood and in adulthood. There are a number of ways through which child
work activity can influence health. A direct negative effect as a result of workplace
hazards and stress is obvious but there may also be indirect effects operating through
impacts on family living standards and education. As pointed out in the beginning of
the chapter that India has some of the worst indicators of child well-being. It is
obvious our health system is far from adequate to meet the requirement of heath care
for children in general. It does need much imagination to visualize the status of child
labours health will be much worse. Most of the government health care schemes
aimed at child welfare do not reach to the children living and working in the Brick
Kilns because of their migratory residence. The government bureaucratic rules require
beneficiary identification in the area to get the benefits. The brick kilns labours are
floating population so they can not take benefit of heath schemes or poverty
eradication programme like BPL ration cards and access to subsidized food grains,

etc. They are not counted as resident in that area while living in brick kilns, so that could not get the benefits of the schemes. There is need of effective policies and programmes which address problems specific to construction sector together with brick kilns which employs millions of floating population including children.

In the next chapter, the historicity of legal measures for protection of child labour in India will be discussed in detail since 1881. An emphasis will be given to study the steps taken by major welfare organizations on problem of Child Labour. The role of National Human Right Commission will be assessed in context of India. The chapter will look into the major initiatives by international organizations and NGOs, how international agencies work against child labour. The major findings and works of international agencies like United Nations, UN Commission on Human Rights, United Nations General Assembly's special session on children, United Nations Committee on the Rights of the Child, The NGO Group for the Convention on the Rights of the Child, United Nations Children's Fund (UNICEF), The International Labour Organization (ILO), United Nations Educational, Scientific and Cultural Organization (UNESCO), Child Protection Initiatives by the World Bank, Global March Against Child Labour, The World Confederation of Teachers (WCT), International Labor Rights Fund (ILRF), Christian Aid, etc will be discussed and assessed.