The link between sanitation and child life expectancy in india critical analysis

Countries, India

“ The expectations are different”, is a statement that Perri Klass makes in her essay entitled “ India”(1986). Thisobservationrefers to the difference in child life expectancy between Klass’ home in North America, and her current home in India, where she is practicing paediatric medicine. In North America, every child is expected to surpass their parents in life expectancy. Meanwhile, in India, the possibility that children will die young is very real and happens more than necessary. In 1998 alone, approximately 2. 5 million children under 5 died in India (Bulletin of the WorldHealthOrganization, 2000,).

What makes this number even more astonishing is that almost all the deaths were preventable. The lack of sanitation leading to deadly water-borne disease in India is the main factor contributing to these extremely high numbers. This essay will explore the role that sanitation has in relation to child life expectancy in India. A base root to sanitation is human hygiene, particularly access to clean water and toiletries. The cost to install a toilet in India is 200 USD (Agoramoorthey&Hsu, 2009). This, to an average American, does not seem like very muchmoneyat all.

However, when you are a farmer working in rural India making an average of 150 to 225 USD per year (Agoramoorthy & Hsu, 2009), this is a tremendous amount of money. This minimal income is barely enough to maintain basic survival (food, shelter, and clothing), let alone buy a toilet. The government of India, at one time, contributed up to 80% of the cost of purchasing a toilet to promote sanitation, but now the subsidy offered is only 20% (Agoramoorthy & Hsu, 2009). An overall lack of funds is the main

contributing reason that only 34% of Indian households have access to a toilet (Agoramoothy & Hsu, 2009).

The other 66% of the population is forced to defecate and urinate in public. The amount of people that do not have access to toilets in India is 638 million (UNICEF India, Water, environmentand sanitation, 2011), which is more than 10 times the entire population of Canada (Stats Canada, 2010). The amount of public defecation in India poses massive health endangerment, especially to the most vulnerable population, children, through water contamination. The majority of Indian households do not even have access to running water. Water is mostly brought in to the homes from wells or unsanitary ponds, mainly by women.

Proper storage of water is also a massive problem causing contamination, as most containers don’t even have handles. 67% of the residents of India do not treat their water, even though it most definitely is chemically or bacterially contaminated (UNICEF India, Water and environment and sanitation, 2011). As displayed in the below chart (Figure 1), the majority of the slum and rural parts of India rely on waters other than piped water for washing themselves and cleaning cooking supplies(Nath, 2003), leading to cross contamination.

Figure 1: Sources of Water for Washing according to Different Population Sectors in Calcutta India (Nath, 2003) Sewage control is also quite poorly maintained in India, hence becoming yet another water- related issue. With a total of about 4000 towns in India, only approximately 200 of them have

partially covered sewage systems, resulting in poor drainage for storm waters leading to frequent flooding of defecated in waters (Nath, 2003). Monsoon season is often the worst for defecation contaminating the waters due to the immense amount of rainfall and resulting in overland runoff.

Contaminated waters are common in India; therefore the water is difficult to avoid especially for kids. Children inadvertently consume defecation in pond water as they are playing, resulting in illness. In the developing world 24, 000 children under the age of 5 die every day from preventable diseases caused by contact of unclean water (water. org, 2011). That is almost a quarter of a million lives that could be saved alone by something as simple as clean water. 21% of all disease in India is water-related (UNICEF India, Water, environment and sanitation, 2011), and yet preventable.

With the prevalence of water-related diseases in India, one would think the government would step in and vaccinate the children against rotavirus. Currently, children in India are not vaccinated against rotavirus, which is the leading cause of diarrheal illness. (UNICEF India, Water, environment and sanitation, 2011) A child here in Canada can get diarrhoea and be given over the counter medicine such as Pesto Bismal and be fine in couple hours or, at worst, be hospitalized for dehydration and be out the next day. In India, in 1996 there were a staggering 1600 deaths a day from diarrhoea, resulting from water contamination.

Unicef India, Water, environment and sanitation, 2011). Something as preventable and treatable as diarrhoea should not cause as many children to

die as it does. Only 39% of children that get diarrhoea in India receive the recommended treatments (UNICEF/WHO, Diarrhoea: Why children are still dying and what can be done?). If these children had received proper treatment, or had a vaccination to prevent this in the first place they would most likely still be alive. Aids was once thought to be the most targeted killer of children in developing countries, but now, a preventable and curable illness like diarrhoea has taken the lead.

Diarrhoea now kills more young children than AIDS, malaria measles combined. (UNICEF/WHO, Diarrhoea: Why children are still dying and what can be done, 2009) As illustrated below in Figure 2, cases of diarrhoea did appear to decline briefly from 1992-1993 only to rise quickly again by 1998 (Nath, 2003). Figure 2: Reported Data on Diarrhoea in India from 1989 to 1998 (Nath, 2003) As noted in Klass' essay (India, 1986) expectations are different in India and North America regarding child life expectancy. In North America what seemingly are simple things like clean water, and toilets, are rare in most parts of India.

We, in America also expect the government to readily step in with immunization programs and funding if needed. In India there are immunization programs but they are not readily implemented. We expect our children to live longer and not die from preventable disease due to unsanitary conditions. In India, it is expected that children may precede their parents in death, due to preventable illness caused by lack of sanitation. With millions of children dying yearly in India from sanitation related illness, maybe it is time something was done instead of just being said.