



Open defecation& lack of sanitation cause diseases that can be prevented through raising awareness among people

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INTRODUCTION

Open defecation is the practice where people go out in fields, bushes, forests, open bodies of water or other open spaces rather than use the toilet to defecate or pass bodily waste. It is a common hazard in Bangladesh, India and in that part of the sub-continent where the gaps between population and the available sanitation facilities are huge. Bangladesh as a densely populated country is not an exception. Open defecation refers to the human practice of defecating in the open space. In Bangladesh, the government has been successful to address this issue in rural areas, but in Dhaka Metropolitan City, the practice of open defecation is still a major problem. Open defecation poses many health risks to the people like diarrhea, intestinal worms, trachoma, fecal oral transmission etc. Floating people, pedestrians, rickshaw pullers, helpers/drivers of buses/human haulers, commuters, street hawkers are the mainly the ones who relieve themselves outside due to either lack of sanitation facilities or lack of access to these facilities. Lack of

sufficient number of public toilets, poor people's lack of access to public toilets, inability to pay for toilets and habitual problem are mainly the causes of open defecation.

IMPACT OF OPEN DEFECTION AND LACK OF SANITATIONS

We all know that human feces contain bacteria and germs which consequently contaminate water. If people continue to defecate in the open space, the water sources can be contaminated with fecal matters. It increases the chance of people getting

affected by virus, bacteria, protozoa and parasitic worms. There are many other diseases which are easily transmitted in communities that have low levels of sanitation, such as ascariasis (a type of intestinal worm infection or helminthiasis), cholera, hepatitis etc.

A child's well-being is highly dependent on both the quality and the availability of water, and on how well this precious resource is managed. Of the waterborne diseases affecting children, the most deadly are diarrhoeal infections. Childhood diarrhoea is closely associated with inadequate sanitation, water contaminated with communicable disease agents, and open defecation is one of the way to produce communicable diseases.

There are some other diseases which affect people if they use unclean water. These are:

- *Trachoma*, a potentially blindness disease caused by bacteria, but flies are a strong environmental factor in its transmission;
- *Scabies*, a persistent irritating rash caused by tiny crawling mites that burrow into the skin;
- *Podoconiosis*, a form of elephantiasis (swollen limbs with thickened skin) that is not caused by an infection at all – but by irritating particles of red clay soil causing a damaging reaction in the skin.

A common feature of these diseases is the lack of clean water for washing. So, though open defecation is an easy practice somewhere but it is not an ignoring issue.

A measurement from medical aspect -
One gram of feces contains:

- 10,000,000 viruses
- 1,000,000 bacteria
- 1,000 parasite cysts

Child faeces contain more germs than adults'.

"Open defecation leads to polluted water; up to 75 percent of India's surface water is polluted. When water is exposed to untreated sewage it becomes a

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breeding ground for parasites and water-borne diseases such as cholera, dysentery, e.coli, and salmonella. Human exposure can come from consuming the contaminated water or eating foods that are washed or irrigated with the polluted water. Children are more susceptible to these diseases which frequently lead to diarrhea. [1]

Diseases those can be the causes of open defecation or lack of sanitation may be categorized into four types:

Water borne diseases

Diarrhoea and other problems associated with the ingesting and exposure to human waste affect children under the age of 5 years the most since they are very susceptible to diseases. This exposure is because most of open defecation happens next to water ways and rivers. In urban areas, this can include the drainage systems that are usually meant to traffic rain water away from urban areas into natural water ways.

Therefore, the result of open defecation near water ways is that it is carried into the water system minus treatment. As a consequence, the contaminated water ends up in the main water source. When people in these regions use the water as it for drinking and cooking (since the water is not boiled most of the time because of poverty and lack of education) it results in water borne diseases such as cholera, typhoid, and trachoma.

Vector borne diseases

Apart from the water borne diseases, when the human waste collects into heaps, it attracts flies and other insects. These flies then travel around the surrounding areas, carrying defecated matter and disease causing microbes, where they then land on food and drink that people go ahead and ingest unknowingly. In such cases, the flies act as direct transmitters of diseases such as cholera.

Compounding the problem of disease exposure

The saddest fact about disease transmission caused by open defecation is the cyclic nature of problems that then begin to manifest. The most common diseases caused by this unsanitary act are increased cases of diarrhoea, regular stomach upsets and poor overall health. With diarrhoea, for instance, it means

that people cannot make their way to distant places due to the urgency of their calls of nature, so they pass waste close to where they have their bowel attacks. It simply ends up creating more of the same problems that started the disease in the first place and in turn, leads to more people catching diseases and less people using the facilities. The result of this is more sick people and more opportunities for the disease to spread.

Malnutrition in children

Malnutrition in children is another health problem associated with open defecation. Once a child is a victim of one of the diseases passed on due to the lack of proper sanitation and hygiene, they begin to lose a lot of fluids and lack of appetite for food. As a result, it gives rise to many cases of malnutrition in children.

SOME CASES [using observation method]

Case - 1

There are many people who suffer from diarrheal and intestinal diseases living in the surrounding area of Sher-E-Bangla Nagar, Dhaka. They are mostly poor people and their food habit is not hygienic. Besides, there is a canal in this area that contains contaminated water. From observation, it was found that open defecation in the bank of that canal is a common practice there. People use water from that canal which is highly unhygienic and thus responsible for causing many diseases.

Case -2

Another observation was carried out in Keraniganj, Dhaka. It is found that maximum people have skin diseases like scabies, rashes etc in that area. In older children and adults the rash is most often found in the spaces between fingers and toes, wrist, armpits, ankles, navel, 'belt line', groin, buttocks, genitals in

men and breasts in women. The river Burigangai is the main source of water supply in Keraniganj. This river contains polluted water and water vehicles frequently discharge human waste directly into the river. Local people sometimes use the water of that river for washing purpose and many of them contracted skin diseases. So, random defecation or

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open defecation is always harmful for health both directly or indirectly.

"Open defecation is a major cause of fatal diarrhea. Everyday about 2000 children aged less than five succumb to diarrhea and every 40 seconds a life is lost"[2].

CONCLUSION

Diseases caused by open defecation can be treated by medication. But this is not our goal. Prevention is always better than cure. Bangladesh has made a firm commitment to work progressively to achieve universal WASH, particularly sanitation coverage through accessible, affordable, appropriate, acceptable and environmentally safe sanitation and hygiene services that all people can use and maintain with dignity, safety and comfort. Bangladesh also recognizes sanitation as a matter of justice and equity, with a powerful multiplier effect that unlocks measurable benefits in health, nutrition, education, poverty eradication and economic growth and preventing open defecation is very important to achieve these goals. Experiences from across the world have shown that construction of toilets alone is inadequate to prevent open defecation. There is a need for concomitant strengthening of local water management and behavioural change through community led approaches.

REFERENCES

- [1] <http://www.canr.msu.edu/news/india-the-problem-of-open-defecation>
- [2] WHODiarrheal Disease. WHO Int Retrieved 2014-03-10

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