

Part 1 of 2: Child Feces Disposal in BANGLADESH



OVERVIEW OF CURRENT PRACTICES

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) tracks progress towards Millennium Development Goal 7, “to reduce the number of people without access to adequate sanitation by half.” However, the estimates are based on one type of sanitation coverage per household, and hence overlook sanitation practices of young children. Due to their developmental status and safety concerns, young children may not be able to use a toilet or latrine, even if their household has access to one.

Just as with adult sanitation, safe disposal of children’s feces should ensure separation of the stool from human contact and an uncontaminated household environment. Instances where a child uses or their feces are put or rinsed into a toilet or latrine are considered more likely than other disposal methods to break the fecal-oral transmission chain. For the purposes of this document, instances where a child uses or their feces are put or rinsed into a toilet or latrine are referred to as safe while other methods are termed unsafe.

In Bangladesh, in 2006, only 22% of households reported that the feces of their children under three were deposited into a toilet/latrine (Figure 1). Therefore, the stools of over 7.5 million children under three were not disposed safely. This includes over 3.5 million children whose feces were left in the open.² Even among those 22% of households with safe child feces disposal, only half (11% overall) have an improved sanitation facility into which they could easily dispose the feces. This stricter definition of disposal type is called “improved disposal” in Figure 1.

In rural areas of Bangladesh, crawling infants come into contact with animal feces, the baby’s own feces, and those of its

FIGURE 1 Percentage of children aged under three by type of feces disposal, Bangladesh Segments shaded brown and gray are considered unsafe disposal methods while green colors are used to designate disposal methods that are considered more safe.

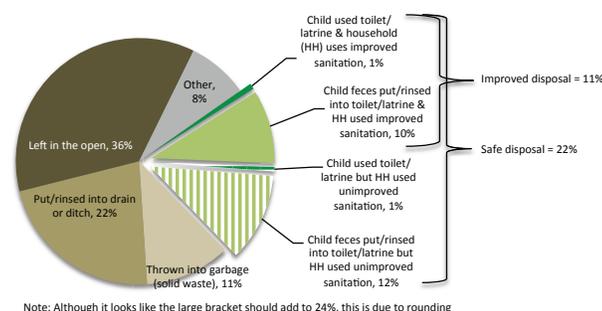
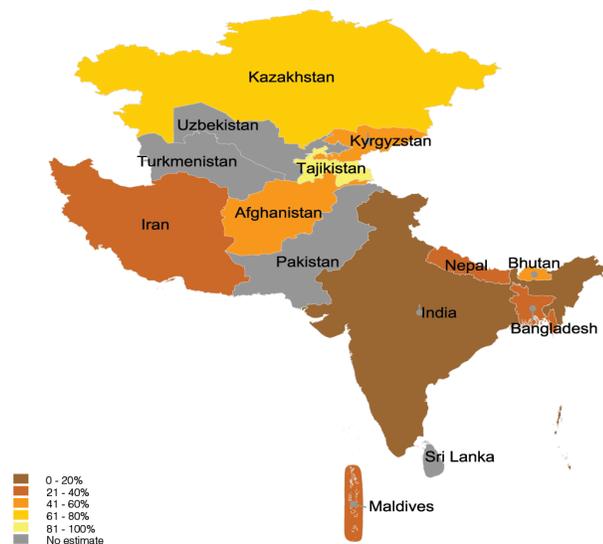


FIGURE 2 The proportion of children aged under three with safe feces disposal reported, South Central Asia¹



Note: The boundaries and the names shown and the designations used on these maps do not imply official endorsement or acceptance by WSP or UNICEF.

brothers and sisters. According to one study, half of the mothers in two villages near Dhaka had also seen their infants eating or touching feces during the previous two weeks.³ In the South Central Asia region, the Maldives, Iran, Nepal, Kyrgyzstan, Afghanistan, Bhutan, Kazakhstan and Tajikistan all have lower rates of unsafe child feces disposal, while India has higher rates (Figure 2).

In Bangladesh, marginalized households and those with younger children consistently report higher rates of unsafe disposal of child feces. Poorer and rural households as well as those without improved sanitation were generally less likely to report safe disposal.

Households practicing open defecation reported the highest level of unsafe child feces disposal (Figure 3). However, it is important to note that in Bangladesh, even among households with improved sanitation, 53% reported unsafe behaviors. Among households with improved sanitation, the feces of 22% of children are being left in the open and those of 17% of children are being put or rinsed into drains or ditches.

In addition, households with younger children were generally more likely to report unsafe disposal methods (Figure 4). Households are most likely to report child feces being unsafely disposed of during the first 0–11 months of age. There is also a peak in open defecation (feces “left in the open”) for children aged 12–23 months, the same age when the majority of children have just started walking.

FIGURE 3 Percentage of children aged under three by household's type of sanitation facility and type of child feces disposal, Bangladesh

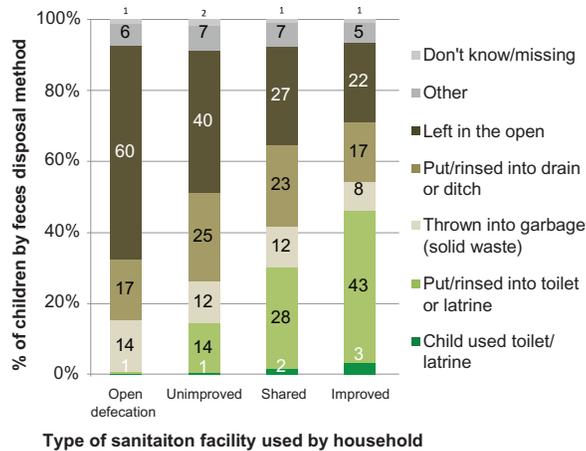
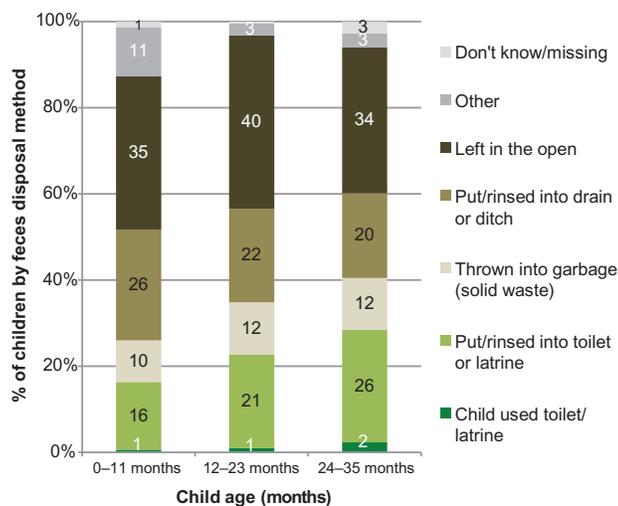


FIGURE 4 The percentage of children aged under three by age and reported type of feces disposal in Bangladesh

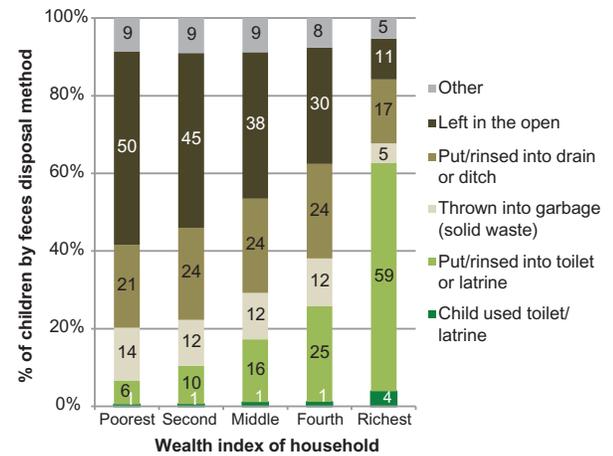


Those children who live in the poorest 20% of households are most likely to live in a household that reported unsafe disposal of the child's feces (Figure 5). However, over a quarter of the wealthiest 20% of households still report leaving child feces in the open, or putting/rinsing them into a drain or ditch.

DATA SOURCES

Unless otherwise specified, all analysis in this brief is based on self-reported child feces disposal behavior collected in the Bangladesh Multiple Indicator Cluster Survey (MICS) 2006, which is the latest MICS/Demographic and Health Survey (DHS) on file for Bangladesh that records child feces disposal behaviors. The MICS only collects data on children under the age of three and as such all graphs in this profile are based on children under three. There is global evidence, as well as evidence from Bangladesh, that self-reports may overestimate safe disposal.⁴ Although in Bangladesh MICS2006 22% of children reportedly either used a toilet/latrine or their feces was put/rinsed into the toilet/latrine, a structured observation of behavior conducted under UNICEF's Sanita-

FIGURE 5 The percentage of children aged under three by household wealth quintile and type of child feces disposal, Bangladesh



tion, Hygiene Education and Water Supply in Bangladesh (SHEWA-B) program in 2007 found only 9% of subjects disposing child feces into a toilet/specific pit.⁵ Regardless of this issue, self-reports are currently regarded as the most efficient method for gauging safe disposal of children's feces.

NOTES

1. The latest available MICS/DHS survey with data for each country, as of January 2014. <http://www.unicef.org/statistics/>.
2. Calculation based on United Nations, Department of Economic and Social Affairs, Population Division. 2013. *World Population Prospects: The 2012 Revision*. DVD edition. (New York: United Nations, 2013). <http://esa.un.org/unpd/wpp/>.
3. Zeitlin, M.F., G. Guldán, G. Klein, R.E. Ahmad, and J. Zeitlin. "Sanitary Conditions of Crawling Infants in Rural Bangladesh." (Washington, DC: U.S. Agency for International Development, 1985). Unpublished report excerpted in *Dialogue on Diarrhoea: The International Newsletter on the Control of Diarrhoeal Diseases* 26 (September 1986): 4. <http://rehydrate.org/dd/dd26.htm>
4. Stanton, B. F., J. D. Clemens, K. M. Aziz, and M. Rahman. "Twenty-Four-Hour Recall, Knowledge-Attitude-Practice Questionnaires, and Direct Observations of Sanitary Practices: A Comparative Study." *Bulletin of the World Health Organization* 65, no. 2 (1987): 217-222.
5. Akhtaruzzaman, M., N. Islam, and S. N. Islam. *Nutrition, Health and Demographic Survey of Bangladesh—2011* (Bangladesh: University of Dhaka, 2011), 19.

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