



what can be done to end open defecation?

This Policy Brief presents policy solutions based on research summarized in "**Revealed preference for open defecation: Evidence from a new survey in rural north India**," a research paper by Diane Coffey, Aashish Gupta, Payal Hathi, Nidhi Khurana, Dean Spears, Nikhil Srivastav, and Sangita Vyas. Read the full paper in Economic and Political Weekly or online at squatreport.in.

Recommendations are based on a survey that interviewed over 3,200 rural households and more than 22,000 people in villages in five states in India: Bihar, Haryana, Madhya Pradesh, Rajasthan, and Uttar Pradesh. The survey focused on sanitation preferences and behaviour. These states are home to 40% of the population of India, to 45% of households in India without a toilet or latrine, and to at least 30% of all people worldwide who defecate in the open.

key messages:

- open defecation and latrine use are priorities
- low-cost latrines are acceptable and desirable
- latrines are for everyone, not just women

action steps:

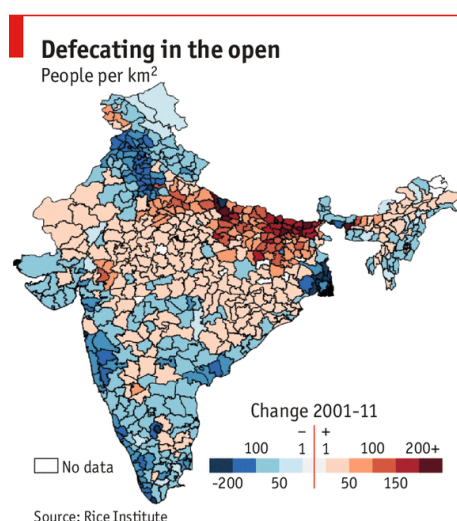
- hire a dedicated behavior change ground staff
- spend more on IEC
- measure latrine use
- ensure that all govt. employees know and spread the message that OD is unacceptable
- educate people that OD is bad for health
- Initiate a high-intensity, pervasive campaign
- establish a fund for experimentation

key messages

open defecation and latrine use are the priority

Exposure to feces caused by open defecation kills hundreds of thousands of babies each year, and impedes the physical and cognitive development of those who survive. The density of open defecation per square kilometer is actually *increasing* in India because population growth has outpaced improvements in sanitation. We will ultimately have to sort out garbage disposal, sewerage, and piped water. But if we want to save lives and improve the productivity of India's workforce, we must tackle rampant open defecation first. Open defecation must be the top priority, and latrine *use* has to take center stage.

figure 1: density of OD increased from 2001-2011

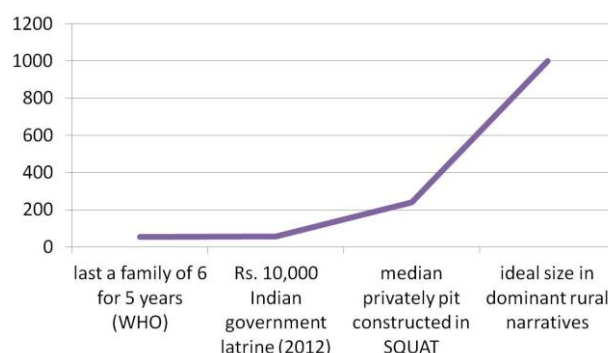


low-cost latrines are acceptable and desirable

Simple latrines, common in most developing countries, are difficult to find in India because they are considered unacceptable, in part because of the intense disgust people feel towards dealing with the feces in the pits. Feces are considered “unclean.” Thus, while safe, usable latrines could be built much more cheaply (such as for 3000 INR in Bangladesh), people in rural India do not want them. Families in India prefer excessively large pits because they do not want to have to deal with emptying them. This unnecessarily large and expensive notion of what constitutes an acceptable latrine prevents many who can afford one. While it

will be difficult to change people's idea of an acceptable latrine, it will be critical to convince people that simple latrines are a safe and sensible way to defecate until they can afford more expensive latrines.

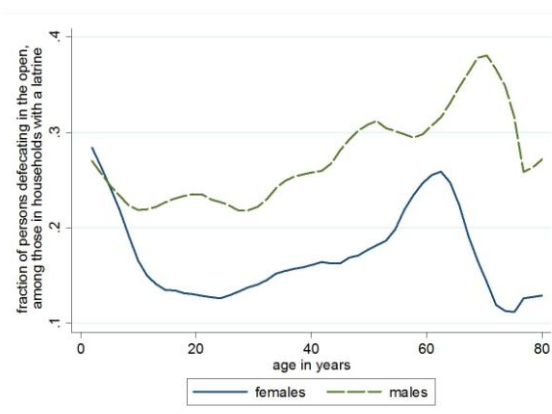
figure 2: “ideal” pit size is 20 times WHO guidelines



latrines are for everyone, not just women

Although women are more likely than men to use a latrine once it is constructed, many with access to a latrine, across all age groups, still choose to defecate in the open. Thus, while recognizing that women face great difficulties because of a lack of sanitation, latrine use is important for everyone. By making sanitation a women's issue, we are excluding men, who often make decisions about latrine building, exhibit a greater preference for going in the open, and may be the hardest to convince to use a toilet. The public health hazards of open defecation exist regardless of whose feces one comes into contact with, thus it is critical that both men and women internalize the importance of latrine use. Messages must push latrine use for all.

figure 3: men and women with latrines go in the open



action steps

hire ground staff exclusively for behaviour change

84% of SQUAT Survey respondents said that they had never heard of village level meetings on sanitation. It is critical that the government's goal of an open defecation free India be known to every rural Indian. Though official policy already recommends district, block, and village level staff, many have not been hired. When they exist, they are often given many responsibilities in addition to sanitation. And still, their main objective focuses on latrine construction. In order to make contact with every individual, staff must be dedicated only to promoting latrine use.

Village-level staff, who can be hired as contract workers, should be trained to convince people about the negative health consequences of open defecation and motivate the use of toilets. They will visit every person, monthly, and track toilet construction, toilet use, understanding of the benefits of latrine use, penetration of messages about latrine use in their village, and attendance in meetings on sanitation.

Village-level staff will report all data to block-level coordinators, at monthly meetings, where they can discuss any problems they faced. Block-level coordinators will conduct random checks on a subsample of all data to check for accuracy, and will help village-level staff when someone is difficult to motivate. Block-level staff will be supervised by existing *swachata preraks* at each district, who will

monitor progress, suggest course corrections if progress is slow, and conduct periodic assessments to make sure that all block- and village-level staff know and are able to communicate accurate information about the importance of latrine use.

Most importantly, this particular workforce cannot be responsible for construction of toilets.

Behaviour change needs its own dedicated staff.

spend more on IEC

IEC funds that have been spent have largely been ineffective, as most people don't recall ever hearing or seeing messages meant to motivate behavior change. Only 31% of SQUAT respondents said that they had ever seen a poster, wall-painting, pamphlet, street play, or film about using latrines. Unfortunately, it is clear from district level sanitation staff that using IEC funds is much more burdensome than spending funds on construction. What is needed is a major shift in the emphasis of government sanitation programming away from construction. The government must push states and districts to spend more of their IEC funds, and to change the rules so that funds can be more easily used. Staff must then pay closer attention to how far the messages they are communicating are reaching, and whether people are changing their behavior as a result.

measure latrine use

In order to eliminate open defecation, attention must be focused on latrine use, rather than latrine construction. A latrine use monitoring unit will soon be created in the Ministry of Drinking Water

Reality Check 1: Rural Indians can afford to build their own latrines

People all over the world, even in places that are poorer than India, build and use simple, inexpensive latrines that safely confine feces and save children's lives. These toilets, recommended by the WHO, can cost as little as 3,000 INR to construct. Our respondents reported that the minimally acceptable latrine would cost an average of 21,000 INR. Thus in India, we rarely see simple latrines. Instead, people either defecate in the open or build very expensive and fancy latrines. Most families in rural India could afford the types of latrines recommended by the WHO, but their preferences and attitudes are holding back widespread latrine use in India, not poverty.

Reality Check 2: Building community toilets alone will not reduce open defecation

People in rural India often don't use, and definitely don't share their latrines. While rural life is often portrayed as harmonious, there are deep caste, gender, religious, and economic inequalities that make the cooperation needed to maintain community latrines incredibly complicated. In 2012 UNICEF-WHO JMP data, 20% of urban households without a latrine used a shared or public toilet, while only 5% of rural households did. Among our respondents, less than 1% of households without a toilet reported using a community latrine. Additionally, of households with working latrines, only 7% report that a non-household member uses it. Before trying to make community latrines work in rural areas, we need to focus on building demand for latrines in the first place. There is a clear discomfort in rural India around the idea of sharing latrines, and so building community toilets alone will not reduce open defecation.

and Sanitation – this is a promising step in the right direction. The quality of latrine use data must be held to the highest standards, so that it can be used for local-level monitoring, to see which efforts on the ground are working best, and which need to be changed.

ensure that all government employees know and spread the message that OD is unacceptable

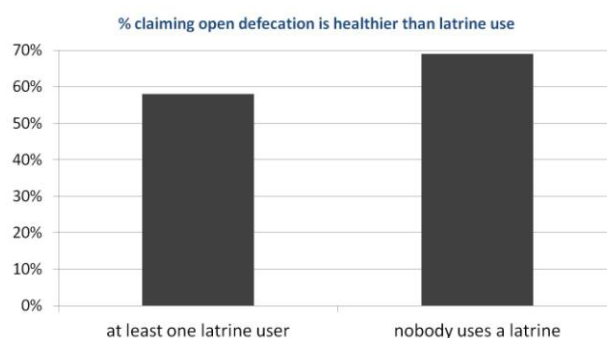
Government workers must lead by example. An important point of contact for many people in rural India are local government workers, including anganwadi workers, ASHAs, ANMs, teachers, panchayat rozgar sevaks, and chowkidaars. The status that these workers may have in rural areas gives them the perfect platform upon which to disseminate information, both formally and informally. Through their words and their actions they can influence how people feel about open defecation and latrine use. By reinforcing the messages from behavior change ground staff and a media campaign, they can convince people that open defecation is unacceptable and that latrine use is a must.

educate people about why OD is bad for them

Within India, 61 million children, or 48% of children under 5, are stunted. These children will do worse in school, complete less schooling, and grow up to be less economically productive adults. They will also be at higher risk of infection and death. Open defecation is both a public health and human capital emergency in India. But still, most people

do not perceive open defecation to be a threat to health. While awareness may not directly lead to behavior change, having accurate information may be a first step to promoting latrine use.

figure 4: most people think OD is healthy



initiate a high-intensity, pervasive campaign

This government has been able to stir a level of enthusiasm for sanitation unseen before, and this must be harnessed into a full-scale campaign that reaches every village in India, at the same time. Leaders, from the Prime Minister to local politicians, activists and industrialists, cricket players and Bollywood stars, all need to keep the issue of open defecation on the agenda for as long as it takes to achieve a Swachh Bharat. They must talk about latrine use, the desirability of inexpensive latrines, and the need to learn and experiment in a mass media campaign. Leading by example, they can ensure that people internalize how important latrine use truly is.

Reality Check 3: Lack of access to water is not a barrier to latrine use

It is commonly believed that people in India do not use latrines because they lack access to water, but this may not be as important a concern as imagined. However, 2005 National Family Health Survey data shows that 75% of households in India get the water they use for cooking, hand washing, and other activities either on their premises or within 10 minutes of their home. Further, only 3% of SQUAT survey respondents who defecate in the open suggest that lack of access to water could be a reason not to use a latrine. In a companion qualitative study, not one of our 100 respondents raised water as a constraint on latrine use.

The government can create a national fund for such experiments in rural India, enabling one experiment per district by earmarking Rs. 600 crores for 600 experiments. Grants for innovative ideas can be given through a competitive selection process. Some experiments can include: (1) developing pit cleaning services to remove concern about pit emptying as a way to promote use, (2) incentivizing entrepreneurs to develop cheaper material for latrine parts in order to encourage the construction and use of low-cost, affordable latrines, and (3) testing targeted messages and mediums to create demand for low-cost latrines.

Reality Check 4: Safe latrines don't need to be expensive

When our respondents were asked what a minimally acceptable latrine should cost, the average response was 21,000 INR. This is about seven times the cost of the types of latrines that are commonly found in neighboring Bangladesh, which has reduced open defecation to a mere 4%. Part of this perception comes from the common notion that the ideal pit should be 10 feet by 10 feet by 10 feet – essentially an underground room to hold feces. This is 20 times larger than what the WHO recommends. People want such large pits because they don't want to deal with cleaning the feces, an attitude that stems from notions of feces being “unclean” and caste associations with those who clean latrines, rather than from legitimate health concerns. The Indian government has responded to this excessively high aspiration by increasing the subsidy for toilets to 12,000 INR, but what is really needed is a shift in mindsets. Simple latrines are an immediate and affordable way to move away from open defecation, so people must be convinced that they are safe, good for health, and desirable.

establish a fund for experimentation

It is time to acknowledge that what has been tried in the past to promote latrine use has not worked for most of the country, and that continuing to do more of the same will not lead to better outcomes in the future. There will be no single answer to solving the challenge of open defecation in India. Instead, different solutions will work in different places, for different people.

Newly pledged funds, both from the government and corporations, must be directed towards experimenting with new strategies, with each entity adapting its unique skills to promote latrine use. India's best and brightest must come together to find new ideas to this age-old problem. Marketing specialists, NGOs, local government workers, corporations, and researchers are needed to target messages to those who need to hear them, and figure out which strategies are most effective at convincing people to use latrines.



what can the SQUAT survey tell policy makers?

Open defecation in rural India is a unique human development emergency. Standing in contrast to the importance of reducing open defecation are the preferences for open defecation that the SQUAT survey found. Few households build affordable latrines; many people who own latrines nevertheless defecate in the open; and people who own government-built latrines are particularly likely to defecate in the open.

Latrine construction alone is not enough to substantially reduce open defecation in the northern plains states where it is concentrated. However, the insufficiency of building latrines does not excuse the government from responsibility.

Achieving a clean India will require a large scale campaign to promote latrine use, the engagement and efforts of every individual to make open defecation unacceptable, and the willingness to experiment and learn what the most effective solutions will be.

for further reading...

If you only read these six pages, you're missing out! This Policy Brief has offered only a peek at the evidence and conclusions in the full research paper, "Revealed preference for open defecation: Evidence from a new survey in rural north India," published in the September 20, 2014 edition of the *Economic and Political Weekly*, or available online at squatreport.in. Although there is not space in these few pages to fully cite all of the important prior work on which this study builds, we acknowledge the following works with gratitude, and we suggest them to a reader interested in better understanding the challenges that substantially reducing open defecation in the plains states of rural north India will have to overcome:

- Barnard, *et al.* 2013. Impact of Indian Total Sanitation Campaign on Latrine Coverage and Use. *PLOS ONE*.
- Galbraith and Thomas. 2009. Community Approaches to Total Sanitation. UNICEF.
- Patil, *et al.* 2013, A randomized, controlled study of a rural sanitation behavior change program in MP, India.
- Perez, *et al.* 2012. What does it take to scale up rural sanitation? WSP: World Bank.



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