culture and the health transition: the case of sanitation in rural north India

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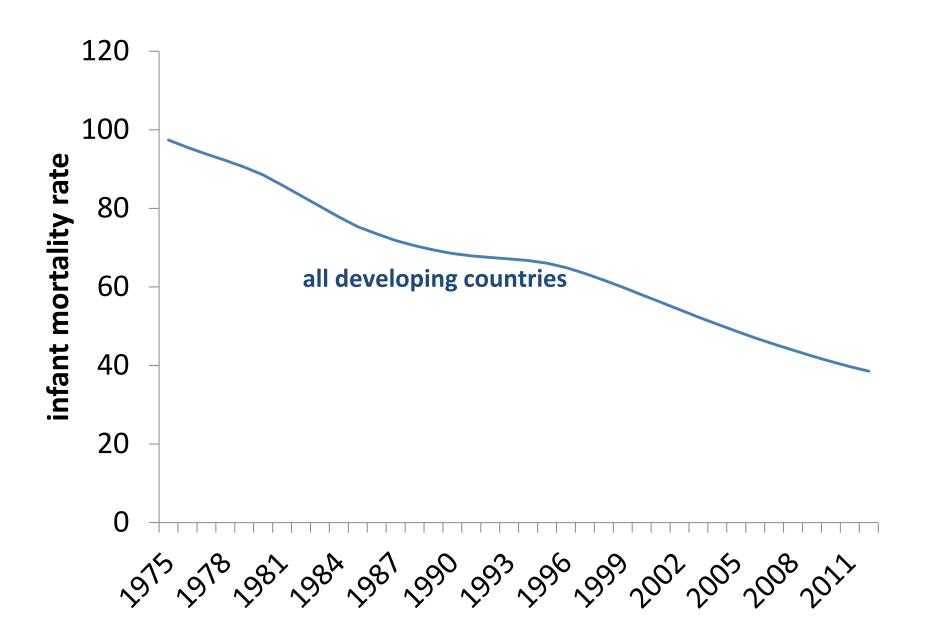
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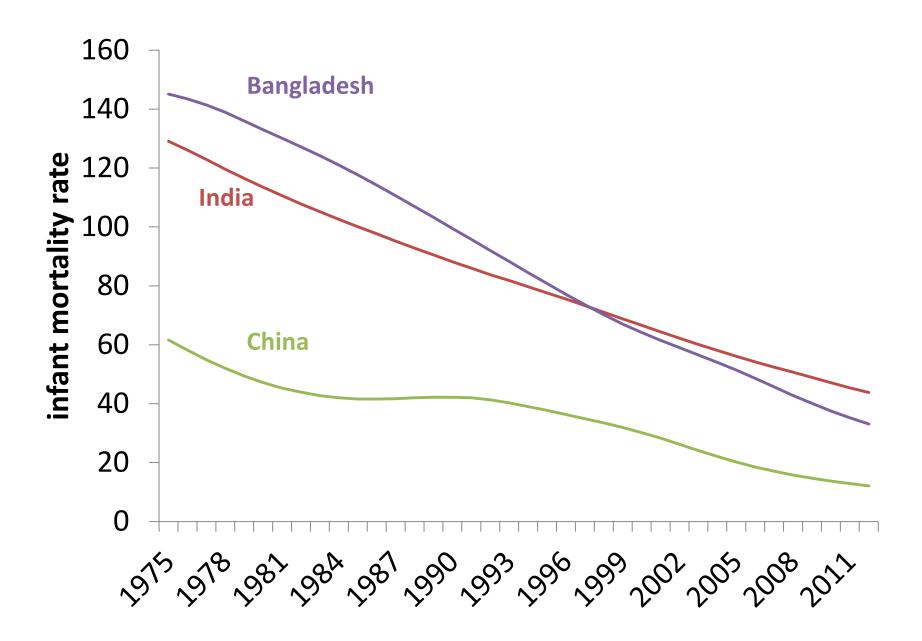
research institute for compassionate economics

how have some societies moved from high mortality and morbidity to low mortality and morbidity?

one: explaining health transitions



Source: World Bank World Development Indicators

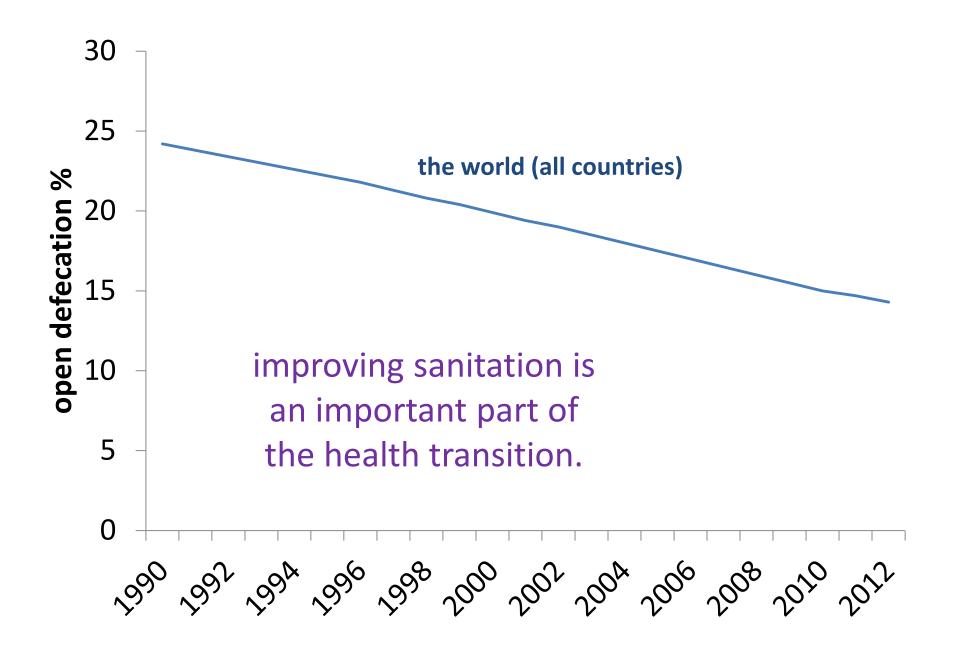


Source: World Bank World Development Indicators

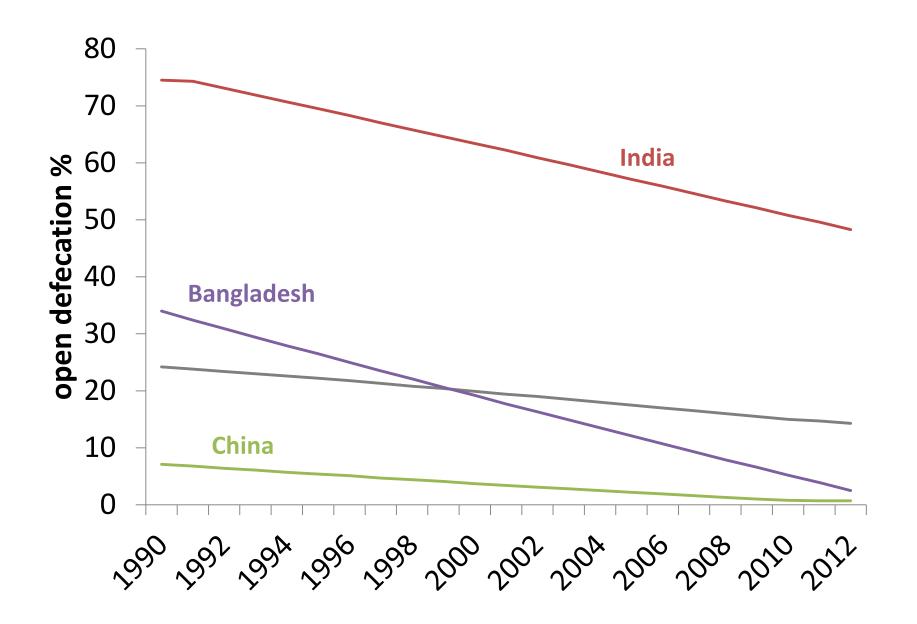
many possible explanations

- income & nutrition (McKeown, 1965)
- women's education (Caldwell, 1986)
- public health interventions (Szreter, 1988)
- understanding infection (Preston & Haines, 1991)

does culture **interact** with these factors to explain differences in the rate of transition?



Source: Unicef-WHO JMP



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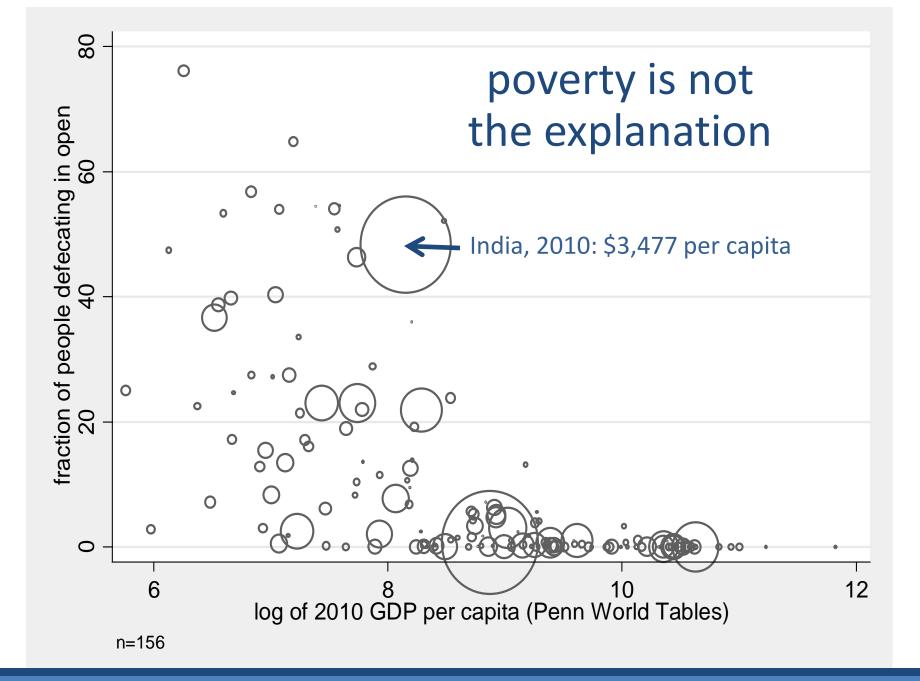
can culture explain why economic growth and development in India has translated into such a slow transition to latrine use?

why has economic growth and development not translated into improved sanitation?

two: open defecation in India

open defecation in India

- 53% of households in India defecate in the open (Census, 2011)
- 4% of households in Bangladaesh defecate in the open; in Nepal 35%; in Pakistan 23% (DHS, 2011)
- 89% of Indian households without a toilet are rural (Census, 2011)
- 60% of people who defecate in the open in the world live in India (JMP, 2012)



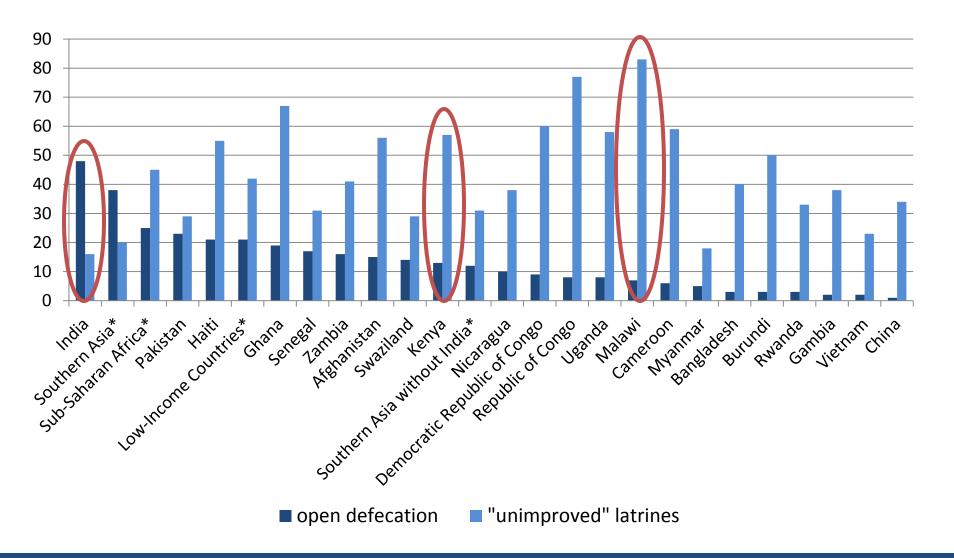
Kenya





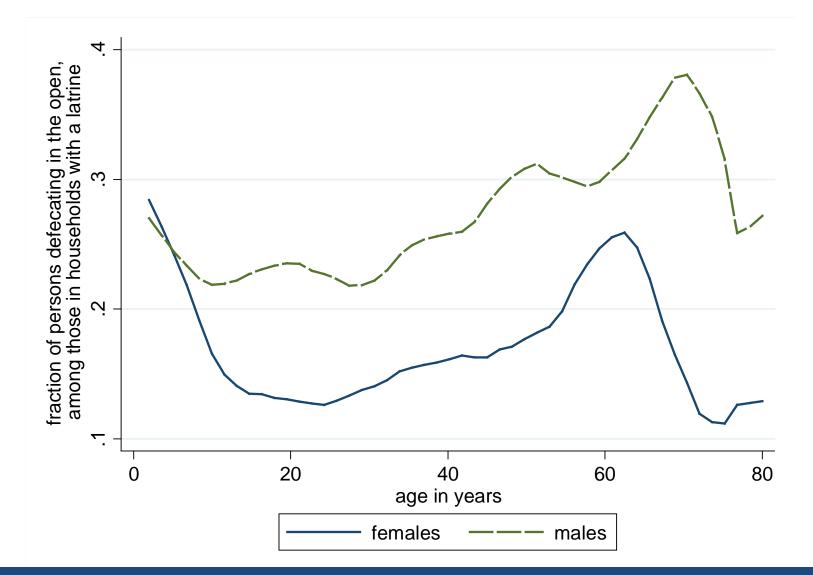
Bangladesh

low demand for use of simple latrines

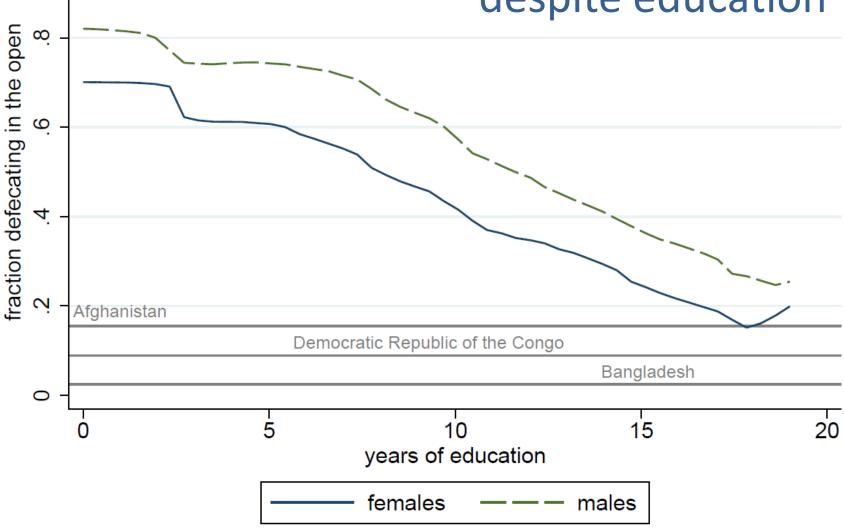


source: UNICEF-WHO JMP

open defecation among toilet owners



open defecation despite education





BBC

bharata bharati

MOBILE TOILET!

INDIA HAS NOR NOULS NOR NOULS

culture?

can culture explain India's exceptionally slow translation of development into better sanitation?

culture shapes the meaning of sanitation behaviours to people in rural India:

- open defecation means living a wholesome and healthy rural life
- accumulating feces in a latrine near one's home means impurity and pollution

three: research methodology

we are not the first to notice cultural roots of Indian open defecation

- O'Reilly, 2014; Ahmed et al., 2010
- V.S. Naipaul: An Area of Darkness
- Gandhi

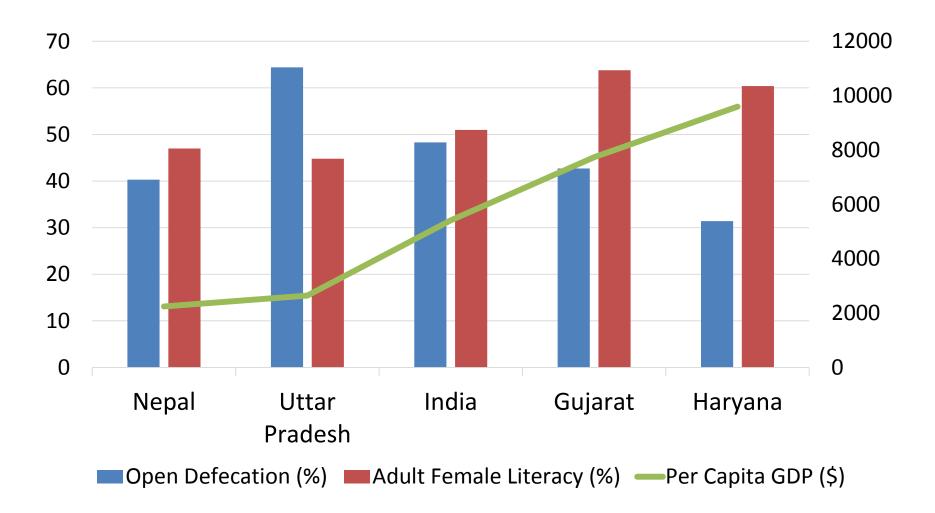
 we believe that we are the first to do a rigorous qualitative study advancing culture as an explanation for sanitation behaviour in this region

purposive sampling

- region: chose 4 regions for socioeconomic and sanitation diversity
- **district**: chose 1 district per region in which the change in rural OD best matched the state change from 2001-2011
- village: chose 4-5 villages per district in which the DLHS 2 sanitation was closest to the 2011 sanitation for the state (randomly in Nepal)
- household: chose 4-6 households per village using field randomization as in the ASER survey



context: four study regions



data collection & analysis

- data: 99 semi-structured interviews
 - one third practice open defecation
 - two thirds have at least one person who switched from open defecation to regular latrine use in the last 10 years
 - 60-90 minute recorded interviews in Hindi, Gujarati and Bhojpuri
 - interviews in teams of 2 or 3
- research strategy: grounded theory approach (Strauss & Corbin, 1998; Charmaz, 1983)
- analysis: coding and memoing by hand

open defecation means wholesome, healthy rural life

four: pulls to open defecation

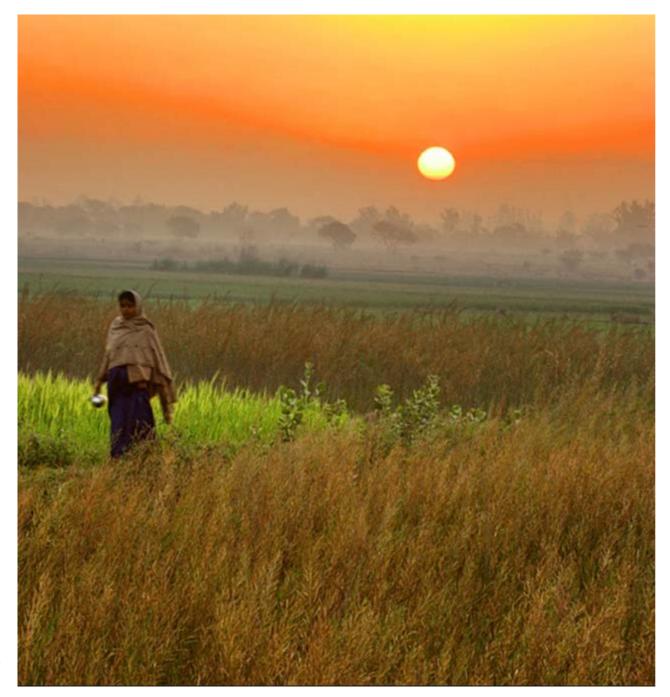


Photo credit: Gaurawa Kumar

"People here do not use latrines. They said that we'll go early in the morning...there are orchards, there are mango trees all around. When they go there early in the morning before sunrise, when they go to defecate early in the morning, at four in the morning, waking up at four in the morning, at four...then getting up while it is still dark everyone gets some fresh air as well. This is the culture in the villages that people should at least wake up early in the morning, before sunrise, and having woken early, we should then go for a walk and then go in the fields there itself..."

"Some five to ten people in the village have latrines but they do not use it because people only use latrines who are sick and so are not able to go out and defecate in the open. Only in such a condition does a man use a latrine. Otherwise you should comfortably go, comfortably go and take in the clean outdoor environment, take in some fresh air, and then return home. Village men are strong because they work in the fields and because there they also get fresh air. If you have a latrine, and a place for bathing, and you defecate in your house, and you do not take a walk anywhere, you do not get out, then you will have pains in your body."

22 year old man, Gupta, Nepali terai (ns8) defecates in the open, has no latrine

"Going out and defecating in the open is best! And I am able to relieve myself nicely in the open...I find using a latrine disgusting, I feel like vomiting. If I go out in the fresh air, I am able to relieve myself to my satisfaction and I feel happy in my heart."

54 year old man, Koli Patel, Gujarat (ns 1) defecates in the open, has no latrine

"In the city, you have medicines, in the village, you have fresh air."

48 year old man Mauriya, UP (s11) both uses his latrine and defecates in the open

"In the summer, you can get some fresh air, and some peacefulness [when you defecate in the open.] If you're cooped up in the house all day, then you go outside and your mind and body get refreshed. There is this benefit of going outside [to defecate]."

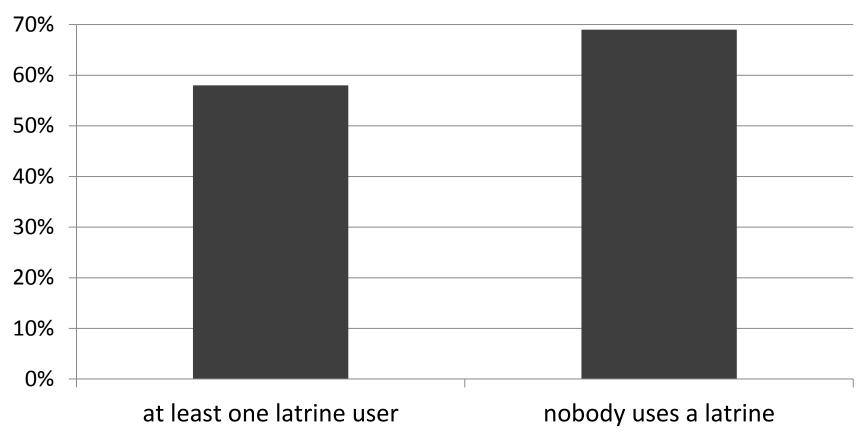
30 year old woman Muslim (Siddiqui), UP (s9) has a latrine sees benefits of both latrine use & open defecation

"I do not want to go inside the latrine... one benefit of going out in open is that one can have some exercise and the second is that all the impurities of one's breath get out... but if one eats and drinks and goes to the latrine in the house one would not live long.... this is the reason why people in the villages live long—for 100 years—and the people in the cities live only 60, 70, 80 or 85 years."

72 year old man, Harijan, Haryana (s4) defecates in the open owns a latrine, is a retired army officer

most people think open defecation is healthier than latrine use

% claiming open defecation is healthier than latrine use



latrine use means accumulating pollution and impurity near the home

five: pushes from latrine use

"Yes, the *pradhan* wanted to give me a latrine, but I didn't take it. I don't have so much space, and as you can see I have Lord Shiva's temple in front of my house, there is also Barhamdev baba's temple. And so if I get a latrine built here, I would not like it...Brother, I do not like that [having a latrine inside the house] either, if these things are in the house then they pollute the house. I really don't like that...I am the kind of person who lives in a clean and pure place, I feel polluted in having a latrine. It gives off bad smells, the smell of dirtiness [feces] will come."

45 year old man, Brahmin, Uttar Pradesh (ns2) defecates in the open was offered a government latrine and refused "In cities, there is a kitchen, a bathroom and a toilet in the same place, and this should not happen."

60 year old woman, Rajput, Haryana (ns2) defecates in the open, has no latrine

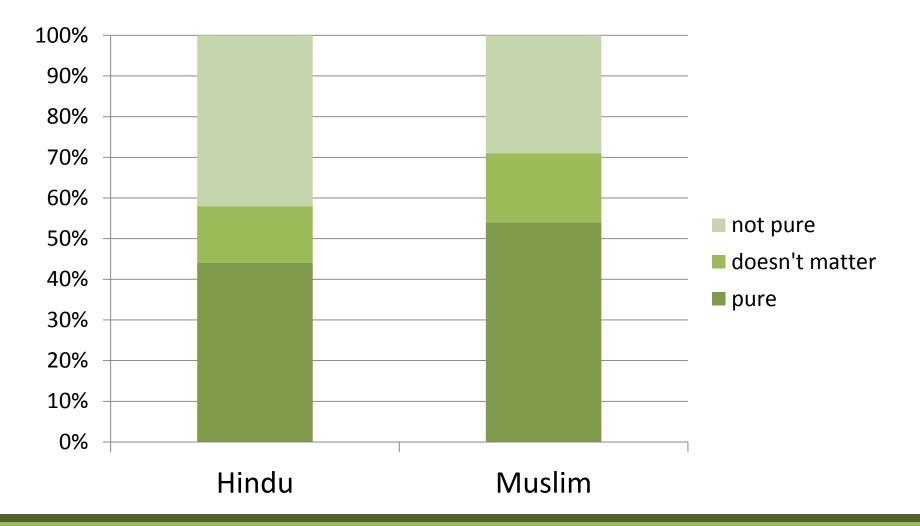


"[By defecating in the open] one can stretch the body, one can go out for a walk. You can also prevent yourself from getting diseases. If a latrine is in the house, bad smells will come, germs will grow.

Latrines in the house are like...hell. The environment becomes completely polluted. There is no benefit of lighting a *diya*, no benefit at all."

22 year old man, Gawd, Haryana (ns5) defecates in the open

Hindus are more likely to consider a latrine near the house to be impure than Muslims



source: SQUAT survey

"The way of life varies place to place. For all the Muslims it is fine [to use a latrine]. But Hindus are always headed outside to defecate in the open... only they know why they do this.

[Objecting to her son's interjection] It's not that it is something that's left over from the old days! **Even if**

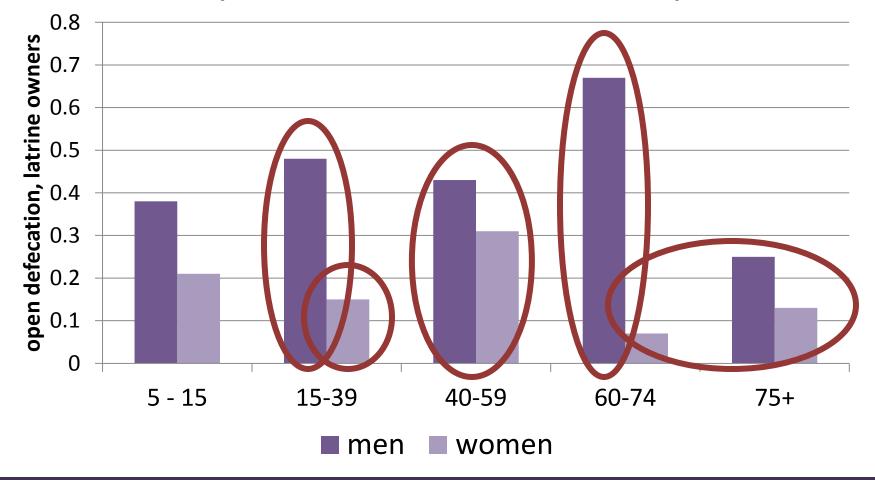
Hindus have made a latrine, still they go out to defecate in the open. Now for our people [Muslims], it's not a problem [to use a latrine]. If we have a latrine in the house, we will use it."

70 year old woman Muslim (Sheik/Siddiqui), Uttar Pradesh owns and uses a latrine

six:

how can we understand the latrine use and latrines that do exist?

over ¹/₃ of people with a latrine do not use it 56% of households with a latrine have at least one person who defecates in open



"[I built a latrine] because of my boy. He has polio, from childhood, it was bothersome. It was a problem, going, coming back here, going far. He couldn't walk."

30 year old woman, Dhanuk, Uttar Pradesh (s7) has a latrine, does not use it

"We have the fields and the jungle, which are good...here people who can walk go there. Those who can't walk will use latrines. We can walk to the fields, so we go there."

26 year old man, Harijan (Passi), Uttar Pradesh (ns7) received a government latrine with IAY, used the materials in the house

"For the old people, like this old lady [signaling her motherin-law] she couldn't walk, so we made [the latrine] for her. Tell me brother, where would this old lady go? And for little kids, or if a woman has given birth and she can't go outside. After a baby is born she will defecate inside the house."

53 year old woman, Chamar, Haryana (s3) has a latrine, sometimes uses it the latrines that people make & use are very expensive



Haryana (s6)



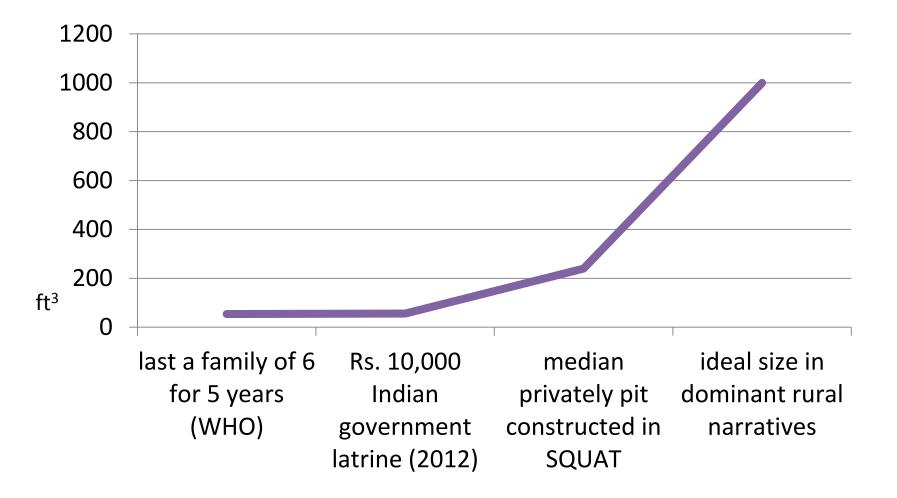
Nepal (s7)





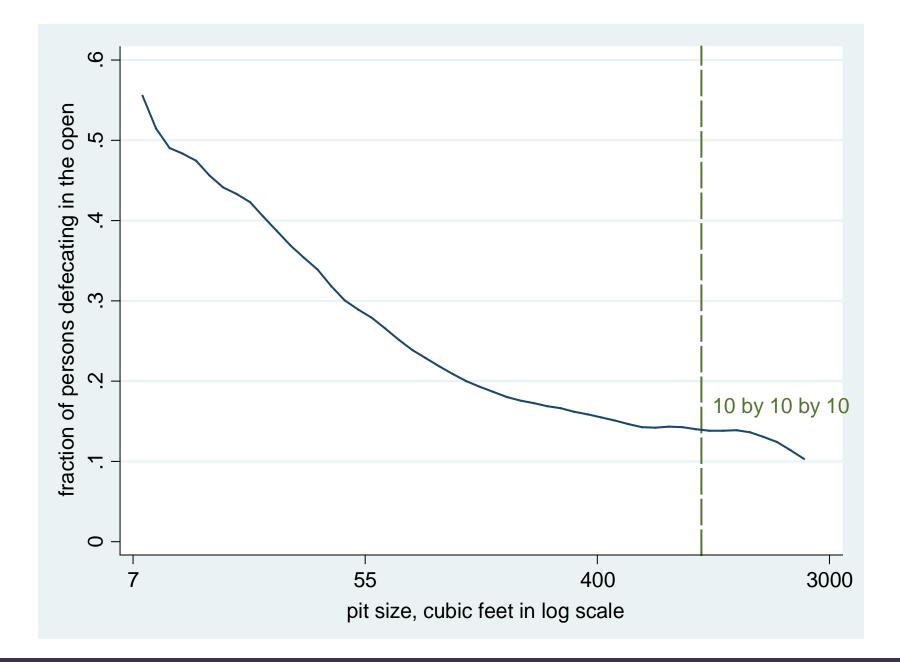


how big should a pit be?



"If the latrine pit is small, then it will fill up fast, no? That's why some people don't use it. I mean, the women of the house use it and the men go outside. That's why a lot of people prefer not to use a latrine."

23 year old woman, Mauriya, Uttar Pradesh (ns8) defecates in the open, has no latrine grew up in a city using a latrine, married into a village



source: SQUAT survey



manual scavenging illegal since 1993





declined from 13 million (2001) to 0.8 million (2011) "You'll only have to get a big pit cleaned after 50 years...with a little one you'll have to call someone over and over."

38 year old man Yadav, UP (s15) has a latrine with a 10X10X10 pit "No one lives forever."

65 year old man, Muslim, Shah, UP (s6) supervised the construction of his nephew's 10X10X10 septic tank

"If we made [the pit] less expensively, it would not last a lifetime."

30 year old woman, Doriya Patel Gujarat (s15) has an 8X8X7 foot septic tank

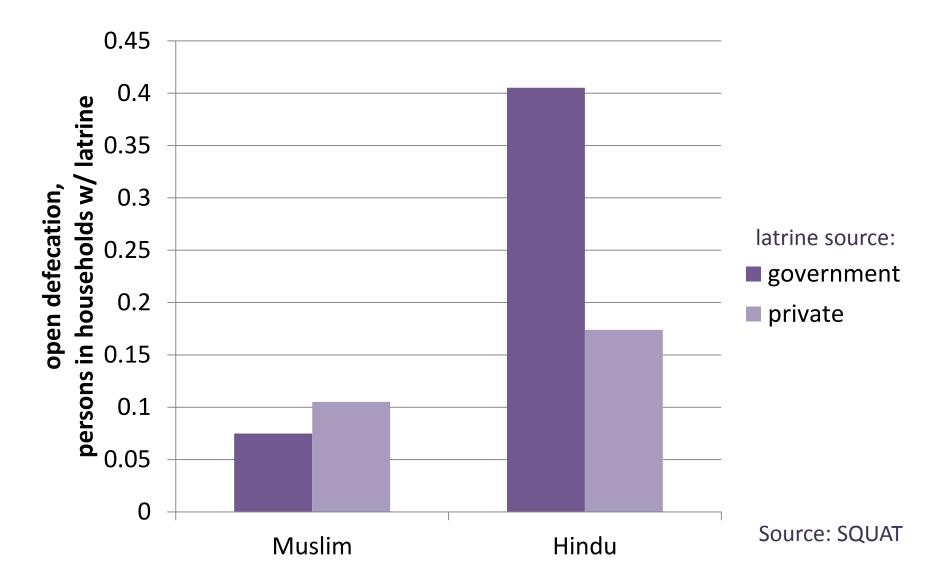
"The [latrines] that you get from the government are no use, they are so small...their pits are so small that in two or three months they will fill up. There will be bad smells and filth in the surroundings. For Adivasi people, who don't have much land, wouldn't they make a house rather than a latrine? [If they made latrines] it would be dirty."

34 year old man, Koli Patel, Gujarat has two latrines with large pits, uses a latrine

"The *pradhan* made this [latrine]. If we'd made it, we'd have made it the way we wanted. All of this Indira Vikas money has come, so the *pradhan* has made it. But he only got a very little pit dug. If we made it the way we wanted, then wouldn't we have used a whole room full of bricks? How can a poor man...? It costs 20 or 25 thousand rupees [make a latrine]."

30 year old woman, Harijan, Uttar Pradesh (s7) has government latrine children use it, she does not, will seal it when they are older

aversion to government latrines is concentrated among Hindus



effective government practices must focus on changing these cultural meanings

summary: how can policy help?

summary

culture shapes the **meaning** of sanitation behaviours to people in rural India:

- open defecation means living a wholesome, healthy rural life
- accumulating feces in a latrine near one's home means impurity and pollution
- the reasons that some people make latrines and use latrines will not readily translate into reducing open defecation in the rural population

government sanitation programs

TSC

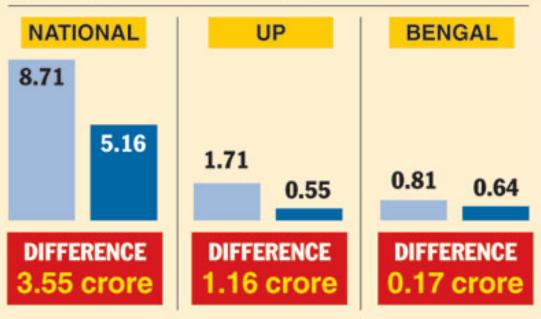
Census

Figures in crore

The Telegraph, 2012

THE FLUSH BLUSH

Number of latrines, according to the Total Sanitation Campaign (TSC) and the census





defunct government latrine, UP

continued focus on construction

W.11039/01/2014-NBA Government of India Ministry of Drinking Water and Sanitation (NBA Section)

12th Floor, Paryawaran Bhawan, CGO Complex, Lodhi Road, New Delhi – 110003. Dated: 4th July, 2014

То

Secretaries/Principal Secretaries In-charge of Rural Sanitation in All States/UTs

Subject : Agenda for first 100 days of new Govt. in respect of Nirmal Bharat Abhiyan (NBA) targets to States/UTs-reg.

Sir/Madam,

This Ministry has finalized targets for the first 100 days of the new Government under various components of Nirmal Bharat Abhiyan (NBA). Consequently targets have been fixed for each of the States/UTs to be achieved by 31st August, 2014. As five months of this financial year would have elapsed upto 31st Aug' 2014, these targets are set at five sevenths of the targets agreed during the AIP discussions. The details of the Annual Targets and 1st 100 days targets for each component is

what sort of public practice is going to bring about cultural change?

how can we make latrine **use** acceptable and desirable?