

Link between Sanitation and Stunting

What is the issue?

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Results of different studies involving the impact of sanitation on stunting has implications for India.

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What is Stunting?

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- Stunting is a complex problem which is related to the low height of the children with respective to their age. \n
- The factors which believed to implicate stunting are prenatal health, breastfeeding and diet.

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• Researchers have homed in on an alternative hypothesis, that poor sanitation plays a greater role in stunting, because faecal bacteria and parasites deprive the child of nutrition.

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- Various trails showed that intestinal inflammation, possibly caused by exposure to faecal germs, is correlated with stunting. \n
- Children in richer South Asian countries are shorter on average than those in poorer Sub-Saharan African countries, and no intervention so far has closed this gap.

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- Much of the height variation among those regions could be explained by differences in open defecation rates \n

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What was the results of the study conducted in this regard?

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• WASH, this study was made with trials, which implemented water, sanitation and hygiene (WASH) interventions in Bangladeshi and Kenyan villages for two years.

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- \bullet The WASH interventions included replacing poor-quality toilets with improved ones, chlorinating drinking water, and promoting hand washing. \n
- This was an effort to prevent stunting (low height for age) seen in children under two years in developing countries. $\gamman{\label{eq:constraint} \begin{aligned} \label{eq:constraint} \end{aligned} \end{aligned} \end{aligned} \end{aligned}$

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- When the trials ended, researchers found these children were not taller than those who did not receive these interventions, this is because the study required atleast two generation of trails. \n
- The findings are a setback to the hypothesis that improving sanitation can thwart childhood stunting, but the findings has given various insights on developing countries.

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What are the important insights of the study?

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• India is the only country today in which over 50% of the rural population still defecates in the open.

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- Bangladesh, while close to India in population density, brought down open defecation rates from 42% in 2003 to just 1% in 2016. $\nprotect{\scale}$
- Only around 3-9% of the participants in the trial in Bangladesh, and less than 5% in the trial in Kenya, defecated in the open. n
- Even in countries like Bangladesh, poor-quality toilets can cause heavy faecal contamination, Villages saw high rates of both contamination and stunting \n
- The study also showed that open defecation had a stronger impact on height when population density was higher, as is the case of India.

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What are the implications for India?

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• India introduced Swatch Bharat Abhiyan (SBA) to eliminate open defecation by 2019.

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• National Family Health Survey reports shows that open defecation still remains quite common in rural India and its distribution across districts looked pretty similar to 2011.

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- This proves India's Swachh Bharat Abhiyan (SBA) it is difficult to change people's sanitation habits.
- Thus programmes like the SBA that focus on constructing toilets can't do much in the face of deep-rooted cultural beliefs about open defecation. \n
- If behavioural change campaigns are not initiated to tackle the problem, Indians will continue to defecate in the open even if they get toilets for free. \n
- Against this backdrop, the Bangladesh study is significant because it did succeed in changing participant behaviour. \n

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Source: The Hindu



