# What Uttar Pradesh tells us about health infrastructure

The death of children in the recent Gorakhpur tragedy has drawn significant attention towards the state of public health institutions in Uttar Pradesh (UP). While much of the focus remained only on Gorakhpur, our analysis shows that within the state, the public health infrastructure is far worse than Gorakhpur in most districts. We have developed an index of public health infrastructure for each district of India by combining measures of quantity and quality of public health infrastructure available. According to this index, Gorakhpur ranks 19 out of 71 districts (census 2011) in Uttar Pradesh. This implies that the disease in the public health system of UP is much worse than symptoms like Gorakhpur reveal.

In our index, we combine information on quantity and quality of public health infrastructure. For measures of quantity, we use actual availability of sub-centres (SC), primary health centres (PHCs), community health centres (CHCs), sub-division hospitals and district hospitals in the district. Additionally, we also use distance to nearest SC, PHC and CHC from each village within the district. There are clear benchmarks for provision of public health infrastructure based on population. Against these benchmarks, government data shows that UP has a shortage of 33% SCs and 35% PHCs. Gorakhpur is significantly better than the state average in this regard.

In terms of CHCs, however, there is an obvious red flag that emerges for UP. The state has a suspicious surplus of 190% CHCs compared to what is required. The data shows that most of these CHCs were constructed in 2014 and 2015. Further scrutiny shows that these CHCs have a severe shortage of human resources and basic infrastructure. Less than half these CHCs have a functioning X-ray machine. Fundamentally, this suggests gross misallocation of resources and wastage of public funds.

The picture looks grimmer when we consider the drastic shortage of human resources and basic infrastructure required to run public health institutions effectively. The data from the government's Rural Health Statistics—2016 shows that there is an overall 84% shortage of specialists, 77% shortage of lab technicians and 89% shortage of radiographers in the CHCs of UP. There are similar shortages in SCs and PHCs in the state as well. Almost 91% of the PHCs do not have a lady doctor on duty and 60% do not have a functional operation theatre. Many of the PHCs and CHCs do not have regular supply of drugs for common ailments. The data shows that one of the leading causes of death in UP is diarrhoeal diseases. This raises concern about the ability of the public health institutions to treat common ailments such as diarrhoea.

UP, Bihar, and Jharkhand are the lowest ranked states in terms of overall quantity and quality of public health infrastructure in India. It is striking that the worst performing districts of Chhattisgarh, which is ranked second among the 21 big states, are comparable to the best performing districts of UP, Bihar and Jharkhand. This disparity across states might have several underlying causes but it also reflects systematic neglect of public health in some states. UP's per capita public spending on healthcare in 2015-16 was less than half of Chhattisgarh's. Moreover, within UP, some districts such as Kushinagar have hardly any rural health facilities at all. Citizens probably need to travel to nearby districts for most basic healthcare.

In the overall ranking, the top 5 states are Jammu and Kashmir, Chhattisgarh, Gujarat, Karnataka and Rajasthan, while the worst six states are Bihar, Jharkhand, UP, West Bengal, Odisha and Haryana. Disaggregating the data further shows that while Gujarat has relatively lesser quantity of public health infrastructure than Kerala, it has significantly higher quality as measured by availability of doctors, nurses, supply of drugs, etc. This makes the overall condition of public health infrastructure of Gujarat superior to Kerala. Similarly, Delhi has more public health infrastructure than most states, but the relative quality is poorer than several large states.

The lesson of the story is that healthcare cannot be about real estate and construction alone. While there has been a massive drive to expand the quantity of public health infrastructure in India, particularly in rural areas, the focus must urgently shift to staffing of doctors, nurses, technicians, availability and maintenance of equipment and supply of drugs. The long-term quality of local public health infrastructure will also be fundamentally determined by the governance reforms that we introduce in this sector.

Health being a state subject offers great opportunities for experimentation in this regard. For instance, some states have chosen to empower their medical officers. These states, for example Kerala, have given greater authority for decision-making to their medical officers and also, therefore, hold them more accountable. In many parts of India, however, most local decisions are routed through the district magistrate's office. This is inefficient and undesirable for sustained improvement of public health institutions in these states. There are several such examples of good governance and best practices available within the country and that could be adopted by the states that are struggling with the knotty problem of poor public health systems.

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*This is the second in a four-part series on reforms in the healthcare sector. To read the first part, 'Restructuring the Medical Council of India to eliminate corruption', click here.*

*Comments are welcome at theirview@livemint.com*

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