## Antimicrobial Resistance Can't Be Tackled By Just Reducing Antibiotics Consumption

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The prevalence of antibiotic-resistant organisms which are responsible for triggering various conditions is associated with numerous social and environmental determinants, such as inadequate hygiene, unsanitary water, and greater corruption, a study issued in the journal Lancet Planetary Health says. The research, carried out by researchers at the Center for Disease Dynamics, Economics and Policy (CDDEP), demonstrated that improved governance and infrastructure are strongly linked to lower levels of AMR (AntiMicrobial Resistance). Better governance encompasses less corruption, more political balance, the rule of law, and lack of violence. On the other hand, the infrastructure framework consists of sanitation, potable water, Internet connectivity, urban development, and electricity access even in remote areas.

Reducing antibiotic consumption is not enough to curb antimicrobial resistance (AMR)

While it is commonly known that antibiotic use boosts the onset and continuation of antimicrobial resistance, the researchers identified that antibiotic intake was not substantially correlated with higher antimicrobial resistance rates.

Minimizing use of antibiotics is not enough to curb antimicrobial resistance because infection, the propagation of resistant strains, may be the dominant factor, the investigators pointed out. "While it is important to reduce antibiotic consumption, we must remember that resistance genes are already widely disseminated in the environment," said Ramananan Laxminarayan.

"Preventing the transmission of resistant pathogens through investments in improved water and sanitation and primary health care are critical to our ability to cope with antimicrobial resistance," the researcher added.

Highest AMR rates recorded in countries with greater corruption and poor public health infrastructure

The research, which was based on economic and public health data of 73 countries, revealed that nations with higher bribery and reduced expenditure on public health infrastructure have the highest rates of antimicrobial resistance (AMR).

"There are no magic bullets here. Any new antibiotics will face the same challenges as the existing ones, and resistance will quickly emerge unless we tackle the problems of improving the health system," stated Ramananan Laximinarayan. Thus, the researcher added, to reduce global antimicrobial resistance (AMR) better governance and improved public health infrastructure are needed.