Exploring Salinity-Linked Health Risk and Community Health Services in Coastal Bangladesh: A Way to Placed-Based Resilient Health System Approach

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Saline intrusion poses a significant threat to public health in coastal Bangladesh. The study was conducted in seven coastal villages in the Gabura Union of Satkhira District in Bangladesh. It aimed to assess the impact of water salinity on health and healthcare delivery. Data were collected from a mixed approach covering simple random sampling for quantitative data through 400 household surveys and 7 focus group discussions for qualitative data in different age groups. The findings revealed a link between salinity exposure and a range of health problems, including gastrointestinal diseases, malnutrition, respiratory infections, hypertension, pregnancy complications, low birth weight, skin diseases, and kidney diseases. The study also illuminated the significant socioeconomic and health-related challenges faced by these communities, emphasizing the pressing need for resilient public health strategies to address the saline intrusion. Our study proposed a place-based resilient health system approach to customize public health services to the specific needs of a community. This tailored intervention could help to mitigate the most pressing issues effectively by optimizing limited health resources despite having unique geographic challenges of this region.

Keywords: Salinity, Health impact, Coastal, Bangladesh, Place-based, Health System