

Population Health, Systems, and Climate Change in the G5 Sahel Region

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Research Question: How does climate change impact the population health of the G5 Sahel and how can health systems prepare themselves?

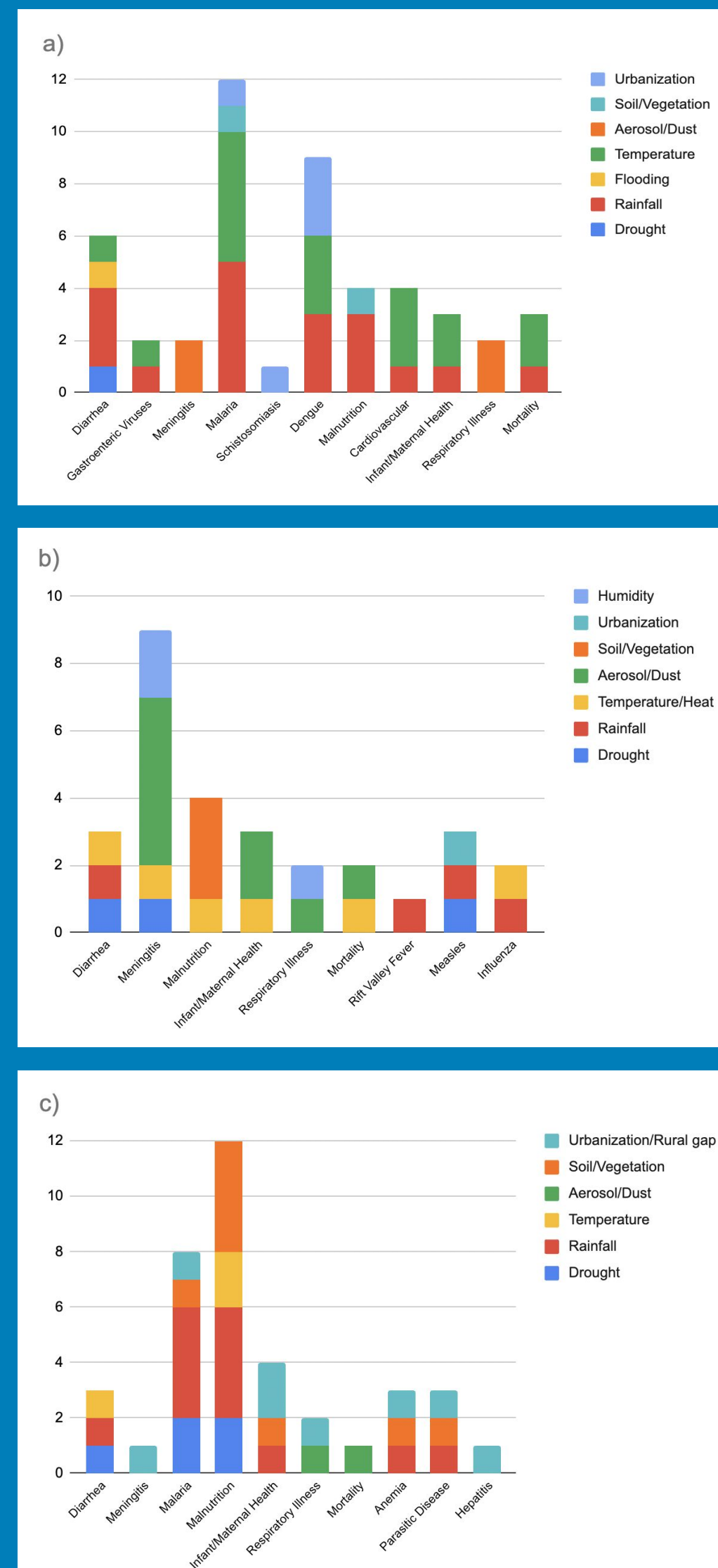
BACKGROUND

Certain countries are more vulnerable to climate change, including the G5 Sahel region of northwestern Africa, which includes Mauritania, Mali, Burkina Faso, Niger, and Chad.¹ The Sahel region is “a loosely defined strip of vegetation that separates the Sahara desert from the tropical savannahs to the south. The region is used for farming and grazing, and because of the difficult environmental conditions at the border of the desert, the region is very sensitive to human-induced land-cover change.”² The G5 Sahel countries face similar climate challenges and political and economic ties, so it is important to understand the implications of climate change on population health, systems, and policies. There are many studies that examine the relationship between climate, population health, and health policy, but to our knowledge there is no review besides reports with general information, and there is not a good understanding of current gaps in the literature. Key stakeholders should have specific information on this topic so they can build resilient health systems and practices for future climate scenarios.

DESCRIPTION OF ORGANIZATION

This study was conducted under the mentorship of individuals from École des Hautes Études en Santé Publique (EHESP), a public health institute in Rennes France. The mission of EHESP is to provide training to future leaders in public health, provide a network of higher education in public health, contribute to public health research activities, and develop international relations through exchanges with other institutions (reference).

TABLES



METHODS

We performed a rapid literature review with a narrative synthesis and weighted thematic analysis. Databases like PubMed, WHO, FAO, UN, and other organizations were used. Relevant keywords, such as country names, climate risks, diseases, and health system buzzwords were used to identify relevant sources for analysis.³ Papers published prior to 2010 were not considered. After an initial search, papers were further screened to ensure relevance. Each paper’s “climate theme x population health theme” was given a point to illustrate the prevalence of each thematic intersection, while the healthcare subtopic employed a primarily narrative synthesis.

The study found that the prevalence in literature of climate and disease themes varies by country, though there are significant gaps considering climate risks to the region. The Sahel countries have implemented policies aimed at reducing the impact of climate change on their healthcare system, but challenges related to funding and implementation continue to persist, leading to significant gaps in essential health service provision in the region.

DISCUSSION

The study's implications for public health research and programs are significant, but limitations such as the scarcity of data, potential oversimplification through narrative synthesis, incomplete database coverage, and simple weight system could lead to an incomplete or one-sided view of the relationship between climate change and health systems in the G5 Sahel countries. Additional research methods and a more comprehensive approach may be needed to gain a deeper and more complete understanding of this complex issue.

REFERENCES

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