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PHILIPPINES

CLIMATE CHANGE AND HEALTH SYSTEM RESPONSE

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The main objective of the study was to gather evidence on climate change and its impacts on health in South Asia (SA), South-East Asia (SEA), and the Pacific Islands (PI). The study was conducted in collaboration with esteemed partner— Asia Disaster Preparedness Centre (ADPC).

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INTRODUCTION



The Philippines faces significant challenges due to its susceptibility to natural disasters¹, along with annual economic loss ranging from 0.7 to 1% of the GDP and affecting 74% of the population. Climate change exacerbates these risks^{2,3}, impacting urban areas and contributing to the health crises⁴ through rising temperatures, amplifying heat-related illnesses, and aggravating the spread of vector-borne diseases. Additionally, extreme weather events linked to climate change pose direct

threats to the health infrastructure, disrupting healthcare services and increasing incidences of injuries and infectious diseases. For example, there was an 85% increase in dengue cases in 2023, due to the extreme events⁵.

The substantial threat that climate change poses to public health, necessitates viable strategies⁶. Environmental and social measures targeting climate-sensitive diseases, alongside fortification of the healthcare systems are essential for both prevention and treatment in changing climate conditions⁷. As health systems form the foundation of individual and community resilience, collaboration across sectors is crucial to manage climate-related risks.

Serving as the first line of defense, healthcare and public health services require restructuring to meet immediate and future challenges. Recognizing the urgency, governments globally are prioritizing climate-change from a healthcare lens across agencies. Coordinated efforts between the health sector and the stakeholders, under a unified climate change strategy are imperative in navigating the intersection of public health and climate change, ensuring a resilient future for the Philippines⁸.

This policy brief aims to address Philippines' primary focus on addressing climate change within the context of health risks and evaluating the capacity of the country's health system to respond effectively. It delves into the recommendations required to navigate and mitigate the impacts of climate change, considering the existing state of the health system.

CHALLENGES



The challenges related to the impacts of climate change on health in the Philippines are multifaceted and require urgent attention. Existing research exhibits significant evidence gaps, including:

- 1. Limited sample sizes:** Despite diverse research topics, studies on climate change and health in the Philippines often rely on small sample sizes, compromising the generalizability of findings and statistical robustness.
- 2. Urban vs rural communities:** While heat-related health risks in urban areas are studied, there is a gap in comprehensive research on rural communities, neglecting unique vulnerabilities and healthcare dynamics in those areas.
- 3. Limited disaggregated data:** The existing evidence lacks comprehensive data by gender and age, hindering nuanced insights into how climate change impacts vulnerable groups like women, children, and elderly and disabled populations.
- 4. Lack of evidence on food-related illnesses:** The existing literature falls short in providing substantial evidence on how climate change influences food-related illnesses in the Philippines—a critical aspect of understanding health risks.

- 5. Zoonotic diseases and climate change:** A gap exists in exploring connections between zoonotic diseases and climate change, impeding preparedness efforts for potential disease outbreaks with changing climate patterns.
- 6. Effectiveness of water and sanitation interventions:** Despite mentions of water and sanitation improvements, there is a lack of research in evaluating their effectiveness in reducing waterborne diseases, which is crucial for informed health infrastructure investments.
- 7. Lack of national-level data:** The review lacks national-level data that is essential for a comprehensive understanding of how climate change impacts diverse demographic groups; thereby hindering the development of targeted public health strategies

In addition to research gaps, other critical gaps exist as well. For instance, it has been observed that climate change exacerbates malnutrition in the Philippines; even under normal circumstances⁹, the cost of providing a nutritious diet is beyond the means of lower-income families. Child stunting and underweight percentages remain significant, especially in areas prone to climate-related hazards^{10,11}. The rise of non-communicable diseases (NCDs) is also alarming, yet preventive and promotional services specific to

this growing health concern are lacking, contributing to a potential health crisis^{12,13}.

There are barriers to accessible healthcare, particularly for indigenous peoples, who endure both poverty and isolation in climate-change incidents. Along with that, indigenous-specific data is also scarce which hampers targeted planning¹⁴. The broader health system grapples with shortages in facilities and personnel, a deficiency in comprehensive long-term care policies, and an urban healthcare imbalance. Financial sustainability and governance issues that were revealed by the inadequacy of health resources during the COVID-19 pandemic, pose critical challenges. Despite efforts to implement National Health Insurance (NHI) for universal coverage, the Philippines still struggles to achieve comprehensive coverage.

Data collection and surveillance are hindered by challenges—such as integrating diverse data streams, ensuring data quality, and addressing privacy concerns—impacting decision-making and resource allocation. These complex challenges necessitate collaborative efforts across various levels, to enhance the resilience and effectiveness of the healthcare system in the face of climate change and broader health issues in the Philippines.

BEST PRACTICES

BEST PRACTICES



Gender-Centric Disaster Management:

One of the best practices mentioned in the UN women report is on putting

Gender at the Center of the Table: the Philippines' Experience in Gender Sensitizing its Disaster Management Mechanism¹⁵.

In the realm of disaster management in the Philippines, a dedicated effort has been made to prioritize gender considerations. The passage of the Magna Carta of Women (R.A. No. 9710) in 2009 was a significant step, establishing a legal foundation for the protection and advancement of women's rights. Central to this initiative is the incorporation of the Gender and Development (GAD) Budget, mandating a minimum 5% allocation by government agencies for programs addressing gender-related issues.

The National Disaster Risk Reduction and Management Plan 2020–2030 (NDRRMP) builds on this groundwork, acknowledging gender mainstreaming as a critical overarching concern. The

plan commits to rectifying gender disparities in disasters, emphasizing equitable participation and decision-making roles for women. **The National Disaster Risk Reduction and Management Council (NDRRMC)**, consisting of 44 members across various sectors, ensures the infusion of gender equality principles, facilitated by bodies like the Philippine Commission on Women (PCW) and the Department of Social Welfare and Development (DSWD).

Playing a pivotal role in implementing gender mainstreaming, **the Office of Civil Defense (OCD), as NDRRMC's executive arm, appoints gender focal points at national and regional levels**, reports through the Gender Mainstreaming Monitoring System (GMMS), and integrates gender considerations into operational guidelines. The OCD utilizes its annual GAD budget to fund initiatives such as capacity building, awareness programs, and gender-responsive enhancements to infrastructure.

Augmenting gender advocacy in disaster contexts, **s**, comprising 30 women's organizations, engages in training programs with backing from the Australian NGO Cooperation Program. These initiatives focus on preparing for and responding to disasters in a gender-sensitive manner, along with engaging in policy dialogues.

Mobile Clinics: The government is implementing measures to develop mobile clinics able to provide care and examinations across remote rural communities. Mobile health clinics are essentially vehicles equipped with medical facilities and staffed by healthcare professionals, providing essential healthcare services to communities that may lack easy access to traditional healthcare facilities. These initiatives aim to bring healthcare

assistance directly to communities, offering services such as basic medical consultations, vaccinations, maternal and child health services, and health education. The program involves collaboration with local communities. This includes community engagement, awareness campaigns, and ensuring that healthcare services are culturally sensitive and tailored to the specific needs of the population. The project also aims at reducing overcrowding at central facilities, saving the cost of expensive journeys, and spreading awareness of healthy lifestyles.

Primary Care and Safe and Green Hospitals: With the recent approval of a new law, PhilHealth (Philippines' national health insurance corporation) now also finances primary care services. Previously funded through a combination of public and private sources, the initiative aims at stabilizing the flow of funding to nationwide care facilities. Provinces in need of extensive investments and upgrades will receive special health funds to homogenize service provision across the country.

To address climate change mitigation - the healthcare sector is responsible for almost 5% of global greenhouse gas emissions - the Department of Health is implementing the initiative "Safe and Green Hospitals". By incorporating energy-efficient technologies, water conservation measures, and sustainable waste management practices, hospitals can reduce their environmental impact. Green building design, with an emphasis on eco-friendly materials and the inclusion of green spaces, not only minimizes the carbon footprint but also contributes to a healing and therapeutic environment.

OPPORTUNITIES

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The challenges faced by the Philippines present a notable opportunity for the country to engage in collaborative efforts and strengthen regional resilience. With its successful health initiatives and disaster management strategies, the Philippines can play a pivotal role in knowledge exchange and capacity building. Additionally, it can explore partnerships with international organizations, such as the Asian Development Bank¹⁶, to establish joint initiatives that address climate-related health challenges. Collaborative research, resource sharing, and support for programs, like the Contingent Disaster Financing (CDF) facility, can enhance regional preparedness.

By collaborating with Philippines' Quezon City that has successfully implemented clean air initiatives, other regions can also establish similar plans reduce their emissions. Sharing expertise in sustainable mobility, investing in renewable energy projects, and adopting eco-friendly transportation methods can contribute to improved air quality and reduced health risks. Moreover, Philippines can engage with the Climate Change Commission (CCC) and the Department of Health (DOH) for the development of climate-smart hospitals, sharing technological advancements, and implementing green practices^{17,18}.

The Philippines malaria eradication model can serve as a good example for many countries¹⁹. Collaborative efforts can focus on integrating climate considerations into disease control strategies, ensuring that vector control measures align with changing climate patterns. Philippines can also share experiences in disaster risk reduction and management owing its effective

implementation of policies and plans, such as the National Disaster Risk Reduction and Management Act. This collaborative approach aligns with the spirit of international cooperation and can create a more sustainable and resilient future.

Recognizing the evolving health landscape and the importance of addressing climate change-related health challenges, the Philippines have positioned itself for transformative healthcare. In 2014, the DOH introduced the Service Delivery Network (SDN)²⁰ as a robust health referral mechanism. This network, comprising both public and private health providers, operates within local health systems, offering an integrated and coordinated core package of healthcare services. With its integrated approach, the SDN can serve as a strategic platform to incorporate climate resilience measures within the broader healthcare system.

The National Health Insurance Act of 2013 marked a significant milestone in the Philippine's journey towards universal health coverage (UHC)²¹. The national government's complete takeover of financing for PhilHealth's indigent members represents a positive stride, eliminating inconsistencies that arose from the prior cost-sharing agreement with local authorities. By integrating climate change-related health considerations into the UHC framework, the Philippines can fortify its commitment to addressing the unique health needs of priority groups amid the challenges posed by climate change.

RECOMMENDATIONS

1. Research and data enhancement

Addressing the multifaceted challenges of climate change impacts on health in the Philippines necessitates a strategic focus on research and data enhancement. It is imperative to allocate resources for extensive research on specific areas, such as the mental health of health workers and coping mechanisms for vulnerable populations. Additionally, there is a critical need to enhance data collection practices, particularly by prioritizing gender-disaggregated data. This approach will contribute to a more nuanced understanding of how climate change affects different demographic groups, informing targeted interventions.

Integration of climate resilience in healthcare systems

The country is encouraged to further integrate climate resilience measures within the healthcare system, leveraging the existing Service Delivery Network (SDN). This could involve incorporating climate-smart infrastructure, disaster response training, and sustainable healthcare practices.

2. Enhance health workforce benefits and compensation

It is advised to adhere to prescribed health workforce benefits and consider adjusting pay structures to address the shortage of doctors and nurses. Recognizing the role of competitive compensation in retaining

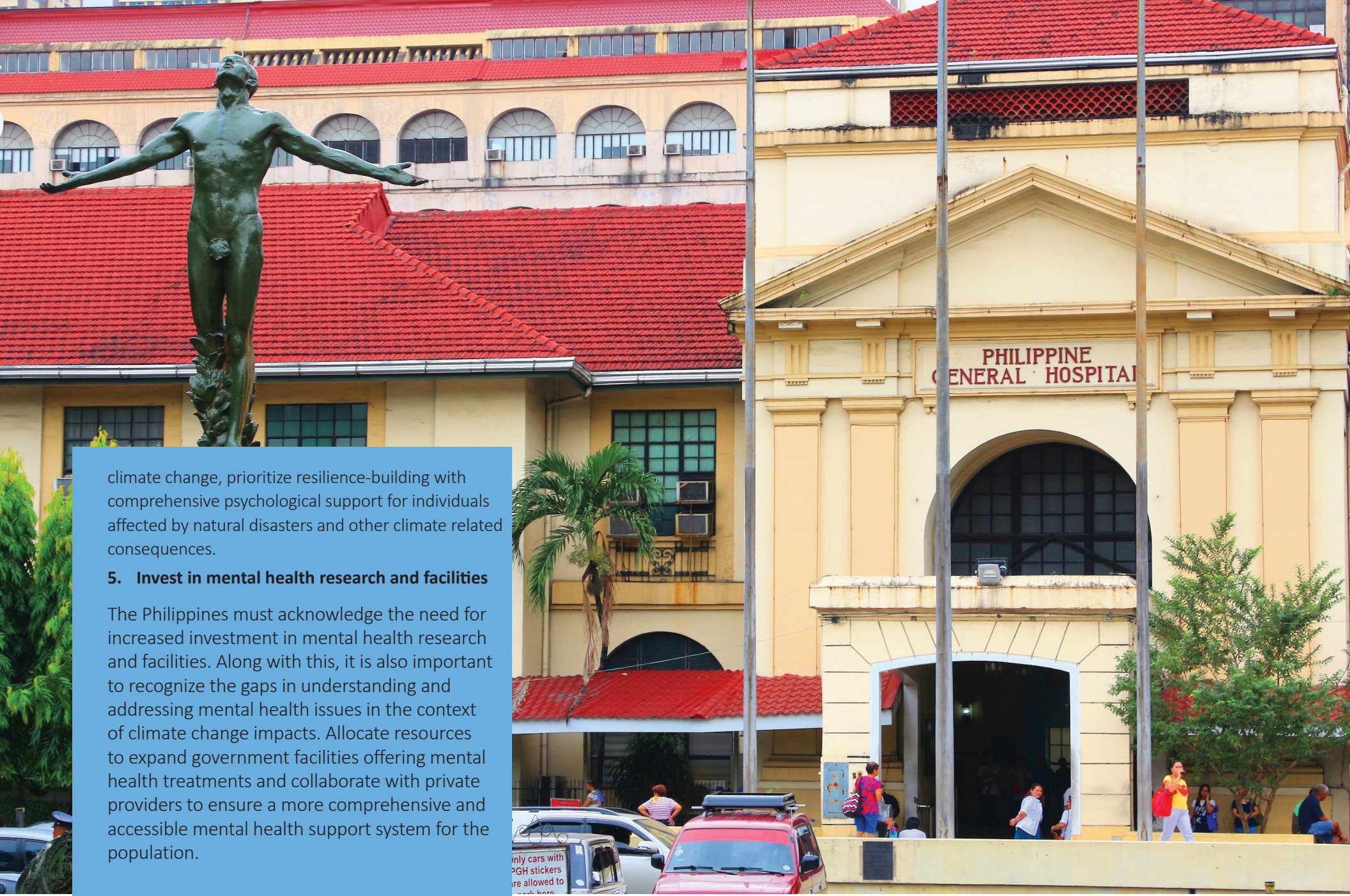
and recruiting medical professionals, as well as ensuring compliance with Magna Carta benefits can be effective. Addressing this issue is crucial for improving geographic and service coverage, especially in the face of climate change impacts on health, which disproportionately affects vulnerable populations.

3. Improve primary and intermediate care

The Philippines should expand primary and intermediate care services to effectively address the rising prevalence of non-communicable diseases (NCDs). ‘Long-term acute care hospitals’ should be introduced to better handle chronic and acute care patients, and prevent overcrowding at central facilities. This approach will be essential in protecting citizens that are at risk of climate change-induced illnesses, by offering timely and comprehensive healthcare.

4. Strengthen mental health assistance networks

It is recommended to scale up mental health assistance networks by addressing the shortage of professionals. Recognizing the current inadequacy of psychiatrists, government nurses, addiction specialists, psychologists, occupational therapists, counselors, and social workers is essential as the first step. Increase the number of facilities and outpatient mental health treatments within the DOH to ensure broader access to mental health services. Given the psychological impact of



climate change, prioritize resilience-building with comprehensive psychological support for individuals affected by natural disasters and other climate related consequences.

5. Invest in mental health research and facilities

The Philippines must acknowledge the need for increased investment in mental health research and facilities. Along with this, it is also important to recognize the gaps in understanding and addressing mental health issues in the context of climate change impacts. Allocate resources to expand government facilities offering mental health treatments and collaborate with private providers to ensure a more comprehensive and accessible mental health support system for the population.

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