

CLIMATE CHANGE AND ITS IMPACT ON THE HEALTH SECTOR IN THE PROVINCE OF ALBAY

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Abstract: This study intended to highlight gaps between likely challenges to public health posed by climate change and Philippine public health system's current state of preparedness. Understanding and addressing gaps in preparedness is critical to protecting the Philippine population against health risks of climate change.

The study aimed to determine local health department personnel's perceptions of climate change and its potential public health effects; illnesses/diseases that can be attributed to climate change; preparedness, resources, plans and activities of local health departments to address potential health impacts of climate change.

Descriptive method was utilized. A questionnaire was administered to public health personnel in rural health units, municipal and secondary hospitals in Albay. Interviews and focus group discussions were done. It employed descriptive statistics to analyze and present research data.

Respondents perceived climate change to be a relevant threat in Albay. Some illnesses may be attributed to climate change directly or indirectly. The province has a strong capability to respond to disasters. The department needs additional resources. The department has activities and plans for programs on climate change adaptation and mitigation.

The study recommends shift of policy from disaster to risk management; integration of environmental health in curricula; and training of RHU personnel. Also to identify climate-related health problems and hazards in the community; inform, educate and empower people on health issues; increase funding for research on climate change and health; design new and existing communities taking into consideration impacts of global warming; and enforcement of laws and regulations.

Keywords: climate change, climate change mitigation, climate change adaptation

I. Introduction

There is a critical need to understand the current knowledge and perceptions of local public health personnel regarding the public health impacts of climate change and assess current preparedness for these impacts in the province. For this reason, the researchers conducted a representative survey of local health department personnel. This study intended to assess the impact of climate change on the health sector in the province of Albay. Specifically, it aimed to: 1) Determine local health department personnel's perceptions of climate change and its potential public health effects; 2) Verify the number of illnesses/diseases that can be attributed to climate change; from 2001 to 2008; 3) Determine how prepared the local health department to address potential health impacts of climate change; 4) Find out what activities the local health departments are currently performing, or planning, that can help prevent further climate change; 5)

Establish what resources do local health departments need to better address climate change; and 6) Find out what programs do local health departments need to better address climate change.

II. Main Text

The study was conducted in Albay Province covering the 15 Rural Health Units and 2 City Health Units being supervised by the Albay Provincial Health Office. The descriptive method was utilized in this particular study. The study employed the theory of human ecology as its theoretical framework.

The findings of the study are as follows: 1) Majority of the respondents answered that climate change has affected the incidence of heat related illnesses, typhoons, floods, droughts, vector-borne, water-borne, and food-borne diseases, anxiety and other mental health conditions, quality and quantity of fresh water available, quality of fresh air, garbage and excreta disposal, food safety and security, housing and health care services for the people in the province of Albay. 2) Diseases/illnesses attributed to climate change includes vector-, water- and food-borne diseases, heat-related illnesses, mental conditions, respiratory illnesses, skin diseases, among others. 3) The local health department has varying levels of preparedness to address health impacts of climate change. 4) There are some climate change adaptation and mitigation activities being undertaken by the health department. 5) Some resources are needed to improve the department's ability to deal with climate change as a health issue. 6) The local health department has plans for programs on climate change adaptation and mitigation.

The conclusions of the study were: Climate change can affect human health directly or indirectly as evidenced by diseases/illnesses that can be attributed to environmental conditions, therefore, particular attention to improving ecosystem management and the capacity for decision-making at the local level is required to achieve enhanced human well-being and improved human health status. The local health department personnel should have access to quantitative data sufficient to relate changes in exposure to the incidence of specific diseases. There is a need to enhance the level of knowledge of health personnel on climate change and its potential health effects in order that they could be very effective in preventing, limiting or managing environmental damage, educating their health constituents, and making adaptive changes that will protect individuals and populations from the adverse health consequences of ecosystem change. The province has reported strengthening preparedness planning, communication systems, and workforce training

over the previous years in order to improve emergency preparedness. Results of the study indicate the workforce believes more improvement in preparedness was needed by the local health department to address health effects of climate change. The respondents believe there are resources needed to incorporate climate change into public health preparedness. The local health department should likewise, make the best use of the resources and expertise available to the department. The local government unit has programs and activities to mitigate effects of climate change in the province, therefore, the health sector can make an important contribution to reducing the damage caused by climate change by actively cooperating and participating in the programs. Plans, programs and activities at the national and provincial levels must trickle down to the municipal level to enhance their knowledge, preparedness and participation in the climate-related activities of the province.

The following are the recommendations of this study: 1.) Shift of policy from disaster management to risk management; 2.) Integration of Environmental Health to nursing curriculum; 3.) Training of RHU Personnel on Emergency and Disaster Preparedness, include climate change and global warming preparedness; 4.) Address social and economic impacts on community health and well-being; 5.) Develop strategies to reduce the risks for vector borne and zoonotic diseases; 6.) Ensure food and water sanitation; 7.) Monitor air quality index (AQI) to combat effects of air pollution; 8.) Monitor health status to identify and solve climate-related health problems, 9.) Diagnose and investigate health problems and hazards in the community; 10.) Inform, educate, and empower people about health issues; 11.) Mobilize community partnerships to identify and solve health problems; 12.) Develop policies and plans that support individual and community health efforts; 12.) Enforce laws and regulations that protect health and ensure safety; 14.) Link people to needed health services and ensure provision of care; 15.) Evaluate effectiveness, accessibility, and quality of health services; 16.) Increase funding for research on climate change and health, including community-based, participatory designs; and 17.) Design new and existing communities taking into consideration the impacts of global warming, by increasing green spaces and reducing black pavement and other climate-smart design.

III. Conclusions

The conclusions of the study are as follows: 1) There are climate-related illnesses/diseases occurring in the province that can be addressed by improving ecosystem management and the capacity for decision-making of the local health department; 2) There is a need to enhance the level of knowledge of health personnel on climate change and its potential health effects in order that they could be very effective in preventing, limiting or managing environmental damage, educating their health constituents, and making adaptive changes that will protect individuals and populations from the adverse health consequences of ecosystem change. 3) Results of the study indicate the workforce believes more improvement in preparedness was needed by the local health department to address health effects of climate change; 4) The respondents believe there are resources needed to incorporate

climate change into public health preparedness, and 5) Plans, programs and activities at the national and provincial levels must trickle down to the municipal level to enhance their knowledge, preparedness and participation in the climate-related activities of the province.

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APPENDIX

(These will be presented in the final paper. To include the questionnaire.)

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