**Is Australia Capable Of Responding To Cross-Cutting And Emerging Public Health Issues?**

**1. Nature of the Issue, its Determinants, and the Way it Emerged**

The issue identified for this research paper is climate change adaption and dengue fever. Climate change adaptation is defined as the reaction to the change in the climate and the global warming. This is mostly to lower the susceptibility of the biological and social system. Dengue fever is a mosquito borne disease, which shows the symptoms of sudden high fever, severe muscle, joint pains, pain in the eyes, severe headache, vomiting, fatigue, and nausea among others. Climate change increases the risk of dengue, as warmer temperature shortens the incubation period of the virus. Thus, it does not have to wait longer for being infectious. The proximal determinants of the issue include the age, wherein, the pediatric individuals are more likely to be susceptible. On the other hand, the distal determinants include excessive garbage and water logging in the locality along with the increased population density. The issue of climate change adaption and dengue fever has emerged as one of the major health issues in Australia (Teixeira, Morato, Barreto, Mendes & Baretto, 2012). It is observed that from 1890s to 1950s in Australia, there has been a significant rise of the issue, which is still prevalent at present. It can be analyzed that the reason behind the emergence of the issue is the increasing temperature and climate changes, in addition to growing human population and demographic shift from a region to the other causing the virus to spread (Kuno, 2009).

**2. The Population ‘At Risk’ and Their Relevant Characteristics**

The population at risk, which is mostly affected by the issue of climate change adaption and dengue fever, is from the urban areas in Australia. Particularly, the population of low-income urban is at greater risk to the issue. In addition, more prominently, the population of peri-urban and slum areas is at the extreme risk from getting g infected by dengue. This is because the greater risk to the issue in those areas is the persistence of certain characteristics of this population. These urban areas have high density in population, poor waste and garbage management, along with the frequent water logging problems (Ebi & Nealon, 2016).

**3. Probable Success If the Issue Was Addressed**

The issue of climate change adaption and dengue fever if successfully addressed in Australia, the increasing number of people affected from the disease would not have taken place. In Australia, a considerable number of people die due to dengue. Thus, if it was addressed properly through necessary steps, the deaths could have been avoided (Gubler, 2002).

**4. Currently Used Strategies to Address the Issue**

In Australia, there are certain strategies, which have been adopted so that they are able to address the issue related to climate change adaption and dengue fever. The nation integrated the strategy to directly control the mosquitoes, wherein, it has been attempting to reduce the source through destruction of larval habitat. Australia has also integrated the strategy to use chemicals for controlling the larval growth, which include insect growth regulators such as S-methoprene, monomolecular surface films. This includes Triflumuron, surface sprays, and bacterial insecticides such as *Bacillus thuringiensis var. israelensis* (Bti). Australia has also been using the strategy of Adult chemical control, which further comprises interior residual spraying, harbourage or barrier spraying, and lethal ovitraps. In addition, the nation has further integrated effective strategy for managing dengue outbreaks, which include the increased role of the government to communicate with the people about the way to deal with the issue. Data management is a crucial strategy for addressing the issue, which includes identifying the areas, wherein, the issue has extensively spread by supporting corresponding effective measures (Bennett, 2015).

**5. Adequacy of the Public Health System**

The public health system in Australia to a certain extent has been effective for the purpose of detecting along with analysing the issue of climate change adaption and dengue fever. The public health system has also been effective in providing advocacy and support to the affected people through proper planning and implementation of the actions. This has been possible due to the implementation of data management system, which collects all the information relating to the issue and its detection. This in turn supports the corresponding analysis, planning, implementing the needful actions, and offering proper aid. The public health system has been effective in communicating with the people about the precautionary measures and the way to overcome the dengue problem (Bennett, 2015; Bevan & Hood, 2006).

**6. Presence of Leadership in the System to Address the Issue**

The public health system in Australia has effective leadership, which has helped in supporting along with dealing with the issue of climate change adaption and dengue fever. The leadership in the system is apparent from the fact that it has five crucial aspects that assists in addressing the issue, which are self leading, engaging others, achieving outcomes, driving innovation, and shaping system. In this context, self leading is apparent from the fact that the healthcare professionals in the nation are self aware, seeks opportunities for personal development, and has strength in their character. The capabilities of engaging others can be done by valuing cultural diversity, communicating honestly, and strengthening consumers. The capabilities of goal oriented focus, effective communication, and accountability in performance supports in attaining the desired outcome (Health Workforce Australia, 2013).

**9. Public’s Role in Addressing the Issue and Their Capabilities**

The public in Australia plays the most vital role in addressing the issue of climate change adaption and dengue fever. They are responsible for maintaining clean environment at their surroundings and avoid water logging. It is crucial to mention that even if the government representatives have attempted to ensure a clean environment in a community, the public on the other hand creates improper waste management. Thus, the role of public is crucial. The public needs to provide appropriate information to the respective health department regarding the disease so that the issue can be addressed effectively and efficiently. The capabilities that public need to have to address the issue is proper knowledge or awareness and appropriate mindset to contribute for the betterment of the community (Webb, Parkes, Saint-Charles, Spiegel, Waltner-Toews..., & Woollard, 2010).

**10. The Way Action on This Issue Might Impact**

The action relating to the current issue would create a positive impact, as it would lead to the development of healthy society. This would certainly help the low income people, who are mostly affected. It would further help in creating a positive impact on the issue, as it can help in ensuring public and the government to work collaboratively. This further would help to encourage conducting other related aspects for social and economic development (World Health Organization, 2012).

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