Improving Public Health Through Melaka Healthy and Green City Initiatives: Review of 5-Years City Approach.

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ABSTRACT

INTRODUCTION: Melaka is one the fast-growing cities in Malaysia; rapid urbanisation leads to economic, social and physical environment changes. 'Melaka Maju 2010' was declared by state government following enhanced understandings on urbanisation challenges and opportunities. This paper is aimed to describe Melaka Initiatives in achieving a liveable, clean and green environment, and review public health improvement within 5-years evidence of achievement. **METHODS:** We did a narrative review based on ten-related documents about Melaka Initiatives of Healthy and Green City. Trend of selected diseases related with healthy and clean environment also being reviewed to emphasis the relationship. **RESULTS:** Nine programmes for Melaka Initiatives of Healthy and Green City were emerged in ensuring sustainability and achieving healthy city goals. Smart partnership concepts between government agencies and various stakeholders including local populations had support the momentum of approach. The programmes are Smart LED and Smart Meter Programme, Melaka Green Seal, 100 Resilience Cities, Melaka World Solar Plant, Green Information Communication Technology, Green Neighbourhood Gardening, Energy Performance Certificate, Bio-degradable Bag Programme. Co-benefits of such programmes were not only related to environmental impacts, also extended towards public health. Effects of clean environment towards vector borne diseases; review of 5-years median dengue cases showed decreasing trend. In addition, the convenience of pedestrian and cycling facilities, parks and playing fields, hence the propensity to take healthy exercise, therefore improving in non-communicable risks. **CONCLUSION:** The approaches and transitions to Melaka Healthy and Green City in 5-years had supported the economic, social and health of its populations.

KEYWORDS: urban health, healthy city, green initiative, public health

Is Malaria Knowlesi Really Confined Only at Rural Community?

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ABSTRACT

Plasmodium knowlesi is a zoonotic malaria that could infect between macaques and humans. The parasite is transmitted by a group of mosquitos that belongs to Anopheles group. Even though the number of human malaria cases in Malaysia has been significantly reduced for the past few decades, the emerging of this zoonotic malaria has become one of public health concern. The main natural hosts for this zoonotic malaria are long-tailed macaque (*Macaca fascicularis*) and pig-tailed macaque (*Macaca nemestrina*). Conventionally, many of this zoonotic malaria cases are reported from rural area. However, as human activities expand with urbanisation and deforestation, these macaques migrate and inhabit areas that are also inhabited by the humans. This ultimately leads to transmissions of *Plasmodium knowlesi*. Outbreaks of zoonotic malaria infection suggest the human-macaques interaction maybe closer than conventionally described. This is evidenced by two zoonotic malaria outbreaks that have occurred in an endemic area of Tampin District, Negeri Sembilan on two separate outbreaks in the same year. Enforcement activities too have led to the discovery of macaque being kept illegally in a populated housing premise. This article serves as an eye opener to public health sector on the epidemiology of emerging zoonotic malaria cases in urban areas.

KEYWORDS: Plasmodium knowlesi, zoonosis, malaria, macaque, Negeri Sembilan