Ecological Study of Urban Built Environment and Hospital Admissions

Kwan Soo Chen1, Rohaida Ismail2, Norlen Mohamed2, Nor Halizam Ismail3
1Center for Southeast Asian Studies (CSEAS), Kyoto University, Japan, 2Environmental Health Unit, Ministry of Health Malaysia, 3Health and Environment Department, Kuala Lumpur City Hall, Malaysia.

ABSTRACT

INTRODUCTION: This study examined the associations between the urban built environmental features and the number of hospital admissions for hypertension in Kuala Lumpur. METHODS: Disease specific records of hospital admissions from year 2008 to 2016 with individual patient’s socio demography and residential postcodes were collected from the Ministry of Health Malaysia. Urban built environmental features and land use data were acquired from the Planning Department of the Kuala Lumpur City Hall. The built environmental data were then subjected to kernel density computations in ArcMap at 400m, 800m, and 1200m for walkability metrics (rail stations, bus stops, road intersections, recreational areas and undeveloped land); and 250m, 500m and 1000m for environmental pollution metrics (roads, highways, rail tracks, and industrial areas). Other included variables are land use mix, residential densities, and economy. RESULTS: Quasi-poisson regressions indicated that increased densities of bus stops at the highest intensity were consistently associated with increased number of hospital admissions for hypertension for all regression models. Conversely, increased densities of undeveloped land were associated with reduced number of hospital admissions for hypertension. Results obtained for the environmental pollution metrics were inconsistent. Among the socio-demographic groups, consistent positive associations were found for the entropy index, and bus stops; and negative associations for residential densities, rail stations, and undeveloped land across all groups. CONCLUSION: Although this is an ecological study, the initial findings pose further questions on the appropriate urban planning that will fit the local conditions to benefit health in the developing countries especially in the Southeast Asian region.

Accelerating Ending Aids in Bangkok Metropolitan City

Thitisant Palakawong Na Ayuthaya
Division of AIDS, TB and STIs, Bangkok Metropolitan Administration

ABSTRACT

Bangkok lies at the heart of Thailand’s AIDS epidemic. The risk of infection is higher because of the dynamics of its diverse and mobile population, social networks and socioeconomic disparities. The Bangkok Metropolitan Administration (BMA) has made HIV one of its top health priorities. “Ending AIDS by 2030” is the goal of Bangkok’s AIDS response, and this is well-articulated in the Bangkok AIDS strategy for 2017-2030. In 2014, at a historic meeting in Paris, Bangkok was one of the cities from across the globe which committed to reach the “90-90-90” targets. Since joining the Fast-Track Cities Initiatives, Bangkok is taking the lead in scaling up proven, high-impact HIV services and strategies, and expanding testing, treatment and prevention for addressing the basic needs for key and vulnerable populations. As a result, Bangkok has demonstrated significant progress: percent of people living with HIV in Bangkok who know their sero-status has increased from 66% in 2014 to 86%; The second “90” has improved from 50% to 72% while the third “90” stands at over 75% in 2017. Making 90-90-90 a reality in a mega-city like Bangkok hasn’t always been easy. It requires substantial effort and strong commitment. During the past few years, BMA have lessons and know what works:
1. Using local evidence to inform programs and policy change is a critical foundation.
2. A strong partnership with community-based organizations on providing HIV services by a people-centred approach such as key Population-led HIV services
3. Bangkok is leveraging innovation as a core strategy and has become one of the first cities in Thailand to provide pre-exposure prophylaxis (PrEP) for key populations through community-led HIV services and BMA municipal public health centres
4. Utilising ICT innovations and online platforms for health promotion