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# KOSPEN: From the Community, for the Community, by the Community

Feisul Idzwan Mustapha M.P.H.*, Shiehafiel Fieqri Hussin M.D. and Rosnah Ramly M.P.H.

*Disease Control Division, Ministry of Health Malaysia, Wilayah Persekutuan Putrajaya, Malaysia*

In many developing countries, various transitions are taking place impacting negatively on health-related behaviours. Therefore, community-based non-communicable diseases (NCDs) risk factor screening and intervention programmes is an important strategy in addressing behavioural modification to reduce the burden of NCDs. The burden of NCD and NCD risk factors continues to increase in Malaysia as evidence by the periodic population-based surveys. Almost one in five Malaysians have high blood sugar and one in three has high blood pressure. Almost half of the population at risk are also unaware of their NCD risk factors. KOSPEN aims at bringing NCD risk factor intervention to the community by creating trained community health volunteers, working together with other government agencies with existing programs and activities at the community level. It is a large scale programme implemented throughout the Malaysia. KOSPEN now has over 6,000 localities with 40,000 trained volunteers. A total of 750,000 adults have been screened, and out of those referred to healthcare facilities, an estimated 64.6% were diagnosed with hypertension, 52.4% were diagnosed with diabetes, 20.8% were pre-hypertensive and 23.3% were pre-diabetes. Working with sectors outside of health required multiple engagements and framing the objectives of KOSPEN in such a way so that they are inline with the objectives of the partner organisations. Advocacy and engagement has to be done both top-down and bottom up, and lastly, health volunteers must be continuously engaged and trained to keep them motivated.

## I. INTRODUCTION

Research has shown that non-communicable diseases (NCDs) are strongly driven by unhealthy behaviours, such as unhealthy eating, physical inactivity, smoking and excessive use of alcohol, including psychosocial stress. We know have very clear body of knowledge on what needs to be done to tackle this increasing burden of NCDs. However the challenge now is how can we effectively implement the various World Health Organisation's (WHO) "best buys" and "good buys" (World Health Organization 2011).

Community-based NCD risk factor screening and intervention programmes is an important strategy in addressing behavioural modification. In many developing countries, various transitions are occurring, including epidemiological, urbanisation, economic, political, cultural and psychological among others that mostly have a negative impact on health-related behaviours. Therefore, the aim of community-based programmes is to provide an eco-system to assist individuals and communities to overcome these obstacles.

### *A. Local Setting*

In Malaysia, NCDs now contribute to an estimated 73% of total death (Institute for Public Health 2015). The Second Burden of Disease Study for Malaysia ranked hypertension, smoking, diabetes, high cholesterol and high BMI as the biggest contributors to both disability adjusted life-years (DALY) and deaths (Institute for Public Health 2012). Premature deaths from NCDs continue to be one of the major development challenges for this country. An analysis of the Malaysian National Health and Morbidity Survey (NHMS) in

*Corresponding author's e-mail: dr.feisul@moh.gov.my

2011 showed that at least 63% of adults aged 18 years and above had at least one NCD risk factor i.e. either overweight or obese, high blood pressure, high blood sugar or high blood cholesterol (Institute for Public Health 2015). Results of the NHMS in 2015 showed that one in two Malaysian adults are either overweight or obese, almost one in five have high blood sugar and almost a third have high blood pressure. An estimated 22% of Malaysians are smokers, and many Malaysians are passive secondhand smokers. More worrying is that almost half of the population at risk are unaware of their NCD risk factors, and since they are asymptomatic, do not seek medical treatment (Institute for Public Health 2015).

### *B. Approach*

Called "Komuniti Sihat Pembina Negara" (KOSPEN), or literally translated meaning "Healthy Communities, Building the Nation", this programme aims at bringing the NCD risk factor intervention to the community by creating trained community health volunteers. These trained volunteers will function as health agent of change who can introduce and facilitate healthy living practices within their respective community. This strategy has been proven to be cost-effective across different countries and settings (Nissinen, Berrios, and Puska 2001). However, Malaysia is the first country ever to implement such an initiative throughout the whole country, in a stepwise manner starting in 2014.

The objective of KOSPEN is to empower the community to enhance their participation and involvement in adopting and practicing healthy lifestyles towards preventing and controlling NCD risk factors. This massive community-based NCD risk factor intervention programme commits on combining efforts in prompting behavioural changes by integrating public education, health policy adoption and creating healthy environments as well as community intervention activities, aiming at halting the increase in the prevalence of NCDs and its risk factors by year 2025.

Currently KOSPEN has six main scopes:

(1) healthy eating; in this scope, all events held within the locality are strongly advised to serve plain water during meals and to separate sugar or milk from hot beverages. Other approaches include salt reduction during meal preparation and use of the Malaysian healthy plate.

(2) active lifestyle; where physical activities and exercises are encouraged or integrated in any communal activities. Every KOSPEN locality is required to carry out physical activities on a regular basis to provide opportunities for the local community to adopt an active lifestyle, including the provision of 10,000 steps walking track.

(3) weight management; each locality runs a weight management program, consisting of a 6-month structured exercise plan

(4) non-smoking practices; all designated non-smoking areas are self-enforced as per regulations. In addition, the implementation of the Smoke-free Home and other individual-owned locations such as food stalls are highly encouraged. Announcement on smoke-free meetings and public events are also instituted within the community.

(5) health screening of NCDs risk factors; these basic health screening includes blood pressure monitoring, random blood glucose, Body Mass Index (BMI), smoking status and mental health status assessment (i.e. depression, stress and anxiety). Those identified as at risk are referred to the nearest healthcare facility for further evaluation and intervention.

(6) stress management; starting in 2018, all KOSPEN volunteers are trained to conduct mental health screenings using mental health screening form (DASS 21). Trained volunteers are also capable of conducting basic interventions in the community for stress management.

There are two main agencies collaborating with the Ministry of Health (MOH) in implementing KOSPEN. For the rural population, MOH collaborates with the Department of Community Development (also known as KEMAS), an agency under the Ministry of Rural and Regional Development. As an agency responsible for the development of rural communities, KEMAS has established mechanisms and programs for rural communities. For each setting, KEMAS personnel and a committee comprising of community leaders

and volunteers are responsible for planning and implementing KEMAS activities, comprising of human capital development, community education and children early education.

For urban and sub-urban areas, MOH collaborates with the Department of National Unity and Integration (also known as JPNIN). Under JPNIN specifically, there is a voluntary program for community unity and integration is known as "Rukun Tetangga". The approach used in these collaborations was to value-add to the existing programs and activities under KEMAS and JPNIN by inculcating a healthy lifestyle culture, which subsequently will further improve the socio-economic level of individuals, families and communities.

Health volunteers within their local community are provided with training that will enable them to promote healthy behaviours, advocate for healthy policy adoption and facilitate environmental changes. Trained volunteers are able to give health talks, conduct advocacy for health policy implementation, and perform basic NCD risk factor screening, with medical equipment provided by MOH to the communities. A web-based monitoring system was also established to enable more effective monitoring of KOSPEN implementation.

### *C. Relevant Changes*

In 2018, KOSPEN has entered its fourth year of implementation, and has over 6,000 localities with 40,000 trained volunteers. To date, a total of 750,000 adults aged 18 years and above have been screened under this programme.

The Institute for Public Health MOH has carried out two studies in 2014 and 2016 to assess the effectiveness of the implementation of KOSPEN (Institute for Public Health 2014, 2016), Of individuals found to be at risk during KOSPEN screening and referred to healthcare facilities, 64.6% were diagnosed with hypertension, 52.4% were diagnosed with diabetes, 20.8% were pre-hypertensive and 23.3% were pre-diabetes (Institute for Public Health 2016).

Currently only 350 KOSPEN sites are running the weight management program. However, 80% of sites showed success in weight reduction, and the average weight loss was 7% of the original body weight (Institute for Public Health 2016).

The evaluation on the KOSPEN volunteers found that majority (89.6%) had positive perception of KOSPEN. Most are aware of their roles (96.5%) and functions (94.2%) within KOSPEN, and almost all (99.7%) knew their responsibilities in conducting community health screening and to refer those found to be at risk to the nearest healthcare facility. The volunteers were also aware of their roles in advocacy (Institute for Public Health 2014).

### *D. Lesson Learned*

Working with sectors outside of health required multiple engagements and framing the objectives of KOSPEN in such a way so that they are in line with the objectives of the partner organisations. Buy-in at the level of top-management also does not necessarily translate to buy-in at the implementers level. Therefore, advocacy and engagement have to be done both top-down and bottom up within the partner organisations.

Initiating engagement with a community to set up a KOSPEN site is also challenging. Detailed stakeholder mapping would be required to identify potential champions and volunteers amongst the local community.

At the district level, the MOH has established a multi-disciplinary team consisting of doctors, nurses and other categories of healthcare providers (HCP) to provide leadership, advocacy and technical support on the implementation of KOSPEN. These HCP are either based at the district health office or MOH health clinics and multi-task between their regular clinical duties and KOSPEN related activities. These teams are important for continuous engagement of local communities, advocacy work and training of volunteers.

Volunteers must be continuously engaged and trained to keep them motivated. As such, refresher courses are conducted annually. To ensure sustainability, MOH are currently looking at various non-monetary mechanisms to reward and compensate the volunteers for their time and commitment.

Ultimately, one major success factor is strong leadership and positive role models within the KOSPEN community itself. KOSPEN requires strong social mobilisation led by

strong leaders to sustain and ensure success. Health must be perceived as high priority of the community and therein the major challenge lies: How do we working in health can position health as high priority in the lives of our population.

The main lessons learnt are summarised in Figure 1.

- With engaging sectors outside of health, adopt a win-win approach, to enable the KOSPEN programme to be inline with the objectives of both MOH and the collaborating organisation.
- Advocacy and engagement has to be done both top-down and bottom-up.
- Health volunteers must be continuously engaged and trained to keep them motivated.

Figure 1. Summary of Main Lessons Learnt

## II. CONCLUSION

KOSPEN is an aggressive step taken by Malaysia in addressing the increasing burden of NCDs. The MOH is targeting as many as 50,000 volunteers by 2022 and estimates that six million Malaysians will benefit from KOSPEN. This can only be achieved through collaboration with various agencies and communities through the health volunteers. The challenge remains on how to get buy-in from not just other stakeholders but members of the communities themselves, and to upscale KOSPEN to many more sites throughout the country.

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