



UNIVERSITI PUTRA MALAYSIA

***FACTORS ASSOCIATED WITH KNOWLEDGE ON HEALTHY
COMMUNITY, EMPOWERS NATION (KOSPEN) AND ITS
IMPLEMENTATION AMONG COMMUNITY HEALTH VOLUNTEERS IN
KULIM DISTRICT, 2017***

NAVINDRA KUMAR A/L SONDRAM

FPSK(M) 2017 32



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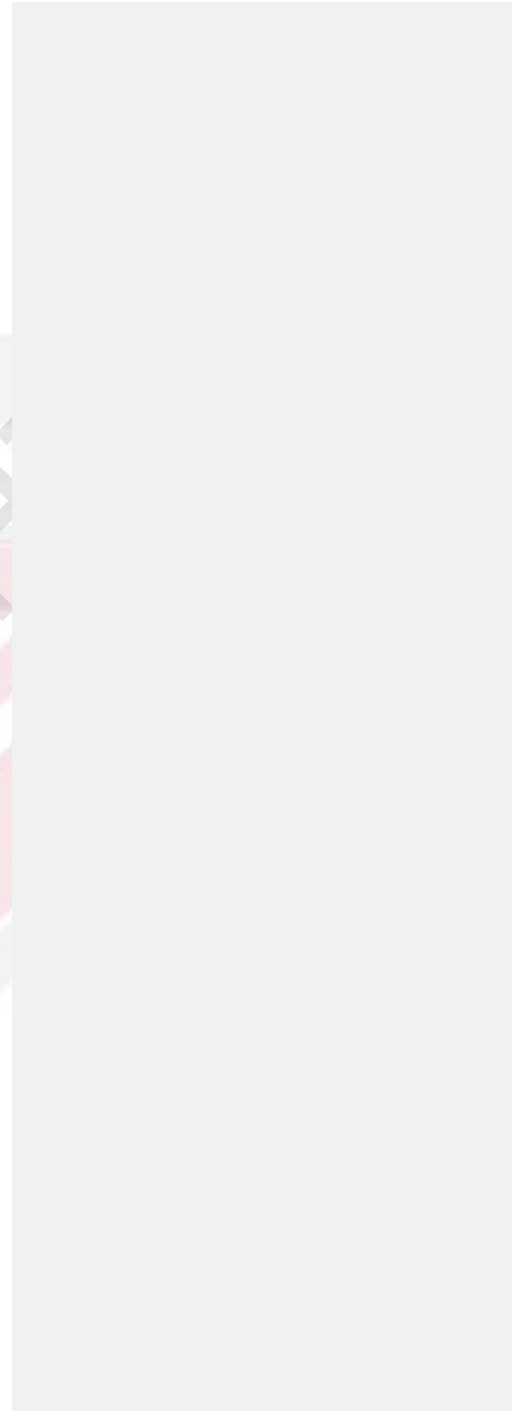
**Dissertation Submitted to the Department of Community Health,
Faculty of Medicine and Health Sciences, Universiti Putra
Malaysia, in Fulfilment of the Requirements for the Degree of
Master of Public Health**

August 2017



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Abstract of dissertation presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Public Health

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August 2017

Chair: Dr. Hayati Binti Kadir @ Shahar, MBBchBAO (Ireland), M.Comm Health (UKM)

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Introduction: The increasing burden of Non-Communicable Diseases and their prevalence has led Ministry of Health (MOH) Malaysia to introduce a community empowerment program "*Komuniti Sihat, Perkasa Negara*" acronymed as KOSPEN in July 2013. Thirty thousand community health volunteers have been trained nationwide up to May 2015.

Objective: To identify the factors associated with knowledge on KOSPEN and its implementation among community health volunteers in Kulim District.

Methods: A cross-sectional study based on simple random sampling was conducted among community health volunteers registered under KOSPEN program in Kulim District. All the community health volunteers who met the inclusion and exclusion criteria were invited to participate in this study. Data collected using self-administered questionnaire adapted from a study conducted by the Institute of Public Health, Malaysia. All data collected were analysed using IBM Statistical Package for Social Science (SPSS) version 22 involving descriptive and inferential statistics with significance level set at 0.05.

Result: The study found that level of knowledge on KOSPEN is associated with employment status ($p=0.02$) and awareness level ($p<0.001$) among the community health volunteers. The level of implementation is associated with age ($p=0.025$), education level ($p=0.007$) and employment status ($p=0.017$) of the community health volunteers. Employment status (aOR=2.133, 95% CI=1.056-4.306, $p=0.035$) and awareness level (aOR=6.119, 95% CI=2.701-13.867 $p<0.001$) were predictors of level of knowledge on KOSPEN. Level of

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implementation of KOSPEN by the community health volunteers could be predicted by education level (aOR=4.085, 95% CI=1.299-12.851 $p=0.016$).

Conclusion: Generally the KOSPEN volunteers had good knowledge on KOSPEN and implementation of KOSPEN program. However, there are still misconceptions among the KOSPEN volunteers regarding their functions and role. Therefore it is important to empower the volunteers with awareness on their roles, functions and good knowledge.

Keywords: KOSPEN, *Komuniti Sihat Perkasa Negara*, knowledge, implementation, community health volunteer



Abstrak disertasi yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Kesihatan Awam

FAKTOR YANG BERHUBUNGAN DENGAN PENGETAHUAN TENTANG KOSPEN DAN IMPLEMENTASI PROGRAM KOSPEN DI KALANGAN SUKARELAWAN KESIHATAN KOMUNITI DI DAERAH KULIM, 2017

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Pendahuluan: Peningkatan beban dan prevalens penyakit tidak berjangkit di Malaysia, telah menggerakkan Kementerian Kesihatan Malaysia untuk memperkenalkan program inisiatif memperkasakan komuniti iaitu KOSPEN (Komuniti sihat, Perkasa negara) pada bulan Julai 2013. Semenjak itu sebanyak 30,000 sukarelawan kesihatan komuitu telah dilatih seluruh negara sehingga bulan Mei 2015.

Objektif: Untuk mengenalpasti faktor yang berhubungan dengan pengetahuan tentang KOSPEN dan implementasi program KOSPEN di kalangan sukarelawan kesihatan komuniti di daerah Kulim.

Kaedah: "Cross-sectional study" secara "simple random sampling" telah dijalankan di kalangan sukarelawan kesihatan komuniti yang terdaftar dibawah program KOSPEN daerah Kulim yang memenuhi kriteria inklusi dan eksklusi. Data dikumpul menggunakan borang soal-selidik. Data yang dikumpul dianalisa menggunakan "IBM Statistical Package for Social Science (SPSS)" versi 22 merangkumi statistik deskriptif dan juga inferensial dengan tahap signifikan ditentukan pada 0.05.

Hasil: Penelitian ini mengenalpasti bahawa status pekerjaan ($p=0.02$) dan tahap kesedaran ($p<0.001$) mempunyai hubungan dengan pengetahuan tentang KOSPEN. Disamping itu, umur ($p=0.025$), tahap pendidikan ($p=0.007$) dan status pekerjaan ($p=0.017$) mempunyai hubungan dengan tahap implementasi program KOSPEN oleh sukarelawan kesihatan komuniti. Status pekerjaan (aOR=2.133, 95% CI=1.056-4.306, $p=0.035$) dan tahap kesedaran (aOR=6.119, 95% CI=2.701-13.867 $p<0.001$) merupakan faktor peramal bagi tahap pengetahuan tentang KOSPEN di kalangan sukarelawan kesihatan komuniti. Dan tahap

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implementasi program KOSPEN oleh sukarelawan kesihatan komuniti dapat diraml oleh tahap pendidikan (aOR=6.119, 95% CI=2.701-13.867 $p<0.001$).

Kesimpulan: Secara umum sukarelawan kesihatan komuniti di daerah Kulim mempunyai tahap pengetahuan tentang KOSPEN dan implementasinya yang baik. Walaubagaimanapun, masih terdapat kekeliruan di kalangan sukarelawan kesihatan komuniti mengenai fungsi sebagai sukarelawan. Maka adalah penting untuk memperkasakan sukarelawan dengan kesedaran tentang fungsi mereka dan juga pengetahuan mengenai KOSPEN.

Kata kunci: KOSPEN, Komuniti Sihat Perkasa Negara, pengetahuan, implementasi, sukarelawan kesihatan komuniti

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I certify that a Dissertation Examination Committee has met on 2nd August 2017 to conduct the final examination of Navindra Kumar A/L Sondaram on his thesis entitled Factors associated with knowledge on healthy community, empowers nation (KOSPEN) and its implementation among community health volunteers in Kulim district, 2017 in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Public Health.

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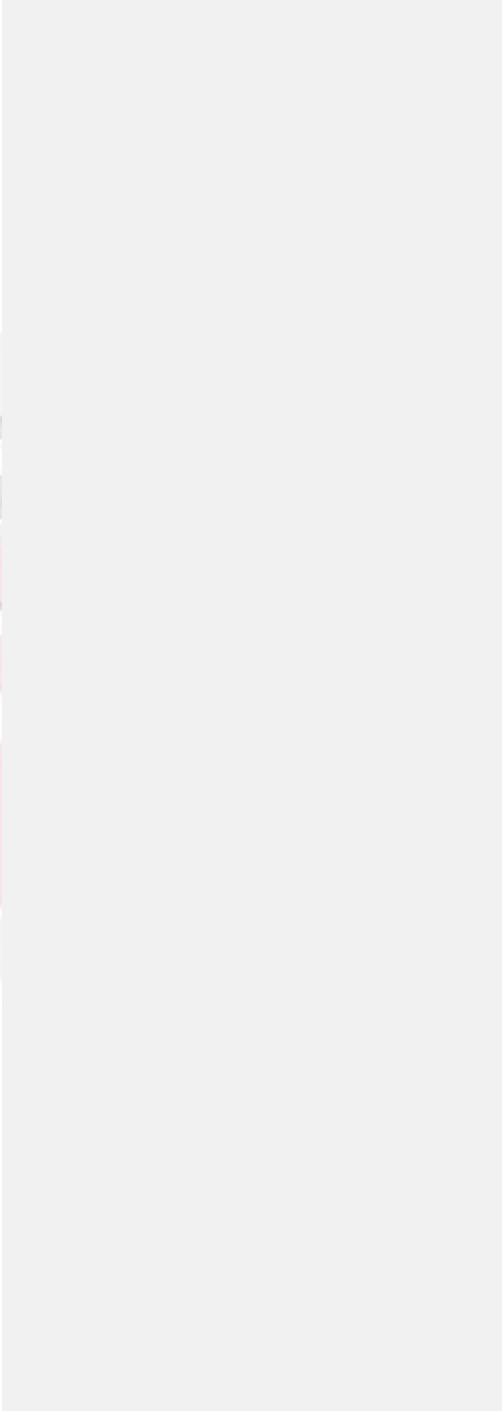
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LIST OF ABBREVIATIONS

| | |
|--------|--|
| KOSPEN | <i>Komuniti Sihat, Perkasa Negara</i> |
| CHW | Community health workers |
| UPM | Universiti Putra Malaysia |
| WHO | World Health Organization |
| KEMAS | Community Development Department <i>(Jabatan Kemajuan Masyarakat)</i> |
| CHV | Community health volunteers |
| COMBI | Communication for behavioural impact |
| NCD | Non-communicable disease |
| iNCD | Intervention for non-communicable disease |
| IPH | Institute for Public Health |
| MOH | Ministry of Health Malaysia |

CHAPTER 1

INTRODUCTION

1.1 Background

Overall prevalence of two out of three major risk factors contributing to non-communicable disease (NCD) which are diabetes mellitus and hypercholesterolemia remained high as found in National Health Morbidity Survey (NHMS) 2015. Whereas the prevalence of high blood pressure has shown a decreased 2.4% in the study done nationwide (Institute for Public Health, 2015). The current prevalence of hypertension in Malaysia is 30.3%, which is lower than the prevalence in 2011 (32.7%) and 2006 (32.2%). However the proportion of “undiagnosed hypertension” remains high at 17.2%, which is the similar ratio to 2011. The prevalence of hypercholesterolemia in Malaysia also increased to 47.7% from 32.6% in 2011 (Institute for Public Health, 2015).

Managing the risk factors early, as well as early detection of the disease can prevent non-communicable diseases. The necessary skills and tools are already available in the health clinics, however these skills need to be transferred to the community level. It is not possible to transfer the doctors, nurses and assistant medical officers to work at the community level, outside of the health clinics or hospitals since they are already providing essential services to an increasing number of clients accessing the healthcare services. Therefore, there is a need to identify “new” agents of change and through community-based interventions there is hope to create more and more agents of change to enable to adopt the “whole-of-community” approach more effectively (Mustapha et al., 2014).

As non-communicable diseases burden and their prevalence still increasing, Ministry of Health (MOH) Malaysia has introduced a community empowerment initiative program, “*Komuniti Sihat, Perkasa Negara*” acronymed as KOSPEN in July 2013. This is an initiative triggered by the Honorable Minister of Health Malaysia Datuk Seri Dr. S. Subramaniam to empower selfcare among Malaysians to combat and reduce the burden of non-communicable diseases in Malaysia, with the existing government mechanism at the grassroot level. The community empowerment is initiated with the collaboration with Malaysian Ministry of Rural and Regional through their Community Development Department (KEMAS). Additionally, it is also part of National Blue Ocean Strategy between MOH and other government agencies which already has existing programs in grassroot level (Ministry of Health, 2013; Subramaniam, 2014).

Ever since July 2013, the nationwide embarkation of KOSPEN nationwide has 30,000 trained volunteers in 5,000 KOSPEN localities. Number of adults screened for high blood pressure, at risk of high blood sugar level,

overweight and smokers has reached 300,000 as per May 2016 (Rosnah, 2016). Among this screened adults, 70% have been referred for diabetic confirmatory test at the health clinics, 36% for high blood pressure and 6.5% of them for class II obesity. By the year 2022, the Malaysian Ministry of Health is estimating almost six million Malaysians would benefit from this community empowerment program by achieving 10,000 KOSPEN localities and 50,000 trained volunteers (Rosnah, 2016).

1.2 Problems Statements

The community empowerment program KOSPEN has been introduced and embarked nationwide since July 2013 (Subramaniam, 2014; Rosnah, 2016). The indicator mainly used to monitor and evaluate the progression of the program has been the number of volunteers trained and the number of adults screened by these trained volunteers.

Kulim District has identified and sensitized 53 villages as KOSPEN localities. Each locality has minimum 5 volunteers called *Gerakan Sukarelawan Satu Malaysia* (GS1M). Therefore there are 344 volunteers in Kulim District who have been trained and given mandated to run the KOSPEN program. The volunteers are trained at their starting point and monitored thereafter. This training and monitoring is handled by the district's Intervention for Non-communicable Diseases (INCD) team. The team is made up by one Medical Officer, one Assitant Medical Officer, one Staff Nurse and one Assistant Environmental Health Officer. This team of five members are solely responsible for the KOSPEN program in the district.

The target of KOSPEN program is to perform health screening for at least 80% of their community member aged 18 and above. Among these 53 KOSPEN localities, 17 localities has low performance in achieving the targeted KOSPEN health screening program (NCD Unit, 2016). This is due to lack of knowledge on KOSPEN and the implementation among the volunteers. Success of KOSPEN program lies upon the active participations of the volunteers. Active participation would be derived from good knowledge towards KOSPEN among these volunteers.

Institute of Public Health Malaysia (IPH) has done a cross-sectional study to evaluate the effectiveness of implementation of KOSPEN in Malaysia. The study was conducted in October to December 2014 among the population was the implementers group (District Health Officer, District iNCD team, KEMAS Distric Officer, KEMAS staff), volunteers and community in three southern states of Malaysia Johor, Melaka and Negeri Sembilan. Generally the study found that the volunteers had good knowledge, acceptance and practice of KOSPEN program. However the study did not study the factors associated and predictors of knowledge of

the Community Health Volunteers. These predictors would be useful in future for recruitment of more effective Community Health Volunteers.

1.3 Significance of study

The researcher would be able to study the associated factors and the predictors of knowledge of KOSPEN and its practice. These factors would help in tailoring volunteers based intervention to increase the knowledge and practice of KOSPEN program. The study would be able to identify the gap in implementation of KOSPEN program by community health volunteers and therefore implementation of the program could be improved. Excellent knowledge and implementation of KOSPEN program among the volunteers would benefit the community by having well-trained volunteers to serve the community. A well-trained volunteer with good knowledge and implementation of KOSPEN program would provide reliable and complete data on health status of the community.

1.4 Research Questions

The research questions of this study are:

- i. What are the sociodemographic factors (age, gender, ethnic, education level, marital status, and employment status) of the Community Health Volunteers in Kulim District.
- ii. What is the level of knowledge on KOSPEN and the level of implementation among Community Health Volunteers in Kulim District.
- iii. What are the factors associated with knowledge on KOSPEN among Community Health Volunteers in Kulim District.
- iv. What are the factors associated with the implementation of KOSPEN program among Community Health Volunteers in Kulim District.

1.5 Objectives of the study

1.5.1 General objective

The general objective of this study is to identify the factors associated with knowledge on KOSPEN and the implementation of KOSPEN program among Community Health Volunteers in Kulim District.

1.5.2 Specific objectives

The specific objectives of this study are:

- i. To identify the sociodemographic factors (age, gender, ethnic, education level, marital status, and employment status), training, and awareness of the Community Health Volunteers in Kulim District.

- ii. To determine the level of knowledge on KOSPEN among Community Health Volunteers in Kulim District.
- iii. To determine the implementation level of KOSPEN among Community Health Volunteers in Kulim District.
- iv. To identify the association between sociodemographic factors, training, awareness and knowledge on KOSPEN among Community Health Volunteers in Kulim District.
- v. To identify the association between sociodemographic factors, training, awareness and the implementation of KOSPEN among Community Health Volunteers in Kulim District.
- vi. To identify the association between knowledge on KOSPEN and the implementation among Community Health Volunteers in Kulim District.
- vii. To determine the predictors of poor knowledge on KOSPEN and poor implementation among Community Health Volunteers in Kulim District.

1.6 Hypotheses

Alternative hypotheses :

- i. There is association between sociodemographic factors and knowledge on KOSPEN among Community Health Volunteers in Kulim District.
- ii. There is association between awareness and knowledge on KOSPEN among Community Health Volunteers in Kulim District.
- iii. There is association between training and knowledge on KOSPEN among Community Health Volunteers in Kulim District.
- iv. There is association between sociodemographic factors and the implementation of KOSPEN among Community Health Volunteers in Kulim District.
- v. There is association between awareness and the implementation of KOSPEN among Community Health Volunteers in Kulim District.
- vi. There is association between training and the implementation of KOSPEN among Community Health Volunteers in Kulim District.
- vii. There is association between knowledge on KOSPEN and the implementation among Community Health Volunteers in Kulim District.

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