

# Involvement and Barriers Towards Provision of Health Promotion Activities Among Nurses in Kuantan, Pahang

Farah Hanun Ahmad Sabri<sup>1</sup> & Aniwani Makhtar<sup>2\*</sup>

<sup>1</sup>National Heart Institute of Malaysia, Kuala Lumpur, Malaysia

<sup>2</sup>Department of Special Care Nursing, Kulliyah of Nursing, International Islamic University Malaysia, Pahang, Malaysia.

## ABSTRACT

**Background:** Nurses make up the single largest healthcare professional group in the Malaysian healthcare system. As frontline healthcare providers, they promote healthy lifestyles to patients and families. Nevertheless, the nurses encounter many barriers towards their involvement in providing health promotion activities. The aim of this study was to explore the nurses' involvement and barriers towards the provision of health promotion activities.

**Methods:** A cross-sectional study was carried out in selected community health clinics in Kuantan, Pahang. It involved 168 nurses who were selected using convenience sampling. The study used a self-administered questionnaire that contained a section on demographic characteristics, the nurses' involvement and barriers towards the provision of health promotion activities questionnaire.

**Results:** The results of this study show that the participants were involved in health promotion activities. Immunisation, weight management counselling, family planning, diabetes counselling, nutritional activity and physical activity were the performance items most frequently cited by the participants in terms of involvement. Meanwhile, lack of time was the most frequently cited barrier item affecting involvement.

**Conclusions:** In terms of continuing professional development and lifelong learning, the study provides valuable information for formulating strategies to offer training opportunities and continual support available in increasing nurses' involvement in health promotion activities.

**Keywords:** Nurses, Involvement, Barriers, Health promotion, Health education

## \*Corresponding author

Dr. Aniwani Makhtar  
Department of Special Care Nursing,  
Kulliyah of Nursing,  
International Islamic University Malaysia,  
Jalan Sultan Ahmad Shah, Bandar Indera Mahkota,  
25200 Kuantan, Pahang, Malaysia.  
E-mail: aniwani@iiu.edu.my

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## INTRODUCTION

Health promotion towards individuals and communities helps them increase their quality standard of health. According to the World Health Organisation (WHO), health promotion refers to a process of enabling people to increase control over and improve their health (1). The Malaysian Health Promotion Board was established in 2006 under an Act of Parliament (Act 651). The act was announced on 29th June 2006 and enforced by the Minister of Health on 1st April 2007 (2). MOH has intensely advocated health promotion practices in both governmental and private sectors in recent years (3). The increase in health campaigns and health information materials has been seen in many healthcare settings across Malaysia. Health promotion and prevention such as the discouragement of smoking, alcohol abuse and weight management and physical exercises are necessary to decrease personal and societal consequences (4).

The importance of nurses' role in health promotion within the hospital and community setting has been widely acknowledged in recent years because many of the major causes of morbidity and mortality worldwide are linked to individuals' lifestyles, and thus, preventable (5). Generally, health promotion by nurses merely focuses on disease prevention and changing the behaviour of individuals with respect to their health. However, having multi-disciplinary knowledge and experience, nurses play a more complex role as health promoters (6). They are involved in a comprehensive range of types of health promotion activities across an extensive scope of nursing contexts, such as general health promoters, patient-focused health promoters and project management health promoters (6).

Nurses have many opportunities to provide health education as they are involved in daily communication with patients and families. They spend most of their time with patients, providing anticipatory guidance about immunisations, nutrition, dietary, medications, safety and prevention of illness. Thus, the rapport built between nurses and patients and their families creates trust, which helps them accept information shared by nurses. Available evidence shows that nurses who personally

engage in health promotion practices are inclined to encourage their patients to carry on with their life appropriately (7).

Nurses' involvement in health promotion activities is tremendously significant; nevertheless, they still encounter many barriers towards their involvement in providing health promotion activities. A literature search showed only one published study in 2009 among pharmacists in community settings in Penang, showing that too little attention has been paid to this subject (8). So far, no study has been conducted in Malaysia to evaluate nurses' involvement and barriers towards the provision of health promotion activities among nurses. Therefore, this study fills the knowledge gap and aims to explore nurses' involvement and barriers towards the provision of health promotion activities.

## METHODS

### Study design

A descriptive and cross-sectional study was performed.

### Study setting

The study was conducted at the selected community health clinics in Kuantan, Pahang. The study was conducted from March to July 2020.

### Population and sample size

The study subjects consisted of 214 nurses working in the selected community health clinics and fulfilling the inclusion criteria. The sample size of 210, of which 20% of the dropout rate was added, was calculated using Raosoft software (9). The total number of participants achieved in this study was 168 nurses.

### Eligibility criteria

**Inclusion Criteria** - All nurses who were working in selected community health clinics and willing to participate in the study were included.

**Exclusion Criteria** - The nurses who were on leave during the data collection period were excluded from the study.

## Instruments

This study used self-administrated questionnaires adopted from a study done by Hasali et al (8). Permission to use the scales was granted by the tool developers. The original questionnaire was in English. Therefore, the questionnaire was translated into Malay using forward and backward translation method. This questionnaire consisted of four sections: (a) Socio-demographic information, which included gender, age, current employment status, level of education and duration of service; (b) Involvement in health promotion activities, which referred to 12 types of health promotion activities. This section included an 11-item checklist scored on a 4-point Likert scale ranging from 1 = very uninvolved to 4 = very involved; (c) barriers towards nurses' involvement, which included factors that individually prevented activities, measured using a 6-item checklist scored on a 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The Malay version of this instrument showed good reliability with Cronbach's alpha coefficients of 0.73 and 0.70, respectively.

## Data Collection

Assisted by the sister of the community health clinics involved, the researcher distributed the questionnaires and the consent forms to all participants who had finished their duty. After the participants were briefed, they were given 30 minutes to answer the questionnaire and submit the completed questionnaire to the researcher. All questionnaires were collected and rechecked by the researcher to isolate unanswered questionnaires.

## Ethical Consideration

Ethical approval was obtained from the Kulliyyah of Nursing Postgraduate Research Committee (KNPGRC) (KNPGRC No:7/2019) and Medical Research Ethics Committee (MREC) (NMRR-20-73-52720). The participants in this study were involved on a voluntary basis. The study procedure was explained to the participants who had agreed to participate before they were asked to sign the consent form. They were also assured about anonymity and privacy.

## Data Analysis

Descriptive statistics were used to analyse the descriptive data. Normality of data was analyzed using Kolmogorov-Smirnov and Shapiro-Wilk test. The significance values for both tests are below 0.05, it is shown that the data significantly deviate from a normal distribution therefore nonparametric Spearman's rank correlation coefficient and Kruskal-Wallis tests were used to examine the associations between the demographic characteristics, involvement and barriers towards health promotion activities. The data were analysed using SPSS Version 22.0 (IBM, Inc., Armonk, NY, USA).

## RESULTS

### Demographic Characteristics of Participants

168 out of 210 nurses in the community health clinics agreed to give written consent and participate in this study. Table 1 shows the distribution of demographic characteristics of the 168 nurses. Mean age and work experience were  $39.09 \pm 5.48$  and  $15.17 \pm 5.42$  years, respectively. Just slightly over a half of the participants were community nurses (56.5%), and about a half of the participants held a certificate in nursing (50.6%).

**Table 1:** Socio-demographic characteristics of the participants

| Characteristics                                    | Number | Percentage |
|--|--------|------------|
| <b>Age</b>   |        |            |
| (Mean = 39.09, SD = 5.48)                          |        |            |
| 20 to 29   | 5      | 3.0        |
| 30 to 39   | 85     | 50.6       |
| 40 to 49   | 73     | 43.5       |
| 50 to 59   | 5      | 3.0        |
| <b>Current employment status</b>                   |        |            |
| Matron   | 3      | 1.8        |
| Sister   | 5      | 3.0        |
| Staff Nurse  | 65     | 38.7       |
| Community Nurse                                    | 95     | 56.5       |
| <b>Level of education</b>                          |        |            |
| Certificate in Nursing                             | 85     | 50.6       |
| Diploma in Nursing                                 | 74     | 44.0       |
| Bachelor in Nursing                                | 9      | 5.4        |
| <b>Working experience</b>                          |        |            |
| (Mean = 15.17, SD = 5.42)                          |        |            |
| 1 to 10 years                                      | 34     | 20.2       |
| 11 to 20 years                                     | 103    | 61.3       |
| 21 to 30 years                                     | 30     | 17.9       |
| 31 to 40 years                                     | 1      | 0.6        |
| <b>Willing to provide health promotion service</b> |        |            |
| Yes  | 168    | 100.0      |
| No   | 0      | 0          |

Note: SD = Standard deviation

**Involvement of nurses in health promotion activities**

The nurses' involvement in health promotion activities is shown in Table 2. The claims to be either involved or very involved were ranked in descending order. Health promotion

activities related to family planning, immunisation and weight management counselling were on the top; meanwhile, health promotion activities related to diabetes counselling, traditional medicine counselling and oral health were the least ones.

**Table 2:** Involvement of nurses in health promotion activities

| Involvement in health promotion activities | Response n (%) |           |          |           |           |
|--|----------------|-----------|----------|-----------|-----------|
|  | VU             | UI        | UC       | IN        | VI        |
| Family planning                            | 8 (4.8)        | 20 (11.9) | 5 (3.0)  | 60 (35.7) | 75 (44.6) |
| Immunisation                               | 7 (4.2)        | 18 (10.7) | 2 (1.2)  | 75 (44.6) | 66 (39.3) |
| Weight management counselling              | 8 (4.8)        | 30 (17.9) | 4 (2.4)  | 95 (56.5) | 31 (18.5) |
| Nutritional and physical activities        | 6 (3.6)        | 34 (20.2) | 9 (5.4)  | 98 (58.3) | 21 (12.5) |
| Diabetes counselling                       | 9 (5.4)        | 50 (29.8) | 8 (4.8)  | 88 (52.4) | 13 (7.7)  |
| Traditional medicine counselling           | 18 (10.7)      | 56 (33.3) | 8 (4.8)  | 73 (43.5) | 13 (7.7)  |
| Oral health                                | 12 (7.1)       | 58 (34.5) | 8 (4.8)  | 81 (48.2) | 9 (5.4)   |
| Cardiovascular counselling                 | 1 (6.0)        | 88 (52.4) | 10 (6.0) | 56 (33.3) | 4 (2.4)   |
| Smoking cessation counselling              | 9 (5.4)        | 88 (52.4) | 11 (6.5) | 57 (33.9) | 3 (1.8)   |
| Asthma counselling                         | 8 (4.8)        | 77 (45.8) | 11 (6.5) | 71 (42.3) | 1 (0.6)   |
| Drug misuse counselling                    | 7 (4.2)        | 93 (55.4) | 11 (6.5) | 57 (33.9) | 0 (0)     |

Note: VU = Very uninvolved, UI = Uninvolved, UC = Uncertain, IN = Involved, VI = Very involved

**Barriers towards the provision of health promotion activities**

The barriers towards nurses' participation in health promotion activities are shown in Table 3. Most participants (n = 89, 53%) identified

lack of time as the barrier influencing their involvement in conducting health promotion activities.

**Table 3:** Barriers towards the provision of health promotion activities

| Barriers towards the provision of health promotion activities | Response n (%)    |           |                            |           |                |
|---|-------------------|-----------|----------------------------|-----------|----------------|
|   | Strongly disagree | Disagree  | Neither disagree nor agree | Agree     | Strongly agree |
| Lack of reimbursement from employer or consumer               | 28 (16.7)         | 50 (29.8) | 25 (14.9)                  | 58 (34.5) | 7 (4.2)        |
| Lack of profitability   | 40 (23.8)         | 78 (46.4) | 19 (11.3)                  | 30 (17.9) | 1 (0.6)        |
| Lack of time  | 18 (10.7)         | 42 (25.0) | 19 (11.3)                  | 70 (41.7) | 19 (11.3)      |
| Lack of training  | 18 (10.7)         | 54 (32.1) | 34 (20.2)                  | 56 (33.3) | 6 (3.6)        |
| Insufficient management support                               | 29 (17.3)         | 58 (34.5) | 28 (16.7)                  | 51 (30.4) | 2 (1.2)        |
| No standard guideline available for offering the services     | 27 (16.1)         | 60 (38.7) | 29 (17.3)                  | 45 (26.8) | 7 (4.2)        |

Note: 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

### Association between demographic characteristics, barriers towards the provision of health promotion activities and involvement of nurses in health promotion activities

The associations between the demographic characteristics, barriers towards the provision of health promotion activities and involvement of nurses in health promotion activities are shown in Table 4. No significant association

was identified between any of the demographic characteristics, barriers towards the provision of health promotion activities and involvement of nurses in health promotion activities.

**Table 4:** Association between demographic characteristics, barriers towards the provision of health promotion activities and involvement of nurses in health promotion activities

| Variables  | Mean rank | X <sup>2</sup> /p - value<br>(Statistical value) | p - value |
|--|-----------|--|-----------|
| <b>Age</b>   |           | 0.582 <sup>a</sup>                               | 0.900     |
| 20 to 29   | 75.00     |  |           |
| 30 to 39   | 86.05     |  |           |
| 40 to 49   | 84.16     |  |           |
| 50 to 59   | 72.60     |  |           |
| <b>Current employment status</b>                                     |           | 1.451 <sup>a</sup>                               | 0.694     |
| Matron   | 105.67    |  |           |
| Sister   | 98.60     |  |           |
| Staffs nurse   | 80.68     |  |           |
| Community nurse  | 85.70     |  |           |
| <b>Level of education</b>  |           | 0.435 <sup>a</sup>                               | 0.804     |
| Certificate  | 85.42     |  |           |
| Diploma  | 84.69     |  |           |
| Bachelor's degree  | 74.22     |  |           |
| <b>Working experience</b>  | -         | 0.020 <sup>b</sup>                               | 0.800     |
| <b>Barriers towards the provision of health promotion activities</b> | -         | -0.082 <sup>b</sup>                              | 0.291     |

Note: X<sup>2</sup>= <sup>a</sup>Kruskal- Wallis test, p= <sup>b</sup>Spearman's rank correlation coefficient, \* p< 0.05

## DISCUSSION

This study aimed to explore the nurses' involvement and barriers towards the provision of health promotion activities. The results of this study show that more than half of the nurses in the present study were involved/very involved in a wide range of health promotion services. The most frequent health promotion activity that the participants were involved in was immunisation. In Malaysia, different vaccines are delivered in the childhood immunisation programme, exclusively run by nurses at community health clinics. Therefore, it is not surprising that the nurses promoted immunisation to the parents and guardians in the battle against communicable diseases. Furthermore, they are also a trustable source of information about the vaccine to the parents and guardians. However, the involvement of nurses in drug misuse counselling related health promotion activities is relatively minimal

and needs to be improved. The possible explanation for this result might be that pharmacists are more highly involved than nurses in giving health promotion related to drugs. Pharmacists are experts who have more in-depth knowledge about drugs, allowing them to educate patients about drugs and medications (10). This is supported by previous studies in Malaysia (8) and Northwest Ethiopia (11), where a majority of pharmacists were involved with drug misuse counselling in their studies.

Nearly all of the participants agreed that all the barriers listed in the data collection tool were obstacles to the provision of health promotion services. However, the most frequent barrier towards nurses' involvement found in this study was lack of time. This finding mirrors reported results in previous studies (4).

Demographic characteristics and the involvement of nurses in health promotion

activities were investigated in this study. However, no significant association between demographic characteristics and involvement of nurses in health promotion activities was found. The non-significant result of the current study could be due to the homogeneity of the study participants who were nurses, predominantly female and from the same educational background. Thus, the way they think and the way in which they perceive their role may not vary that much. To the best of our knowledge, no study to date has been found to measure the association between barriers towards the provision of health promotion activities and nurses' involvement in health promotion activities. The results of the current study did not show any significant association between barriers towards the provision of health promotion activities and nurses' involvement in health promotion activities.

This study has several limitations. First, it was a cross-sectional study; thus, causal relationships could not be inferred. Second, the study population consisted of nurses from particularly selected community health clinics in Kuantan, Pahang. Thus, the results cannot be assumed to represent all nurses in Malaysia as the generalisability of the results may be an issue. Therefore, further studies should include all nurses from other cities of Malaysia in order to better understand nurses' involvement and barriers towards the provision of health promotion activities in Malaysia.

## CONCLUSION

A majority of the nurses participated in immunisation activities, and lack of time is the major barrier that limits nurses to participate in health promotion activities. The study provides valuable information for formulating strategies to increase nurses' involvement in health promotion activities by offering more training opportunities and continual support for continuing professional development and lifelong learning.

## CONFLICT OF INTEREST

The researcher declares that there is no conflict of interests.

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