

ORIGINAL ARTICLE

PERCEPTION TOWARDS HEALTH PROMOTION ACTIVITIES: FINDINGS FROM A COMMUNITY SURVEY IN THE STATE OF PENANG, MALAYSIA

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ABSTRACT

The study aimed to explore the perceptions towards health promotion activities among population of Penang Island, Malaysia. The study was designed as a questionnaire based cross sectional analysis. General public from the district of Jelutong, located in the state of Penang, Malaysia was conveniently approached for the study. Descriptive statistics were used to ascertain demographic characteristics where as inferential statistics were employed to measure the extent of association among study variables. Out of 480 respondents, a response rate of 82.7% was achieved. The study cohort was dominated by females (63.0%) and majority of the participants belonged to Malay ethnicity (88.1%). One hundred and seventy two (43.3%) never attended a health promotional campaign and mentioned lack of time and transport as potential barriers. Among those who attended such activities, one third was satisfied with the benefits of health campaigns. Approximately 90% of the participants demanded accessible locations, common language as mode of communication and complete medical checkups with professional advice at health promotional campaigns. General public can encouraged to participate in the health promotion activities by considering their priorities before designing a health promotion program. This will help in targeting and achieving the goal "health for all".

Key words: Perception, health promotion, population, Malaysia.

INTRODUCTION

The concept of health promotion, self care and community participation is widely incorporated in the national health agenda documents and policies around the globe¹. Health promotion is the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions². Health promotion, through investment and action has a marked impact on the determinants of health. Health promotion creates the greatest health gain for people, contributes significantly to the reduction of inequities in health, furthers human rights, and builds social capital³. The ultimate goal is to increase health expectancies and to narrow the gaps between individuals and groups.

The conception of health promotion, self-care and community participation emerged during 1970s, primarily out of concerns about the limitation of professional health system and rising cost of health care^{4,5}. Since then, there has been rapid growth in these areas in both developed and developing countries due to the positive evidences of effectiveness of such interventions^{1,5}. In order to effectively communicate the message behind the concept of health promotion and self care, a good coordination,

communication and commitment is well needed between healthcare personals, social workers and communities^{6,7}. This aids in delivering relatable health related message which can be than translated into sustainable actions at large scales⁷.

In Malaysia, health promotion and self care are long adopted as part of the national health agenda. The vision for nations health which have the following statement "to develop a nation of healthy individuals, families and communities, through a health system that is equitable, affordable, efficient, technologically appropriate, environmentally adaptable and consumer-friendly, with emphasis on quality, innovation, health promotion and respect for human dignity, and which promotes individual responsibility and community participation towards and enhanced quality of life" clearly shows that health promotion activities are given high priority by the ministry of health⁸.

The State of Penang is the second smallest Malaysian state with a high population. Highly urbanised and industrialised, Penang is one of the most developed and economically important states in the country^{9,10}. Penang has been successful in reducing poverty with less than 0.3% of the population below the poverty line in 2010, compared with 29% in 1980¹¹. Despite the progress made, urban poverty among some

inhabitants still prevails and this has a negative impact on population's health outcomes¹¹. Drug abuse, demographic changes such as ageing and ethnic diversity also pose challenges to healthcare system¹¹. One of the great challenges in developing and executing an effective health promotion programmes is often attributed to lack of manpower support from volunteers and partnerships from private sectors^{6,7}. Although, health promotion is being carried out at a number of areas in Penang, the impact of such activities is not documented. Therefore, this study aims to investigate the perceptions towards health promotion activities (diabetes and hypertension screening and health seminars) among residents in Jelutong District, Penang, Malaysia. It assesses their knowledge, attitude and practice towards health promotion activities currently being organized in the area. To the best of our knowledge and through extensive literature review, this is the first study of its kind reported from Penang, Malaysia. It is believed that the results will help policy and decision makers to plan and decide accordingly health promotion activities to further improve awareness and access of the population.

METHODS

Study design, settings and sampling frame

A questionnaire based, cross-sectional household survey was conducted from 1st October 2011 to 30th Nov, 2011 at Jelutong, Penang. Jelutong is located in the north-east of Penang and consists of a working-class suburb of George Town, Penang. Georgetown is the capital of the state of Penang and has a population of 1,253,748. It is the second largest metropolitan city in Malaysia by population¹². The development of Jelutong goes back to the turn of the 20th century, as the population spills southward from the city¹³.

An automated online calculator was used for sample size calculation¹⁴. The sample was calculated based on 95% confidence interval and 5% margin of error. With a response distribution of 50%, the required sample for this study was 384. An additional 25% was added as potential dropout¹⁵, hence a total of 480 respondents were thereby conveniently approached for the study. The total number of houses in Jelutong is 800 and there are 4 family members on average living in each house.

Respondent's familiarity with Malay language (National language of Malaysia) and aging above 18 years and living in Jelutong, Penang was taken

as inclusion criteria. Data collection was mostly done in weekend, when the response rate was expected to be high.

Ethical issues

The study was approved by institutional ethical committee of Discipline of Social and Administrative Pharmacy (DSAP/01/11). Written and signed consent was also taken prior to data collection.

Study questionnaire

A 20 item structured questionnaire, comprising of five sections was used for data collection. Respondents were asked to answer in limited choice, multiple choice and 3 point Likert scale format. All respondents were requested to answer section one, two and three (demographics, perceptions and awareness towards health promotion activities). However, section four and five were offered to those respondents who had participated in health promotion campaign at least once in their life.

The primary version of the questionnaire was developed in English language by the research team through extensive literature review. It was later translated into Malay language by using standard translating procedures^{16,17}. The Malay version of the questionnaire was tested for its reliability and validity. The internal consistency was assessed by using Cronbach's alpha ($\alpha = 0.78$) and was found to be in acceptable ranges¹⁸. Validity (face, content and convergent) of the questionnaire was performed by experts at Discipline of Social and Administrative Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia. The questionnaire was piloted among 30 respondents for its acceptability and consistency. Minor modifications were needed after the pilot testing. Data from the pilot study was not included in the final results.

Statistical analyses

The data were computed and analysed using Statistical Package for Social Sciences (SPSS version 16.0, SPSS Inc., Chicago, IL, USA). Descriptive analysis was conducted. The results of each item on the questionnaire were reported, as percentages and frequencies. Chi-square was used to test the significant association between the categorical study variables. P value of <0.05 was considered to be of statistical significance.

RESULTS

Demographic characteristics of respondents

A total of 397 responses were received with a

response rate of 82.7% as described in Table 1. Majority of the respondents (n=95, 23.9) were categorized in the age group of 48-57 years with females dominating the entire cohort (n=250,

63.0). Two hundred and sixty nine (67.8%) attained secondary education and majority 162 (40.8%) were working as government employees.

Table 1. Demographic characteristics of study respondents

Characteristics	Frequency (n=397)	Percentage (n=397)
Age (years)		
18-27	81	20.4
28-37	80	20.2
38-47	79	19.9
48-57	95	23.9
>58	62	15.6
Gender		
Male	147	37.0
Female	250	63.0
Race		
Malay	350	88.1
Chinese	15	3.7
Indian	32	8.0
Educational Level		
Primary	55	13.8
Secondary	269	67.8
College/University	73	18.4
Occupation		
Unemployed	31	7.8
Government employee	162	40.8
Private employee/Own business	120	30.2
Retired	44	11.1
Others*	40	10.1
Monthly Income**		
< RM 500	68	17.1
RM 500-RM 1000	95	23.9
RM 1001-RM 1500	110	27.7
RM 1501-RM 2000	64	16.1
>RM 2001	60	15.1

*Student.

**RM 1= 0.332094 US \$ (RM=Ringgit Malaysia).

Perceptions towards health promotion

Table 2 explains the perception of respondents towards health promotion. One hundred and fifty (37.8%) of the respondents stated that health promotion means “a free medical check up” for them. In addition, 118 (29.7%) and 109 (27.5%) described “health talks” and “health campaigns” as their understanding of health promotion respectively. However, 126 (31.7%) revealed that

health promotion is a collection of free medical check up, health talks and campaigns.

Mass media was rated as the best source of information about health promotion activities (n=200, 50.3%) followed by newspapers (n=123, 30.9%) and advertisements (n=119, 29.9%). Almost half (n=198, 49.9%) of the respondents were quite satisfied that health promotion

activities should be carried out once in three months.

One hundred and forty four (36.2%) respondents explained that they are not able to join health promotion activities due to the lack of time.

However, 121 (30.4%) indicated that the unavailability of transport as major reason of not attending a health promotion campaign. On the other hand, a small number of the respondents (n=50, 12.5%) were not interested in joining a health promotion activity.

Table 2. Perception of respondents towards health promotion activities

Questions*	Frequency	Percentage
What do you understand about health promotion activities?		
Health Talk	118	29.7
Health campaign/ exhibition	109	27.5
Free medical Check-up	150	37.8
All of the above	126	31.7
None	21	5.3
How frequent do you want the health promotion activities to be held?		
Once a week	60	15.1
Once in every 3 months	198	49.9
Once a year	105	26.4
Once in every 6 months	33	8.3
What is your source of information about health promotion activities?		
Mass Media	200	50.3
Internet	55	13.9
Newspaper	123	31.0
Family members	62	15.6
Friends	94	23.7
Advertisement	119	29.9
What is the reason for not joining health promotion activities?		
No transport	121	30.4
Babysit	10	2.5
No time	144	36.3
Not interested	50	12.6

*Respondents were allowed to choose multiple options.

Awareness towards health promotion activities

Majority of the respondents (n=336, 84.6%) had heard of health promotion activities as shown in Table 3. A significant association among gender (P=0.002) was noticed when this statement was compared with study variables. Age was significantly related (P=0.001) as 343 (86.4%) of the respondents expressed satisfaction with their current health status. Moreover, 223 (56.2%) of the respondents declared that they have participated in a health promotion activity prior to this study. However, there was no significant

association reported. While respondents were asked to join a health promotion program to be held in their neighbourhood, majority (n=346, 87.2%) expressed their interest. Education level was found significantly associated with willingness to join health promotion program in premises (P=0.015). Majority of the respondents (n=330, 83.1%) stated that they practically apply the information which they receive from the health promotion activities with no significant association among study variables.

Table 3. Awareness towards health promotion activities

Items	Yes		No		P value*				
	(n)	%	(n)	%	Age	Gender	Education	Income	Occupation
1	336	84.6	61	15.4	0.509	0.002	0.994	0.406	0.521
2	223	56.2	172	43.3	0.059	0.834	0.468	0.061	0.658
3	343	86.4	54	13.6	0.001	0.288	0.264	0.804	0.322
4	330	83.1	66	16.6	0.162	0.288	0.211	0.804	0.458
5	346	87.2	50	12.6	0.162	0.288	0.015	0.804	0.212

*Chi square test.

1. Have you ever heard of health promotion activities?

2. Have you ever joined any health promotion activities?

3. Are you satisfied with your current health status?

4. Do you apply the useful information you gained from the health promotion activities in your daily life?

5. Are you willing to join the health promotion activities if there is one held in your area?

Satisfaction towards health promotion activities

Responses to questions exploring the satisfaction towards health promoting activities are described in Table 4. Majority of the respondents (n=200, 89.6%) who attended health promotion campaigns agreed that attendance was of worth and valuable. One hundred and ninety (85.2%) were in favour that the information helped them to ameliorate their health quality. Both gender (P=0.004) and education (P=0.002) were found to be significantly associated with this statement.

For the quality of information being delivered, 195 (87.4%) agreed that health information was concise and clear. The respondents (n=202, 90.5%) were found satisfied with the involvement of health officers and assured that the activities organized during health promotion were attractive (n=160, 71.7%). This can be a reason that 210 (94.1%) of the respondents agreed to have more health campaigns at their premises. However, none of the study variable was found significance with respect to question 1, 3, 4, 5 and 6.

Table 4. Satisfaction towards health promotion activities

Items	Response*						P value**				
	A		N		D		Age	Gender	Education	Income	Occupation
	n	%	n	%	n	%					
1	200	89.6	15	6.7	8	3.5	0.483	0.322	0.214	0.962	0.111
2	190	85.2	20	8.9	13	5.8	0.328	0.004	0.002	0.033	0.245
3	195	87.4	17	7.6	11	4.9	0.082	0.150	0.042	0.041	0.322
4	202	90.5	16	7.1	5	2.2	0.074	0.878	0.193	0.406	0.325
5	160	71.7	10	4.4	53	23.7	0.950	0.356	0.844	0.035	0.214
6	210	94.1	5	2.2	8	3.5	0.856	0.657	0.250	0.095	0.441

*A=agree, N=neutral, D=disagree.

**Chi Square.

Note: Frequency and percentages are calculated based on the respondents' experience of attending health promotional camps.

1. Health promotion activities provide me lots of benefit.

2. Information obtained had improved my health quality.

3. Information delivered during health promotion activities was clear and easy to understand.

4. Involving health officers were friendly and easy to communicate with.

5. I think that all activities held during health awareness promotion had attracted me to get involved in it.

6. More health awareness promotion activities should be organized at my location.

Suggestions towards improving health promotion programme delivery

Respondents' suggestions towards improving health promotion programme delivery are presented in Table 5. One hundred and eighty respondents (80.7%) wanted a comprehensible information flow during health promotion activities. Majority of the respondents (n=201, 90.1%) agreed that health promotion advertisements should be displayed at more

accessible locations. In addition, (n=218, 97.7%) were in favour of health promotion activities to be held at nearby locations so they can join with ease. Almost same number of respondents preferred that health officers should provide check-up and professional advice (n=216, 96.8%) as well as health tips during the programs (n=210, 94.1%). Nevertheless, there was no significant association among all questions and variables included in the study.

Table 5. Suggestions towards improving health promotion programme delivery

Items	Response*						P Value**					
	A n	%	N n	%	D n	%	Age	Gender	Education	Income	Occupation	
1	180	80.7	12	5.3	31	13.9	0.167	0.216	0.358	0.076	0.168	
2	201	90.1	11	4.9	11	4.9	0.440	0.127	0.231	0.276	0.232	
3	218	97.7	0	0	5	2.2	0.478	0.338	0.061	0.210	0.222	
4	216	96.8	2	0.8	5	2.2	0.488	0.341	0.158	0.150	0.321	
5	210	94.1	6	2.6	7	3.1	0.186	0.170	0.105	0.471	0.132	

*A=agree, N=neutral, D=disagree.

**Chi Square.

Note: Frequency and percentages are calculated based on the respondents' experience of attending health promotional camps.

1. Information should be delivered through language understood by majority.
2. Health awareness promotion advertisement should be displayed at more accessible locations.
3. Health awareness promotion should be conducted at nearby locations.
4. Health officers should provide complete check-up and advice during health awareness promotion.
5. Health tips should be given during health promotion activities.

DISCUSSION

In the past decades, association between lifestyle modifications, behavioural change and overall health status has been an issue under continuous discussion. The higher cost of healthcare provokes the need of finding most effective and efficient methods of modifying health behaviours¹⁹. An approach which has generated much interest is the employment of health promotion campaigns promoting health awareness and lifestyle adaptations. Health promotional campaigns are frequently conducted worldwide but it has been observed that outcomes of such programs are only presented as internal reports that are not generally available to the public²⁰. Within this context, critics highlight a lack of an adequate appreciation system and the complexity of the attitude/behaviour change process as a reason of non-reporting of health campaigns. As a result, the interpretations of most of those

evaluations of health campaigns which have been carried out seem to have an overall vague impact on behavioural change and attitude¹⁹.

Health promotional campaigns are also frequently organized in the national language (Bahasa Melayu) at the community levels in Malaysia. Several government departments, agencies and non-governmental organizations (NGOs) are actively involved in promoting health awareness to the population. However, post health promotional surveillance is absent among these organizations. The current study was therefore carried out to assess the perception of general public towards health promotional campaigns as post campaign surveillance. As perception assessment is most significant in determining behaviour change²¹, success or failure of the health educational campaigns can be visualized after a change in behaviour.

The study participants were cooperative and willing to answer without any hesitation. From the results of the study, participants cited mass media and advertisements in newspaper as their major information sources about health promotional campaigns in Jelutong, Penang. This is contrary to what is reported by Altman et al (1999) whereby the authors reported mass media as an obstacle particularly among hard-to-reach populations⁶.

Although majority of the participants have heard of health promotional activities, but almost half of them had never attended any activity of such kind. One possible reason can be attributed to the poor advertisement; hence the population lacks the information of health promotional activities being held in their areas. The current study reported that females were more aware of the health promotional programs as compared to the counterparts. One possible reason can be related to the social aspect which connects females of the area more strongly as compared to males. The study also highlighted a significant association among age and educational level and the will to join health promotional program and satisfaction with the current health status. It is a common observation that health awareness increases with an increase in educational level and is also supported by the current study²²⁻²⁴.

Furthermore, people at times can have “*there is nothing for me*” feeling. Considering this factor as potential barrier, the organizers have to aggressively explain the aim of health promotional activities well before the initiation of the actual activity to the entire population. This can help people to overcome the barrier and visualize the ‘benefits of joining’.

Time, transportation, financial constraints and social commitments can also limit the attendance of targeted population. Our study participants were quite eager to engage themselves in the health promotion activities if are held near their housing areas and specifically once in three months period. In addition, females stated that transportation and time management is one major hurdle for them in attending such activities. Similar results were presented by a General Education Diplomas (GED) program in Boston²⁵. Wiggins described learning disabilities, lack of transportation and lack of child care which is in line to the current study results²⁶. A probable manner of overcoming these obstacles is to organize health promotional campaigns by taking mutual consent about time and place which is convenient to the population. At times it seems impossible to engage the entire population

in decision making, representatives of the society can be targeted to fulfil the task. Providing free transport from a specific area to the health promotional site can minimize the problem to transportation.

Majority of the respondents were found to practically apply the information they obtained from the health promotion activities. Similar results were presented in a study conducted in USA where most of the rural residents in Honduras boiled water after participating in the consciousness-raising program²⁶.

A significant and meaningful relationship between participants’ satisfaction and health promotional activities was found. Almost 90% of the participants stated that health promotional activities were beneficial for them and improved their quality of life. In a similar finding, patients’ overall satisfaction was highly correlated with loyalty to the hospital, as the services provided by the institute increased their quality of life²⁷.

While asking for suggestions, majority of the participants agreed that health promotional information should be delivered by a language which is easy to understand. Native language has potential to ease communication in healthcare evaluation and can improve quality and safety²⁸. The language used would affect the level of comprehension of the participants about the messages delivered during health promotion activities. In addition, respondents preferred that health officers must provide professional advice according to each visitor’s condition. This will help them to understand about their health and present condition. Healthcare providers play a key role in providing the relative information and support needed to overcome barriers faced by majority of people²⁹.

The study focussed a population consisting primarily of the Malay ethnicity. This can cause imbalance among the ethnic groups as small representation is not representative to the particular ethnicity. In addition, the study was conducted in one district of Penang city. The results can vary from place to place are thus are not general to the entire Malaysian population.

In spite of the limitations, the current study highlights the perception of the study population toward health promotional campaigns. Government and social agencies while designing health campaigns can benefit from the study findings. Keeping in view the “*demands and priorities*” of the target audience can help in conducting the health promotional campaigns in

the most effective and efficient manner. This will maximize the involvement of people, build interest and result in behavioural change, thus promoting life style modification; the ultimate goal of health promotional activities.

CONCLUSION

The ultimate goal of health promotion campaigns is to improve health outcomes for communities, including improvements in quality of life, function, independence, equity, mortality and morbidity. Although the participants seem satisfied with the health promotional activities, involvement of the entire sample was not reported. General public must be educated about the benefits of joining health promotion activities so that the entire community can attend and equally benefit from health promotion campaigns.

REFERENCES

1. WHO. Health promotion in a globalized world, 2007. Available from: http://apps.who.int/gb/ebwha/pdf_files/WHA60/A60_18-en.pdf (accessed 20 May 2012).
2. WHO. Health promotion. Geneva: World Health Organization, 2006. Available from: http://www.who.int/topics/health_promotion/en/ (accessed 10 September 2012).
3. Glanz K, Rimer BK, Viswanath K. Health behavior and health education: theory, research, and practice. San Francisco: Jossey-Bass Inc Pub; 2008.
4. WHO. Declaration of Alma-Ata. International Conference on Primary Health Care, 1978; Alma-Ata, USSR.
5. WHO. Ottawa charter for health promotion. First International Conference on Health Promotion; 1986; Ottawa, Canada.
6. Altman DG, Endres J, Linzer J, Lorig K, Howard-Pitney B, Rogers T. Obstacles to and future goals of ten comprehensive community health promotion projects. *J Community Health* 1991;16(6): 299-314.
7. Roussos ST, Fawcett SB. A review of collaborative partnerships as a strategy for improving community health. *Annu Rev Public Health* 2000; 21(1): 369-402.
8. Merican M, Rohaizat Y, Haniza S. Developing the Malaysian health system to meet the challenges of the future. *Med J Malaysia* 2004; 59(1): 84-93.
9. Penang in a state of renaissance, 2011. Available from: <http://www.igeorgetownpenang.com/features/847-penang-in-a-state-of-renaissance> (accessed 21 May 2012).
10. Lim Guan Eng. Only 6% of the population yet Penang contributes 36% of Malaysia's FDI in 2010: Penang must not live in the past but learn from the past so that we can save the future for our children, 2011. Available from: <http://dapmalaysia.org/english/2011/f eb11/lge/lge1218.htm> (accessed 21 May 2012).
11. Organisation for Economic Co-operation and Development. Higher Education in Regional and City Development: State of Penang, Malaysia, 2011. Available from: <http://www.oecd.org/edu/imhe/47505889.pdf> (accesses 25 May, 2012).
12. World Gazetteer. Malaysia: metropolitan areas, 2011. Available from: <http://www.worldgazetteer.com/wg.php?x=&men=gcis&lng=en&des=gamelan&geo=-152&srt=pnan&col=dhoq&msz=1500&va=x&pt=a> (accessed 22 May 2012).
13. Jelutong, Penang. 2009; Available from: <http://www.penangtraveltips.com/jelutong.htm> (accessed 18 May 2012).
14. Raosoft Sample size calculator, 2011. Available from: <http://www.raosoft.com/samplesize.html> (accessed 15 May, 2012).
15. Adamchak S, Bond K, Maclaren L, Magnani R, Nelson K, Seltzer J. A guide to monitoring and evaluating adolescent reproductive health programs, 2000 Available from: http://www.rhrc.org/resources/general_fiel dtools/toolkit/40g%20M&E%20of%20Adol%20RH%20Programs%20Part%201.pdf (accessed 22 May, 2012).
16. Behling O, Law KS. Translating questionnaires and other research instruments: problems and solutions: Sage Publications, Inc.: California, 2000.
17. Harkness JA, Schoua-Glusberg AS. Questionnaires in translation. In: Harkness

- JA. (eds). Cross-cultural survey equivalence. ZUMA-Nachrichten Spezial 3: Mannheim, 1998.
18. Santos JRA. Cronbach's alpha: A tool for assessing the reliability of scales. *J Extension* 1999; **37**(2): 1-5.
19. Flay BR, DiTecco D, Schlegel RP. Mass media in health promotion: an analysis using an extended information-processing model. *Health Educ Behav* 1980; **7**(2): 127-47.
20. Haskins JB. Evaluative research on the effects of mass communication safety campaigns: a methodological critique. *J Safety Res* 1970; **2**(2): 86-96.
21. Janz NK, Becker MH. The health belief model: A decade later. *Health Educ Behav* 1984;**11**(1): 1-47.
22. Bandura A. Health promotion by social cognitive means. *Health Educ Behav* 2004; **31**(2): 143-64.
23. Glasgow RE, Lichtenstein E, Marcus AC. Why don't we see more translation of health promotion research to practice? Rethinking the efficacy-to-effectiveness transition. *Am J Public Health* 2003; **93**(8): 1261-7.
24. McLeroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Educ Behav* 1988; **15**(4): 351-77.
25. Rivera L. Changing women: An ethnographic study of homeless mothers and popular education. *J Soc & Soc Welfare* 2003; **30**: 31-51.
26. Wiggins N. Popular education for health promotion and community empowerment: a review of the literature. *Health Promot Int* 2011. doi: 10.1093/heapro/dar046.
27. Mortazavi S, Kazemi M, Shirazi A, Aziz-Abadi A. The Relationships between patient satisfaction and loyalty in the private hospital industry. *Iran J Public Health* 2009; **38**(3): 60-69.
28. Lambert MF, Shearer H. Developing a common language for evaluation questions in quality and safety improvement. *Qual Saf Health Care* 2010; **19**(4): 266-70.
29. Becker H, Stuifbergen A. What makes it so hard? Barriers to health promotion experienced by people with multiple sclerosis and polio. *Fam Community Health* 2004; **27**(1): 75-85.