### **ORIGINAL ARTICLE**

# PERCEPTION OF INDIVIDUALS IN FARMING SECTOR TOWARDS HEALTH CARE SERVICES IN THE IMPLEMENTATION OF THE NEW NATIONAL HEALTH FINANCING SCHEME

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### ABSTRACT

Introduction	:	Limited access to health services, variations in quality of health care and pressure to contain escalation of health care cost are problems in health care systems that are faced by all the societies in the world especially in developing countries. There is an urgent need to conduct a study to assess perception of individual towards health care services in the new planned National Healthcare Financing Scheme.
Objective	:	The study objective is to examine the perception towards health care services among the farming community and to assess the willingness to contribute to The New National Health Financing Scheme.
Methods	:	A cross sectional study involving farmers in the state of Selangor in Peninsular Malaysia was conducted. A total of 400 farmers as the household head were selected using multistage random sampling method.
Results	:	The respondents' mean score of perception towards public healthcare services were higher than the respondents' mean score of perceptions towards private healthcare services except for accessibility and convenience aspects. There was no association between willingness to contribute to The New National Healthcare Financing Scheme and perception towards public healthcare services but there was association between willingness to contribute to The New National Healthcare Financing Scheme and perception towards private healthcare services.
Conclusion	:	Perception towards healthcare services is an important element in the implementation of The New National Healthcare Financing Scheme as it will determine the willingness of an individual to contribute to it.
Keywords	:	National Healthcare Financing Scheme, Perception towards healthcare services, Willingness to contribute to National Healthcare Financing Scheme.

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#### **INTRODUCTION**

All societies in the world especially in developing countries faced generally similar problems in health care system, which among others includes limited access to health services, variations in quality of health care and pressure to contain escalation of health care cost. According to Katharine et al, health care spending has grown almost twice as fast as has the gross national product since 1965 in USA<sup>1</sup>. Malaysia is no exeption in this respect and faces many problems in relation to healthcare financing. One of the main problems is how to contain ever-increasing health care cost while maintaining the quality of healthcare provided. Most of the healthcare cost in Malaysia were bourned by the the government, but it was estimated that only 5% of the cost could be recovered back though user  $fees^{2,3,4}$ . One of the policy option to reduce financial burden of the government is to establish a national health financing scheme. The idea was mooted since 1985, but one of the problems faced by policy makers is to develop mechanism to cover more than one third of the population working in the informal sector. Therefore, there is an urgent need to conduct a study to assess the perception of individuals and families in the informal sector particularly those working in the farming sector towards healthcare services and their willingness to contribute to The New National Health Financing Scheme.

#### METHODOLOGY

This was a cross-sectional study involving farmers in the state of Selangor in Peninsular Malaysia. A total of 400 head of households were selected using multistage sampling method. All respondents were personally interviewed using a pre-tested and validated questionnaires by the researcher. The stages were districts, 'mukim' and villages. All the head of households in the selected villages who is a farmer by occupation were selected. Instrument for this study was a questionnaire. To identify the respondents' perception towards healthcare services. Patient Satisfaction Ouestionnaires 18(PSO 18) questionnaires was adapted, translated and validated in order to make it suitable for target population<sup>5</sup>. The PSQ 18, contains 18 items tapping each of seven dimensions of satisfaction with medical care measured by the PSQ III; general satisfaction, technical quality, interpersonal manner, communication,

financial aspects, time spent with doctor and accessibility and convenience. Willingness to pay was measured by asking about highest expenditures for care that they are willing to pay and their willingness to contribute to The New National Healthcare Financing Scheme. These questions were adapted from Option for Healthcare Financing in Malaysia by Al Junid et al<sup>6</sup>. The gathered data was analyzed using SPSS version 11.5. For univariate analysis, the result was presented in a form of frequency distribution. For bivariate analysis, the result was presented using the t test/ ANOVA. For multivariate analysis, the result was presented using the result was presented using the t using linear regression model.

#### RESULTS

Total respondents involved in this study were 400. They were farmers who stay in selected villages in Selangor. The response rate was 98.8%. Most respondents (87.3%) were more than 40 years old (mean 56.9±12.6). A total of 349 or 87.2% of respondents were males as the head of the household. Majority of respondents were Malays and 74.5% of them have low education level.

# Perception towards healthcare services

Table 1 shows that the respondents' mean score of perception towards public healthcare services were higher than the respondents' mean score of perception towards private healthcare services except for accessibility and convenience aspects.

	Public	Private		
	Mean (std.dev)	Mean(std.dev)	P value*	
- General satisfaction	7.55 (0.05)	7.52 (0.05)	0.613	
- Technical quality	15.39 (0.07)	14.93 (0.09)	0.000	
- Interpersonal manner	7.89 (0.03)	7.47 (0.05)	0.000	
- Communication	7.76 (0.04)	7.57 (0.05)	0.002	
- Financial aspects	7.62 (0.04)	5.52 (0.06)	0.000	
- Time spent with doctor	7.64 (0.05)	7.48. (0.05)	0.014	
- Accessibility and convenience	14.41 (0.08)	28.33 (0.05)	0.000	

Table 1 Mean Score of Perceptions	<b>Towards Healthcare Services</b>
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(\*Student t-test)

### Willingness to pay

Majority of the respondents agreed for the healthcare cost such as outpatient registration fee (74.3%) and specialist clinic fee (55.5%) to be increased. Mean value of willingness to pay for the outpatient charges in the public healthcare facilities was RM4.43 ( $\pm$ 4.51). However, for the same charges in the private healthcare facilities, the mean value was RM5.62 ( $\pm$  3.32). The amount of contribution that respondents' willing to pay was between RM0.00 to RM100.00 per month (Median RM2.00, interquatil range RM7.50).

# Influencing factors for individual to contribute to National Healthcare Financing Scheme

Table 2 shows the influencing factors for individual to contribute to National Healthcare Financing Scheme. When linear regressions was used in the multivariate analysis with willingness to pay as dependent variable, it was found that level of education and per capita income were the variables with significant value. Those in high education level group were willing to pay RM5.20 more compare to those in low education level group. With every increase of RM1.00 in per capita income, willingness to pay of respondent increases by 0.6 cent.

Table 2 Influencing Factors for Individual to contribute to National Healthcare Financing
Scheme - Linear Regression Model

	Unstandardised coefficients				95.0% confidence interval for B	
	В	std. error	t	Sig. value	lower	upper
Education level	5.167	1.372	3.766	0.000	2.470	7.864
Per capita income	0.006	0.002	3.771	0.000	0.003	0.009

## Relationship between willingness to contribute to The New National Healthcare Financing Scheme and respondents perception towards healthcare facilities

Table 3 shows that there was no association between willingness to contribute to The New National Healthcare Financing Scheme and respondents perception towards public healthcare services but there was association between willingness to contribute to The New National Healthcare Financing Scheme and respondents perception towards private healthcare services.

	Willingness to pay	
	<b>R</b> value	p value*
Public healthcare facilities		-
General satisfaction	-0.021	0.679
Technical quality	-0.003	0.946
Interpersonal manner	0.001	0.984
Communication	0.009	0.865
Financial aspects	0.045	0.365
Time spent with doctor	0.031	0.536
Accessibility and convenience	0.004	0.930
Private healthcare facilities		
General satisfaction	0.099	0.048
Technical quality	0.106	0.035
Interpersonal manner	0.123	0.014
Communication	0.123	0.014
Financial aspects	0.064	0.2
Time spent with doctor	0.11	0.028
Accessibility and convenience	0.092	0.065

 Table 3 Relationship Between Willingness To Contribute To The New National Healthcare

 Financing Scheme And Respondents' Perception Towards Healthcare Facilities

(\* Correlation test)

# DISCUSSION

Respondents were more satisfied with public healthcare services compared to private healthcare services except for accessibility and convenience issues. This is because they were not satisfied with the private healthcare charges which were more expensive. This is consistent with the study done by Haliza et al., where respondents were more safisfied with public healthcare services compared to private healthcare services in term of charges<sup>7</sup>. In the public healthcare services, the charges for outpatient care are free in community clinic, RM1 in health clinic and RM5 in specialist clinic. Whereas in the private healthcare services, the charges for outpatient clinic are determine by the type of treatment and medicine given. Usually it ranges between RM20-RM30 for simple upper respiratory illness. The charges in public healthcare services are low because it is subsidized by the government.

Majority of the respondents are willing to pay for the increased in the charges of healthcare services in the outpatient and the specialist clinic. This is in contrast to the study done by Al Junid et al., which found that majority of respondents were not willing to pay for the increased in the healthcare services charges<sup>6</sup>.

Mean outpatient charges in public healthcare facilities that respondents willing to pay was RM4.43 ( $\pm$  4.51). This is consistent with the study done by Raja et al in Klang Valley area, where the willingness to pay in public outpatient clinic was  $RM5.00^8$ . In a study done by Al Junid et al, 63.1% of his respondents willing to pay less than RM3.00 for the outpatient charges in public healthcare facilities<sup>6</sup>.

Mean inpatient charges in public healthcare facilities that respondents willing to pay was RM5.62 ( $\pm$ 3.32). In a study done by Al Junid et al, 58.9% of his respondents willing to pay less than RM10.00 for inpatient charges in public healthcare facilities<sup>6</sup>.

Willingness to pay for outpatient charges in private healthcare facilities were much higher. Mean outpatient charges in private healthcare facilities that respondents willing to pay was RM16.34 ( $\pm$ 7.33). In a study done by Al Junid et al, 51.6% of his respondents willing to pay less than RM10.00 for outpatient charges in private healthcare facilities<sup>6</sup>. In a study done by Raja et al, the willingness to pay for outpatient charges in private healthcare facilities was RM15.00<sup>8</sup>.

It is found that the factors influencing willingness to pay were education level and per capita income of an individual. The higher the level of education, the more willingness to pay to The New National Healthcare Financing Scheme. This is the same for per capita income, the higher the per capita income, the more willingness to pay to The New National Healthcare Financing Scheme. This result is consistent with the study done by Mandy Ryan et al, which stated that willingness to pay was positively related to income<sup>9</sup>. Al Junid et al found that socioeconomic status, ethnicity and ownership of an insurance were the influencing factors for willingness to pay to healthcare services  $^{6}$ .

In this study, perception towards public healthcare facilities services did not have any relationship with willingness to pay to contribute in National Healthcare Financing Scheme. This is because, respondents were satisfied with the public healthcare services that they received which is free or at least with a minimum charges. Thus they were not willing to contribute more to the NHFS. However, there was an association between perception towards private healthcare facilities services and willingness to pay to contribute in National Healthcare Financing Scheme except for financial and accessibility aspects. Although their perception towards private healthcare facilities services were low generally, they still willing to pay more because they need certain services at the convenience time such as after usual government clinic time. Atkin et al in his study in Philipines, found that patients are still willing to pay for private healthcare services although the charges increased 28 times higher, because for them the private healthcare services were better than public healthcare services<sup>10</sup>. For Adevi in his study in Thailand, willingness to pay were influenced by quality of healthcare and perception towards healthcare<sup>11</sup>.

# CONCLUSION

Perception towards healthcare services is an important element in implementing The New National Healthcare Financing Scheme as it will determine the willingness of an individual to contribute to The New National Healthcare Financing Scheme. However, this perception is influenced by the level of education and per capita income of population.

Majority of the farmers were willing to pay or contribute to the National Healthcare Financing Scheme.However the public perception gap for both public and private healthcare facilities need to be narrowed down before National Healthcare Financing Scheme is being implemented.

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