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Tumbuhan Ubatan & Beraroma (MAPs)

Pengetahuan Tradisi

PROSIDING PERSIDANGAN INDUSTRI HERBA *2015*

Memperkasa jalinan industri herba ke arah transformasi ekonomi

3–5 November 2015

PUTRAJAYA

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2015

CONSUMER PREFERENCES IN SELECTING HERBAL PRODUCTS

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ABSTRACT

Malaysia has identified that herbal industry could help in generating gross national income (GNI). Under National Key Economic Area (NKEA), in transitioning from agriculture to agribusiness, the first entry point project is unlocking value from Malaysia's biodiversity through high-value herbal product. One of the efforts to produce high-value herbal products is the industry need to properly strategize their production based on actual consumer preference. In order to understand consumers' behavior on herbs and herbal based products, a study on Consumer Preference and Demand towards Herbal Based Product in Peninsular Malaysia was conducted in 2013. The survey was conducted by using stratified random sampling based on population in each district of Peninsular Malaysia. A total of 4,452 respondents were interviewed using structured personal interview. The result from this study highlights status on the use of herbal based products among the respondents and their criteria in selecting herbal products. The findings showed that 73% of respondents were currently using herbal based products. A total of 2,499 respondents (76%) agreed that products with certificate from Ministry of Health (MoH) are the most important aspect in herbal based product selection. Aside from MoH certificate, Good Manufacturing Practice (GMP) certificate was also an important concern of 72% of the respondents concern. This study showed that the industry, especially manufacturers should produce herbal based product with good quality and safety. Related agencies should also help the manufacturer acknowledged to better understand the procedure to get certificates.

Keywords: herbal industry, consumer preference, market driven, Peninsular Malaysia

INTRODUCTION

Import value for herbal based products such as plant based, ginseng root, additional food, skincare products and pharmaceutical in 2012 was USD 402 million (Rohana *et al*. 2013). This indicated that demand for herbal based products among Malaysians is quite high. Rohana *et al.* (2014) reported that 45% of the herbs and herbal products consumers in Malaysia used herb in traditional way while 46% of them used contemporary value-added products.

In order to produce high-value herbal products that meet consumer demand, production based on the actual consumer preferences are needed.

MATERIALS AND METHODS

The respondents for this study were indentified by stratified random sampling based on population in each Majlis Perbandaran with consideration on the gender and age to represent the whole Peninsular Malaysia. A total of 4,452 respondents were interviewed via personal interview using structured questionnaire.

The questionnaire comprised of three sections. Section A concerned the status on the consumption of the herbs and herbal based products and Section B was about the perception and knowledge on herbs and herbal based products. The background information of the respondent was gathered in Section C.

The objective of this study was to assess the pattern of consumer behavior on herbs and herbal based products. The Theory of Planned Behavior was used as a guideline to develop the question in the Section B. In the questionnaire, there were twelve criteria with five likert scale used to measure the consumer's preference in selecting herbal based products.

The information gathered from the questionnaire was analyzed using reliability test, correlation test and descriptive statistic.

RESULTS AND DISCUSSION

The status on the use of herbs and herbal based products was shown in Table 1. A total of 3270 (73.5%) out of 4452 respondents used herbs and herbal based products in 2013. Further discussion is to focus on the 3270 respondents.

Table 1. Status on the use of herbs and herbal based products

Status	No. of respondents (%)
Never use	1116 (25)
Used in 2013	3270 (73.5)
Used in 2008 – 2012	66 (1.5)
Total	4452(100)

To test the reliability of the twelve criteria used to understand the consumer's preference, the Cronbach's Alpha (α) was used. Based on George &

Mallery (2003) the twelve criteria were acceptable to be used in measuring the consumer's preference in selecting herbal based products as the α = 0.7.

Consumer preference based on twelve criteria in selecting herbal products was shown in Table 2. There were five criteria in selecting herbal based product that concerned the most namely easy availability (48.8%), efficacy of the product (63.3%), previous satisfaction (70.7%), manufacturer with GMP compliance (72.2%) and MoH registered product (76.8%).

Table 2. Respondents' views on importance criteria in selecting herbal based product

Statement	Likert Scale Score* (Percentage)					Mode
	1	2	3	4	5	
Importance of brand	3.2	18.9	20.4	34.9	22.6	4.0
Importance of GMP compliance manufacturer	0.4	2.2	3.0	22.2	72.2	5.0
Importance of MoH registered product	0.3	2.0	1.8	19.1	76.8	5.0
Importance of products' testimonial	2.8	18.9	20.9	36.8	20.5	4.0
Importance of manufacturer with good reputation	1.4	11.9	14.3	47.3	25.1	4.0
Importance of efficacy	0.5	1.7	4.4	30.0	63.3	5.0
Importance of recommendation from family and friends	3.1	12.5	27.6	36.9	19.9	4.0
Importance of high mass media coverage	4.2	20.2	28.1	31.3	16.2	4.0
Importance of low price	2.2	15.6	32.0	27.4	22.8	3.0
Importance of packages' design	2.6	15.6	22.3	35.0	24.5	4.0
Importance of easy availability	0.3	3.1	7.5	40.3	48.8	5.0
Importance of previous satisfaction	0.2	0.6	2.1	26.4	70.7	5.0

* 1= very unimportant, 5= very important

From Table 3, 406 consumers with limited knowledge on herbs mentioned that manufacturers with GMP compliance was a very important criterion. While 1,280 and 454 consumers, with moderate and high knowledge on herbs respectively also agreed with the same statement. There was significant correlation between consumer preferences on importance of GMP compliance products with their knowledge on herbs had a weak correlation.

When the level of knowledge on herbal products was high, there was more tendency of respondents to choose products with GMP compliance as the most important criterion.

Table 3. Correlation between consumer preferences on importance of GMP compliance products with their knowledge on herbs

| Level of knowledge on herbs | GMP compliance manufacturer | | | | | Total |
	Very Unimportant	Unimportant	Moderate	Important	Very Important	
Very low	0 (0.00)	3 (0.09)	9 (0.28)	22 (0.67)	101 (3.09)	135 (4.13)
Low	3 (0.09)	22 (0.67)	19 (0.58)	117 (3.58)	406 (12.42)	567 (17.34)
Moderate	4 (0.12)	32 (0.98)	50 (1.53)	461 (14.10)	1280 (39.14)	1827 (55.87)
High	4 (0.12)	13 (0.40)	13 (0.40)	111 (3.39)	454 (13.88)	595 (18.20)
Very high	1 (0.03)	2 (0.06)	6 (0.18)	16 (0.49)	121 (3.70)	146 (4.46)
Total	12 (0.37)	72 (2.20)	97 (2.97)	727 (22.23)	2362 (72.23)	3270 (100)

Note: R= 0.043, p= 0.013
Source: Survey, 2013

According to Table 4, there was no significant difference between yearly expenditure and consumer preferences on the importance of GMP compliance. Table 5 showed that there was significant difference between consumers' preference on the price of herbal product in the aspect of their yearly expenditure on the herbal based products. Consumers that chose low price as the most important criterion had the average spending of RM442 compared to consumers with the average spending RM764 that claimed low price was the less important criterion.

Table 4. ANOVA test for consumer preferences based on importance of GMP compliance products from the aspect of yearly expenditure.

| Likert scale score | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Maen | | Min | Max |
					Lower Bound	Upper Bound		
Very Unimportant	12	484.28	799.48	230.78	-23.69	992.24	0.00	2268
Unimportant	72	560.15	805.80	94.96	370.80	749.51	0.00	4105
Moderate	97	384.34	568.71	57.74	269.72	498.97	0.00	4296
Important	727	485.99	988.52	36.66	414.02	557.97	0.00	11760
Very Important	2362	512.15	799.00	16.44	479.91	544.39	0.00	12000
Total	3270	503.50	839.32	14.68	474.72	532.28	0.00	12000

Note: F= 0.714, p= 0.582
Source: Survey, 2013

Table 5. ANOVA test for consumer preferences based on importance of herbal based products with low price from the aspect of yearly expenditure.

Likert scale score	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Very Unimportant	73.00	763.83	1655.79	193.80	377.51	1150.16	0.00	11760.00
Unimportant	510.00	594.35	1069.59	47.36	501.30	687.40	0.00	8492.00
Moderate	1048.00	507.92	796.59	24.61	459.64	556.20	0.00	11544.00
Important	895.00	475.99	834.97	27.91	421.21	530.77	0.00	12000.00
Very Important	744.00	442.55	547.74	20.08	403.13	481.97	0.00	6000.00
Total	3270.00	503.50	839.32	14.68	474.72	532.28	0.00	12000.00

Note: F= 4.497, p= 0.001
Source: Survey, 2013

CONCLUSION

The level of knowledge on herbal based products correlated with the consumers' concern on its safety. However, this did not affect their tendency to spend on the herbal based products.

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