UNIVERSITI PUTRA MALAYSIA

**CONSUMPTION OF HEALTH PRODUCTS BY OLDER
CONSUMERS IN PENINSULAR MALAYSIA**

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By

LEE SIEW YEN

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of

the Requirements for the Degree of Master of Science

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Dedicated

To my dearly beloved family for all their unconditioned love, supports, understanding

and patience.

Abstract of thesis submitted to the Senate of University Putra Malaysia in fulfillment of requirement for the degree of Master of Science

CONSUMPTION BEHAVIOR ON HEALTH PRODUCTS BY OLDER CONSUMERS IN PENINSULAR MALAYSIA

By

LEE SIEW YEN

June 2007

Chairman   : Associate Professor Laily Paim PhD

Faculty   : Human Ecology

The purpose of the study are (i) to identify older consumers' purchasing behavior, (ii) to determine the monthly expenditure on health products by older consumers, and (iii) to investigate factors affecting the consumption behavior of health products by older consumers in Peninsular Malaysia. The data was obtained from secondary data entitled Consumer Behavior of Older Consumers in Malaysia, funded through the Intensification of Research in Priority Areas (IRPA, Project code 06-02-03-0136-PR) by Ministry of Science, Technology and Innovation. A total of 1,356 respondents were chosen using the non-probability quota sampling. The dependent variable of this study, consumption behaviors was measured by total amount spent on health products. While, purchasing behavior was assessed by the pre-purchasing behavior, behavior during purchasing and post-purchasing behavior. Multiple linear regressions were used to identify the factors

that affect the consumption behavior of health products by older consumers in Peninsular Malaysia.

More than half (57.30%), of the respondents were male respondents, and that 42.70% were female respondents. There 56.19% were Malays, 29.42% Chinese, and 11.21% Indians respondents in the study, while the remaining respondents were from other ethnicities. Eight market outlets were identified where respondents had access to health products. These outlets were sundry shops, mini market, convenience store, super market, hypermarkets, pharmacies, Chinese medical halls, and traditional healers.

The finding showed that 71% of the respondents (n=963) had spent less than RM114.00 per month on health products. Independent T-test showed that there were significant differences in amount of money spent on health by certain social demographic groups and that those who spent more than RM114.00 (mean) tended to be urban, female and non-working respondents ($p<0.05$). Pharmacies, Chinese medical halls and sundry shops are those places that the respondents normally had access to health products.

There were 14 variables used in this regression model, which explained about 16% variance of monthly expenditure on health products. Of the 14 variables, eight variables significantly contributed to the model. The model showed that these eight variables were: gender, stratum, number of years education, estimated monthly household income, number of annoyances faced during purchasing, number of chronic illnesses experienced, number of prescription drugs taken, and age. Out f these eight variables,

number of years education and number of prescription drugs taken are the two variables that most influence respondents' monthly expenditure on health products.

In conclusion, the majority of the respondents needed health products and this need increases the cost of living for older Malaysians. In order to maintain and increase their overall quality of life, the need for a healthy lifestyle for this older population as well as for the coming generation should be addressed. Ministry of Health should provide a special scheme to help those older consumers who are receiving lower income and can not afford to purchase the health products to maintain their health. Attention must be given to proper labelling, disclosures that are easy to understand, comprehensive, accurate, and more useful in enabling consumers to understand risks and costs and to compare products. Hence, the government should fully enforce and use Labelling Acts. The Ministry of Domestic Trade and Consumer Affairs should ensure that all the market outlets follow the rules stated in the Labelling Acts.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

PERLAKUAN PENGGUNA KE ATAS PRODUK KESIHATAN DI KALANGAN WARGA TUA DI SEMENANJUNG MALAYSIA

Oleh

LEE SIEW YEN

JUNE 2007

Pengerusi : Professor Madya Laily Paim, PhD

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Kajian ini bertujuan untuk (i) mengenalpasti perlakuan pembelian warga tua, (ii) mengenalpasti perbelanjaan bulanan produk keshitan warga tua, dan (iii) mengkaji faktor yang akan mempengaruhi perlakuan pengguna ke atas produk kesihatan warga tua di Semenanjung Malaysia. Kajian ini menggunakan data sekunder Perlakuan Pengguna ke atas Produk Kesihatan di Kalangan Warga Tua di Semenanjung Malaysia yang dibiayai di bawah Intensifikasi Penyelidikan dalam Bidang Keutamaan (Kod Projek 06-02-03-0136-PR) oleh Kementerian Sains, Teknologi dan Innovasi. Seramai 1,356 orang responen dipilih melalui kaedah persampelan rawak. Pembolehubah bersandar dalam kajian ini, perlakuan pengguna diukur dengan jumlah perbelanjaan ke atas produk kesihatan. Sementara itu, perlakuan pembelian warga tua dikaji melalui perlakuan

sebelum pembelian, perlakuan semasa pembelian dan perlakuan selepas pembelian. Multiple Linear Regression digunakan untuk mengenalpasti faktor yang akan mempengaruhi Perlakuan Pengguna ke atas Produk Kesihatan di Kalangan Warga Tua di Semenanjung Malaysia.

Lebih daripada separuh (57.13%) responden merupakan responden lelaki dan 42.70% adalah responden wanita. Mengikut peratusan bangsa, 56.19% terdiri dripada bangsa Melayu, 29.42% berbangsa Cina dan 11.21% berbangsa India sementara responden yang selebihnya terdiri daripada etnik lain-lain. Lapan pusat perniagaan yang menjual produk-produk kesihatan telah dikenalpasti seperti kedai runcit, pasar mini, pasar segera, pasar raya, pasar raya besar, farmasi, kedai perubatan Cina dan kedai penyembuhan tradisional.

Dapatan kajian menunjukkan seramai 71% daripada responden (n=963) membelanjakan kurang daripada RM114.00 sebulan untuk produk kesihatan. Ujian t-bebas menunjukkan terdapat perbezaan yang signifikan pada purata wang yang dibelanjakan untuk kesihatan oleh pembolehubah demografik sosial dan mereka yang membelanjakan lebih daripada purata RM114.00 terdiri daripada wanita yang tidak bekerja dan tinggal di kawasan bandar ($p \leq 0.05$). Farmasi, pusat perubatan Cina, dan kedai runcit adalah tempat yang selalunya dikunjungi responden untuk mendapatkan produk-produk kesihatan mereka.

Terdapat 14 pembolehubah digunakan di dalam model regresi yang menerangkan 16% variasi perbelanjaan bulanan ke atas produk kesihatan. Daripada 14 pembolehubah tersebut, lapan daripadanya adalah bilangan penyakit kronik yang pernah dialami, jantina, strata, bilangan tahun pendidikan, bilangan ubat yang diambil, anggaran perbelanjaan bulanan isi rumah dan umur. Bilangan tahn pendidikan dan jumlah ubat-ubatan yang diambil merupakan dua pembolehubah yang paling mempengaruhi perbelanjaan bulanan ke atas produk kesihatan.

Sebagai kesimpulan, majoriti responden memerlukan produk kesihatan dan ini memerlukan peningkatan kos sara hidup bagi warga emas Malaysia. Dalam usaha memelihara dan meningkatkan kualiti kehidupan secara menyeluruh, keperluan kehidupan yang sihat di kalangan warga emas dan generasi yang akan akan datang harus ditekankan. Kementerian Kesihatan patut menyediakan skim khas bagi golongan warga tua yang daif dan tidak mampu untuk membeli produk kesihatan bagi mengekalkan tahap kesihatan yang baik. Perhatian perlu ditumpukan bagi perlabelan produk kesihatan supaya mudah difahami dan maklumat produk tersebut dengan tepat. Maklumat ini amat berguna bagi membolehkan pengguna sedar akan risiko penyalahgunaan produk kesihatan, kos serta memudahkan pengguna untuk membuat perbandingan produk yang lain. Oleh yang demikian, kerajaan perlu menguatkuasakan dan melaksanakan Akta Perlabelan dengan sepenuhnya. Kementerian Perdagangan Dalam Negeri dan Hal Ehwal Pengguna perlu mewajibkan kedai-kedai untuk mematuhi Akta Perlabelan.

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Finally, the author wishes to express her sincere thanks to her beloved family, beloved mother, for her patience, unconditional love, support, understanding and sincere prayers.

I certify that an Examination Committee has met on 10th March 2008 to conduct the final examination of Lee Siew Yen on her Master thesis entitled "Consumption Behavior on Health Products by Older Consumers in Peninsular Malaysia" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

_____

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Date:

This thesis was submitted to the Senate of University Putra Malaysia has been accepted as fulfilment of the requirements for the degree of Master of Science. The members of the Supervisory Committee were as follows:

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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions

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LEE SIEW YEN

Date:

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CHAPTER 1

INTRODUCTION

1.1   Background

As we move into the 21st century, many countries in the world are experiencing an increasing proportion of older consumer in their populations. According to the United Nations (2002), the number of people aged 60 years and above was estimated to triple in 50 years' time, charting a rise from 630 million to almost two billion come 2050. In addition, it was also estimated that between the year 2000 and 2050, the proportion of older consumer was expected to double from 10% to 21% globally (United Nations, 2002). Furthermore, the ageing population is poised to become a major issue in developing countries, with about 62% or 374 million persons aged 60 years and above (United Nations, 2002).

While the populations of more developed countries have been ageing for more than a century, this process began much later in less developed countries, and it is being compressed into few decades (AARP, 2001). By 2050, nearly 1.2 billion of the expected 1.6 billion people aged 65 and above will reside in the more developed countries (United Nation, 2002). The South East Asian region is projected to register a 435% increase in its elderly population between 2000 and 2050, a rise from 39.5 million to 175.8 million older consumers in half a century (United Nation, 2002). Today, Malaysia is facing the same scenario of a large ageing population. One out of every 16 peoples in Malaysia is an older consumer. In the last census (2000), there were 1,451,665 persons aged 60 years and above in the country. This means that

6.1% of the national population of 23.27 million was made up of older consumer in 2000. By 2030, the proportion of older consumer in Malaysia will hit 15% of the total population, completing Malaysia's demographic transition into a fully "aged" nation (Department of Statistics Malaysia, 2004).

Malaysians' life expectancy in 1990 was 68.8 years for males and 70.3 years for females. However, these numbers have increased to 71 years for males and 76 years for females (Malaysian Quality of Life, 2004). Rapid modernization, urbanization, and industrialization have resulted in the rise of new generations as increased life expectancy and lowered fertility converge to accelerate the demographic transition of population ageing. In another words, this have increased the population of ageing in Malaysia (Malaysian Quality of Life, 2004).

As many countries in the world are facing an increasing in their ageing population, hence, it has drawn great attention from the world. The Vienna International Plan of Action on Ageing (Vienna Plan) was the first international instrument on ageing, guiding thinking and the formulation of policies and programs on ageing (International Plan Action on Ageing, 2004). The Vienna Plan was adopted in the same year at Vienna, Austria by the World Assembly on Ageing. In the Vienna Plan and the World Assembly on Ageing, the health issue among older consumers is one of the items on the agenda. This is especially important because as those individuals experience a decline in health during their golden age, this could lead greater expenditure on health products.

1.2 Problem Statements

As older consumers aged, they face metabolic and physiological changes and encounter a decline in health with old age (Egg Nutrition Centre, 1997). This will directly affect their nutritional needs in later life (Prus 2001) and thus, their need for health products increased. There are places for the older consumers purchased their health products. The terms of purchase for over-the-counter (OTC) drugs are common in society. It has become one of the common market outlets where older consumer can purchase their health products (Fan, Sharpe, Hong, 2003). This is a very crucial issue the older consumer purchase their health product without proper prescription from doctor. The number of health products purchased can lead to excess in disability and the potential life-threatening illness. It is very important to consider specially the effect of central nervous system active medications because they are commonly used by the older consumers (Crompton & Kemeny, 1999; Millar, 1996; Millar & Stephens, 1993).

Sometimes the older consumer went to purchase their health product at over-the-counter alone or even with their spouse. As they make the decision to purchase it is really based on their own knowledge and their own judgement without a proper guideline. Furthermore, Nolan (2002) noted that the health care is also influence by age-related vision loss. Reduced acuity means that the older consumers might face difficult time or a total inability to read medicine labels or treatment directions from the label. Without being able to read this information, the older consumer may set their own dosage or ignore the drugs and treatment recommendations entirely. This meaning they may not understand side effects, warnings, or interactions with other

substances (Nolan, 2002). Therefore, it is very important to have a better understanding on older consumers' purchasing behavior.

As mentioned that as older consumers aged, their health become the crucial aspect that the concerns the most. Their needs changed as they aged and it leads them to spend more on their health products. Similarly, Chai (2006) stated that health expenses increase public social spending when health becomes the main concern issue among the older consumers. It increases their dependencies on the family members as they age because their income decreases when they move into retirement. They need their financial support to help them maintain their health care as the health expenditure increased compared when they were young. Thus, it is very important for the older consumers to be good money manager because once they reach their retirement age, they will move into non-saving stage (Chan, 2005). This is because the older consumers need to spend money for their daily expenses and to maintain a basic lifestyle from their accumulated savings (Garman, 1997). This is especially true among those with inadequate financial resources as they were found to be poor money manager (Crompton et al., 1999; AARP report, 2004). At the older ages, the older consumers may suffer illnesses that require frequent medical treatment. The expenditure on health treatment will increase the cost of living in later life. Therefore, financial security and better employment status might lead to better health which means it provides adequate income for them to have a better health products purchasing behavior (Crompton et al., 1999).

1.3   Research Question

Many researchers have conducted studies on ageing but a study on the consumption behavior of health products by older consumers in Peninsular Malaysia is lacking. Hence, questions specifically put forward in this study are:

1. What are the older people's purchasing behavior on health products?

2. What is the monthly expenditure allocated for health products?

3. What are the factors affecting the monthly expenditure on health products?

1.4   Objective of the Study

The general objective of this study is to determine the consumption behavior of health products by older consumers in Peninsular Malaysia

The following are the specific objectives of this study:

1. To identify the purchasing behavior of health products by older consumers in Peninsular Malaysia

2. To determine the amount of monthly expenditure of health products by older consumers in Peninsular Malaysia; and

3. To investigate the factors that affect monthly expenditure on health products by older consumers in Peninsular Malaysia.

1.5   Research Hypotheses

The study focused on consumption behavior on health products of older Malaysians. The following hypothesis was tested.

H1:   Consumption behavior of older consumers is influenced by gender, stratum (urban/ rural), purchasing behavior, years of education, number of prescription drugs, employment status, age, monthly estimated household income, ethnicity, marital status, time spent purchasing health supplements, number of chronic illnesses experienced.

1.6   Significance of the Study

In line with international efforts on concerns about older people's economic development, advancing health and well-being in old age, and in ensuring an enabling and supportive environment, this study is to determine the consumption behavior of older Malaysians more specifically, on health products. Malaysia is experiencing an increasing proportion of older consumers in their population and this number will increase in the future. Not many studies have been carried out on this issue. Even though there are a lot of similar researches that have been conducts overseas but due to value differences and expectation in life between other countries and Malaysia, the findings or the results from these studies do not reflect the Malaysia scenario. Hence, findings from this study seek to highlight older consumers' purchasing behavior and their monthly estimated expenditure on health products in Malaysia.

This study will provide an input on the older consumers' ability to pay for their health products. The study will also provide information regarding the problems that older consumer encountered during their purchasing because research would be conducted on older consumers. The information will provide an input for policy makers to improve older consumers' accessibility in terms of market outlets, time preference to purchase, time spent, reasons for them to purchase at the market outlets, and the annoyances that they face.

Thus, this study will be helpful to students and professionals, such as researchers and lecturers, on theoretical and crucial issues concerning older consumers. In addition, findings from this study will help to increase understanding and provide more information among policy makers, planners and implementers and add to existing body of knowledge to aid effort which seeks to remove factors that inhibit such changes. It is hoped that this information would give more input to the relevant authorities when forming a plan of action on ageing to improve the welfare of older consumer and lead them to a better lifestyle using health products.

1.7   Limitation of the Study

Although this study used the database from the IRPA project entitled "Consumption Behavior of Older Consumers in Malaysia" which covered respondents from East and West Malaysia, only the First Phase data from Peninsular Malaysia were used in this study. This was due to the fact that the data from first Phase already has been collected in Peninsular Malaysia and was ready to be used. The second Phase has been carried out but the data were not ready to be used in this study. Hence, this study did not cover most of the older consumer in Malaysia. Thus, this study showed the scenario of only a fraction of ageing societies' consumption behavior and it is predicted that Peninsular Malaysia's society as a whole would show a similar scenario.

In terms of the data used, limitations also related to accuracy of income variables and definition of health products. Income is personal concerns and many people might not have been willing to share honestly with those whom they felt they were not familiar. They might not have revealed the exact information that was needed in this study. This type of survey will not reflect the real and exact resources of income of the respondents. Hence, data regarding income were only estimated. The income data that we used were estimated amounts given by the respondents in this study.

Besides that, in this study health products were not specified as health supplements, medicine prescribed by doctors, or any specific drugs to cure certain illnesses. Health products are defined in very general terms. Hence, this study does not discuss any specific information regarding older consumers' interpretation of dietary supplement

labels. In terms of market outlets, in this study only eight market outlets were identified where the respondents purchased their health products. The market outlets studied were sundry shops, mini markets, convenience stores, super markets, hyper markets, pharmacies, Chinese medical halls and traditional healers. Hospitals and other medical care providers are not listed as market outlets in this study.

Since this study used secondary data, the purchasing behavior was not summed up as one score to describe the purchasing behavior. Each variable in the purchasing behavior had a different scale of measurement that could not be grouped into one score to represent the purchasing. This study only profiled the purchasing behavior. Besides that, there are limited continuous variables that can be used for Pearson Correlation test. Therefore, there are only 5 variables that can be used for the test.