A CROSS SECTIONAL STUDY ON THE PHYSICAL AND FUNCTIONAL HEALTH STATUS OF THE ELDERLY POPULATION IN KAMPUNG TEBAKANG MELAYU, SERIAN

2 SEPTEMBER - 19 OCTOBER 2002

GROUP B

AHMAD TIRMIZI BIN JOBLI
ALY BIN ALIAS STEPHEN NAH
BAW WING FU’UN
CHONG SI SHYAN
HEONG AI LEE
HEDRAWI BIN JOO LIAN
KOE DUCIN HAN
HANNA LIM TING SHIN
HITI BAILULITI BINTI BUNIRAH
WEI YEN NGOsH BINTI ZAINI
WONG HOI FEI

COMMUNITY MEDICINE POSTGRADUATE PROGRAMME
FACULTY OF MEDICINE AND HEALTH SCIENCES
UNIVERSITY OF MALAYSIA SARAWAK
SARAWAK 2002
A CROSS-SECTIONAL STUDY ON THE PHYSICAL AND FUNCTIONAL HEALTH STATUS OF THE ELDERLY POPULATION IN KAMPUNG TEBAKANG MELAYU, SERIAN (02/09/02-18/10/02)

Community Medicine Posting
Faculty of Medicine and Health Sciences
University Malaysia Sarawak
Sarawak
2002

Group B
Ahmad Tirmizi bin Jobli
Aly bin Alias Stephen Nah
Bawih Inu Pu’un
Ch’ng Li Shyan
Heng Ai Lee
Julian Ong Joo Lian
Ooi Boon Han
Ronald Tang Hion
Siti Baiduri binti Busrah
Widyaningsih bt Zaini
Wong Poh Fei
DECLARATION

We hereby declare that this research is an original product of our very own efforts, other than certain facts and figures with which the citations have been clearly listed in the bibliography.

Ahmad Tirmizi bin Jobli (4069)
Aly bin Alias Stephen Nah (4222)
Bawih Inu Pu'un (2053)
Ch’ng Li Shyan (3899)
Heng Ai Lee (3708)
Julian Ong Joo Lian (3715)
Ooi Boon Han (3710)
Ronald Tang Hion (3898)
Siti Baiduri binti Busrah (4215)
Widyaningsih bt Zaini (4208)
Wong Poh Fei (3722)

25 OCTOBER 2002
ACKNOWLEDGEMENT

First and foremost, we would like to state that the completion and success of this research is due to the efforts and hard work of many parties. We owe our deepest gratitude to each and every one of them for their relentless support and trust in us throughout the research.

We would like to take this opportunity to thank the lecturers and staff of University Malaysia Sarawak (UNIMAS) for providing us the necessary help and support whenever we were in need. This especially goes to Professor Dr. Hashami Bohari (Deputy Dean of Faculty of Medicine and Health Sciences), Associate Professor Dr. Win Kyi and Puan Rashidah (our group supervisors), Mr. Cliffton Akoi (Community and Public Health Posting Co-ordinator) and Dr. Kamaludin Bakar (Public Health Component Co-ordinator) for their unfailing guidance, support and patience and who never failed to show up in Tebakang whenever we needed help and Associate Professor Dr. Mariah Ahmad (Core Group Leader) for her assistance. Our heartfelt thanks also goes to Mr. Albert for all his help and support and En. Mohammad and En. Awang for the transportation provided. Special thanks also go to Cik Sidiah Siop, for her valuable guidance and support throughout the duration of our research.

We would also like to thank the Ketua Kampung of Kampung Tebakang Melayu, En. Haji Abang Sioni bin Haji Abang Masu’udi, all the JKKK of the village and not forgetting all the villagers of Kampung Tebakang Melayu, for without their co-operation, kindness, hospitality and relentless support, this research would never have been possible. Many thanks go to En. Pathiee and Cikgu Madehi for their guidance and assistance throughout the entire period of our research.

Many thanks to Dr. Lee Ping Yen and Dr. Ong Teng Aik, Prof. Yap Sim Bee, Mr. Ngu (owner of JOY Pharmacy) and all our sponsors, Datuk Abang Roselic Abang Paleng, En. Zamhari Ahmad and Persatuan Melayu Sarawak for their support in our intervention programme which was held on the 29th of September 2002.
Lastly, we would like to extend our heartfelt gratitude to those who were directly or indirectly involved in our research project and our sincerest apologies to those whom we may have left out unintentionally.
ABSTRACT

A cross-sectional study on the physical and functional health status of the elderly population of Kampung Tebakang Melayu aged 60 years and above was carried out from the 2nd of September 2002 to the 18th of October 2002 by the fourth year medical students of University Malaysia Sarawak (UNIMAS). 76 respondents were identified and universal sampling was employed. Data was collected through interviews using a semi-structured questionnaire. 69 out of the 76 respondents (90.8%) were able to complete the physical examination and investigations and analysis of the parameters were based on these respondents. The data obtained was analyzed using the SPSS programme.

The results revealed that gender distribution among the elderly population was equal. 69.7% of the elderly were currently married, all with primary education and 39.5% of the males and 21.1% of the females were found to be still economically active. The household income of most of the respondents was RM 500 and above. There was also a positive correlation between advancing age and the number of illness symptoms. 80% of the respondents attributed their illness symptoms to the ageing process. The most common diagnosed medical condition was hypertension. Results showed that there was a negative correlation between advancing age and the number of medical conditions diagnosed. A significantly less number of the old olds (aged 70 and above) were found to be taking prescribed medication or to have sought medical attention from a doctor within the past 6 months as compared to the young olds. 86.8% of the elderly were functionally independent according to the Barthel’s Index and there was significant association between poor functional status and existing medical conditions. From the physical and biochemical examinations, it was found that 34.3% of the young olds and 25% of the old olds had four or more abnormal parameters.

As a conclusion, the elderly population was found to be independent but in need of regular medical screening and treatment, especially for visual problems and chronic medical conditions. Also, a quarter of the elderly needed help to travel to distant places and thus community support is needed to provide assistance and transportation for them to go for medical treatment.

From the results obtained, an intervention programme themed ‘Kenali Awal, Rawat Segera. Hidup Sihat’ was held on 29th of September 2002. The aim of the programme was to heighten the knowledge regarding ageing, elderly healthcare, importance of health screening and to create the awareness that ageing does not necessarily equate to ill-health.
ABSTRAK

Satu kajian keratan rentas terhadap tahap kesihatan fizikal dan keupayaan kendiri di kalangan warga tua di Kampung Tebakang Melayu berusia 60 tahun dan ke atas telah dijalankan dari 2 September 2002 hingga 18 Oktober 2002 oleh pelajar perubatan tahun 4 dari Universiti Malaysia Sarawak (UNIMAS). Seramai 76 orang responden telah dikenalpasti dan kaedah persampelan universal telah diaplikasikan. Data dikumpul melalui kaedah temuramah yang berpendukung borang kaji selidik separa-struktur. Hanya 69 orang daripada 76 responden (90.8%) mampu melengkapkan pemeriksaan fizikal serta ujian yang telah dilakukan dan parameter-parameter yang diuji telah dianalisa berdasarkan responden tersebut. Data-data yang diperolehi telah dianalisa menggunakan program SPSS.

Keputusan yang didapati menunjukkan taburan jantina di kalangan populasi warga tua adalah seimbang. Terkini, sejumlah 69.7% daripada warga tua masih berkahwin, kesemua berpendidikan rendah dan sejumlah 39.5% daripada kaum lelaki dan 21.1% daripada jumlah wanita secara keseluruhan didapati masih mempunyai pendapatan sendiri. Hasil pendapatan isirumah kebanyakkan responden adalah RM 500 dan ke atas. Terdapat hubungkait yang positif di antara peningkatan umur dan bilangan gejala penyakit yang dihidapi oleh warga tua. Sebanyak 80% daripada responden mengaitkan gejala penyakit mereka kepada proses penuaan. Masalah kesihatan yang biasanya disahkan adalah penyakit tekanan darah tinggi.

Keputusan menunjukkan bahawa terdapat hubungkait yang negatif di antara peningkatan usia dengan jumlah penyakit yang telah disahkan. Sebilangan kecil warga tua ‘tua’ (berusia 70 tahun dan ke atas) didapati telah mengambil ubatan atau pernah mendapatkan rawatan daripada doctor sepanjang tempoh 6 bulan yang lalu jika dibandingkan dengan golongan warga tua ‘muda’. Sejumlah 86.6% daripada warga tua terbabit didapati mempunyai tahap keupayaan kendiri yang tinggi berdasarkan Indeks Barthel dan terdapat hubungkait yang jelas di antara penurunan tahap keupayaan kendiri dengan masalah kesihatan yang sedia ada. Melalui pemeriksaan secara fizikal dan biokimia, didapati bahawa sebanyak 34.3% daripada golongan warga tua ‘muda’ dan 25% daripada golongan warga tua ‘tua’ mempunyai 4 atau lebih parameter-parameter yang abnormal.

Sebagai kesimpulan, didapati populasi warga tua masih mempunyai tahap keupayaan yang tinggi, namun begitu, keperluan terhadap penyaringan kesihatan yang kerap dan rawatan segera, terutamanya untuk masalah penglihatan dan masalah kesihatan yang kronik. Kira-kira satu perempat daripada warga tua juga memerlukan bantuan untuk pergi ke tempat yang jauh dan seterusnya sokongan dari aspek kemasyarakatan diperlukan dalam membantu dan menyediakan kemudahan pengangkutan untuk membolehkan mereka mendapatkan rawatan yang sewajarnya.

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CHAPTER I

INTRODUCTION AND BACKGROUND INFORMATION

1.1 Introduction

Geriatrics is fast becoming an important issue that has been given much emphasis on a worldwide scale. All around the world, physicians and other health care professionals alike are recognizing the urgency to the mastery of both geriatrics, which is defined as the health and social care of the elderly and geriatrics medicine, which is defined as that subdiscipline within geriatrics specifically devoted to the medical care of the elderly (Hazzard et al., 1999).

There has been a dramatic rise in the elderly population through the present century. The prime reason for the worldwide increase in the proportion of elderly population is the combined effect of declining child mortality, a falling birth rate and advances in medicine (Coni & Webster, 2000). On the local front, the improvements on nutrition, public health and advances in medicine have contributed to an increased life expectancy and to the demographic changes in Malaysia (Poi, 1997).

There are about 600 million people in the world aged 60 and over and this figure is expected to rise to approximately 1.2 billion in 2025 (World Health Organization, 1998). In Malaysia, there is a growth of the population aged 60 and above as proven by statistics from the Ministry of Health’s Annual Health Report, 2000. According to them, within this half a decade, there has been a rapid rise of 0.5% of population aged 60 and above to the current 6.2%. In Sarawak, the percentage of population aged 60 and above is 5.86% in 1996 rising to 5.93% in 1999 (Department of Statistics, Malaysia, Sarawak Branch, 1999).
Rapid population ageing will lead to changing demands to the health care systems which is an inevitable issue that needs to be addressed. In addition to this, an elderly person costs the health service nine times as much as a young person and these costs can be reduced by health promotion, disease prevention and self-reliance schemes (Coni & Webster, 2000). In the recent years, Malaysian government is beginning to recognize the importance of elderly health care and has been proactive in their approach towards improving the health status of the elderly population in the country. In line with the government’s vision, more emphasis should be given to the elderly population not only from the aspect of their physical health but to other aspects and circumstances surrounding them. This is fundamental to ensure that they age under the most optimal conditions achievable.

In view of this point, more studies should be carried out in the local setting to gather information regarding the current health status of the elderly population. This study is focused towards the assessment of health status of population aged 60 and above in Kampung Tebakang Melayu, which encompasses their physical and functional health. This particular population is chosen because the physical and social changes associated with ageing are combined with the debilitating effects of multiple, often simultaneous, acute and chronic diseases. Both the presentation of illness and its response to treatment are altered in old age and not only is the presentation of disease often different, but its management varies with the social and economic environment. Furthermore, the younger population is a more productive age group and generally has more secure financial and social support as compared to the elderly population who have to deal with losses, be it emotionally due to loss of spouse, financially as most of them have lost a source of steady income and also socially, all in the face of debilitating health. In other words, old age is unfortunately a time of loss (Coni & Webster, 2000). Therefore, it is important that more attention and focus be dedicated to the elderly population as they are in fact, the ones who are most in need of the education and awareness of their own health.
Typical of most developing countries, Malaysian society has its own system of family and kinship which provides for the needs of the elderly, and cultural norms encourages this trend since filial piety is deeply respected. However, urbanisation, industrialisation, modernisation and socio-economic changes are rapidly affecting the lifestyle and well-being of the elderly in many developing countries like Malaysia. Therefore, in recent years, in the wake of changing social trends, there has been growing interest in and concern for the health and well-being of the elderly in Malaysia (Yassin & Terry, 1990).

This study will also be a stepping stone towards the establishment of a research database on geriatrics locally and this will further increase the knowledge currently available about the elderly. Based on these researches, new health policies can be tailored to suit the needs and requirements of this unique population as there is a pressing need to assess future requirements to formulate appropriate programmes and policies, particularly with respect to health care and social services (Shahar, Earland & Rahman, 2001).

1.2 Background of Kampung Tebakang Melayu

Kampung Tebakang Melayu is a Malay village located 15 km from Serian. The village is situated along Batang Kayan river. The Penghulu who is assisted by 26 committee members looks after the affairs of the village.

1.2.1 Demography

Based on the data obtained from Serian district office, Kampung Tebakang Melayu has a population of 805 people with a total of 148 households, each with an average of 5 occupants. Male to female ratio is about 1:1. The villagers are all Muslims and 37% of them are civil servants.
1.2.2 History

According to their ancestors, Kampung Tebakang Melayu existed since the 14th century. Moreover, it has its own administration since 1928, when Serian has not been set up yet. At the time, Kampung Tebakang Melayu has its own district office and police station. However, the village has maintained its way of life even with inception of Serian as the main administrative center in the area.

1.2.3 Basic amenities

Of the total 148 households, 138 houses have electricity supplied by SESCO. Similar number of houses has piped water supply by Jabatan Kerja Raya while another 8 houses use rain water tanks. The main road connecting Serian to the village is tarred while within the village the roads are only cemented. The village is only accessible by a suspension bridge, which only allows people, bicycles and motorcycles to pass through. Thus, car owners have to leave their vehicles on the other side of the river. Kampung Tebakang Melayu has a mosque, a multi-purpose hall and a playground. Other facilities within 3 kilometre distance from the village include a kindergarten, a primary school, a secondary school and a library. The government health center is 5 kilometers from the village and is accessible through tar road. On the other hand, Serian District hospital is 15 kilometers away. However, due to the inaccessibility of the village, the municipal council does not provide solid waste disposal system. Thus, the majority of rubbish is disposed into the river.

1.2.4 Social organization and politics

The Parliament member for P.173 Serian, which covers the village, is, YB. Mr. Richard Riot Ak. Jaem while the Ahli Dewan Undangan Negeri for N.16 Tebedu covering the village is YB. Datuk Michael Manyin Ak. Jawong. The village on the other hand is headed by Penghulu, Haji Abang Sioni bin Haji Abang Masu'udi assisted by Jawatankuasa Kemajuan dan Keselamatan Kampung (JKKK).
Table 1.1: Organization chart of JKKK of Kampung Tebakang Melayu

<table>
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<td>Pathiee bin Haji Abdul Rahman</td>
</tr>
<tr>
<td>Deputy Chairman</td>
<td>Haji Shafiee bin Mohamad</td>
</tr>
<tr>
<td>Secretary</td>
<td>Awang Jolkipli bin Haji Awang Seriee</td>
</tr>
<tr>
<td>Assistant Secretary</td>
<td>Yahya bin Sulaiman</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Mohammad bin Teh</td>
</tr>
<tr>
<td>Assistant Treasurer</td>
<td>Sahali bin Rayan</td>
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<td>Head of Infrastructure Development</td>
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<tr>
<td>Head of Hygiene Health and Environment</td>
<td>Kr. Jasni bin Haji Hasbi</td>
</tr>
<tr>
<td>Head of Culture, Youth and Sports</td>
<td>Abang Rahman bin Abang Jamali</td>
</tr>
<tr>
<td>Head of Security</td>
<td>Haji Jemat bin Haji Han</td>
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<td>Head of Women’s Affair</td>
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<td>Haji Hamid bin Haji Matali</td>
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<td>Head of Agriculture</td>
<td>Kamal bin Manan</td>
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<td>Senyam bin Haji Han</td>
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<td>Head of Religious Affairs</td>
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CHAPTER 2

STATEMENT OF PROBLEM AND LITERATURE REVIEW

2.1 Statement of problem

During the first visit to Kampung Tebakang Melayu for the community sounding on the 24th August 2002, we held a discussion with the representatives of the village. From the discussion, the village committee had proposed five topics, which the villagers felt, are quite significantly important to the villagers. These topics included:

1. Geriatric health
2. Hypertension
3. Asthma
4. Health seeking behaviour
5. Solid waste disposal system

After taking into consideration how each of this topic would benefit the villagers, a consensus was reached to study geriatric health as the villagers were quite concerned over the health of the elderly. Moreover the elderly population in Kampung Tebakang Melayu constitutes more than 10% of the total population. Furthermore, they felt it would be beneficial for the younger generation to understand the problems faced by the elderly. This understanding will enable the elderly to lead a healthy, quality life as well as maintaining their independence, productivity and dignity.

Based on the Village Health Promoter’s account, ‘Program Warga Tua’ for the elderly launched previously has raised the awareness among the villagers regarding common asymptomatic diseases such as diabetes mellitus and hypertension. However it is noted that the program was not fully implemented
and the elderly did not gain much from it. Thus the villagers felt it was only appropriate if more focus is
directed towards the elderly to continue where the programme has been left off. During the discussion, the
villagers were noted to be quite inquisitive especially the younger generation whom were concerned about
their parent’s health.

2.2 Literature Review

2.2.1 Demographic characteristics of the Older People

The definition of elderly varies according to different sources. Studies conducted in USA tend to regard
elderly as those aged 65 and above, while in Japan where the life expectancy is highest in the world there
are moves to redefine elderly from the present 65 years and above to 75 years and above (Watts, 2002). In
Malaysia, the elderly or ageing population will be taken to mean people aged 60 years and above, as
accordance to the United Nation’s and Malaysia Ministry of Health’s definition (Karim, 1997).

The rapid boom in the number of elderly population worldwide was estimated by WHO at about 600
million in the year 2000. Of which, about half were in developing countries. A projection for the year
2025 the number of elderly will increase to 1.2 billion and subsequently 2 billion by the year 2050. By
then, developing countries would contribute almost two thirds of the amount. In these developing
countries, between 1980 and 2020, the total population is expected to increase by 45% while the elderly
group will increase by 80% (Arokiasamy, 2000).

The decline in child mortality and a falling birth rate contributes to the worldwide phenomena of
increasing elderly population (Kinsella, 1992). This is readily seen in the developed countries. At the
same time, developing countries will soon experience a distortion in their population pattern whereby the
elderly population rapidly rises as contraceptive policies are accepted (Coni & Webster, 2000). Studies
have also shown that elderly women outnumbered men where there are only 8 men for every 10 women.
Women also outlive men, and in the very old age the ratio of women to men is 2:1 (UN, 1998).
2.2.2 An Overview of the Elderly Population in Malaysia

In the local setting, Malaysia does not differ very far from her counterparts. Since the early 1970's to the year 2000, there has been a steady increase in the elderly population from 5.7% to 6.2% of the total population. In the 1970's, the average Malaysian life expectancy at birth was 63 years for males and 68 years for females (Ministry of Health, Malaysia, 1995); Malaysians born in the year 2000 can expect to live to an age of 70.2 for males and 75.0 for females (Department of Statistics, Malaysia, 2000). A nationwide census conducted in the year 1991 revealed that the ratio of elderly males to females was 1:1.5 (Department of Statistics, Malaysia 2000). Projected figures between 1990 and 2020 in the number of aged persons in Malaysia are 1.01 million for males and 1.20 for females. The sex ratio of men per 100 women will decrease from 90.1 in 1990 to 85.8 in 2020 (Karim, 1997).

The increment of the elderly population is determined by the reductions in fertility and reduction in mortality. The implementation of health programs and improvement in the standard of living has also brought the remarkable decrease in mortality (Arokiasamy, 1997). In Peninsular Malaysia itself, the crude death rates declined from 12.4 per 1,000 populations in 1957 to 4.7 per 1,000 populations in 1990. Infant mortality rate (IMR) also fell from 76 per 1,000 live births to 12 per 1,000 live births over the same period. At the same time, fertility was seen to decline and the crude birth rate (CBR) fell from 46 per 1,000 populations in 1957 to 28.4 per 1,000 populations in the 1990. Total fertility rate (TFR) also recorded a decline from 6.7 in 1957 to 3.3 in 1990 (Karim, 1997).

2.2.3 Demography of Sarawak

Sarawak is the largest state in Malaysia with a land area of about 125,000 square kilometers. It is located on the Island of Borneo and is separated from Peninsular Malaysia to the west by the South China Sea. Administratively, it is divided into eleven divisions, which are sub-divided into twenty-eight administrative districts (Department of Statistics, Malaysia, Sarawak Branch, 2001). The petroleum