# HEALTH STATUS AND DIFFERENTIAL USE OF MEDICAL RESOURCES: A SURVEY SAMPLE IN KUALA LUMPUR

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## INTRODUCTION

This paper presents information on self-assessed health status and use of modern and traditional medical services by a small sample of Malay, Chinese, and Indian residents of urban central Selangor. There is increasing literature on the variety of medical resources in Malaysia including comprehensive overviews,<sup>1,2</sup> and specific reports and studies on modern scientific,<sup>3</sup> traditional Malay,<sup>4-7</sup> Chinese,<sup>8</sup> and Indian<sup>9</sup> medical practices. Differential use of medical services by urban populations has received some attention,<sup>10</sup> but most data have been obtained from rural settings.

#### **METHODS**

The data on which this short report is based were collected during 1980 as part of a study of environmental risk factors associated with nasopharyngeal carcinoma in central Selangor, Peninsular Malaysia.<sup>11, 12</sup> The study area comprised 27 census districts, including the federal territory of Kuala Lumpur and adjoining towns of Petaling Jaya, Ampang, Shah Alam and Klang. In 1980, the total population of this area was 1.6 million; its ethnic composition was 50% Chinese, 30% Malay, 18% Indian and 2% others.

R.W. Armstrong, PhD, MPH Department of Health and Safety University of Illinois, Urbana Illinois 61801, USA For the cancer study, 100 Chinese non-disease control participants were selected by interviewers in the residential neighbourhood of cancer cases. This group was representative of the geographical distribution of Chinese in the study area. 50 Malay and 50 Indian non-disease control participants were selected at random from the general Malay and Indian populations of the study area, stratified by census district. It is these 200 control participants that form the source of data for this paper.

Each participant in the study was interviewed in their own home using the home language. Interviewing extended over a period of one week, and included in the schedules were questions on health and illness in childhood, adolescence and adulthood; use of nasal ointments currently and ten years prior to interview, and current choice of different medical services. These questions were asked to obtain data for testing hypotheses about history of illness, use of nasal ointment, and use of medical services in the study on nasopharyngeal carcinoma. None of these factors were found to be risk factors for this cancer.<sup>11, 12</sup>

The participants ranged in age from 18 to 75, with mean ages of sex and ethnic groups between 35 and 43 years (Table I). Only two Chinese participants were single-person households; the remainder were all members of family households. Patterns of occupation, and other social and economic characristics were representative of the general population. All participants had lived in the study area for at least five years.

# RESULTS

Participants were asked to describe their health in childhood, adolescence and adulthood, and while the majority reported good health (about the same as their peers) with some minor ills, there were some variations between ethnic groups (Table I). A higher proportion of Chinese than Malay or Indian participants perceived their health at all life stages as better than average with no illness. In describing physical exercise for most of their lives, larger proportions of Indian males and Malay females reported strenuous physical activity than other groups, and Malay males and Chinese females the relatively largest proportions in sedentary patterns (Table I). Recollection of serious illness that required specialist medical treatment revealed that 16-18% of females had such a history, with Malay and Chinese males about 25% and Indian males 40% (Table II). The larger proportion of Indian males is probably due to chance in a small sample. The most often cited reasons for medical treatment were heart disease, tuberculosis, malaria, appendicectomy and other surgery, and injuries due to accidents.

Most participants reported having fewer than three colds, throat coughs, or other mild upper respiratory disease episodes per year (Table II). No difference was reported by participants in the frequency pattern of these minor ills in the present, and ten years prior to interview. When all members of the respondent's

TABLE I
SELF-ASSESSMENT OF HEALTH STATUS AND PHYSICAL ACTIVITY

Item	Malay		Chinese		Indian	
	Male	Female	Male	Female	Male	Female
Number of participants	22	28	65	35	25	25
Mean age (years)	35.0	36.5	43.3	42.0	41.8	37.5
Health in childhood $(0-12 \text{ yrs.})$ :						
Healthier than others, no illness (%)	-	7	43	29	20	8
Good, like most others, some illness (%)	82	79	45	54	60	84
Poor, worse than most others, much illness (%)	18	14	12	17	20	8
Total (%)	100	100	100	100	100	100
Health in adolescence:						
Healthier than others, no illness (%)	-	7	42	23	16	8
Good, like most others, some illness (%)	91	89	49	71	76	88
Poor, worse than most others, much illness (%)	9	4	9	6	8	4
Total (%)	100	100	100	100	100	100
Health in adulthood:						
Healthier than others, no illness (%)	_	7	32	20	4	4
Good, like most others, some illness (%)	100	89	63	74	80	92
Poor, worse than most others, much illness (%)	_	4	5	6	16	4
Total (%)	100	100	100	100	100	100
History of physical exercise:						
Always strenuous at work and leisure (%)	14	21	12	3	36	8
Moderate at work and leisure (%)	59	68	72	69	48	80
Sedentary at work and leisure (%)	27	11	16	28	16	12
Total (%)	100	100	100	100	100	100

household were considered, the reported frequency of mild upper respiratory disease episodes per year generally increased, due most likely to the inclusion of children in the assessment.

Use of patent nasal ointments (principally Vicks), has generally increased among participants while use of Tiger Balm\* has, with the exception of Chinese females, decreased (Table III). Nasal ointments were almost exclusively of western manufacture, and were used only at times of mild respiratory illness. They were most popular among Malay participants and least among Chinese. Tiger Balm, originating in Hong Kong, was most popular with Chinese participants and least with Malay. All participants who used Tiger Balm applied it as a balm to the head and neck to relieve aches and pains, as well as for mild respiratory illnesses. The Chinese only used it to treat insect bites, and to treat toothache – in spite of the manufacturer's contraindication for internal use. Tiger Balm was applied by all participants straight from the jar, without prior heating or other intervention, and was used only as needed to treat ailments. Malay and Chinese participants preferred the light-coloured balm, and the Indian preferred the dark.

TABLE II PERCENTAGE OF PARTICIPANTS RECALLING ILLNESS

	Malay		Chinese		Indian	
	Male	Female	Male	Female	Male	Female
Serious illness in the past requiring extended						
medical treatment:	27	18	25	17	40	16
Frequency of colds, throat cough:						
Respondent only – (episodes/year)						
More than 6	4	7	8	6	32	12
4 – 6	23	7	12	17	4	4
1 - 3	55	43	35	40	40	56
<1	18	43	45	37	24	28
Total	100	100	100	100	100	100
Respondent's household – (episodes/year)						
More than 6	18	28	14	20	56	36
4 – 6	41	36	15	31	16	20
1 - 3	27	18	40	20	20	44
<1	14	18	31	29	8	_
Total	100	100	100	100	100	100

 TABLE III

 PERCENTAGE OF PARTICIPANTS USING NASAL OINTMENTS AND TIGER BALM

		Malay		Chinese		Indian	
		Male	Female	Male	Female	Male	Female
Use nasal ointments – now – 10 years ago		60	68	28	20	48	40
	41	68	15	11	32	32	
Use Tiger Balm* – now – 10 years ago		18	21	46	63	44	40
	- 10 years ago	36	50	51	57	68	64

\* A patent balm made principally of petroleum jelly, camphor, menthol, and natural oils.

All those surveyed had used modern scientific (western) medical services in the past except one participant, a 67-year-old Chinese male, who had gone to only Chinese traditional practitioners. Use of Malay, Chinese, and Indian traditional medical practitioners and related services tended to follow ethnic lines (Tables IV, V). However, Chinese medical practitioners had been used by sizeable proportions of Malay and Indian participants in addition to Chinese. Use of other services such as faith healers and temple priests followed strictly ethnic lines. Malay participants using other services referred to herbal folk medicines (*ubat kampung*), Chinese participants (mostly females) to Chinese temple activities, and Indian participants to Indian temple keepers (*pujaris*). The participants were asked if their family had a family doctor — one who served all members of the family at time of need for medical attention. More Malay and Indian households than Chinese claimed to use such a practitioner, and all were modern scientific professionals (Table IV).

More than half (56%) of Indian participants, 30% Malay, and 24% Chinese, used modern scientific medical services exclusively. A simple combination of services was most important for Chinese with 58% of participants using modern scientific and Chinese medical services only. For Malay and Indian participants, a greater variety of medical resources was drawn upon (Table V).

TABLE IV
PERCENTAGE OF PARTICIPANTS USING DIFFERENT MEDICAL SERVICES

Service	Malay		Chinese		Indian	
	Male	Female	Male	Female	Male	Female
Western modern scientific	98	100	100	100	100	100
Malay traditional (bomoh)	50	54	1		12	_
Chinese (sinseh)	23	43	68	86	20	20
Indian (Homeo-Ayurveda-Siddha)	5	_	1	-	36	16
Spiritual, faith healing, folk medicine	32	36	9	30	16	20
Family doctor (Western)	23	32	20	9	28	48

TABLE V PATTERN OF SINGLE AND MULTIPLE USE OF MEDICAL SERVICES

	Participants (%)*					
Service	Malay	Chinese	Indian			
Western modern scientific only	30	24	56			
Western and Malay (bomoh)	18	_	4			
Western and Chinese (sinseh)	2	58	4			
Western and Indian (Ayurvedic etc.)	-	-	12			
Western, Malay, Chinese	16	1	_			
Western, Malay, Spiritual-Folk	8		_			
Western, Chinese, Spiritual-Folk	8	13	4			
Western, Malay, Chinese, Spiritual-Folk	8		2			
Western and Spiritual-Folk	8	2	4			
Western and other combination	2	1	14			
Chinese only	_	1	. —			
Total	100	100	100			

\* The number of participants were: Malay -50; Chinese -100; Indian -50.

Participants were asked which kind of medical services they would go to first for each of eight selected medical conditions (Table VI). Only the proportions for modern scientific medical services are reported here because they were by far the most popular for most conditions among these urban participants. As expected, Chinese made greater use of alternative Chinese medical practitioners, particularly for muscular and back pains for which acupuncture is believed to be more effective. All participants believed scientific medicine the first choice for internal chest pain, infected severe cuts, fractures, high fever and toothache. It was less favoured by all groups for psychological/mental disorders.

## DISCUSSION

The self-assessment of relative health status by the participants in this study reflects what would be expected from the general population of urban Malaysians in 1980. 80% recall their childhood health as being good or better, and 90% of their adolescent and adult health as being in this category. The small proportion of those reporting good health comprise the majority of those experiencing serious illness and most contact with medical services. Half or more of the participants had one or more encounters with mild upper respiratory infections, while the proportion exceeded 60% for all household members. The pattern of physical exercise in work and leisure time conforms to patterns expected in an urban population of a rapidly developing country.

Variations between sexes and ethnic groups follow cultural and occupational norms. Indian males in the study group were more active in team sports than Chinese or Malay males, and more walked or used bicycles than cars or buses to go to work or other activities, and most had an occupational history of labouring jobs.

The survey of use of nasal ointments and Tiger Balm in this group found no unusual usage of these medications beyond what the manufacturers recommend. They were used to treat ills when these occurred, and there was no regular use when symptoms of illness were not present. There was a definite decline in report use of Tiger Balm among most participants during the ten years prior to the study, while the use of nasal ointments had increased.

For these urban residents, modern scientific medical services were the most important in terms of first choice, frequency of use, and for most ailments. Modern scientific services commanded the only important single choice of service with one-third (34%) of all participants using them alone. Virtually all other kinds of medical resources were used in addition to modern scientific services. 70% of Malay participants, 76% Chinese and 44% Indians, used one or more traditional medical services, including spiritual healing and. folk medicine, to supplement modern scientific services.

Condition	Malay		Chinese		Indian	
	Male	Female	Male	Female	Male	Female
Skin rash	96	93	77	77	84	92
Persistent back pain	95	86	49	43	84	88
Persistent chest pain	100	100	87	83	92	96
Severe cut with infection	100	96	95	91	96	100
Fractured leg	91	93	71	71	100	100
High fever	100	93	85	90	88	100
Psychological/mental disorder	91	64	55	50	56	64
Severe toothache	100	96	100	100	96	100

TABLE VI PERCENTAGE OF PARTICIPANTS INDICATING MODERN SCIENTIFIC MEDICINE AS THEIR FIRST CHOICE FOR TREATMENT OF SELECTED MEDICAL CONDITIONS

Chinese medical practitioners were used by all ethnic groups, while Malay and Indian practitioners were used almost exclusively by members of their respective ethnic groups. Meade<sup>10</sup> reported that 10-25% of the patients of Chinese medical practitioners in Kuala Lumpur in 1974 were non-Chinese. Data from this study would indicate the ethnic proportions of potential patients of Chinese medical practitioners in 1980 to be 73% Chinese, 17% Malay and 10% Indian, that is, 27% non-Chinese. One-third of Chinese participants indicated that they would go to Chinese medical services for muscular and joint complaints such as rheumatism, and for psychological disorders. This compares with data for Chinese practitioners reported bv Meade.<sup>10</sup> A small proportion of Chinese participants also indicated a choice of Chinese practitioners for skin ailments and treatment of leg fracture. Indian participants indicated that they would go to Indian medical practitioners (Homeo-Ayurveda-Siddha) for treatment of minor and chronic illnesses such as rheumatism, asthma, skin diseases and hypertension. These findings are in agreement with those reported by Colley.<sup>9</sup> Malay participants who would choose a Malay practitioner (for example, *bomoh*) also indicated minor and chronic illnesses but more internal complaints, such as digestive disorders, hypertension and diabetes, and psychological problems.

Traditional spiritual healers and religious priests were also cited as important by many participants of all ethnic groups. They would seek such care for emotional concerns or 'problems in life', or when medical treatments from scientific or other practitioners were apparently failing, or to obtain a prediction on the outcome of their illness. In general, as Chen<sup>1</sup> has pointed out, the role of these traditional practitioners would seem to be mainly as a ritual specialist providing social and emotional support that is complimentary to the role of the scientificallyoriented physician.

Urban residents of Kuala Lumpur make use of the large variety of medical resources available to them. There are indications that Chinese traditional medical practice and Indian traditional inedical practice are being strengthened by new professional organizations, modernization of service establishments, and increased advertising.<sup>9,10</sup> The situation for Malay traditional practitioners in Kuala Lumpur is unclear because they have not been studied. However, it is also evident that modern scientific medical services are paramount in this urban situation, and while the alternative traditional services will be used from time to time by a substantial proportion of residents, they are secondary to the modern variety.

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