ORIGINAL ARTICLE

TOWARDS HEALTHY CITY MALACCA : THE COMMUNITY'S SATISFACTION, EXPECTATION AND CONTRIBUTION FOR A HEALTHIER CITY

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ABSTRACT

The Healthy City concept was taken by Malaysia in 1994 and Malacca State has initiated this project in late 1997 and launched in September 1998. The aim of the project is to find ways of achieving a better quality of urban life. The objective of this study was to assess the views and responses of Melaka Tengah community with regards to the existing facilities and services rendered in the district. The views will be incorporated into ideas for the policymakers and planners to develop Malacca into a healthy city. Three methods were used to collect the data. Questionnaires were given to the community of Melaka Tengah District. The respondents were selected by multistage sampling. Observation was carried out at selected public places to assess the community's practices and contribution. Ten focus group discussion were conducted consisting of health staff and public to discuss on environmental, social, physical and economic issues of Malacca. There were 3 sectors that had mean scores above 3.0 (the cut off level for being satisfied). They were health, housing and environment. In terms of dissatisfaction, there were 4 sectors scoring below 3.0. These include domestic waste disposal, road system, public transportation and recreational park. The community expected the services to be improved especially in terms of cleanliness. They agreed to contribute in their own ways in developing the sectors discussed except for public transportation, wet market and food premises which were beyond their control. Observation showed that some of the community members exhibit bad behaviours that can contribute to an unhealthy city. The Melaka Tengah community expected efficient and quality services and they agreed to contribute in making Malacca into a Healthy City.

Key words: *Healthy City, Malacca.*

INTRODUCTION

Urbanisation is a process of expansion in size and population in urban areas. It involves dynamic changes in economic, social and physical environment as well as migration of people from rural to urban areas. Symptoms of urbanization found in other developing countries are also common in Malaysia. These include traffic congestion associated with noise, air pollution and road traffic accidents, water degradation of urban rivers due to sewerage and industrial waste water discharge, lack of community facilities, inefficient solid waste disposal and psychosocial stress created by urban life style.

Healthy City is a public health approach that builds upon the work of T Mckeon who recognizes that many of the things that make people healthy, do not lie within the jurisdiction of the health care system. The interaction between physical, mental and social factors influences the determinants of health of the community.[1]

In 1985/86, the European office of WHO proposed a health promotion project known as Healthy Cities Project. The intention was to devise ways to apply the principles of Health For All (HFA) through local action in cities. The strategy involved bringing together partnership for health from the public, private and voluntary agencies and the community.

A city is viewed as a complex organism that is living, breathing, growing and constantly changing. Whereas a healthy city is defined by Hancock and Duhl in 1988 as : " .... *one which is continually creating and improving those physical and social environment and expending those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential*".

Although the definition provides a frame of reference, it may not be so clear cut as to be used in developing activities pertaining to a healthy city. Therefore, for practical purposes, a healthy city can be characterized by the following entities[2]:

1. A clean and safe physical environment of high quality
2. A stable ecosystem that is sustainable in the long term
3. A strong, mutually supportive, and non-exploitative community
4. A high degree of participation and control by the public over the decisions affecting their lives, health and well being.

5. The meeting of basic needs for example food, water, shelter, income, safety etc
6. A diverse, vital and innovative urban economy
7. The encouragement of connectedness with the past in terms of cultural and biological heritage
8. An urban layout that is compatible with and enhances the preceding characteristics.
9. An optimum level of appropriate public health and care services accessible to all.
10. High health status with high levels of positive health and low levels of disease.

The Healthy Cities Project Proposal in Malaysia was forwarded to the Ministry of Health in 1994. Two cities, Johor Bharu and Kuching were selected as pilot projects. Other cities like Malacca, Penang and Kuala Lumpur followed in the second phase. At the national level, a steering and technical committee with the involvement of multiple agencies was formed. A national plan of action was developed in 1996 and this was then disseminated to all states interested in joining the healthy cities programme.[3]

The City of Malacca initiated the Healthy City Programme at the end of 1997, spearheaded by the Malacca State Health Department and endorsed by the Malacca State Government. This was followed by setting up of the structure and identifying the keyplayers, strategies, activities and networking for the programme. The secretariat of this programme consist of the State Economic Planning Unit, Malacca Municipality Council (Majlis Perbandaran Melaka Bandaraya Bersejarah) and Malacca State Health Department.[4]

The objective of this study was to assess the views and responses of the Melaka Tengah community with regards to the existing facilities and services rendered in the district. These responses will then be incorporated to the ideas of the policy makers and planners in developing Malacca into a healthy city. The findings of the study will also provide the base line information for further action and comparison.

METHODOLOGY

This study was a cross sectional study involving the population of Melaka Tengah District. The data were collected by using 3 techniques : questionnaires, focus group discussion and observation. Assistance from the Federal and State Statistics Department was obtained for selection of samples from the population of Melaka Tengah District. Multistage sampling was used in choosing randomly the enumeration blocks (EB) of the urban and rural areas of the district. Living quarters in the chosen EB was selected by systemic random sampling.

All household members, above 15 years without the exclusion criteria were taken. The exclusion criteria include respondents who were mentally handicapped, deaf or dumb, seriously ill, demented or those with psychiatric problems. Houses that were closed or with no tenants were visited at least 3 times before it was dropped from the list. There were 988 eligible respondents.

Questionnaires were given to the community of Melaka Tengah District. Questions on satisfaction cover 10 sectors which include health services, recreational facilities, social problems, transportation, road, solid waste disposal, food premises, wet market, community attitude and safety. About 25% of the questions were open ended questions and views were marked on Likert scale or as close ended questions.

Observation were carried out at selected public places to assess the community's practices and contribution. There were 11 sites observed, including recreational parks, bus stations, public toilets, food courts, wet markets and zebra crossings. Ten focus group discussions were conducted to discuss environmental, social, physical and economic issues. Each group had 8 members consisting equal proportion of both gender and members from urban and rural setting. Members were taken both from the public and health staff. Health staff members were used for discussing non-health issues.

Statistical analyses using t-tests were done to determine any difference between rural and urban respondents.

RESULTS

General Findings

A total of 589 houses were sampled with 64.3% being occupied. There were 988 eligible respondents with 54% from urban and 45% from rural areas. There were 57% Malays, 40.0% Chinese, 1.5% Indian and 0.9% others. The male to female ration was 1:1 and the mean age was 35.2 years. A majority (61.7%) had secondary education, 17.5% primary education and 12.8% tertiary education. Only 8.1% did not have any schooling. Thirty percent of the respondents stayed in wooden kampong houses, 15.9% lived in low cost houses and 35% lived in medium cost houses.

Satisfaction

There were three sectors which the community were satisfied. These sectors obtained mean scores above 3.0, which was the cut off level for being satisfied. They were health, housing and environment sectors.

Health

Out of the 529 respondents interviewed in the urban areas and 459 in the rural areas, 90.9% and 95.4% respectively utilized services provided at the government health facilities. There were more Malays (96.6%) than Chinese (87.9%) using services from these facilities.

Table I showed six aspects of community satisfaction. The quality of attention given, quality of treatment, interior design, charge and parking area all scored above 3.0 (3.03 to 3.39) except for waiting time (2.98). The mean scores in rural areas, in all aspects, were higher than urban areas with significant difference noted in quality of attention given, waiting time, interior design and charges.

Housing

The community were satisfied with certain aspects of their housing such as size and space of house, space of the lawn, cleanliness of the environment and roads in their residential area with mean scores ranging from 3.08 to 3.17 (Table 2). However other aspects of housing such as recreational parks, domestic waste disposal and availability of public telephones had a poorer mean score of 2.58, 2.81 and 2.99 respectively.

Environment

Out of 985 respondents being asked on the cleanliness of Malacca Town, 830 (84.5%) were satisfied as compared to 152 respondents who were dissatisfied, with a mean score of 3.08. (Table 3). Meanwhile 984 respondents answered regarding their satisfaction level about aspect of safety within the city where 864 (87.7%) were satisfied with a mean score of 3.19. For the question on caring attitude of the community, a total of 979 responded. Eight hundred and forty eight (86.9%) respondents stated that they were satisfied with mean score of 3.21.

During FGD, the members were satisfied with the cleanliness, caring attitude of the community and safety in the city. There were some issues that they were not satisfied with. These include factories sited near housing estates causing pollution and poorly maintained drains which were clogged, causing flash floods in their areas.

Dissatisfaction

Four sectors had mean scores below 3.0. They were domestic waste disposal (2.76) road system (2.75), public transport (2.87) and recreational parks (2.8).

Table I. Satisfaction of respondents towards the government health services by residential area

Satisfaction		Value			
		n	Mean Score	SD	p value
Quality of Attention Given	Urban	481	3.23	0.760	
	Rural	431	3.41	0.685	0.000*
	Total	912	3.34	0.731	
Waiting Time	Urban	480	2.90	0.770	
	Rural	461	3.07	0.774	0.000*
	Total	911	2.98	0.777	
Quality Of Treatment	Urban	479	3.27	0.689	
	Rural	430	3.34	0.631	0.120
	Total	909	3.31	0.663	
Interior Design	Urban	481	3.33	0.711	
	Rural	430	3.45	0.666	0.011*
	Total	911	3.39	0.692	
Charge	Urban	460	3.26	0.717	
	Rural	386	3.40	0.760	0.006*
	Total	846	3.32	0.740	
Parking Area	Urban	461	2.99	0.786	
	Rural	402	3.07	0.724	0.130
	Total	863	3.03	0.758	

Table 2. Satisfaction of respondents towards various aspects of housing by residential area

Satisfaction		Value			
		n	Mean Score	SD	p value
Condition of the House	Urban	529	3.32	0.765	
	Rural	449	3.26	0.724	0.234
	Total	978	3.29	0.746	
Size and Space of The House	Urban	528	3.07	0.708	
	Rural	447	3.17	0.752	0.037*
	Total	975	3.12	0.730	
Space of The Lawn	Urban	507	3.06	0.994	
	Rural	420	3.15	1.058	0.653
	Total	927	3.10	1.023	
Domestic Waste Disposal	Urban	521	2.74	0.558	
	Rural	391	2.91	1.227	0.045*
	Total	912	2.81	1.044	
Recreational Parks	Urban	433	2.56	1.247	
	Rural	258	2.60	1.451	0.000*
	Total	691	2.58	1.372	
Cleanliness of	Urban	524	3.03	0.833	
the Environment	Rural	426	3.16	1.001	0.808*
	Total	947	3.09	0.913	
Road at Housing Areas	Urban	533	3.05	0.785	
	Rural	440	3.11	0.786	0.230
	Total	973	3.08	0.786	
Public Telephones	Urban	496	2.95	1.128	
	Rural	406	3.04	1.140	0.880
	Total	902	2.99	1.133	

Table 3. Satisfaction of respondents by residential area towards the cleanliness, security of Malacca Town and caring attitude of the community

Satisfaction		n	Mean	SD	p value
The Cleanliness of	Urban	532	2.99	0.671	
Malacca Town	Rural	453	3.18	0.655	0.000*
	Total	985	3.08	0.670	
The Safety of	Urban	532	3.13	0.716	
Malacca Town	Rural	452	3.25	0.693	0.009*
	Total	984	3.19	0.708	
The Caring Attitude of	Urban	528	3.14	0.749	
Malacca People	Rural	448	3.30	0.722	0.001*
	Total	976	3.21	0.740	

Domestic Waste Disposal

A total of 610 respondents received the services from the Local Authority in managing their domestic waste. Four hundred and thirty four respondents were from the urban areas and 176 were from the rural areas with a mean score of 2.76. Meanwhile the other 372 respondents had their domestic waste burnt, buried or disposed using community bins in neighbouring areas. There were a total of 6 non-respondent to this question.

The FGD found members staying in urban areas were disappointed because household domestic waste was collected only once or twice a week. This results in rubbish getting rotten and giving a bad smell. They also complain that occasionally rubbish were collected during lunch time giving an awful smell and sometimes leaches from the lorry and left a stinking smell for days on the roads.

Road system

A total 979 members responded to the questions, giving a mean score of 2.75. Both urban and rural respondents had similar opinion on the road system. Among the reason given by the respondents who did not feel satisfied with the road system include : too many potholes (80%), a lot of digging activities (69.2%), narrow roads and streets (64.6%) and too many traffic lights (20.7%).

Public Transportation

A total of 768 responded to the question concerning the level of satisfaction towards the public transportation services with a mean score of 2.87 and 2.88 for urban and rural respectively.

Their level of satisfaction regarding bus/taxi fares, punctuality, attitude of drivers and conductors and the comfortness of the facilities provided had mean score ranging from 2.52 to 2.98. Punctuality had the lowest mean score (2.52) and amount of fares had the highest mean score (2.98).

Responses obtained during the questionnaires were supported by the observation findings done at the town bus-station. About 50% of the buses were not punctual and their departure and arrival at the station were sometimes not according to schedule. The seats provided at the station were only four long benches. Many commuters were noted to be standing and leaning against the walls of the bus station.

About 12.8% of 726 respondents knew that there was a suggestion box at the bus station, 37.8% reported that they have never seen it, whereas 49.4% did not know of its existence. There was no timetable for the arrival and departure of the buses at the bus station.

Recreational Parks

Two hundred and seventy four (28.7%) of the respondents felt that the number of recreational parks were adequate, 376 (39.3%) mention that they were fairly adequate and 300 (31.3%) noted it to be inadequate. However 7 (0.7%) reported that they had never gone to any recreational parks in the district.

Parking spaces at the recreational parks had the highest total mean scores for satisfaction (3.02). Findings for the waste bins provided, maintenance of recreation parks and food stall gave mean scores of 2.88, 2.88 and 2.81 respectively. Lowest mean score of 2.47 were obtained for the public toilets in recreational parks.

Expectation

The respondents expected a cleaner city but they were generally satisfied with the level of cleanliness (except for solid waste disposal and cleanliness at public areas). They expected more medium low cost and low cost houses to be built. They also would like to have more health campaigns at rural areas with decrease waiting time at the health clinics and hospitals.

Public transport services were expected to be more efficient in term of punctuality, comfort and better attitude of drivers. The public facilities and food premises were also expected to improve their cleanliness.

Contribution

The community was willing to contribute to the healthy status of the city except in areas not within their control e.g. public transportation, wet market and food premises. Among the suggestions from the community were the recycling programme, healthy diet campaign, informing the police for suspicious acts, obey road regulations and zebra crossings.

DISCUSSION

The ratio of the respondents living in urban areas to rural areas was 1.2:1. This pattern was expected and this form part of the rationale for the Healthy City programme. Comparison of the racial composition in the urban and rural areas with the general census done in 1990 still showed predominantly Chinese community in the urban areas and Malays in rural area. Nonetheless there was an increase of 4.4% of the Malay population in urban areas. This could be due to occupational needs and better economic opportunities for the Malays in the urban areas.

Seventy five percent of the respondents were from 15-44 years age group. This was similar to the Malaysian population pyramid where the majority of the population are from this age group. Sixty two percent of the respondent had secondary education and another 13% had tertiary education. A more educated population would enable an easier implementation of Healthy City activities and the community would be more willing to participate in community work.

Although 26.4% of the respondents were unemployed, majority of them were housewives (96% of the unemployed). The number of true unemployed was only 10 out of 988 respondents (1.0%). The city has a thriving and resilient economy with ample job opportunities with the average economic growth rate per capita GDP at 3.8% in 1999-2000.[5] This is one characteristic already available in Malacca.

There were three sectors that were above the satisfaction level : health services, housing and environment. The mean scores for aspects of health services such as quality of attention given, quality of treatment, interior design of health facilities, treatment charges and parking area were good with scores ranging from 3.03 to .3.39 with the exception of waiting time which had a mean score of 2.98. These findings gave a positive feedback of the city, fulfilling one of characteristics of a healthy city. A healthy city provides an optimum level of public health care services which is accessible to all.

As for housing, the respondents were satisfied with the condition of their own houses which could be seen from the high mean score of 3.22. They were also satisfied with aspects of housing that were under their control such as size, spaces and spaces of lawn which had mean scores of 3.12 and 3.10 respectively. However, there were factors of housing that they were not satisfied with such as domestic waste disposal, recreational park and public telephone. There was an increasing demand for the local authorities to cater to the needs of the community especially concerning aspects of efficient domestic waste disposal adequate recreational parks and maintenance of public telephone in residential areas.

The other sector that met the satisfaction criteria was environment. Environment include aspects such as cleanliness, safety and caring attitude. The cleanliness aspect of the environment, which had the lowest score still need attention. The active involvement of the State Government, local authorities and the community would be needed to improve the situation. Feeling safe staying in a neighbourhood is also important for one's mental health and could be further enhanced by the caring attitude of the community.

There are four sectors that had a mean score below the satisfaction level of 3.0 and these include domestic waste disposal, road system, public transport and recreational park.

The respondents generally were not satisfied with the domestic waste disposal judging by the mean score of 2.76. The urban respondents had a lower mean score of 2.74 as compared to the rural respondents, which had a mean score of 2.86. This may be due to the fact that the rural respondents have less waste to dispose and evidently more ways to dispose of their waste such as by burning and burying. There is a need for the local authorities to look into this aspect especially regarding the frequency of domestic waste collection in residential areas.

Being a historical city, some of Malacca's roads dates back to the colonial years and therefore are too narrow for today's needs. These roads and the associated buildings forms a cultural heritage which Malacca is proud of and gives its people its connectedness to its past history. The other problems with the road system eg. uncoordinated maintenance works, will need the cooperation of the relevant agencies to solve them.

Good efficient public transportation is important for city dwellers to get to their places of work and education. They will also need transportation for other activities of daily living eg. getting food supplies and going to recreational areas. Less people will use their own vehicles if public transportation is a good alternative. Less cars will mean less congestion on the road and less pollution. This will definitely contribute to a healthier city.

CONCLUSIONS

There were 3 sectors that had mean scores above 3.0 (the cut off level for being satisfied). They were health, housing and environment. In terms of dissatisfaction, there were 4 sectors scoring below 3.0. These include domestic waste disposal, road system, public transportation and recreational park. Generally, the community expected public services and utilities to be improved especially in terms of cleanliness. They agreed to contribute in their own way in developing the sectors discussed except for public transportation, wet market and food premises which were beyond their control. Observation showed that some of the community members had bad behaviours that could contribute to an unhealthy city.

The findings of this study could be used by the Malacca State planners and policy makers for future planning. The policy makers should also provide supportive facilities to improved public services to the community. Enforcement should be strengthen by relevant agencies especially in improving the cleanliness of the wet market and food premises, in upgrading the quality of the public transportation system and in curbing the social indiscipline. The community could and should be mobilize to participate in social and health programme as 50% of the respondent felt that they could contribute in keeping the environment clean and safe, in lifting the health of their family and in controlling social indiscipline.

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REFERENCES

1. World Health Organisation. Building A Healthy City: A Practioner's Guide 1995

2. World Health Organisation Regional Office For Europe. Twenty Steps For Developing A Healthy Cities Project 1992.

3. Ministry of Health, Malaysia. Seminar Kebangsaan Kesejahteraan Bandaraya Malaysia 1995.

4. Jabatan Kesihatan Negeri Melaka. Progress Report of Healthy City Malacca 1998.

5. Unit Perancang Ekonomi Negeri, Negeri Melaka. Data Asas Melaka 1999.