

HealthLine – A Telephone Health Information and Promotion Service in Singapore

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ABSTRACT

HealthLine is a toll-free telephone information service on healthy living. Provided by Singapore's Ministry of Health, it augments national health promotion programmes and simultaneously feels the pulse of the common health concerns of the population. The development of the telephone information service is described and the ease of the use of telecommunication in the provision of health information and promotion is highlighted in the paper.

Keywords: telephone information service, telecommunication, health information, health promotion

INTRODUCTION

Provision of health information through telecommunication is rapidly being recognised as an effective tool in health education and promotion. This is evident by the rapid growth in the number of telephone health information services available in Singapore, and internationally in countries like the United Kingdom, United States of America, Australia and China. However, most of these telephone information services are topic based. For example in Australia, there are telephone information services available specifically for schizophrenia⁽¹⁾ and cancer⁽²⁾, whilst in Beijing, there are hotline services to provide advice to troubled women confronted with many challenges and pressures in the workplace and at home⁽³⁾.

The public's response to the use of the telephone as a link to health information is equally popular. A telephone survey conducted by Inforum Inc, a Nashville-based health care planning and marketing information company showed that households in the United States make more than 1 million calls per month to telephone health care information services with more than 7% of all households in the United States having used some form of telephone health care information service at least once during the past two years⁽⁴⁾.

Telephone health information services are also available to medical professionals. For example, MIST (Medical Information Service via Telephone) provides free consultation service on a 24-hour, 7 days-a-week basis for physicians in Alabama and around the world.

Through the system, physicians can gain access to the Medical Centre of the University of Alabama (UAB) at Birmingham, and obtain specific medical information or discuss possible diagnosis and other patient-related problems with UAB Medical Centre specialists⁽⁵⁾.

In Singapore, various telephone information services are also available to provide information and counselling on specific conditions like AIDS, schizophrenia and arthritis. On 1 December 1992, HealthLine, a toll-free telephone information service was set up to provide a comprehensive range of information on healthy living. It has two components; a personalised service and a 24-hour pre-recorded information service. We present here, details of its development, features and public response to the service over the last four years.

Development

In 1991, a Review Committee on National Health Policies noted that although the health status of Singaporeans was good, (in 1990, infant mortality rate was 4.7 per 1,000 live births and life expectancy at birth was 74 years)⁽⁶⁾, Singapore was experiencing high prevalence rates of cancer, heart disease and stroke. The Committee recommended the adoption of a health promotion and disease prevention strategy to reduce morbidity and mortality from these lifestyle diseases and reduce health care cost⁽⁷⁾. In response to the recommendations of the Review Committee on National Health Policies, the government implemented the National Healthy Lifestyle Programme in April 1992. This multi-sectoral programme aims to create awareness of the need to lead a healthy lifestyle, teaching the skills to do so and providing a supportive environment for this.

The National Healthy Lifestyle Programme adopts a multi-sectoral approach involving government ministries, statutory boards, health professional bodies, employers, unions and community organisations working together to provide a supportive social and physical environment to encourage healthy living by the people.

A Healthy Lifestyle Unit (HLU) within the Ministry of Health was also set up to co-ordinate the healthy lifestyle programmes of various government and private organisations and act as a focal point of contact for the National Healthy Lifestyle Programme.

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To facilitate its role as a bureau of information on healthy living, the Healthy Lifestyle Unit introduced HealthLine to the public on 1 December 1992.

Features

HealthLine is a toll-free telephone information service on healthy living. Funded and managed by the Ministry of Health, Singapore, it provides the public with information on health-related topics, programmes and services to promote healthy living. Information is presented in English, Mandarin, Malay and Tamil, so as to reach out to the major ethnic groups residing in Singapore.

Two types of services are available. These include a personalised service by three nurses answering questions on health and a pre-recorded information service on healthy living. The latter component uses an Audiotex voice messaging system. The personalised service is readily available on toll-free 1800-2230313. Accessing the 24-hour pre-recorded information service is also relatively simple. By dialing the toll-free number 1800-7422066, the caller is able to interact with the voice messaging system for selection of not only the information but also the language in which information is required. The advantage of using an Audiotex voice messaging system is that it allows callers to exercise flexibility in their choices to either proceed or repeat any portion of the application as and when they prefer.

Furthermore, the voice processing system has a greater capacity compared to any PC-based system and allows the human voice to be recorded and stored electronically in the system.

Training of nurses manning HealthLine

Nurses manning HealthLine were specially selected. They are bilingual, have an interest in health education and the ability to communicate over the telephone.

Prior to the commencement of HealthLine, these nurses were sent on attachments to several health departments to enable them to gain valuable insight into the programmes and services provided by these agencies to promote healthy living. They also attended relevant courses to widen their knowledge on healthy living, develop effective communication skills and provide health education effectively through telecommunication.

Types of information

On the personalised service, members of the public can contact the nurses during office hours (8.30 am to 5.00 pm, Mondays to Fridays and 8.30 am to 1.00 pm on Saturdays) to clarify, discuss and find out more about any topic related to healthy living. The nurses however, do not advise on treatment of any medical condition.

To assist the nurses in responding to the queries of the callers, a customised computerised reference manual on health information is available. A resource panel comprising health experts in the

various fields was also set up for the nurses to consult when faced with difficult queries.

The 24-hour service which complements the manually operated telephone information system provides pre-recorded information on various aspects of healthy lifestyle and programmes and services to promote healthy living. Over the last three years, several enhancements have been added and currently the 24-hour service provides the following information:

- (i) Health messages
Pre-recorded interviews with experts on various aspects of healthy living are featured. Two new topics on healthy lifestyle are available each week.
- (ii) NutriLine
Tips on healthy eating are provided in this segment.
- (iii) QuitLine
Information to assist smokers to quit smoking is available on this segment.
- (iv) Library Information Service
This segment provides a comprehensive data bank on various aspects of health-related topics including nutrition, exercise, mental health, smoking, common diseases and symptoms, travel health and AIDS.
- (v) Programmes & Activities on Healthy Living
A calendar of forthcoming events, seminars and exhibitions organised by various organisations for the public are featured.
- (vi) Services to Promote Healthy Living
Information on various health screening, immunisation and counselling programmes are available.

Callers to the 24-hour service can also participate in a weekly quiz and win prizes. A unique feature of the 24-hour pre-recorded component of HealthLine is that it allows callers to record their queries and telephone numbers on the system for the nurses to retrieve and return calls.

Response to HealthLine

During the four year period from 1 January 1993 to 31 December 1996, HealthLine received a total of 2,144,972 calls (Table I).

There is an increasing trend in the number of calls to both components. The call volume to the 24-hour service increased from 467,157 in 1993 to 655,147 in 1996, while that for the personalised service rose from 7,191 calls in 1993 to 18,332 calls in 1996 (Table I).

The monthly variation of calls received from 1993 to 1996 for the 24-hour and personalised services is shown in Figs 1 and 2 respectively. The increased number of calls during certain months corresponds to new programmes added to the service and publicity of these programmes in the media. Major health promotion programmes like the annual National Healthy Lifestyle Campaign, National Smoking Control Campaign and AIDS Awareness Programme, also contribute to the upsurge in calls during certain months.

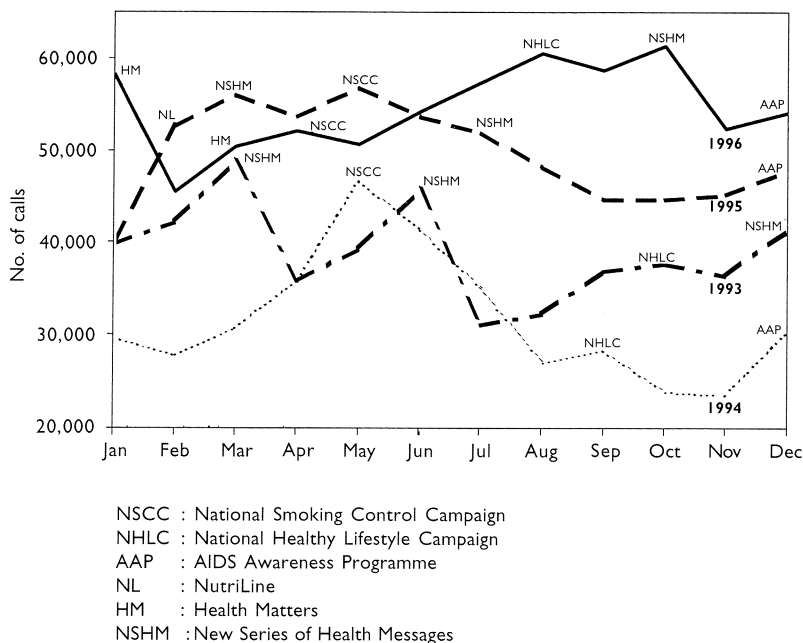


Fig 1 – HealthLine 24-hour pre-recorded service – monthly variation in calls

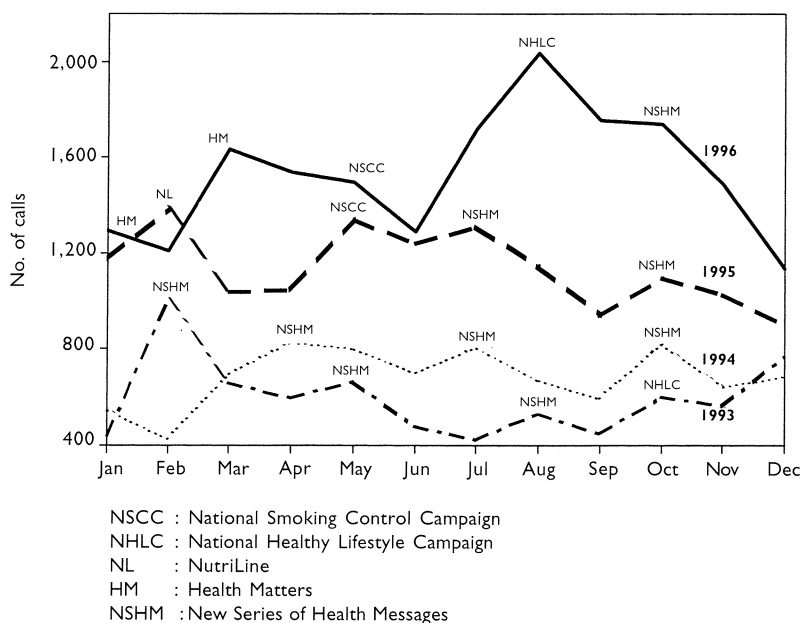


Fig 2 – HealthLine personalised service – monthly variation in calls

With regard to various segments preferred by callers, the “Quiz” was the most popular segment on the pre-recorded component, with more than 50% of callers participating in this segment. From 1993 to 1995, the second most popular segment was “Health Messages”. The percentage of callers requesting health information ranged from 10% to 15% between 1993 and 1995. However in 1996, almost 26% of callers sought information from the “Library Information Service”. This increase was in response to publicity of the segment through the distribution of the “Library Information Service” pamphlets to all school children in 1996 (Table II).

The introduction of two programmes in 1996, namely “Healthwise”, a contest targeted at the working population and “Health Matters”, a 13-part series with the Television Corporation of Singapore generated not only a surge in overall call volumes but also attracted calls to these two segments and caused a decrease in other segments like “Health Services” (2.8%), “QuitLine” (4.8%) and “NutriLine” (3.2%) (Table II).

On the personalised component, in 1993 while the majority or 26% of the callers sought information on nutrition, 32% of the callers in 1994 sought medical information. Medical information continued to be the most popular subject in 1995 to 1996 with 27% to 34% of callers seeking information respectively. “How do I know I have high blood pressure?” “What are the symptoms of diabetes?” and “What is migraine?” are some of the questions asked by these callers.

With the airing of the 13-part series, “Health Matters” on television, HealthLine’s personalised telephone number was publicised with each episode. This prompted callers to call HealthLine nurses and seek further information on Screening (6.2%) and Health Promotion Programmes (4.6%) related to the medical conditions discussed during the 13-part series. Callers also requested for pamphlets on these medical conditions and enquired further about HealthLine and its services (13.8%, as reflected under the “Others” category) (Table III).

DISCUSSION

HealthLine, by providing a range of health information, aims to create awareness and stimulate public interest on health issues. Its easy toll-free accessibility to Singaporeans (44.7% or 1 in 2 Singaporeans own telephones)⁽⁸⁾ facilitates its role as a health education tool. Through its various programmes, HealthLine has so far encouraged close to 2.1 million callers to become better informed in healthy living and be more involved in their own health care. Thus HealthLine complements local health promotion activities. This concept is similar to the Hull HealthLine available in Hull, United Kingdom⁽⁹⁾.

Besides being a health education tool, HealthLine also provides a useful “snapshot” of the health concerns and interests of Singaporeans. Through the monitoring of requests for the different categories of information, HealthLine has the potential to be used by local health educators and promoters to prioritise health programmes.

CONCLUSION

HealthLine, a toll-free telephone service provides information on health topics, programmes and services to promote healthy living. It has received an overwhelming response of 2.1 million calls since its commencement in December 1992. Easy accessibility, user friendly features of the system,

Table I – No. of calls to HealthLine

Types of service	Number of calls			
	1993	1994	1995	1996
24-hour pre-recorded service	467,157	380,038	595,198	655,147
Personalised service	7,197	8,237	13,666	18,332
Total	474,354	388,275	608,864	673,479

Table II – 24-hour pre-recorded service category of segment requested

Segment	Percentage of calls			
	1993	1994	1995	1996
Quiz	69.0	66.0	58.0	37.9
Health messages	15.0	11.4	10.4	11.1
Queries	7.6	7.1	5.0	4.4
Health programmes	5.3	4.0	3.0	4.4
Health services	3.1	3.0	2.6	2.8
Library information-service*	-	4.7	12.0	25.7
QuitLine*	-	3.8	5.4	4.8
NutriLine**	-	-	3.6	3.2
Healthwise***	-	-	-	2.9
Health matters***	-	-	-	2.8

* New programmes introduced in 1994

** New programmes introduced in 1995

*** New programmes introduced in 1996

Table III – HealthLine: Personalised service category of information requested

Category	Percentage of calls			
	1993	1994	1995	1996
Nutrition	25.4	14.8	16.3	10.3
Medical information	22.4	32.4	27.0	34
Health services	19.2	15.9	15.6	7.7
Exercise	7.4	9.8	9.8	8.6
Smoking	9.7	13.3	6.7	1.9
Weight management	2.9	3.1	6.3	6.3
Stress management	3.0	4.8	5.9	3.6
Screening	1.4	1.3	3.7	6.2
Immunisation	0.6	0.5	2.5	3.0
Health programmes	0.5	0.4	1.4	4.6
Others	7.5	3.7	4.8	13.8

confidentiality and provision of a wide range of interesting and relevant health information have contributed to this favourable public response.

By feeling the "pulse" of the health interests and concerns of the public, HealthLine also has the potential to be used by health educators to prioritise health education and promotion programmes. Ultimately, we hope that Healthline, by continuing to provide up-to-date health information, will become integral to most Singaporean households and act as a link to healthy living.

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