Knowledge, Attitude and Practice of Medical Checkup

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Centre for Health Protection
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Executive Summary

Background

Disease prevention is now recognized as a superior strategy to decrease the morbidity and mortality of different types of diseases. It is a cost-effective way to improve the population health. Attending regular medical checkups is one of the tools for disease prevention, which enables certain diseases or risk factors to be detected at an early stage for introducing timely interventions, such as lifestyle modifications, pharmaceutical or surgical treatment, in order to improve individual health outcome. Nowadays, there is a variety of medical checkup tests in the market. It becomes a public health issue in helping the public to make sensible choice and minimize the risk of harm implicated after unnecessary invasive investigations. The Department of Health (DH) conducted a cross-sectional survey to collect pertinent information on the knowledge, attitude and practice of medical checkups in Hong Kong population aged 15 and above in 2008. The survey was conducted under the Thematic Household Survey of the Census and Statistics Department (C&SD) and was commissioned to a private research company. It is hoped that the information collected will help the policy makers, the medical professionals and the public health authority to devise evidence-based plan in health policy, resource allocation as well as provision of health services and programmes.

The survey aims at assessing the knowledge, attitude and practice of medical checkups in local population aged 15 and above. Specific utilization pattern of medical checkup services by the population and different subgroups are also analyzed.

Survey Method

The survey was conducted from 23 February to 29 May 2008. It covered the 5.75 million land-based non-institutionalized population of Hong Kong aged 15 and above, excluding the foreign domestic helpers. Subjects were selected by stratified systematic sampling from the Frame of Quarters maintained by C&SD. Relevant data were collected by face-to-face interviews, using a standardized and structured questionnaire during household visits. Medical checkup was defined as an encounter with the health care system for the purpose of screening disease(s) without prior doctor's diagnosis related to the screening test. Checkups involving taking blood pressure only and dental checkup were excluded. By applying appropriate weighting factors, the information collected from the interviewed individuals could be used for drawing inferences on the utilization pattern of medical checkup services of the population aged 15 and above in Hong Kong.

Descriptive analysis was adopted to describe the knowledge, attitude and behaviour of medical checkups. Subgroup analysis by sex and age was performed. Further analysis by educational attainment and monthly personal income was also included as appropriate.

Key Findings

A total of 10 027 households, out of 13 064 households in the selected sample, were successfully interviewed, accounting for an overall response rate of 76.8%.
Information was collected from 25,208 eligible persons from the interviewed households. Key findings were listed as follows -

**Knowledge and Attitude of Medical Checkups**

To gauge the knowledge and attitude of medical checkups of persons aged 15 and above, respondents were asked to give their views on a series of statements. These statements included attitude/some misconceptions towards medical checkups.

Over 90% of the 5.75 million persons aged 15 and above had high expectations on the effectiveness of medical checkups on early detection of diseases. The vast majority (92.8%) of persons aged 15 and above believed that “majority of diseases can be detected earlier through medical checkups” and 94.4% of the persons aged 15 and above believed that “for the majority of diseases, detection at earlier stages can improve their prognosis”.

Other misconceptions about medical checkups had been identified in the survey:

i) The most advanced investigations are most effective in detecting diseases (Misconception rate: 87.8%).

ii) Abnormal findings in a medical checkup mean that the person must be suffering from certain diseases i.e. false positive (Misconception rate: 74.2%).

iii) Normal findings in a medical checkup mean that the person must be free from diseases i.e. false negative (Misconception rate: 59.4%).

Furthermore, the majority opined that history taking (90.5%) and physical examination (92.5%) by doctors were always necessary components of medical checkups. Most of them (94.5%) preferred the checkup result to be interpreted and explained by a doctor.

Subgroup analysis showed that elders aged 75 and above had the lowest percentages of agreements to the statements describing medical checkups but highest percentage of choosing “don’t know” across different age groups.

**Practice of Medical Checkups**

48.5% of the 5.75 million persons aged 15 and above had ever had medical checkups. The proportions of persons aged 15 and above who had medical checkup(s) in the 3 years and 12 months before enumeration were 33.1% and 19.6% respectively. The percentage further dropped to 16.7% for those with regular medical checkups.

23.2% of the 5.75 million persons aged 15 and above planned to have medical checkups in future. It was found that a greater proportion of women had or planned to have medical checkups than men. The highest and lowest rates of having or planning to have medical checkups were in persons aged 35 to 44 and 15 to 24 respectively.

In general, people with higher educational attainment and higher income tended to have a higher rate of having or planning to have medical checkups.

Among 2.96 million persons aged 15 and above who never had medical checkup, the reasons “consider themselves healthy” and “never thought about it” were mainly claimed by persons aged 15 to 74. For those aged 75 and above, the two most
quoted reasons for not having medical checkups were “never thought about it” and “lack of money”.

For 1.66 million persons who had medical checkups but reported not having medical checkup in the 12 months before enumeration, the commonest reasons were “consider themselves healthy” and the second most common reason for not attending medical checkup cited by age groups under 65 was “lack of time” while the older age groups (aged 65 and above) was “lack of money”.

**Characteristics of Medical Checkup Conducted in the 12 Months Before Enumeration**

Among 1.13 million persons aged 15 and above who had medical checkups in the 12 months before enumeration, details of up to three most recent medical checkups (i.e. 1.20 million medical checkups) were collected. The vast majority (94.5%) of these medical checkups were conducted in Hong Kong. About 70% were conducted in local private settings.

The three most prevalent investigation items included in the checkups were blood tests (80.1%), blood pressure (76.4%) and body weight and height measurement (62.6%). Nearly two-thirds of the checkups (63.5%) were done without any particular health concerns.

Doctor was the main party to provide information on medical checkups (50.3%), decide investigation items to be included in the checkup (44.8%) as well as interpret and explain the result of medical checkups (82.5%).

About one-quarter of the medical checkups were provided free of charge, including free offers by commercial companies or employers. The remaining checkups were mainly paid by the persons who had the medical checkups or their family members (91.6%). The median of the total cost of medical checkup done over the 12 months before enumeration was HK$600. 85.2% of the checkups were rated as very satisfactory or satisfactory.

**Source of Information on Medical Checkups**

Nearly 60% of the 5.75 million persons aged 15 and above had ever received information on medical checkups.

Of those 3.37 million persons who had ever received information on medical checkups, the leading source of information was the advice from doctors (35.1%). Other sources included pamphlets/posters in clinics or medical laboratories (30.2%), advertisements in housing estates from community organizations, board of owners or District Council members (26.2%) and promotional calls/personal letters from credit card or insurance companies (24.1%).

Different age groups received information related to medical checkups from various sources. For persons aged 45 and above, the leading source was the advice from doctors (36.2% to 63.9%). Information provided by insurance or credit card company was the main source of information for those aged 25 to 34 (36.1%). The remaining two age groups (aged 15 to 24, 35 to 44) received relevant information mainly from the printed materials in clinics or medical laboratory (being 28.3% and 35.4% respectively).