

# Population Health Survey

**2003/2004**



**Collaborative Project of  
Department of Health and  
Department of Community Medicine  
University of Hong Kong**



**Department of Health**

## Executive Summary

The Department of Health collaborated with the Department of Community Medicine of the University of Hong Kong to conduct the Population Health Survey (PHS) in 2003/2004 and to report the patterns of health status and health-related issues of the general population in Hong Kong, in order to strengthen the information base on population health, thereby, supporting evidence-based decision making in health policy. The PHS included 7 084 land-based non-institutionalized population of Hong Kong (excluding foreign domestic helpers) aged 15 and over, representing 5.68 million persons after applying population weights. The household response rate was 72%.

Specifically, this report aims to describe: (1) the general health status, (2) the prevalence and incidence of major health conditions, (3) mental health status, (4) health behaviour relating to major causes of mortality and morbidity, (5) preventive health practices, (6) health promoting behaviours, (7) health service utilization, (8) social and financial support, and (9) quality of life of the population.

### ***General Health Status***

The results show that 2.7% of persons aged 15 and over considered their general health conditions “excellent”, 20.0% perceived that their general health condition was “very good”, while 36.0% “good”, 35.5% “fair” and 5.7% “poor”. There was generally a negative relationship between age and self-reported health status.

### ***Major Health Conditions***

#### Acute conditions

Common cold or upper respiratory infections (35.3%), low back pain (27.3%), joint pain (21.3%), dizziness (17.9%) and neck pain (16.1%) were the five most frequently reported acute health problems encountered by the Hong Kong population in the one month prior to the survey.

#### Chronic conditions

Among the major chronic conditions, overweight and obesity, hypertension, high blood cholesterol, diabetes and asthma were the five most prevalent conditions.

#### ■ Overweight and obesity

Close to two-fifths (38.8%) of persons were categorized as overweight or obese, including 21.0% as obese. A higher proportion of males (42.5%) than females (35.9%) were classified as overweight or obese.

### ■ Hypertension

Doctor-diagnosed hypertension was reported by 12.1% of persons, with a strong age dependency relationship, i.e. from 0.7% in the 15-24 age group to 41.5% in the 75 and above age group, in which half (6.1% of persons) were reportedly first diagnosed during the past 12 months. However, field measurement of blood pressure using electronic sphygmomanometer revealed that another 15.1% were found to have high blood pressure by the World Health Organization (WHO) criteria. For those who had been diagnosed with hypertension, about three-quarters (73.4%) had taken doctor-prescribed medicines to control their blood pressure while 15.6% reported to have taken over-the-counter medications.

### ■ High blood cholesterol

About one in twelve (8.4%) reported that they had been diagnosed of having high blood cholesterol by a doctor. About half of the cases (4.1% of persons) were identified in the 12 months preceding the survey. The proportion increased with age (the highest proportion is 19.8% in the 65-74 age group). Among all who were diagnosed with high blood cholesterol, 35.1% were taking doctor-prescribed medicine and 8.8% were taking over-the-counter medications.

### ■ Diabetes

A total of 3.8% of persons reported had been diagnosed with diabetes, in which 42.3% of these diagnoses (1.6% of persons) were made during the previous 12 months. Similarly, people in the older age groups were more likely to be diagnosed with diabetes (the highest proportion is 14.3% in the 65-74 age group). Regarding the treatment, 12.9% of persons diagnosed with diabetes were taking insulin and 77.8% taking diabetic pills to control their blood sugar level.

### ■ Asthma

The proportion of persons diagnosed with asthma was 1.9%. Among them, nearly one-fifth (0.4% of persons) reported that the asthma was diagnosed in the 12 months preceding the survey. The prevalence was found relatively higher in older age groups (4.4% and 2.4% for people aged 75 and above and people aged 65-74 respectively) and the younger age group (2.3% for people aged 15-24).

For the other important chronic diseases, coronary heart disease was reported in 1.6% of persons, followed by chronic obstructive pulmonary disease (1.4%), cancer (1.3%) and stroke (1.1%).

## ***Mental Health Status***

### **Anxiety**

The anxiety level of persons was measured by the State-Trait Anxiety Inventory (STAI). The scale ranged from 10 to 40 – the higher the score, the higher the anxiety level. The median STAI scores reported by females and males were 17.0 and 16.0 respectively. People aged 25 – 34 years reported the highest scores (median=18.0), whereas the older age groups (65-74 and 75 and above) registered the lowest scores (median=15.0).

Overall, the proportion of people self-reported having been told by a doctor that they had anxiety disorder was 2.0%. The prevalence of doctor-diagnosed anxiety disorder was highest in people aged 45-54 age group (3.3%).

### **Depression**

Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D). The scale ranged from 0 to 60 – the higher the score, the more severe the level of depression. Males generally reported slightly lower median CES-D scores (11.0) than females (12.0). The median score was the highest among the younger age groups of 15 – 34 (13.0).

The prevalence of self-reported doctor-diagnosed depression was 1.5% and people aged 75 and above had the highest prevalence of 2.5%.

### **Schizophrenia**

Overall, 0.2% of people self-reported that they had been diagnosed to have schizophrenia by a doctor. The prevalence ranged from 0.0%-0.4% among various age groups.

### **Dementia**

The proportion of people who have ever been diagnosed with dementia by a doctor was 0.3%. The prevalence increased from 0.0% - 0.1% among people aged 15 – 64 to 3.6% for people aged 75 and above.

### **Suicidal behaviour**

In the 12 months prior to the survey, 3.6% had seriously considered suicide, 2.6% had made a plan about how they might commit suicide, and 1.4% actually attempted suicide where about half of these cases (52.8%) resulted in injuries or poisoning requiring medical treatment.

### **Stress management**

Almost half (48.6%) did not report taking action to manage their stress level in the month prior to the survey. Among those who had tried to reduce stress, 47.5% chose shopping or leisure activities and 41.2% selected reading or listening to music to reduce their stress.

## ***Health Risk Behaviours and Health Related Lifestyle Practices***

### **Smoking**

About one in four (24.6%) reported that they had ever smoked cigarette. Among those who had ever smoked, 59.6% smoked at least one cigarette per day (daily smokers), 6.8% of persons smoked occasionally (smoking less than one cigarette a day), 33.5% had quitted smoking (including ex-daily smokers and ex-occasional smokers). The corresponding daily smoking prevalence was 14.7% (4.7% for females versus 26.8% for males).

Among those daily smokers and occasional smokers at the time of survey, about one in eight (12.0%) started smoking at age less than 14 years. Among the daily smokers, the median number of cigarettes smoked per day was 10. Males tended to smoke more cigarettes per day than females (median number of cigarettes 13.0 versus 8.0). Among the “ex-smokers”, 92.5% had quitted for at least six months.

Based on the criteria that the respondent himself/herself was not a smoker and his/her household members did not smoke at home no matter whether they were smokers or not, it was estimated that 58.5% of people lived in a “smoke-free” home. Regarding smoking in the workplace, one-third (33.2%) of currently employed persons reported that they were exposed to second-hand smoking within 10 feet at work. Overall, 81.4% of all the persons had been exposed to second-hand smoking in places other than home and workplace in the month preceding the survey.

### **Alcohol consumption**

Overall, 61.6% of persons were non-drinkers and 4.7% were ex-drinkers. While 23.7% of persons drank alcohol occasionally (drink less than once a week), 9.5% were regular alcohol users drinking at least once a week.

Among those who had ever drunk alcohol, the mean age that they first started drinking was 20.2. Males started drinking at an earlier age than that of females (19.5 versus 21.4). Among the current drinkers, 14.4% had binge drinking in the month preceding the survey (7.9% for females and 18.5% for males).

### **Physical activity**

In the 7 days preceding the survey, 9.0% of people reported they had engaged in vigorous physical activities, 21.9% had undertaken some moderate physical activities and 88.0% had walked at least 10 minutes at a time.

According to the International Physical Activity Questionnaire (IPAQ) (short-form), 31.8% of persons were classified as “inactive”, 49.5% as “minimally active” and 12.4% as “highly active”. Slightly more males (14.4%) than females (10.6%) were in the highly active category. In terms of age, people aged 15-24 (13.6%) and people aged 75 and above (8.4%) had the highest and lowest proportions of people being classified as highly active respectively.

### Diet and nutrition

Daily fruit consumption (at least once per day) was reported by 55.0% of persons, with 61.8% for females and 46.7% for males. Among those who indicated that they ate fruits at least once a day, the mean number of fruits eaten a day was similar for females (1.4) and males (1.3). Daily vegetable consumption (at least once per day) was reported by 87.3% of females and 79.2% of males, giving an overall proportion of 83.6%. Among those who indicated that they ate vegetables at least once a day, the mean number of bowls of vegetables eaten a day was 1.2, with 1.3 for females and 1.1 for males. Overall, 16.3% reported having five or more servings of fruits and/or vegetables per day, with 19.9% for females and 11.9% for males.

In general, 60.7% and 37.6% of all persons reported that they ate meat and fish everyday respectively. About half (50.1%) ate soybean curd at least once weekly; 23.1% drank milk at least once a day and 36.6% drank Chinese tea everyday. Besides, 7.8% reported that they ate food with high fat content at least once a day and 36.9% had removed all fatty parts such as chicken skin from their food when eating.

A substantial proportion of persons chose or avoided certain food due to their concern about their body weight (54.2%) and for maintaining or improving weight (53.2%). Regarding the dietary contents, 60.6% and 50.1% of persons reported that they would choose or avoid foods due to their fat and cholesterol contents respectively.

### Use of medication

During the month prior to the survey, analgesics (35.1%), health supplements (18.5%) and traditional Chinese medicine (16.7%) were the 3 most common types of medication used. Moreover, 8.7% of women aged 15 – 49 had taken birth control pills and 1.5% of women aged 30 and above had taken hormones for menopause or aging symptoms in the month preceding the survey.

### Weight control

Overall, 21.5% of the persons reported that they had done something to lose weight or keep from gaining weight in the 12 months preceding the survey. Compared with males (16.4%), a higher proportion of females (25.6%) reported that they had done so. For those who had done something to control weight in the past 12 months before enumeration, majority chose to do exercise (60.7%), eat less food (57.4%) or switch to food with lower calories (27.8%).

### Breastfeeding

Among those women who had ever been pregnant, 53.8% had breast-fed their children. Over three-fifths of women who ever had breast-fed their child/children reported that they breast-fed more than 1 child (61.2%). In regard to the number of months that they had breast-fed each child, 59.9% had done so for 4 or more months. Among those women who did not breast-feed their child/children, mothers' physical or medical problems (42.2%) was the most frequently reported reason for not doing so, followed by problems with their jobs or scheduling difficulties (41.1%).

### ***Preventive Health Practices***

#### Physical check-up

On the whole, 23.2% of persons reported that they had regular physical check-up. There were more females than males who had regular physical check-up (28.1% in females versus 17.3% in males).

#### Sigmoidoscopy or colonoscopy

About 2.1% of the population had ever received sigmoidoscopy or colonoscopy examinations when they had no symptoms or discomfort at all, while 3.1% received such examinations when symptoms or discomfort (such as rectal bleeding) were apparent.

#### Stool occult blood test

Overall, 4.8% of persons reported that they had received a stool occult blood test before, including 3.0% of those having no symptoms or discomfort.

#### Prostate-specific antigen test and digital rectal examination of the prostate (males only)

The ever screening rate for prostate-specific antigen (PSA) tests was 4.4%, including 1.9% of those having no symptoms or discomfort. The overall rate increased with age, from 1.0% among men aged 44 or below to 14.5% among men aged 65 and above.

Overall, 1.6% of males had the digital rectal examination (DRE) of the prostate when there were no apparent symptoms or discomfort and 2.4% had it because of symptoms or discomfort, giving an overall proportion of 4.0% of males reported that they had DRE of the prostate before.

#### Cervical smear and breast examinations (females only)

For women aged 18 and above, the proportion of women reported that they ever had a cervical smear was 40.0%, including 35.1% of those having no symptoms or discomfort at that time.

Overall, 17.3% of the females aged 35 and above had ever had mammography, including 13.3% of those having no symptoms or discomfort at that time. Regarding clinical breast examination, 35.4% of females had it with no symptoms or discomfort and 4.6% had the examination because of symptoms or discomfort, giving an overall rate of 40.0% reported that they had undertaken clinical breast examination before.

#### Blood cholesterol measurement

Overall, 29.4% of people aged 15 and above had their blood cholesterol measured before, among which 94.2% had the test done in the last 5 years.

#### Blood pressure measurement

Less than two-thirds (62.9%) of people had their blood pressure checked by a medical or other health professional in the past five years. Among those persons who reported that they had their blood pressure checked in the last 5 years, 88.7% reported that they had their blood pressure last checked within 2 years preceding the survey.

#### Blood sugar test

About one third (33.7%) of persons reported that they had their blood sugar checked before, among which 83.7% had the test last done within the 3 years preceding the survey.

#### Injury prevention

Over one-third (36.7%) of people reported that they had done something or taken precaution in the 12 months preceding the survey to prevent injuries at home or in the workplace. Measures taken among those persons included: had been more careful (88.3%); received safety training (11.2%) and used protective gear (28.6%). As for driving or riding in a car, 70.3% of people reported that they “always” used seatbelts.

#### ***Health Promoting Behaviours***

About half of persons (52.0%, with 54.3% for females and 49.2% for males) were doing or planning to do something (including those people in preparation, action and maintenance stages) in the next month to promote their health or prevent diseases. In contrast, 26.7% (24.3% for females and 29.7% for males) did not contemplate (i.e. people in the pre-contemplate stage) doing anything to promote their own health in the 12 months preceding the survey nor planning to do so in the next 6 months.



## ***Health Services Utilization***

### **Doctor consultation**

Regarding the preferences in medical treatment, the majority (76.2%) would usually visit a western medical practitioner when they were sick while 19.0% would visit both western medical practitioners and traditional Chinese medical practitioners. For those who would consult western medical practitioners (including those would visit both western and Chinese), 64.3% would visit private clinics while 27.8% would visit public clinics or accident and emergency departments at public hospitals. In the 30 days prior to the survey, 39.3% of persons reported what they recognized and recalled as an episode of discomfort, illness or injury. Among them, 18.3% visited western medical practitioners at public clinics or accident and emergency departments at public hospitals while 36.4% visited western medical practitioners at private clinics or hospitals. Moreover, 40.2% took over-the-counter western medications and 13.0% reported consuming over-the-counter Chinese medication or herbs.

### **Hospitalization**

Regarding hospitalization in the past 12 months, 7.4% of persons had been admitted to a local hospital as an in-patient. Among those had been hospitalised, 71.4% had been admitted to hospital under Hospital Authority, 17.7% had been admitted to private hospital while 6.8% had been admitted to both. Close to three-fifths (59.4%) stayed less than 5 days in the last episode, with 66.1% for females and 50.6% for males, and the overall median duration of stay in hospital was 3 days, with 3 days for females and 4 days for males.

### **Mental health professional consultation**

Overall, 1.8% of persons reported to have sought advice from a mental health professional, with 2.2% for females and 1.2% for males.

## ***Social and Financial Support***

While 18.9% of persons claimed that they did not need help from others for emotional support, 60.6% felt that they could count on someone for emotional support. Among those people who could count on someone for emotional support, a majority cited friends (56.7%) as the most helpful in providing them with emotional support, followed by spouse (43.4%). In terms of financial support, 49.5% of persons reported that they could count on someone for financial support.

## *Quality of Life*

### Self-rated quality of life

A total of 41.8% rated their quality of life as good or very good and about half (50.6%) gave a neutral response, on a 5-point Likert scale (very poor to very good). The younger age groups were more likely to rate their quality of life as good or very good (54.1% for 15-24 age group versus 33.3% for 75 and above age group).

### WHOQOL-BREF (HK) Scores

The WHOQOL-BREF (HK) instrument measures four different domains of quality of life – physical health, psychological, social relationships and environment. The raw score of each domain was then converted into transformed domain score. All four transformed domain scores ranged from 4 to 20 – the higher the scores, the better the quality of life.

- Physical Health Domain

The median physical health domain score for both females and males was 16.0. In general, a negative association was apparent with age. Younger (aged 15-24) persons had higher scores (median score=16.6) while older persons (aged 75 and above) reported lower scores (median=13.7).

- Psychological Health Domain (culturally adjusted)

The median score was 14.5 for both females and males. Again, a general negative gradient was noted in association with age. The median score for those aged 15-24 was 14.5 as compared to 13.7 for those aged 75 or above.

- Social Relationships Domain

The median score for both females and males was 14.7. The youngest age group (aged 15-24) had the highest score (median=16.0). However, the lowest score was noted among those aged 35-44 (median=13.3).

- Environment Domain

Both females and male had similar scores (median=13.5). The median score was fairly invariant between age groups. It was 14.0 for those aged 15-24 and 13.5 for the other age groups.