

# Health care needs in the Tai Po district of Hong Kong: initial indications from a population-based study

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The objective of this study was to obtain a representative profile of residents in Tai Po district, Hong Kong, with regard to their health status, health service use and socio-demographic characteristics. From October 1992 to February 1993, a cross-sectional telephone survey of 7573 Tai Po residents was undertaken. Acute illness episodes in the past month, chronic illness history, and treatment choices for acute and chronic illnesses were used as outcomes. Socio-demographic data were also obtained. Seventeen per cent of respondents reported having acute illness in the previous month, 66% of whom attended private clinics; 5.2% reported having chronic illness, 58.5% of whom attended public clinics. Most (88.5%) acute illness sufferers who used Western medical services for acute illness did so within Tai Po, while 52.7% of chronic illness sufferers used services outside of the district. Older, female, and lower income respondents were more likely to use public clinics. These preliminary findings help to reflect the health needs of residents in Tai Po.

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*Key words: Health services needs and demand; Health services; Health resources; Hong Kong*

## Introduction

### *Population-based health services research in Hong Kong*

To plan effectively for the provision of health care in a community, a systematic population-based measurement of health status and health service use should be adopted. A general profile of the population (its socio-demographic characteristics, health problems, health care utilisation patterns, and the distribution of factors associated with health problems) helps identify gaps and opportunities in community health needs and provides baseline data for the formulation and evaluation of health service programmes.<sup>1,2</sup> A recent study in In-

onesia uses basic morbidity and utilisation measurements to demonstrate planning needs in primary health care.<sup>3</sup>

Unfortunately, there are deficiencies in our knowledge about the health status of the Hong Kong population. Little basic information is available locally about morbidity, mortality, and health service utilisation patterns. As Hay points out, the dearth of such data makes it difficult to properly assess the health of the community, or to allocate scarce resources to the health care sector in a systematic and rational manner.<sup>4</sup> As part of a territorial drive towards quality management in health care, both the Department of Health and the Hospital Authority of Hong Kong have emphasised the importance of cost-effectiveness in the delivery of quality health care.<sup>5,6</sup> The development of health needs databases thus plays a vital role in health services planning.

These information gaps have prompted a series of projects in recent years on health services in Hong Kong. Studies on government Outpatient Department clinics (GOPD), Accident and Emergency Departments (A&E), and Specialist Outpatient Departments (SOPD) give a general picture of the public health care sec-

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**Table 1. Prevalence of acute and chronic illness by gender and age**

Age group (y)	Any Acute Illness (%)			Any Chronic Illness (%)		
	Male	Female	Total	Male	Female	Total
0-9	29.4*	28.9*	29.2*	2.1*	0.9*	1.5*
10-19	12.2*	15.6*	13.8*	0.9*	0.6*	0.7*
20-49	12.4*	15.9*‡	14.1*	2.2*	2.3*	2.2*
≥50	17.8*	22.4*†	20.2*	16.8*	21.9**	19.4*
<b>All ages</b>	<b>15.4</b>	<b>18.7‡</b>	<b>17.0</b>	<b>4.6</b>	<b>5.8†</b>	<b>5.2</b>

\* comparison across age groups with  $P < 0.01$

† comparison across gender groups with  $P < 0.05$

‡ comparison across gender groups with  $P < 0.01$

Chi-square tests were used for comparisons between groups

tor.<sup>7-10</sup> The findings provide insight into the structure and utilisation patterns of various public health care services in Hong Kong. These studies all employed a clinic-based approach, except for one part of a health services study that was a population-based telephone survey enquiring about general health status and utilisation behaviour in Hong Kong (referred to in this paper as the Territory-wide phone survey).<sup>9</sup> Unfortunately, findings from the clinic-based investigations cannot be extrapolated to the population at large and can only be used to describe the characteristics of people who attended the clinics being studied.

Although the Territory-wide phone survey yielded valuable results on the distribution of self-reported morbidity and treatment methods, differences between communities means that findings that are valid for Hong Kong in general might not be relevant at the local community level. For example, the Territory-wide survey found that 45% of respondents reported their last episode of illness to have occurred within the prior three months. The corresponding figure obtained in another survey conducted at housing estates in Shatin district was 26%.<sup>11</sup> The difference between the two sets of findings may partly be explained by demographic differences between the two population samples. Lloyd and Yu's disease maps demonstrate wide geographic variations in standardised mortality ratios between districts in Hong Kong for a number of major diseases.<sup>12</sup> Hospital administrators in Hong Kong have often commented on the need for population-based health data that are relevant to their districts (Cheng MY, personal communication).

The government Department of Health has stated that "a full assessment of the Territory's health should

include measures of variation between different geographic areas and social groups."<sup>13</sup> A comprehensive search of the Medline literature and past issues of the Hong Kong Medical Journal have revealed no population-based health needs assessment studies at the district level in Hong Kong. It is for the above reasons that we decided to conduct a health needs study of a major district in the New Territories.

#### **Background to Tai Po telephone health survey**

Tai Po district is an ancient town located in the north-east of the New Territories and dates back to at least the Tang dynasty (618-907AD). In 1979, the Hong Kong government earmarked Tai Po for development as a satellite town, one of several designated new towns. This resulted in a population explosion in Tai Po, increasing from only 48 000 in 1979 to an estimated 253 000 in 1995.<sup>14</sup> Today, the district has a diversified economy, with only a small fraction of the labour force (about 1.8% of the population) still employed in the traditional agricultural or fishery trades. Tai Po maintains a large manufacturing base and has a higher proportion of lower middle-class households and blue collar workers than does the average district in Hong Kong.<sup>15</sup> These residents are likely to have a high need for publicly-funded health care.

Although the population growth of Tai Po is slowing down, local District Board members are concerned about the adequacy of public health care facilities, particularly access to hospital services for the community. Until 1996, there were no hospitals in Tai Po, and residents needed to travel to neighbouring Shatin, where the nearest public hospital was located. The recently opened Alice Ho Miu Ling Nethersole Hospital (Tai Po) and the Tai Po Infirmary and Convalescent

Hospital, which is scheduled to open in 1998, will provide the district with a capacity of 1662 beds.<sup>16</sup>

Currently, the district's needs for general outpatient services are served by 56 private clinics (staffed with 53 doctors), five charity clinics (with eight doctors) and two public clinics, the Tai Po Jockey Club Clinic and the Tai Po Wong Siu Ching Clinic (with 10 doctors)<sup>17</sup>; these facilities provide mainly general outpatient services. Before the Nethersole Hospital opened, most patients needing outpatient specialist care had to visit specialist clinics outside Tai Po.

The Social Services Committee of Tai Po district approached the Department of Community and Family Medicine of The Chinese University of Hong Kong with a request to study the health care needs and provision of services in Tai Po. Information generated from this investigation was expected to help improve existing health services and to provide a foundation for future health care planning in the district, especially with regard to the planning of service provisions by the new hospitals.

**Subjects and methods**

*Study objectives*

In this paper, we concentrate on a population-based telephone health survey of Tai Po residents carried out

in 1992 and 1993. The objective was to obtain a representative profile of Tai Po residents with attention to their health status, health service use, and socio-demographic characteristics. This paper presents preliminary findings from the telephone survey and demonstrates their relevance to health services planning.

*Sampling procedure*

The 1992 edition of the residential telephone directory for the New Territories of Hong Kong was used as the sampling frame. Each page of the directory was chosen at random. Two columns of telephone numbers were randomly selected from each page. The first three numbers with Tai Po prefixes were selected. Sampling and interview were performed at the same time, until 2000 households had been successfully interviewed.

The dialing procedure was as follows: as far as possible, contact was attempted in the evening. If there was no answer, each number was attempted three times, each on different days, before it was classified as "no answer." Another number was then sampled from the directory. Details of the sampling procedure have been reported elsewhere.<sup>17</sup>

*Survey instruments and methods*

The survey instruments consisted of structured telephone questionnaire interviews conducted by trained

**Table 2. Prevalence of acute and chronic illness by socio-demographic characteristics**

Socio-demographic factors	Any Acute Illness (%)	Any Chronic Illness (%)
Birthplace		
China	19.0	11.1
Hong Kong/Macau	16.4*	3.2 <sup>†</sup>
Education		
primary or less	20.5	8.1
secondary or more	14.0 <sup>†</sup>	2.6 <sup>†</sup>
Economic activity		
inactive	19.2	6.9
active	14.1 <sup>†</sup>	2.9 <sup>†</sup>
Monthly household income		
< HK\$10 000	20.1	6.8
≥ HK\$10 000	18.7	4.1 <sup>†</sup>

\* P<0.05

<sup>†</sup> P<0.01

Chi-square tests were used for comparisons between groups

interviewers. For each household that was successfully contacted, the interviewer requested an interview with the household head. Respondents were asked questions about:

1. Socio-demographic background. Respondents were asked about their age, gender, place of birth, educational attainment, employment status, and monthly household income.
2. Experience with acute illnesses (defined in this study as minor non-recurrent conditions) in the month leading up to the day of the interview. Subjects were asked whether they had suffered from flu, musculo-skeletal problems, accident-related conditions, and other minor ailments in the previous month.
3. History of chronic illness (defined in this study as chronic and long term illnesses). Subjects were asked whether they suffer from conditions such as hypertension, diabetes mellitus, heart problems, and chronic obstructive airways disease.
4. Choice of treatment(s) for acute illness. Interviewees were asked whether they used public, private, or other forms of health care to treat their episode of acute illness.
5. Choice of treatment(s) for chronic illness. Subjects were asked whether they used public, private, or other forms of health care to treat their chronic illness.
6. Health and health care-seeking behaviour of family members.

### Statistical analysis

The data were analysed using univariate and bivariate statistical analysis. Differences in the distribution of attributes were identified using Chi-square tests. In addition, the following composite variables were included in the analysis: "any acute illness," defined as having suffered from one or more of the acute illness

items listed in the questionnaire; and "any chronic illness," defined as having any one of the chronic illness items listed in the questionnaire interview.

In-depth face-to-face interviews by physicians were conducted on a volunteer subsample of subjects to check on the reliability of their self-reported chronic illness history. The physicians asked each subject the following questions about each of the chronic illness items: whether they had previously been diagnosed by a doctor as having the illness; whether they had ever taken doctor-prescribed medication to treat the illness; and whether they have had to stay in the hospital for treatment of their illness. If the response was yes to any of the questions, the subject was labelled as having been diagnosed with the chronic illness. The interviews were conducted without prior reference to the telephone survey data.

The overall proportion of agreement between the survey data and the physician interview for all the chronic illness items was calculated as the total number of subjects with identical self-reported diagnoses by both methods divided by the total number of subjects seen. Estimates of Cohen's kappa were computed as outlined in Fleiss.<sup>18</sup> The interpretation of the kappa statistic is as follows:

- $k = 1$  if there is complete agreement
- $k \geq 0$  if the observed agreement is greater than or equal to chance agreement
- $k \leq 0$  if the observed agreement is less than or equal to chance agreement

### Study population

The survey was carried out from October 1992 to February 1993. A total of 3025 residential telephone numbers were attempted, of which 2441 households were successfully contacted. Of these, 2022 households,

**Table 3. Choice of treatment for acute and chronic illness**

Treatment type sought	Any Acute Illness (%)		Any Chronic Illness (%)
	Primary treatment	Secondary treatment	
Private Western practitioner	66.0	34.3	33.4
Government outpatient clinics	16.1	19.8	22.0
Accident & Emergency departments	1.7	1.1	—
Chinese medicine practitioner	4.2	38.1	—
Self-medication/rest at home	12.0	6.7	—
Specialist outpatient clinics	—	—	36.5
Others	—	—	8.0

— not applicable

**Table 4. Health care utilisation of public clinics by socio-demographic characteristics**

Socio-demographic factors	Proportion attending public clinics for Any Acute Illness (%)	Proportion attending public clinics for Any Chronic Illness (%)
Monthly household income		
< HK\$10 000	26.4	69.4
≥ HK\$10 000	11.3 <sup>†</sup>	56.4*
Gender		
male	16.7	54.5
female	18.6	61.9
Age group (y)		
0-49	15.3	45.9
≥ 50	26.0 <sup>†</sup>	63.5 <sup>†</sup>

\* P&lt;0.05

† P&lt;0.01

Chi-square tests were used for comparisons between groups

consisting of 7573 individuals, were interviewed, giving a response rate of 82.8%; 481 subjects from 190 households participated in the face-to-face clinical interview.

## Results

### *Socio-demographic characteristics of the study population*

Socio-demographically, the study sample had proportionately more men (51.3%, 95% CI, 50% to 52%) than women, with 23.6% (95% CI, 23% to 25%) of respondents having been born in China, 56.1% (95% CI, 55% to 58%) were not working, and 46.1% (95% CI, 45% to 47%) had attained primary school level education or less. Forty-four per cent of the surveyed households (95% CI, 42% to 46%) reported monthly incomes of less than HK\$10 000.

### *Prevalence of acute illness*

Seventeen per cent of respondents (95% CI, 16% to 18%) reported that they had experienced episodes of acute illness in the past month (Table 1). Ninety-six per cent of these complaints (95% CI, 95% to 97%) were minor ailments, such as headache, flu, cold, and stomach problems. The remaining four per cent (95% CI, 3% to 5%) consisted of psychological conditions and accident-related illnesses or injuries. Of the reported minor ailments, 77.1% (95% CI, 74% to 80%) could be categorised as flu, colds or coughs, 7.8% were musculo-skeletal problems (95% CI, 6% to 10%), and

15.1% consisted of other conditions (95% CI, 12% to 18%).

Age and gender were found to be significantly associated with acute illness (Table 1). Children and the elderly had higher illness rates than did the other age groups. Overall, females had a significantly higher reported prevalence of acute illness than males; in particular, those aged 20 years and older suffered markedly more from acute illnesses than males (Table 1) Acute illness sufferers were also significantly more likely to be less educated, born in China, and economically inactive (Table 2).

### *Health service use patterns of acute illness sufferers*

Health care use behaviour by acute illness sufferers were comparable to figures for the general Hong Kong population,<sup>9</sup> with a majority of respondents reportedly consulting private general practitioners, many consulting doctors at GOPDs and a minority consulting Chinese medicine practitioners (Table 3). Overall, 2.7% (95% CI, 2% to 3%) of the study population (205 of 7573 subjects) had consulted GOPD clinics in the past month for the primary treatment of their acute illness episode and 80% of these (95% CI, 74% to 86%) consulted clinics within Tai Po.

Nearly 20% of acute illness sufferers reported a second treatment method in addition to their principal choice (Table 3). A substantial proportion of second

**Table 5. Selected chronic illnesses: agreement between telephone survey and clinical interview**

<b>(a) Any Chronic Illness</b>					
Any Chronic Illness as obtained from survey	Any Chronic Illness confirmed by clinical interview			Overall agreement	K(95% C.I.)
	yes	no	total		
	Count (row%, column%)	Count (row%, column%)	Count (row%, column%)		
yes	59(73.8; 52.7)	21(26.3; 6.4)	80(100; 18.2)	83.1%	0.51(0.41-0.61)
no	53(14.7; 47.3)	306(85.2; 93.6)	359(100; 81.8)		
total	112(25.5; 100)	327(74.5; 100)	439(100; 100)		
<b>(b) Hypertension</b>					
Hypertension as obtained from survey	Hypertension confirmed by clinical interview			Overall agreement	K(95% C.I.)
	yes	no	total		
	Count (row%, column%)	Count (row%, column%)	Count (row%, column%)		
yes	22(84.6; 62.9)	4 (15.4; 1.0)	26 (100; 5.9)	96.1%	0.70 (0.57-0.83)
no	13 (3.2; 37.1)	399 (96.8; 99.0)	412 (100; 94.1)		
total	35 (8.0; 100)	403 (92.0; 100)	438 (100; 100)		
<b>(c) Diabetes mellitus</b>					
Diabetes as obtained from survey	Diabetes confirmed by clinical interview			Overall agreement	K(95% C.I.)
	yes	no	total		
	Count (row%, column%)	Count (row%, column%)	Count (row%, column%)		
yes	9 (90.0; 90.0)	1 (10.0; 0.2)	10 (100; 2.3)	99.5%	0.90 (0.76-1.00)
no	1 (0.2; 10.0)	427 (99.8; 99.8)	428 (100; 97.7)		
total	10 (2.3; 100)	428 (97.7; 100)	438 (100; 100)		

treatment methods (38.1%, 95% CI, 32% to 44%) involved consultation with a Chinese medicine practitioner (Table 3). Most respondents who used Western medical services for their first and second treatment choices, respectively, used facilities within Tai Po district—83.8% (95% CI, 82% to 86%) and 88.5% (95% CI, 83% to 94%).

Older age groups (those aged 50 years and older) were significantly more likely to consult public clinics for acute illnesses than younger individuals (Table 4). A higher proportion of women with acute illness used public clinics than did men but the difference was not significant (Table 4). Low income respondents were significantly more likely to receive their treatment from public clinics than those with higher household incomes (Table 4).

#### **Prevalence of self-reported chronic health conditions**

Of the 7573 participants in the survey, only 5.2% (95% CI, 5% to 6%) reported suffering from chronic illness

(Table 1). The five most common reported conditions were hypertension, diabetes mellitus, coronary heart disease, chronic obstructive airways disease, and asthma.

Age and gender were found to be significantly associated with chronic illness, with older residents being much more likely to report having chronic illness than other age groups and females reporting a significantly higher prevalence of chronic illness (Table 1). In particular, women older than 50 reported suffering from chronic illnesses more than men did. Chronic illness sufferers were also significantly more likely to come from lower income households, to be less educated, born in China, and to be not working (Table 2).

#### **Health service use patterns of chronic illness sufferers**

Unlike acute illness patients, more chronic illness sufferers used health services outside of Tai Po (52.7%, 95% CI, 48% to 58%), with more than half attending GOPDs or SOPDs (Table 3). Most SOPD users con-

sulted clinics outside Tai Po (86.4%, 95% CI, 81% to 92%). Overall, 1.9% of the study population consulted SOPD clinics.

Age was significantly associated with the chronic illness sufferer's choice of treatment (Table 4). Older people were more likely to consult public clinics for their chronic conditions than were younger ones (Table 4). More female chronic illness sufferers used public clinics than did males but the difference was not significant (Table 4). Respondents from the lower income households were significantly more likely to receive their treatment from public clinics than those with higher household incomes (Table 4).

**Comparison of telephone survey data with clinical interview data**

Table 5 shows the classification and kappa statistics of the two most common chronic illnesses, hypertension and diabetes mellitus, and "any chronic illness" by the telephone survey and the clinical interview method. The agreement is good for all three items, with

kappa statistics of 0.70, 0.90, and 0.51 for hypertension, diabetes, and "any chronic illness," respectively. The respective proportions of agreement for the three items were 96.1%, 99.5%, and 83.1%. Table 6 shows similar statistics for participants in the clinical examination survey who were not household heads. This agreement is also good, with kappa estimates of 0.70, 0.75, and 0.50 and percentages of agreement of 96.2%, 99.3%, and 84.9%, respectively.

**Discussion**

**Validity of survey findings**

Compared with alternative methods of measuring health care needs in the population, the structured telephone interview has previously been shown in Hong Kong to be a cheap, reliable, and accepted method of data collection.<sup>19,20</sup>

There is a high degree of face-validity to the results. The health care use patterns obtained from the survey are comparable to Territory-wide figures.<sup>9</sup> The

**Table 6. Selected chronic illnesses: agreement between telephone survey and clinical interview for subjects who are not heads of the household**

<b>(a) Any Chronic Illness</b>					
Any Chronic Illness as obtained from survey	Any Chronic Illness confirmed by clinical interview			Overall agreement	K (95% C.I.)
	yes	no	total		
	Count (row%, column%)	Count (row%, column%)	Count (row%, column%)		
yes	31(77.5; 47.0)	9(22.5; 4.0)	40(100; 13.8)	84.9%	0.50(0.37-0.62)
no	35(14.0; 53.0)	215(86.0; 96.0)	250(100; 86.2)		
total	66(22.8; 100)	224(77.2; 100)	290(100; 100)		
<b>(b) Hypertension</b>					
Hypertension as obtained from survey	Hypertension confirmed by clinical interview			Overall agreement	K(95% C.I)
	yes	no	total		
	Count (row%, column%)	Count (row%, column%)	Count (row%, column%)		
yes	14(82.4; 63.6)	3(17.6; 1.1)	17(100; 5.9)	96.2%	0.70(0.53-0.87)
no	8(2.9; 36.4)	265(97.1; 98.9)	273(100; 94.1)		
total	22(7.6; 100)	268(92.4; 100)	290(100; 100)		
<b>(c) Diabetes mellitus</b>					
Diabetes as obtained from survey	Diabetes confirmed by clinical interview			Overall agreement	K(95% C.I)
	yes	no	total		
	Count (row%, column%)	Count (row%, column%)	Count (row%, column%)		
yes	3(75.0; 75.0)	1(25.0; 0.3)	4(100; 1.4)	99.3%	0.75(0.41-1.100)
no	1(0.3; 25.0)	285(99.7; 99.7)	286(100; 98.6)		
total	4(1.4; 100)	286(98.6; 100)	290(100; 100)		

socio-demographic profile of the study population was generally similar to the overall Tai Po population (as reported by the 1991 census)<sup>15</sup> in terms of factors such as gender, household size, living quarter type, and economic activity. As with previous telephone health surveys in Hong Kong,<sup>9,20</sup> there was a slight over-representation of people in higher socio-economic groups, but generally the study population was reasonably representative of Tai Po.

As shown by the kappa statistics, the replies of the respondents about chronic illnesses showed agreement between the telephone survey and clinical interview method. The kappa statistics also showed that having the household head (a proxy respondent) answer questions about chronic illnesses for all household members, is reliable. The results for acute illnesses, which were not included in the clinical interview, should be interpreted with more caution.

### ***Implications of initial findings***

At this basic level of analysis, some patterns can already be discerned. It appears that local residents have reasonable access to general outpatient care, since a majority of people with acute illnesses who consulted doctors did so within the Tai Po district. The public clinic consultation data, however, is a bit more complicated. Extrapolating the GOPD use rate in the study sample to the entire population in Tai Po, about 6600 residents were estimated to have consulted GOPD clinics in one month. This figure must be interpreted with caution because we have not taken into account seasonal variation. What is interesting is that some GOPD users visited clinics outside Tai Po (from our survey data, more than 1300 of the 6600 residents consulted non-Tai Po clinics). One possible explanation is that there is excess demand for GOPD care in Tai Po, and inadequate provision within the district forced some users to seek GOPD care outside the district. A detailed utilisation review<sup>10,21</sup> of Tai Po clinics is needed to ascertain whether or not this is the case.

More than 50% of the chronic illness sufferers obtained their treatment from SOPDs outside Tai Po; this probably indicates inadequate provision of SOPD services in the district. It appears that people with chronic conditions that require specialist treatment are more likely to attend public specialist clinics than private ones, indicating a possible shortage of affordable and accessible services in the private sector.

Extrapolating the chronic illness consultation data to the entire population of Tai Po, more than 4600 Tai Po residents consulted SOPDs for their chronic illness.

Another 4200 residents used private clinics to treat their chronic conditions, some of whom might have shifted to SOPD care if it had been available in the district. Potentially, the expected pool of SOPD patients is 4000 to 9000. This is only a preliminary estimate—further analysis and a more detailed needs assessment study are needed for more accurate numbers. It does provide health care planners, however, with a rough idea of their specialist outpatient workload and gives a basis for assessing staffing needs in the new hospitals in Tai Po, to cater to this projected number of SOPD users.

The preliminary findings indicate that for both acute and chronic illnesses, users of public clinics are significantly more likely to come from low income households (Table 4). The differences remained after adjustments were made for age and sex. This is consistent with other studies, which have demonstrated that socially disadvantaged groups are more vulnerable to ill-health and have a greater need for public health services.<sup>22-25</sup>

Besides private and public clinics, some Tai Po residents visited Chinese medicine practitioners (Table 3); little is known about the quality and practice of Chinese medicine in Hong Kong. There is an opportunity here for more in-depth analysis of the survey data to characterise those who patronise Chinese medicine practitioners and to compare the results with a recent Territory-wide review of traditional Chinese medicine in Hong Kong.<sup>26-29</sup>

### ***Limitations of survey findings***

The telephone survey measured reported morbidity, which is partly dependent on subjective and cultural factors. For chronic illnesses, especially those with less overt symptoms, it was likely that many people were unaware that they had a health problem. There is thus an urgent need to ascertain the true prevalence of chronic conditions in Hong Kong. This can only be achieved with population-based clinical examinations of representative samples of populations in the districts and the Territory. A pilot clinical examination survey of Tai Po residents has been carried out by our team and has been reported elsewhere.<sup>17</sup>

### **Conclusion**

Although there is a subjective element to self-reported illnesses, they are important outcome indicators of health and as studies such as that by Fielding et al have shown, strong predictors of health care use.<sup>30</sup> In this study, the majority of self-reported acute and chronic



illness sufferers (more than 80%) sought treatment from medical practitioners. Prevalence data can help reflect the health care needs of a community and can play an important role in the health authority's decision on the mix and quantity of services to supply to an area. This study has provided some preliminary population-based data for the evaluation of health care in Tai Po district.

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