# An Executive Summary of

# *A Multi-Disciplinary Study on the Causes of Elderly Suicides in Hong Kong*

by

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# Executive Summary

## 1.0 Introduction

1.1 This research project was commissioned by the Health and Welfare Bureau in 1999 and was carried out by a multi-disciplinary research team from the University of Hong Kong and the Chinese University of Hong Kong, comprising a epidemiologist, a sociologist and a psychiatrist.

1.2 The objective of this study is to provide scientific and research-based information to further the understanding of suicidal behaviour of the elderly population in Hong Kong. The report examines various issues, including a literature review and international comparison of the elderly suicide problem, a population-based prevalence study of elderly suicidal ideation, a psychological autopsy study in Hong Kong and a review of the current data reporting system.

## 2.0 Overview of the Elderly Suicide Problem

2.1 Suicide rates vary widely around the world. For example, Hungary recorded a national suicide rate of 32.4 per 100,000 in 1997 whereas the rates for United States and England & Wales were 11.6 and 6.6 respectively (World Health Organisation, 1999). Hong Kong's suicide rate lies in the middle of the global scale.

2.2 Worldwide, older adults are the highest risk group for suicides. Although numbers are smaller, rates often exceed the much-publicised rates for younger age groups. The ratio of attempted to completed suicides is considered much lower among senior than young adults as older suicides demonstrate greater lethality and determination compared to younger groups (Conwell, 2001; Klinger, 1999; Yip and Chiu, 1998).

2.3 Suicide is a 'multidimensional malaise' (Shneidman, 1985). A number of characteristics are considered to be the risk factors that contribute to suicide in late life. They include physical and psychiatric illnesses, cumulative losses, lack of social support, stressful life events, and personality traits.

## 3.0 International Comparison

3.1 As mentioned above, Hong Kong's general suicide rates lie in the middle of the global scale. Although it has a higher elderly suicide rate (particularly female elderly suicide rate) than some of its neighbours with populations which are not predominantly composed of people of Chinese descent, this rate has remained relatively stable for the past two decades. Elderly suicide rates in Hong Kong have decreased from 29.5 per 100,000 elders in 1997 to 26.3 in 1999 and remained stable in 2000, despite an increase in the overall suicide rates. The ratio of elderly suicide rates versus the overall suicide rates has also decreased from 2.46:1 in 1997 to 1.99:1 in 2000 (Figure 3.1, Tables 3.1&3.2,). Against such background, it is possible that

with effective prevention programmes in place, overall suicide rate should be able to reduce (if not at least to maintain).

3.2　　　Comparison is also made between the methods used in committing suicides in Australia, Hong Kong, Singapore and Taiwan between 1984-1994.　In Hong Kong and Singapore, 60% of all suicide deaths were results of jumping from height, whereas this method is relatively uncommon in Australia and Taiwan.　Over 80% of the population in Hong Kong and Singapore live in high-rise blocks, providing an effective and accessible method for suicide. In Australia, the use of firearms is more prevalent among rural elderly people, and poisoning is more frequently found among females.　The method used is thus very much determined by its availability and accessibility. The rapid rise in inhaling burning charcoal fumes as a suicide method does not seem to appeal to the elderly in Hong Kong. On the other hand, the method of charcoal burning has not only worked as a substitute but inflates the suicide rate especially among the middle aged.
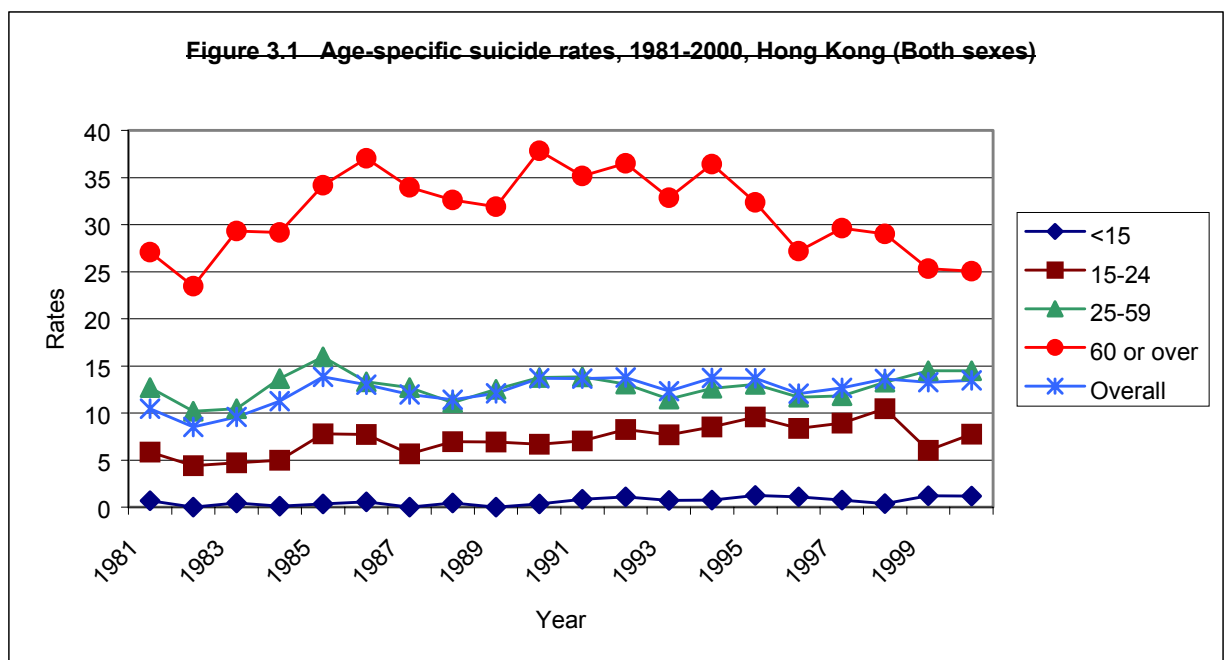


Figure 3.1　Age-specific suicide rates, 1981-2000, Hong Kong (Both sexes)

**Table 3.1    Suicide Rates (per 100,000) by Gender, Age and Countries**

| Country | Year | Gender | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75 & + | All Ages |
|---|---|---|---|---|---|---|---|---|---|---|
| *Asian Countries* | | | | | | | | | | |
| China (Rural Area) | 1994 | M | 16.7 | 21.9 | 23.1 | 30.1 | 48.6 | 101.5 | 142.6 | **23.7** |
| | | F | 33.0 | 42.0 | 29.0 | 31.1 | 44.8 | 74.7 | 100.5 | **30.5** |
| China (Urban Area) | 1994 | M | 3.6 | 6.3 | 7.5 | 8.3 | 9.0 | 16.9 | 38.2 | **6.5** |
| | | F | 6.4 | 7.1 | 7.1 | 7.3 | 8.6 | 15.9 | 32.8 | **7.0** |
| Hong Kong | 1994 | M | 9.5 | 13.7 | 12.1 | 14.2 | 19.4 | 39.2 | 62.7 | **13.4** |
| | | F | 8.7 | 9.8 | 9.5 | 9.7 | 19.7 | 26.0 | 49.1 | **11.3** |
| Japan | 1994 | M | 12.0 | 19.8 | 24.1 | 35.6 | 38.9 | 29.7 | 55.1 | **23.1** |
| | | F | 5.1 | 8.3 | 8.2 | 12.0 | 15.1 | 19.1 | 35.2 | **10.9** |
| Korea | 1994 | M | 11.0 | 15.7 | 16.5 | 20.3 | 22.4 | 28.6 | 46.1 | **12.8** |
| | | F | 5.9 | 8.1 | 6.5 | 7.7 | 8.5 | 11.3 | 18.1 | **6.1** |
| Singapore | 1994 | M | 11.7 | 14.8 | 16.0 | 19.0 | 17.2 | 34.4 | 88.7 | **14.0** |
| | | F | 10.2 | 8.4 | 10.2 | 9.0 | 13.9 | 20.3 | 56.3 | **9.6** |
| *Western Countries* | | | | | | | | | | |
| Australia | 1993 | M | 23.7 | 27.7 | 21.1 | 22.9 | 22.2 | 22.2 | 30.9 | **18.7** |
| | | F | 3.7 | 5.4 | 6.5 | 7.3 | 5.0 | 5.8 | 6.7 | **4.5** |
| Canada | 1993 | M | 23.8 | 28.1 | 28.4 | 27.9 | 23.8 | 23.0 | 26.9 | **21.0** |
| | | F | 4.7 | 5.8 | 7.9 | 8.7 | 6.8 | 5.5 | 6.4 | **5.4** |
| Finland | 1994 | M | 45.5 | 51.2 | 67.0 | 58.1 | 54.5 | 37.6 | 60.2 | **43.6** |
| | | F | 7.8 | 10.7 | 18.5 | 23.6 | 15.0 | 11.3 | 9.3 | **11.8** |
| Greece | 1994 | M | 4.1 | 5.7 | 4.5 | 7.1 | 7.4 | 9.6 | 14.3 | **5.5** |
| | | F | 0.4 | 1.2 | 1.3 | 1.4 | 2.7 | 2.9 | 3.0 | **1.4** |
| Hungary | 1994 | M | 20.2 | 46.4 | 76.6 | 91.8 | 83.9 | 92.7 | 178.5 | **55.5** |
| | | F | 5.2 | 9.0 | 18.6 | 23.3 | 20.0 | 26.3 | 66.2 | **16.8** |
| New Zealand | 1993 | M | 39.4 | 29.3 | 22.2 | 20.7 | 15.8 | 24.8 | 25.0 | **20.5** |
| | | F | 5.9 | 9.7 | 5.5 | 7.3 | 8.6 | 4.8 | 3.9 | **5.4** |
| Norway | 1993 | M | 21.9 | 25.1 | 27.4 | 28.2 | 20.5 | 28.1 | 36.6 | **21.1** |
| | | F | 6.0 | 7.5 | 7.6 | 6.3 | 9.6 | 10.1 | 9.6 | **6.5** |
| Poland | 1994 | M | 17.9 | 27.9 | 39.5 | 45.6 | 32.7 | 37.0 | 35.4 | **24.7** |
| | | F | 2.7 | 4.2 | 6.8 | 7.5 | 7.0 | 7.7 | 5.9 | **4.5** |
| United Kingdom | 1994 | M | 11.5 | 18.5 | 17.4 | 15.4 | 12.0 | 10.7 | 16.2 | **11.9** |
| | | F | 2.2 | 3.8 | 4.0 | 4.6 | 4.5 | 4.3 | 5.7 | **3.3** |
| USA | 1992 | M | 21.9 | 24.0 | 23.7 | 22.4 | 24.1 | 29.9 | 52.3 | **19.6** |
| | | F | 3.7 | 5.0 | 6.6 | 7.3 | 6.5 | 5.9 | 6.5 | **4.6** |

Source: World Health Organization Yearbook 1995, WHO

**Table 3.2    Suicide Deaths Rates by Age Group and Gender (HK), 1981-2000**

| | | | | | | | | | | | | | | | Rate | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | under 15 | | | 15-24 | | | 25-39 | | | 40-59 | | | 60 or over | | | All Ages |
| | M | F | P | M | F | P | M | F | P | M | F | P | M | F | P | |
| 1981 | 0.45 | 0.49 | 0.47 | 7.0 | 4.61 | 5.86 | 14.1 | 9.72 | 12.1 | 15.3 | 11.1 | 13.4 | 31.7 | 23.5 | 27.1 | 9.6 |
| 1982 | 0.0 | 0.0 | 0.0 | 4.4 | 4.49 | 4.42 | 10.7 | 6.77 | 8.92 | 15.6 | 7.21 | 11.7 | 21.5 | 25.0 | 23.4 | 7.8 |
| 1983 | 0.15 | 0.48 | 0.31 | 4.8 | 4.6 | 4.71 | 9.47 | 6.0 | 7.84 | 18.6 | 8.25 | 13.8 | 33.7 | 25.8 | 29.3 | 8.8 |
| 1984 | 0.0 | 0.16 | 0.08 | 6.3 | 3.6 | 5.0 | 14.8 | 9.21 | 12.2 | 17.7 | 13.3 | 15.7 | 34.7 | 24.7 | 29.2 | 10.4 |
| 1985 | 0.15 | 0.33 | 0.23 | 8.5 | 7.0 | 7.79 | 15.4 | 12.8 | 14.2 | 21.2 | 15.4 | 18.5 | 39.3 | 30.0 | 34.2 | 12.8 |
| 1986 | 0.45 | 0.33 | 0.39 | 7.8 | 7.66 | 7.72 | 13.8 | 9.33 | 11.6 | 19.2 | 11.7 | 15.7 | 42.5 | 32.6 | 37.0 | 12.0 |
| 1987 | 0.0 | 0.0 | 0.0 | 6.9 | 4.39 | 5.68 | 13.9 | 10.6 | 12.3 | 14.8 | 11.4 | 13.2 | 39.8 | 29.2 | 34.0 | 11.1 |
| 1988 | 0.46 | 0.17 | 0.32 | 6.8 | 7.14 | 6.94 | 12.2 | 7.49 | 9.92 | 11.5 | 14.5 | 12.9 | 36.2 | 29.6 | 32.6 | 10.6 |
| 1989 | 0.0 | 0.0 | 0.0 | 7.4 | 6.44 | 6.92 | 13.5 | 10.8 | 12.2 | 14.6 | 11.2 | 13.1 | 38.1 | 26.6 | 31.9 | 11.3 |
| 1990 | 0.16 | 0.34 | 0.24 | 7.2 | 6.21 | 6.7 | 16.2 | 11.6 | 14.0 | 16.7 | 9.62 | 13.4 | 45.7 | 31.1 | 37.8 | 12.8 |
| 1991 | 0.64 | 0.52 | 0.58 | 7.6 | 6.55 | 7.11 | 15.0 | 10.5 | 12.8 | 18.4 | 11.5 | 15.2 | 42.1 | 28.9 | 35.0 | 12.8 |
| 1992 | 1.0 | 0.52 | 0.76 | 10.8 | 6.0 | 8.48 | 13.9 | 8.87 | 11.4 | 19.1 | 11.0 | 15.4 | 41.4 | 31.6 | 36.2 | 12.9 |
| 1993 | 0.33 | 0.69 | 0.5 | 8.8 | 7.0 | 7.91 | 12.8 | 9.52 | 11.1 | 13.8 | 9.91 | 12.0 | 36.8 | 28.7 | 32.4 | 11.6 |
| 1994 | 0.16 | 0.87 | 0.5 | 9.1 | 8.28 | 8.71 | 14.3 | 8.71 | 11.5 | 15.2 | 13.7 | 14.5 | 43.8 | 28.8 | 35.8 | 12.9 |
| 1995 | 0.81 | 0.87 | 0.84 | 13.1 | 6.06 | 9.64 | 16.6 | 8.53 | 12.4 | 18.5 | 10.0 | 14.5 | 37.9 | 26.1 | 31.6 | 12.9 |
| 1996 | 0.8 | 0.69 | 0.75 | 9.2 | 6.81 | 8.0 | 15.6 | 7.0 | 11.1 | 15.4 | 8.2 | 12.0 | 28.9 | 23.8 | 26.2 | 11.1 |
| 1997 | 0.82 | 0.18 | 0.51 | 11.7 | 5.6 | 8.68 | 14.5 | 6.7 | 10.4 | 17.2 | 10.0 | 13.8 | 35.4 | 24.3 | 29.5 | 12.0 |
| 1998 | 0.17 | 0.36 | 0.26 | 12.6 | 8.11 | 10.4 | 16.8 | 8.13 | 12.2 | 20.7 | 10.8 | 15.9 | 35.0 | 24.0 | 29.2 | 13.2 |
| 1999 | 0.84 | 0.9 | 0.87 | 7.1 | 4.7 | 5.9 | 19.5 | 9.46 | 14.1 | 22.2 | 11.1 | 16.8 | 31.8 | 21.3 | 26.3 | 13.1 |
| 2000 | 0.86 | 0.92 | 0.89 | 9.3 | 5.81 | 7.56 | 20.3 | 9.5 | 14.4 | 19.0 | 12.0 | 15.6 | 31.1 | 21.8 | 26.3 | 13.2 |
| *Average* | *0.41* | *0.44* | *0.43* | *8.3* | *6.05* | *7.2* | *14.7* | *9.06* | *11.8* | *17.2* | *11.1* | *14.4* | *36.4* | *26.9* | *31.3* | *11.7* |

Remarks:

a) Does not include 3 unknown age and/or sex in 1981, 2 in 1984, 1 in 1988, 4 in 1995, 7 in 1996, 1 in 1997, and 4 in 1998

b) Figures in 1981 to 1997 are data from Registered Death Files from the Census and Statistics Department.

c) Figures in 1998 to 2000 are provisional data from the Coroner's Court

d) The rates since 1996 are compiled using the latest revised population estimate from the Census and Statistics Department

## 4.0    Prevalence Study

4.1    In order to ascertain estimates of the prevalence of suicidal ideation and behaviour among the elderly people in Hong Kong, a population-based survey was carried out between October 1999 to February 2000 on 917 Chinese aged 60 or above. The response rate was about 73%.

4.2    The questionnaires contained items that addressed two areas: having suicidal wishes and having a feeling that life is meaningless. About 7.4% of the respondents had expressed that life is meaningless and 5.5% had expressed suicidal wishes.

4.3    The results also showed that poor physical health, including poor vision, hearing problems, and having a number of diseases, and poor mental health – in the form of depression – are good predictors of suicidal ideation in the local elderly population.   Factors that contribute to the feeling that life is meaningless are vision problems and depression.   Depression was thus found to be a major psychological factor affecting those elderly who either harboured suicidal wishes, or had the feeling that life is meaningless.   Further analysis was carried out, linking individual factors to depression and the results showed that financial problems and relationship problems are significant risk factors.

4.4    According to the prevalence study, the elderly people who engage in active coping, that is, those who actively seek to manage or control the negative events in their lives, fare better and have lower levels of depression than those who are passive or have poor coping skills.


## 5.0    Psychological Autopsy

5.1    Psychological autopsy (PA) refers to the forensic, medico-legal investigation of the manner and cause of so-called equivocal deaths – a death in which it is not immediately clear whether a person committed suicide or not, e.g. drug-ingestion deaths, single-car accident deaths. The PA entails reconstructing a detailed picture of the victim's symptoms, personality, lifestyle, and possible causes of the suicide, in the weeks and months before death.   This information is gathered through psychological information from personal documents; police, medical, and Coroner records; and first-person accounts, either through depositions or interviews with family survivors, friends, co-workers, school associates, and physicians (Litman, 1989; Selkin, 1994).   This procedure, originally used to assist the Coroner to determine the most likely cause of death in undetermined cases, has evolved into a systematic method for studying the many risk factors in suicide cases (Shneidman, 1977, 1994).

5.2    In this study, a psychological autopsy has been carried out to retrospectively study the factors and circumstances leading to the suicide of elderly people in Hong Kong. The purpose of the autopsy was to identify risk factors that were present in the suicide subjects but not the control groups. Interviews were conducted with family members and friends of elderly victims between March 2000 to June 2001 to collect information on 62 cases of elders aged 60 or above who had committed suicide. The

information collected was compared to a control sample of 100 elders of similar age and sex. The response rate was about 76%.

5.3     The results showed that the presence of psychiatric illness, poor physical health, negative life events, and a past history of attempted suicide distinguished the suicide subjects from the control group.   Another distinguishing feature is personality traits.   The suicide subjects were found to be more neurotic, less extroverted, less open to experience, less agreeable and less conscientious when compared to the control group.   An interaction of certain factors, such as current psychiatric disorders, negative life events, and personality trait of being less conscientious appear to be a good predictor of elderly suicide risk.


## 6.0     Review of the Current Data Reporting System

6.1     The Study has identified two possible problems in the current data reporting system in Hong Kong.   The first is a reporting delay between the Coroner's office and the Births and Deaths Registry.   For example, a death which occurred in the fourth quarter of a calendar year, may not be reviewed by the coroner until the second or third quarter of the following year.   However, by that time, the month of May (before 1998) or June (since 1998) cut-off date imposed by the Census & Statistics Department (C&SD) will have passed, and the death will not be included in the data for the calendar year in which it actually occurred.   A 5%-18% of underreporting of suicide deaths has been found using the known death files from the C&SD (Table 6.1).


**Table 6.1     Suicide Deaths in Hong Kong from Registered Death Files and Known Death Files, 1981-1998**

| Year | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|---|---|
| Registered Death | 501 | 412 | 471 | 562 | 696 | 665 | 620 | 598 | 641 |
| Known Death | 497 | 405 | 460 | 555 | 684 | 641 | 601 | 569 | 609 |
| Difference | 4 | 7 | 11 | 7 | 12 | 24 | 19 | 29 | 32 |

| Year | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|---|---|
| Registered Death | 729 | 735 | 749 | 684 | 780 | 799 | 722 | 777 | 863 |
| Known Death | 679 | 689 | 727 | 638 | 741 | 718 | 646 | 645 | 819 |
| Difference | 50 | 46 | 22 | 46 | 39 | 81 | 76 | 132 | 44 |

6.2     The second problem relates to the classification of possible suicide deaths as undetermined cause of death files (E980-E989).   From our study of the death files in this section in 1997, it appears that about 50% of the cases contained in these files could be classified as suicide deaths.   Although the number of E980-E989 deaths has not been large in recent years, it could affect the total number of suicide deaths as much as 10%.

6.3     The research team has constructed a reporting delay function to adjust for the underreporting.   The reporting delay function needs to be updated annually in order to provide accurate and timely estimation of suicide deaths based on the known death files from C&SD each year.   It is therefore recommended that a permanent monitoring system should be set up to monitor the local suicide trend in a more timely fashion.


## 7.0     Recommendations

7.1     The Study has put forward a number of recommendations in the light of its aforementioned findings. The recommendations are appended below:

> (a)   A surveillance and monitoring system:
>
> The existing system of recording deaths fails to provide a timely or accurate estimate of the suicide rate in Hong Kong.   We suggest that a monitoring system be established, with the assistance of the Coroner's Office.   We also believe that this work should be on going, and Government support and funding will be necessary to make it viable. It is recommended that the newly established Centre for Suicide Research and Prevention at the University of Hong Kong (HKU) be supported by the Government; since the members of the HKU research team, who are founding members of the Centre, have the expertise and experience to maintain the monitoring system once it has been set up. The data obtained will be made accessible to both local and international suicide researchers.   With a formal research centre in HK, reciprocal arrangements could be made with international centres of suicide research so that there will be a continuous exchange of data, findings, and expertise.

> (b)   Suicide archives:
>
> Acquiring of detailed overseas suicide figures is bound to involve some cost.   At the moment, one of the most cost-effective means of obtaining suicide data is from the World Health Organization (WHO), which has been systematically collecting suicide information from its member states for years.   The International Association of Suicide Prevention (IASP) and other WHO-sponsored non-governmental organizations (NGOs) are also excellent organizations with which to share suicide information and data.

(c)   Prevention:

5.5% of elderly people surveyed in the prevalence study expressed a wish to commit suicide or had made a suicide attempt in the past year. These suicidal thoughts or attempts are highly correlated with both depression and physical illness.   In the case of physical illness, about 75% of the elderly victims in the psychological autopsy study had consulted a medical practitioner within one month of his or her suicide and more than 90% within three months.   It is necessary to explore how this particular phenomenon can be used in intervention.   Similar observations have been made in studies from other countries (Appleby et al., 1999; Conwell, 2001; Isometsä, 2000; Pirkis and Burgess, 1998).

Furthermore, such factors as vision and hearing problems, problems in carrying out daily living activities and the lack of a social support network are significant factors relating to their wish to commit suicide. It is also relevant to note that living with children has a beneficial effect on the elderly.

i.   A diagnostic tool:

In the PA study, the multiple logistic regression analysis identified current psychiatric illness, certain life events and personality traits, which were significant in the classification of both the suicide cases and the controls.   The use of a cut-off figure of 0.15 produced an agreement of 92% with the prediction, which was very promising indeed.   Basically, this indicates that a diagnostic tool can be developed to identify high-risk elderly people, especially one that includes the identification of personality traits and recent stressful life events.

ii.   Intervention at the primary care level needs to be strengthened:

As it appears that elderly people at risk of suicide have had access to health services not long before their suicidal act, both general practitioners and the primary health care sector offer excellent opportunities for intervention.   In both the survey study and the psychological autopsy study, it was found that depression and hearing and/or vision impairment significantly predict elderly wish.   A study by Conwell et al. (1998) found similar results. At the same time, depression seems to be a major common factor among the suicide victims in the control group.   As with other cultures, elderly Chinese people are more likely to express their affective discomfort and distress in physical terms, instead of reporting symptoms of depression or the fact that they have suicidal thoughts (Conwell, 2001; Chi et al., 1997).

We suggest further training for primary health care practitioners, which will help them identify and diagnose depression and

suicidal ideas among the elderly. Also, the emphasis might be on depression rather than on suicide itself. If the depression among the elderly can be detected and resolved, it is likely that the suicide rate among the elderly will drop as a result. In particular, it is essential that general practitioners be able to recognize depression, and refer those elderly with severe depression or suicidal risk to psychiatrists. These cases should be seen urgently, and psychogeriatric fast track clinics should be set up so that early and effective intervention can be provided. Psychogeriatric teams should be strengthened to provide support, from the secondary and tertiary levels, to the general practitioners, the department of Social Welfare and NGOs.

Some sort of `incentive' should be provided for the front-line health care workers to urge them to spend more time providing counseling to elderly people during medical consultations. Greater emphasis should also be placed on the recognition and effective treatment of depressive disorders and suicidal states in the elderly during medical training at the undergraduate and postgraduate levels. We understand the medical curriculum is already very full, however, with the use of problem-based learning, the existing teaching materials should be able to incorporate the subject of depression and suicide. In addition, continuing education is another useful source to better equip general medical practitioners on the detection and management of depression and suicide, in the elderly as well as other age groups.

iii. Community outreach:

A significant proportion of elderly people still slip through the net of the primary health care practitioners: those who are house-bound and physically unable to access health care; those who live alone in isolated areas; those who do not have telephones or for other reasons cannot be reached by the outside world; and those who choose not to access health care service. The 36 Support Teams for the Elderly of the Social Welfare Department are currently providing community outreach services to homebound elderly persons. Separately, Suicide Prevention Services have launched an outreach program for elderly people who wish to commit suicide. With such active intervention, the risk levels of these elderly people have effectively been lowered. It is noteworthy that 79.3% of these cases showed positive change after intervention: 52% improved within 1 month of referral and 76% of the cases showed positive changes within 3 months. Only one death has been reported among their clients (Suicide Prevention Services, 2000). In one study carried out in Italy, telephone contact by trained workers was found to be effective in giving social and psychological support to the elderly (De Leo, Carollo, & Dello Buono, 1995). Another study showed that through proactive telephone intervention, positive results were

found in depressed and isolated elderly people (Morrow-Howell, Becker-Kemppainen, & Judy, 1998). These studies suggest that similar outreach programs could conceivably work in Hong Kong. Social workers, other family members or volunteers could be trained to reach out to elderly people on a scheduled basis. Telephone calls are both time- and cost-effective, and enormously beneficial, as the person taking the call receives social contact with the outside world. Outreach program is urgently needed to approach this particularly vulnerable group. However, whether outreach programs have to be structured and run by trained social workers has yet to be determined since these could be very expensive to run. Furthermore, we are proposing a change of attitude of the community at large - to be more alert to the needs of the elderly, and be ready to reach out and provide support to them.

Based on the Suicide Prevention Services' experience, it is not easy to expect a Chinese elderly person to express his or her personal feelings. Usually, they have very strong self-esteem and almost always choose to hold their emotions close to themselves. As a result, trust, respect and a good relationship are first required before an elderly person will open up and freely express any distress they may experience. Volunteers will visit every elderly client twice a month - or more frequently if necessary - and augment this contact through frequent follow-up phone calls. Through this approach, volunteers provide a chance for high-risk elderly people to more openly express themselves and let out their emotions (Suicide Prevention Services, 2000).

iv. Education of family members:

Of the elderly suicide victims in the psychological autopsy study, about 27% and 36% respectively had explicitly or implicitly stated to their family members that they had plans to commit suicide. It is important for these family members not to ignore this signal and to seek immediate professional help. Also, a more integrated program should be put in place to respond to the needs of the family such that the lives of the family members will not be inordinately disrupted.

v. Education for the public:

It is important to educate the public at large as to the prevalence of psychiatric illnesses - especially depressive illnesses - among the elderly. This will allow those who come into frequent contact with the elderly - be they family members or others - to become aware of the signs and symptoms of depression and to alert the appropriate authority or family member(s). Early detection and treatment is by far the best preventive strategy. It

is noteworthy that many suicide myths still exist among health care professionals: only education will equip them with the necessary skills to handle suicidal elderly people with confidence. We firmly believe that this will help prevent elderly suicides in Hong Kong.

vi.      Healthy ageing:

More than 50% of the suicide deaths in our study had a poor or very poor health condition. The majority suffered from hypertension, cardiovascular disease, cancer, arthritis, or bronchitis. About 61% had been hospitalized within three months of their death. The informants suggested that nearly 70% of the suicide deaths were primarily due to health problems. Hence, it is important to promote public awareness as to the maintenance of good physical and mental health throughout the course of one's life. We should work closely with the local media (TV, radio, magazine and newspaper) to continuously promote this message, since it is as imperative for both the young and the old to maintain a healthy lifestyle.

vii.      Co-ordination among the various sectors:

An effective strategy of suicide prevention will only be possible if it is comprehensive and involves various sectors, including the Hospital Authority, the Department of Health, the Department of Social Welfare, NGOs, academics and policy makers. Co-ordination and cooperation between these sectors in the planning and delivery of suicide prevention services are crucial to the success of these interventions.

viii.     Appropriate resource allocation:

Resource will be necessary for the various interventions, public education campaigns and medication costs, such as antidepressants. Evaluation must form an integral part of any suicide prevention program. The cost of evaluation needs to be built into any research proposal, and the effectiveness of any suicide prevention program needs to be evaluated. Resource allocation should be evidence based.

## 8.0     Conclusion

8.1     The elderly suicide rate in Hong Kong has been on a decreasing trend since 1997 and remains stable in 2000, despite an increase in the overall suicide rates. The research team has witnessed the commitment of the Hong Kong Government to invest more funding in elderly services, an increase in the number of volunteers who

participate in the prevention of elderly suicide work, and the support of research-based information. All of these could have contributed to the temporary success of a stable, rather than a rising elderly suicide trend. The research team hopes that the current level of support can be sustained and maintained, so that our elderly can enjoy their twilight years. Elderly suicide is not solely a medical or social problem, but a public health problem, which involves all sectors of our community. It is important for a rapidly ageing city such as Hong Kong to improve its elderly services, and for each member of our society to participate in caring for our elderly.

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