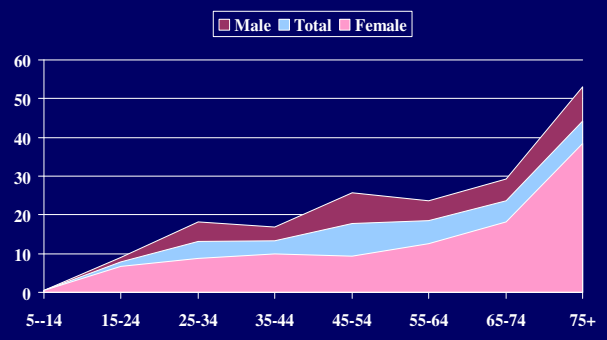
Elderly Suicide Prevention Tier Model

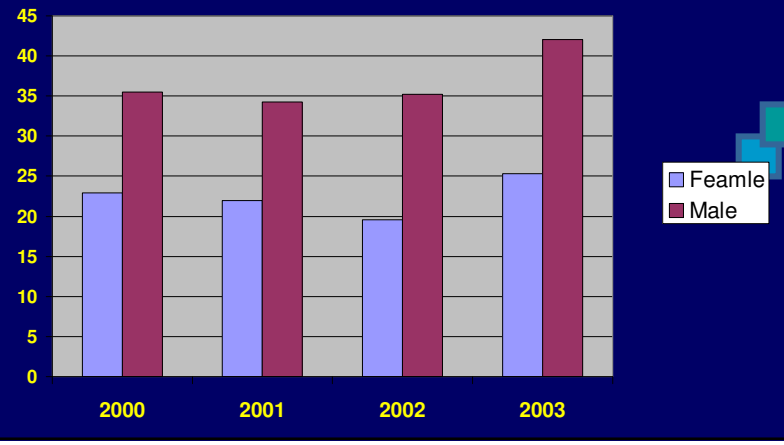
Life Clinic

Nov 2001-September 2004

Suicide Rates By Gender And Age Hong Kong SAR (1999)



Suicide rate in Hong Kong by Sex



Male elderly (75 or above) suicide rate, 1990-1994 (*C. Pritchard & D. S. Baldwin. 2002*)

Country	GPSR	Elder	Elder/GSPR ratio
Singapore	95	553	5.82
China – urban	92	440	4.78
Hong Kong	100	453	4.53
Japan	116	412	3.55
China – rural	297	932	3.14
Korea Republic	57	154	2.70
United Kingdom	34	58	1.71
Australia	51	76	1.49
USA	45	56	1.24
New Zealand	56	48	0.86
Ireland	40	34	0.85
Canada	54	45	0.83
Combined China	179	644	3.60

Female elderly (75 or above) suicide rate 1990-1994 (*C. Pritchard & D. S. Baldwin, 2002*)

Country	GPSR	Elder	Elder/GPSR ratio
China – urban	77	510	6.62
Singapore	136	839	6.17
China – rural	227	1327	5.85
Hong Kong	139	642	4.62
Korea Republic	125	373	2.98
Japan	217	569	2.62
USA	198	507	2.56
Australia	204	325	1.60
New Zealand	224	324	1.45
United Kingdom	121	163	1.34
Canada	210	280	1.33
Ireland	154	147	0.96
China combined	143	845	5.91

Female suicide rate by different age band (*C. Pritchard & D. S. Baldwin, 2002*)

		Age (years)						
Country	GPSR	15–24	25–34	35–44	45–54	55–64	65–74	75+
Rural China	297	415	350	279	311	431	673	932
Ratios	1.00	1.40	1.18	0.94	1.05	1.45	2.27	3.14
Urban China	92	105	87	85	91	123	221	440
Ratios	1.00	1.15	0.95	0.93	0.99	1.34	2.40	4.78
Hong Kong	100	62	91	89	93	150	255	453
Ratios	1.00	0.62	0.91	0.89	0.93	1.50	2.54	4.51
Japan	116	47	82	87	135	165	223	412
Ratios	1.00	0.41	0.71	0.75	1.16	1.43	1.92	3.55
Korea	57	65	76	63	65	66	104	154
Ratios	1.00	1.14	1.33	1.11	1.14	1.16	1.83	2.70
Singapore	95	94	101	101	80	117	235	553
Ratios	1.00	0.99	1.06	1.06	0.84	1.23	2.47	5.82

Ratios refer to the suicide rate in that age band compared with the GPSR.

Elderly suicide in Hong Kong Features and risk factors

- *M:F=1.3:1*
- *Commonest method: jumping(43%), hanging(35%), poisoning(8%)*
- *76% consulted a doctor one month prior to suicide*
- *86% has psychiatric problem, majority depressive disorder. Only 37% had ever consulted for psychiatric problem, and around 15 % at MHS*

Risk factors

Elderly suicide in Hong Kong-- case-controlled psychological autopsy study. Chiu HF et al, 2004; Tsoh et al,2004

Depression	***60% odds***
Previous suicidal ideas /attempt	***60 % had volunteered wish and 1/3 had history of suicidal attempt***
Physical factors	***COAD, arthritis, pain, cancer, poorer IADL***
Social factors	***Not living with children, religion not salient in life, life event : family discord, (social network not protective, most financially adequate)***
Personality	***Less agreeable, more neurotic, less open to experience***

Elderly suicide prevention lies in the province of psychiatry

- Suicide rate reduced with increased prescription of antidepressants
  - Gotland study (Rutz et al, 1982; 1985)
  - England study (Lodhi and Shah, 2004)

Elderly suicide prevention lies in the province of psychiatry

- Many depressed elderly left untreated in the community
  - 5 % elderly population (41000) have depression (Chiu et al,)
  - 8000 is using MHS

Suicidal ideas and QOL study from life clinic

- Logistic regression
- Suicidal ideas correlate with psychological domain ($P<0.05$) but not with health, social or environment.

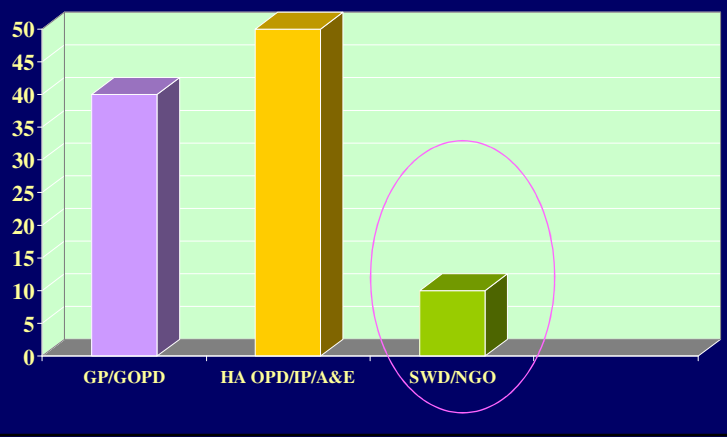
Model of suicide prevention

- Early identification of at risk cases (depressed and suicidal) in the community with fast assessment and better management helps to reduce suicide rate
- GP/counselor helps to manage mildly depressed or lower risk cases

What is special about the Life Clinic ?

- *Fast assessment and management/crisis intervention*
- *Enhancement of access to Mental health services from community gate-keeper*
- *Education and Liasion : GP in the management of depression/ referral of suicidal cases to ESPP. Educate helping professionals in detection of depression in elderly clients*

Access enhancement to Mental health services from community gate-keeper



Education of GP-Why important?

- Many depressed elderly left untreated in the community
  - 5 % elderly population (41000) have depression (Chiu et al,)
  - 8000 is using MHS
- Suicide rate reduced with increased prescription of antidepressants
  - Gotland study (Rutz et al, 1982; 1985)
  - England study (Lodhi and Shah, 2004)

GP Training

- Repeat education is necessary (Gotland study)

Do the ESPP really reach the elders at risk?

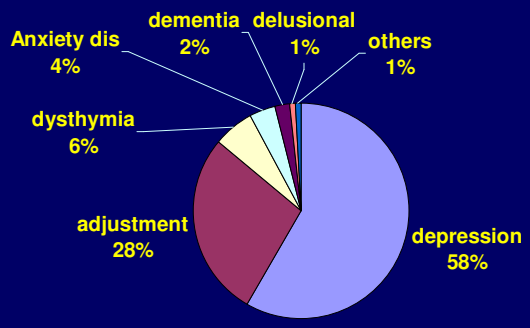
Profile of 135 cases

M:F	1:3
Mean age	73.5
Single, widow, divorced, separated	47%
Living alone	21%
Financial problem	53%
No relatives felt close to	54%
No good friends	78%

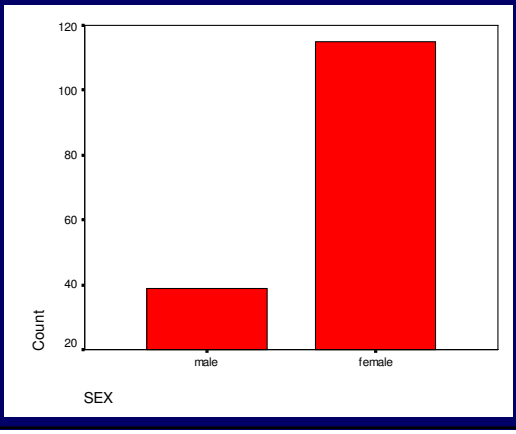
Profile of 135 cases

2 or more physical disorders	70%
Poor self rating of health	63%
COAD, Cancer and Pain conditions	30%
Suicidal ideas in the 3 months prior to service	76%
Suicidal attempt in the 3 months prior to service	6%

Psychiatric Diagnosis



Male depressed clients remain elusive to the service



Comparison of the NDH cohort(N=91) with the suicide completers(N=67) from prior study (S Chan)

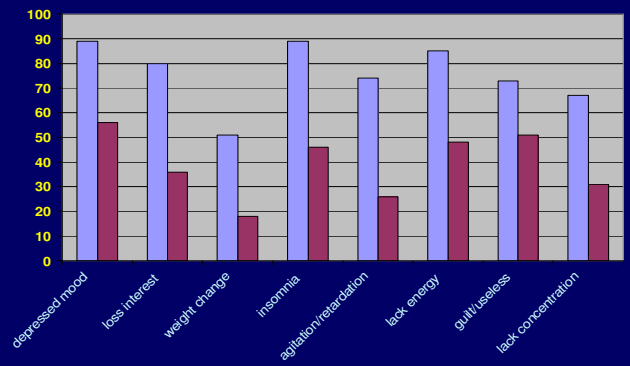
Risk factors	Chi-square value/ t-test*	P-value	Remarks
Living arrangement(w/ children)	0.007	0.932	
Current MDD	0.648	0.421	
Arthritis	0.659	0.402	
COAD	**5.501**	**0.017**	**OR=3.22** (more disease load in espp over completers)
Stroke	**6.648**	**0.001**	**OR=0.309** (less disease load in espp than attempters)
Age	-1.829	0.069	**Mean age(espp): 74.9 Mean age(cs): 77.16**
IADL	**2.236**	**0.027**	**Mean IADL(espp): 8.62 Mean IADL(cs): 6.27**

Does our service benefit our clients?

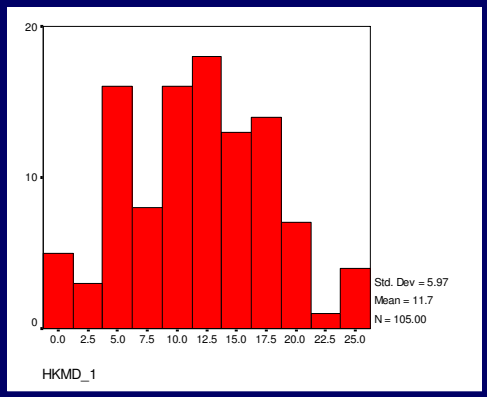
Clients outcome

- 10 clients died of physical illness
- Not one committed suicide
  - Only one has attempted suicide

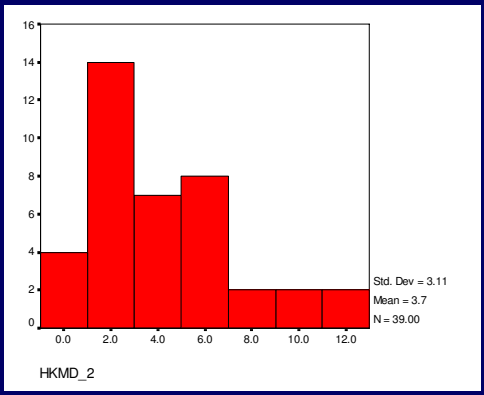
All Psychiatric symptoms improved significantly (Kappa)



Hamilton Depression Rating Scale (Pre)



Hamilton Depression Rating Scale (Post)



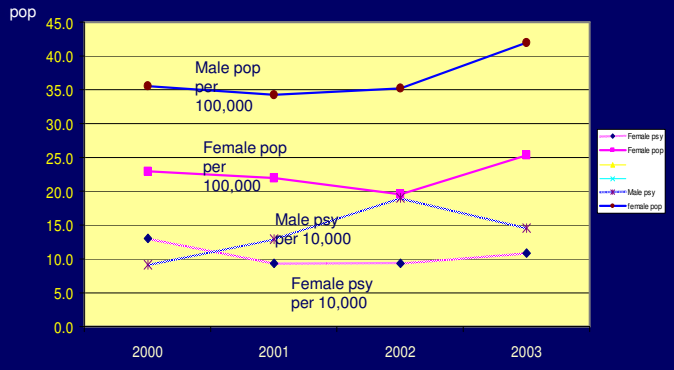
Others

Improved self-rating in physical health	Bad or very bad rating drops from 63% to 26%
88% felt medication useful	
89% stated they will consult the doctor again when they encounter the same problem	

Outcome

- No comparable group available , ESPP cannot be assessed independently from PGT team,eg, effciency of screening affect the rate in ESPP and non-ESPP population, effect of SARS

Male elderly suicide rate in HA psychiatric population dropped in 2003 against HK wide trend



Success of the model depends on

你有以下的現象嗎?

1) 你感到悲傷，低落嗎?
2) 你有失眠嗎?
3) 你對以往的活動失去興趣和喜樂嗎?
4) 你有想放棄活下去的念頭嗎?

Liaison with NGO

- Active approach to detect suicide cases
- NGO needs additional resources and service on psychological treatment for depressed elderly

Success of the model depends on