

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Sample Matching Process

Early intervention (EI) and standard care (SC) group patients were individually matched based on age (+/-2 years), gender and diagnosis, 548 pairs were successfully matched. For unmatched EI patients, diagnosis was matched first and then gender. Two EI patients with psychosis not otherwise specified were matched with SC patients with diagnosis of schizophrenia.

Standard Mortality Ratio (SMR) calculation

The person-years-at-risk stratified by age range and gender was calculated based on the mortality rate of Hong Kong (The Mortality Trend in Hong Kong, 1981 to 2015) and the period of follow-up, which gave the number of expected deaths. The number of deaths observed for the same gender and age range in the study divided by the number of deaths expected provided the standardized mortality ratios.

eTable 1. Details of the Number of Patients Screened and Excluded With Individual Reasons of Exclusion

	Early Intervention	Standard Control
Total screened cases, n	805	921
Included cases, n/total screened cases (%)	617 (76.6)	617 (67.0)
Excluded cases, n/total screened cases (%)	188 (23.4)	304 (33.0)
Reason for exclusion, n/total excluded cases (%)		
Received >1 month treatment before mental health service	60 (31.9)	93 (30.6)
Organic condition	0	7 (2.3)
Mental retardation	8 (4.3)	24 (7.9)
No diagnosis of psychosis	10 (5.3)	28 (9.2)
Delusional disorder	0	2 (0.7)
Affective psychosis (depression and mania)	83 (44.1)	83 (27.3)
Unable to retrieve case records	21 (11.2)	34 (11.2)
Drug-induced psychosis	6 (3.2)	33 (10.9)

eTable 2. Comparison of Unweighted and Propensity Score Reweighted Patients Characteristics by Early Intervention Group (EI) and Standard Care Group (SC)

Variable	Unweighted				PS reweighted(IPSW)			
	All	EI	SC	<i>P</i>	All	EI	SC	<i>P</i>
Gender^a				0.857 ^b				0.975 ^b
Female	0.480	0.483	0.478			0.478	0.477	
Male	0.520	0.517	0.522			0.522	0.523	
Age (1-y increase)	21.27	21.22	21.32	0.620 ^c	21.27	21.22	21.33	0.561 ^c
Age of onset (1-y increase)	20.53	20.45	20.62	0.379 ^c	20.53	20.47	20.61	0.485 ^c
Education year (1-y increase)	10.70	10.90	10.50	0.004 ^c	10.71	10.71	10.71	0.996 ^c

^aGender are expressed as the proportion, age, age of onset and education year are expressed as the mean value.

^bA two-sides χ^2 test was used.

^cA two-sides *t* test was used.

eTable 3. Details of Mortality and Suicide of Patients in Both Groups Over 12 Years

	Early Intervention (n = 617)	Standard Care (n = 617)
Total mortality, N (%)	28 (4.5)	49 (7.9)
Reason of death (ICD-10 code), N (% of the death)		
Natural Death (A00-Q99) ^a	1 (3)	1 (2)
Suicide with Clear Intention (X60-X84)	4 (14)	9 (18)
Suicide with Undetermined Intention (Y10-Y34)	23 (82)	37 (75)
Unnatural Non-suicide (V01-Y89)	0 (0)	2 (4)
Total suicide, N (%)	27 (4.4)	46 (7.5)
Methods of suicide, N (% of the suicide)		
Jumping from Height	21 (77)	32 (69)
Drug Overdose	1 (3)	2 (4)
Drowning	2 (7)	2 (4)
Hanging	2 (7)	4 (8)
Charcoal Burning	1 (3)	2 (4)
Undetermined method	0 (0)	4 (8)

^a Cause of death for one patient of EI group was Diabetic Ketoacidosis and one patient of SC group was Asthma.

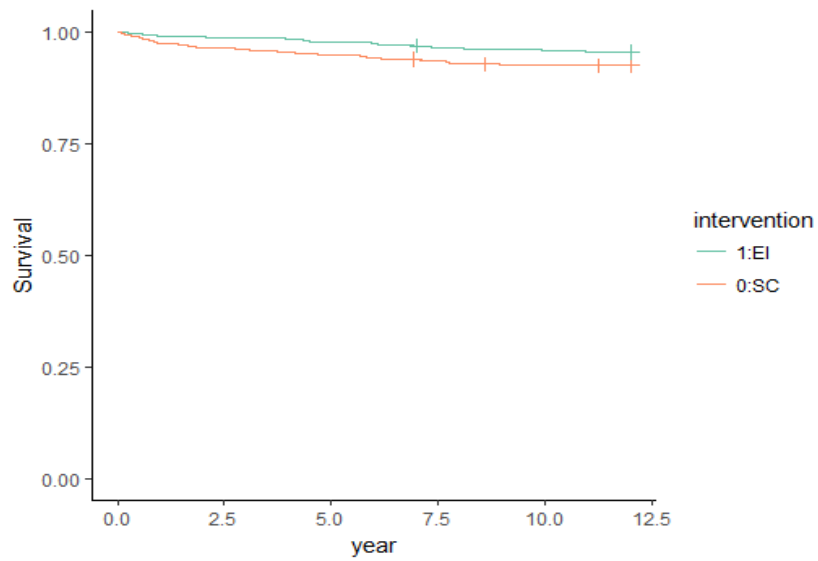
ICD-10 code: International Classification of Diseases and Related Health Problems tenth revision

ICD-10 code A00-Q99: death directly caused by disease-initiated events; ICD-10 code V01-Y89: deaths caused by fatal injuries from external events including accidents, violence and suicide.

eTable 4. Propensity Score Adjusted Hazard Ratio of Early Intervention Group to Standard Care Group Before and After 3-Year (Outcome: Suicide; Other Causes of Death Are Censored)

	On or before 3-year		After 3-year	
	HR (95% C.I.)	p	HR (95% C.I.)	p
Full model	0.32 (0.14, 0.71)	0.005	0.86 (0.46, 1.61)	0.633

eFigure. Kaplan-Meier Plot of the Subjects' Survival With Outcome as Suicide



The Kaplan Meier survival analysis with the outcome as suicide over 12 years comparing the patients received early intervention service (EI) and standard care service (SC) found a significant effect of EI service.