15-year computer-record study of adolescents exposed to peer suicide

CP Tang *, SF Hung, CC Lee, TP Ho, PWL Leung

KEY MESSAGES

1. Adolescents exposed to peer suicide and non-exposed controls did not differ significantly after 15 years, except for the percentage of females who attended accident and emergency department three times or more.
2. For schools in which a suicide occurred, a de-briefing or support programme should be implemented to increase student resilience, especially for peers of the suicide victim.

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[1] CP Tang *, [1] SF Hung, [1] CC Lee, [2] TP Ho, [3] PWL Leung

[1] *Kwai Chung Hospital*
[2] *Department of Psychiatry, The University of Hong Kong*
[3] *Department of Psychology, The Chinese University of Hong Kong*

* Principal applicant and corresponding author: tangcp@ha.org.hk

Introduction

Exposure to suicide is associated with an increased risk of suicide because of imitation behaviour.[1] Suicide prevention programmes for young people are based on the assumption that imitation plays a role in self-harm/suicidal behaviour.[2] Adolescents exposed to peer suicidal behaviour are more at risk of developing depression in the short term, harbouring suicidal ideation, and enacting suicide attempts.[3,4] However, a 3-year study of youths exposed to suicide found no evidence of heightened risk for self-harm/suicidal behaviour.[1] Exposed to peer suicide evokes more suicidal thoughts and attempts and heightens depression in immediate term but not after 6 years.[3]

Adolescents exposed to the attempted suicide of a close friend or family member also show a heightened risk for suicidal behaviour.[5] The attention and concern given to the suicide attempters and the less grave outcome (such as death and bereavement) may 'encourage' at-risk adolescents to attempt such behaviour. In Hong Kong, 25% of adolescents exposed to suicide were probable psychiatric cases, and 15 to 21% of them reported suicidal acts.[4] The risk remained evident after controlling for age, sex, and other potential psychosocial risk factors. Adolescents exposed to attempted suicide are at greater risk than exposed to completed suicide: the former were at greater risk of externalising problems, whereas the latter were at greater risk of internalising problems.

In Hong Kong, the percentage of having probable psychiatric illness in adolescents exposed to peer attempted suicide and non-exposed controls was 26.4 and 11.5, respectively, whereas the percentage of having a history of suicidal acts in peers of suicide completers, attempters, and controls was 15.1, 21.0, and 4.8, respectively. Close friends of suicide completers/attempters, respectively, were particularly at risk of internalising/externalising problems, psychiatric disturbances, and suicidal behaviour. It was uncertain whether such risk was transient or persistent.

This study reviewed records of adolescents exposed to peer suicide and non-exposed controls in terms of psychopathology and attendance at accident and emergency department (AED) and/or psychiatric clinics/hospitals of the Hospital Authority.

Methods

This study was conducted from July 2010 to July 2011. Of 2869 subjects studied 15 years earlier with regard to suicidal behaviour and exposure to suicidal behaviour, 2701 subjects' data were retrieved from the Clinical Management System of the Hospital Authority. The system provides over 90% of the accident and emergency service and over 99% of inpatient psychiatric service in Hong Kong. Medical records of the subjects such as AED attendances, psychiatric hospital admissions, psychiatric outpatient attendances, AED diagnoses, and psychiatric inpatient/outpatient diagnoses were reviewed.

Results

In females attended AED three times or more, the percentage was lower in non-exposed controls than those exposed to completed suicide (35.3% vs 44.3%, X^2=8.147, P=0.017) or those exposed to attempted suicide (35.3% vs 42.4%, X^2=6.117, P=0.047) [Table]. Male subjects showed a similar trend, but the effect sizes were smaller: (35.5% vs 40.4%, X^2=2.396, P=0.302) and (35.5% vs 38.6%, X^2=0.809, P=0.667),

TABLE. Accident and emergency department (AED) attendances of those exposed to completed or attempted suicides within 15 years

AED attendance	Female			Male		
	Exposed to completed suicide (n=271)	Exposed to attempted suicide (n=531)	Non-exposed controls (n=604)	Exposed to completed suicide (n=280)	Exposed to attempted suicide (n=254)	Non-exposed controls (n=761)
Low (0)	71 (26.2%)	160 (30.1%)	209 (34.6%)	79 (28.2%)	69 (27.2%)	220 (28.9%)
Medium (1-2)	80 (29.5%)	146 (27.5%)	182 (30.1%)	88 (31.4%)	87 (34.3%)	271 (35.6%)
High (≥3)	120 (44.3%)	225 (42.4%)	213 (35.3%)	113 (40.4%)	98 (38.6%)	270 (35.5%)

respectively.

The exposed and non-exposed groups did not differ significantly in the number of contacts with psychiatric services, self-harm, suicidal behaviour, death, AED diagnoses, drug abuse, aggressive behaviour, or psychiatric diagnoses.

Discussion

Accident and emergency department attendances

Adolescents exposed to peer suicide had significantly more externalising and internalising problems than the non-exposed controls.[4] The exposed groups also exhibited more suicidal behaviour and drug abuse that could cause haphazard behaviour and higher use of the AED. Nonetheless, these subjects were not actually examined; it may just have been a display of help-seeking behaviour that was not as prevalent in the non-exposed controls. This finding has service and cost implications for the AED. It is unknown whether help was also sought from other sources such as the Social Welfare Department, community services in non-government organisations, or religious organisations.

Self-harm and suicidal behaviour

Adolescents exposed to peer suicide were not at higher risk of developing self-harm or suicidal behaviour in the long term. Nonetheless, the negative impact of exposure to suicidal behaviour, in terms of heightened self-harm and suicidal behaviour, may be sustained over a longer period.[4]

Contact with psychiatric services

In a 3-year study[1] and a 6-year study,[3] the risk of developing psychiatric disturbances in those exposed to suicide was only short-lived and subsided in the long term. For schools in which a suicide occurred, a de-briefing or support programme should be implemented to increase student resilience, especially for peers of the suicide victim.

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