

Always hard to absorb: youngsters suicide from childhood adversity

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Suicide is a complex social issue. According to the World Health Organization (WHO), each year there are nearly 800,000 deaths from suicide worldwide (1). Among youngsters with ages from 15–29 years old, suicide is the second leading cause of mortality worldwide, and its incidence rate is increasing (1–5). Therefore, it is important to identify corresponding risk factors for future intervention.

Recently, Björkenstam *et al.* (6) reported a retrospective cohort study, to investigate the association between different indicators of childhood adversity and suicide among 15–24 years old adolescents and young adults.

In this study, the authors enrolled a large population of 548,721 adolescents and young adults according to the database of various Swedish registers. To categorize childhood adversity, they used seven indicators: death in family (suicide in family was analyzed separately), parental substance abuse, parental psychiatric disorder, parental criminality, parental separation/single parent household, household receiving public assistance, and residential instability. Analyses were adjusted by different potential confounders, including year of birth, foreign born parent, parental education, school performance grade, and childhood psychopathology.

Youngsters with at least one indicator of childhood adversity accounted for 42% proportion of the whole study population; among them, there were a total of 256 suicide cases. Compared with youngsters without indicators of childhood adversity youngsters with the indicators had at least a 1.4 times higher incidence rate of

suicide. The corresponding rate was 1.9 (95% CI: 1.3–2.8) in death in family, 2.9 (1.4–5.9) in suicide in family, 1.9 (1.4–2.4) in parental substance abuse, 2.0 (1.5–2.8) in parental psychiatric disorder, 2.3 (1.7–3.0) in parental criminality, 1.4 (1.2–1.7) in parental separation/single parent household, 1.6 (1.3–2.0) in household receiving public assistance, and 1.6 (1.1–2.4) in residential instability, respectively (*Table 1*). More importantly, a dose-response effect existed for the above comparison [one indicator: 1.1 (0.9–1.4); two indicators: 1.9 (1.4–2.5); at least three indicators: 2.6 (1.9–3.41)] (*Table 1*).

According to the study, it is also interesting to know, for youngsters with poorer grade performance in school, the suicide risk increased [poorest versus highest: 2.0 (1.4–2.8)]. This result is related to other research showing that the rate of incident suicide among youngsters with the lowest performance in schools was 4.57 times higher than the suicide rate among youngsters with the highest performance (7). Data indicate that, intervention may be considered to be implemented in school period, in order to prevent future suicide.

From this study, a challenge is, even though a higher rate of suicide was found in childhood adversity, it is also important to know that a large proportion of this study population (58%) did not suffer from childhood adversity, but the number of suicides among these youngsters accounted for 41% (175/431) of suicide cases in all population. Namely, despite all relevant indicators of childhood adversity investigated in this study, perhaps there were other risk factors influencing those youngsters who

Table 1 Association between childhood adversity and suicide (6)

Population	Individuals (n)	Suicides (n)	Risk ratio (RR)
All	548,721	431	—
No indicators	317,023	175	1 (Reference)
Death in family	17,784	28	1.9 (1.3–2.8)
Suicide in family	3,074	8	2.9 (1.4–5.9)
Parental substance abuse	40,524	71	1.9 (1.4–2.4)
Parental psychiatric disorder	28,369	48	2.0 (1.5–2.8)
Substantial parental criminality	23,145	56	2.3 (1.7–3.0)
Parental separation/single parent household	161,789	181	1.4 (1.2–1.7)
Household receiving public assistance	108,754	154	1.6 (1.3–2.0)
Residential instability	19,222	30	1.6 (1.1–2.4)
Indicators (n)			
0	317,023	175	1 (Reference)
1	127,348	88	1.1 (0.9–1.4)
2	61,962	83	1.9 (1.4–2.5)
≥3	42,388	85	2.6 (1.9–3.4)

finally decided to end their lives. Further investigation is warranted.

In summary, this study is the first to comprehensively investigate cumulative risk effect of different indicators of childhood adversity on suicide among youngsters. It found that, with more indicators of childhood adversity, youngsters have a higher risk of committing suicide. In addition, it is also the first to separately investigate these many relevant indicators of childhood adversity for suicide with large population size. Based on the research finding, youngsters who exposed with suicide in the family, parental criminality, and parental psychiatric disorder, potentially have higher risk of committing suicide. This study demonstrated potential social patterns behind suicide behavior, which is worthy for improving public awareness and preventing suicide in real practice.

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This editorial is written for my dear nephew who recently left, as well as considerable children who were or who are suffering from adversity, even tribulation. Life still could be full of love and joy, deserving continuous involvement. More importantly, our society would like to care,

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Footnote

Conflicts of Interest: The author has no conflicts of interest to declare.

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