Risk and Protective Factors of Adolescent Suicidality: An Umbrella Review and Meta-Analysis

AUT

Waitemata District Health Board
Best Care for Everyone

Rebecca Richardson, Tanya Connell, Mandie Foster, Julie Blamires, Smita Keshoor, Chris Moir, Irene Zeng

OBJECTIVE

To use a systematic method to synthesise recent review literature on adolescent mental health outcomes (self-harm and suicidality) and their risk and protective factors.

BACKGROUND

Suicide remains the second most common cause of death in young people aged 10–24 years and is a growing concern globally. The literature reports a vast number of factors that can predispose an adolescent to suicidality at an individual, relational, community, or societal level. There is limited high-level research in identifying and understanding these risk and protective factors of suicidality in adolescents.

METHOD

The study used an umbrella review method (systematic review of systematic reviews) to synthesize evidence from the literature in the past 20 years about the risk and protective factors to self-harm and suicidality (suicide ideation and suicide attempt) in adolescents. The study includes the results from quantitative synthesis from 36 systematic reviews with meta-analysis.

KEY FINDINGS

Exposure Risk Factors

Bullying
Both victimisation and perpetration associated with suicidality and self-harm. Bullying victimization was the most attributed environmental exposure with PAF 21.8% for suicide ideation and 31.6% for suicide attempts, the pooled odds ratio for suicide attempt was 3.0 (95% C.I. 2.58-3.53, <.0001).

Antidepressants
Relationship found between Antidepressant and SRRI exposure and youth suicidal behaviour, suicidal ideation and self-harm

Vulnerability Risk Factors

Female Gender
suicidal behaviours and self-harm more prevalent in female youth than male youth

Mental Health Disorders
associations between a range of mental health disorders and suicidal behaviour and self-harm

Past Suicidality and Self-harm

Sexual Orientation
higher risk of suicidal behaviour for sexual minority youth

Problematic Behaviours
Such as school absenteeism, Substance use, legal problems, and aggressiveness

Protective Factors

School Preventative Factors
Association between school connectedness and school-based interventions (such as Signs of Suicide, Headstrong, Good Behaviour Game, and Mastery Learning) and a reduction in youth sicidal behaviours

Sleep Duration
lower risk of suicide attempts from adolescents with greater sleep duration

DISCUSSION

Health professionals working in population health, school settings and community mental health should consider these risk factors when assessing and treating vulnerable young people. A person-centred approach with an emphasis on connectiveness and bully-free school environments, should be a priority focus for schools, health professionals and public health policy makers.

it is vital to create bully-free environments, eradicate school related exposures, and provide protective interventions within schools.

- Faculty of Health and Environmental Science, Research Office, Department of Biostatistics and Epidemiology, Auckland University of Technology
- Faculty of Health and Environmental Science, School of Nursing, Auckland University of Technology
- Faculty of Health and Environmental Science, School of Psychology, Auckland University of Technology
- Faculty of Health and Environmental Science, School of Oral Health, Auckland University of Technology
- Centre for Postgraduate Nursing Studies, University of Otago, Christchurch

Bilsen, J. (2018) Suicide and Youth: Risk Factors. Frontiers in Psychiatry, 9, 540.
Centres for Disease Control and Prevention. (2023). Facts About Suicide. Author. https://www.cdc.gov/suicide/facts/
Hawton, K., & Harriss, L. (2008). Deliberate slef-harm by under-15-year-olds: Characteristics, trends and outcome. Journal of Child Psychology and Psychiatry 49(4), 441-448
Patton, G.C., et al. (2009) Global Patterns of Mortality in Young People: A Systematic Analysis of Population Health Data. Lancet, 374 881-892.

For full list of references included in umbrella review please contact Rebecca Richardson at Rebecca.Richardson@aut.ac.nz