TITLE: The Association Between Self-Harm Behaviors and Suicide: Clinical Evidence

DATE: 10 June 2011

RESEARCH QUESTIONS

1. What is the association between self-harm behaviors and the incidence of suicide in adolescents and adults?

2. What is the association between self-harm behaviors and the risk of suicide in adolescents and adults?

KEY MESSAGE

The evidence suggests that self-harm behaviors may be associated with an increase in the incidence and risk of suicide in adolescents and adults.

METHODS

A limited literature search was conducted on key resources including PubMed, PsycINFO, The Cochrane Library (2011, Issue 5), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2006 and May 12, 2011. Internet links were provided, where available.

A focused search with main concepts appearing in title or subject heading was conducted using key health technology assessment resources, including PubMed. Methodological filters were applied to limit retrieval to randomized controlled trials and non-randomized studies. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2008 and May 17, 2011. Internet links were provided, where available.
The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and non-randomized studies.

Three systematic reviews and eight non-randomized studies were identified regarding the association between self-harm behaviors and the incidence or risk of suicide in adolescents and adults. No relevant health technology assessments or randomized controlled trials were identified. Additional articles that may be of interest are available in the appendix.

OVERALL SUMMARY OF FINDINGS

One systematic review\(^1\) examined the prevalence of mental disorders, suicidal ideation, and deliberate self-harm in lesbian, gay, and bisexual people. The authors concluded that this population had a significantly higher risk of deliberate self-harm, suicidal ideation, and substance misuse. The association between self-harm and eventual suicide was not discussed.

The authors of a meta-analysis\(^2\) concluded that there was a very strong association between suicide attempt and deliberate self-harm and the risk of suicide. Mood disorders and substance-related issues were also associated with an increased risk of completed suicide. Three studies\(^3,7,8\) concluded that repeated self-harm is associated with an increased risk of eventual suicide. The highest risk of repetition of self-harm was observed during the first year after the initial incident.\(^8\) One non-randomized study\(^7\) examined the prevalence and risk factors for suicide attempt associated with first episode psychosis. The authors concluded that previous self-harm was a key predictor of future suicide attempt. The authors recommend a focus on interventions to reduce the repetition of self-harm,\(^4,7\) and suggest that the improved management of self-harm may result in an overall reduction of suicide rates.\(^8\)

The authors of another review\(^3\) determined that psychosocial interventions implemented after incidences of self-harm did not impact the overall suicide rate. Four studies\(^5,9,10,11\) examined the records of patients presenting to hospital with self-harm injuries. A retrospective chart review\(^5\) of adolescent and adult patients presenting to the emergency department (ED) with self-harm injuries, including lacerations and overdose determined that the suicide risk factors of these patients were poorly documented. A medical record review\(^8\) of patients of all ages determined that previous hospitalization for poisoning with weak opioids was associated with a significant increase in the risk of subsequent suicide. The risk of suicide was most elevated during the first week following the overdose. The authors of a third study\(^10\) reviewed the medical records of children less than 15 years of age who presented to hospital with deliberate self-harm injuries. They concluded the long-term risk of suicide in these subjects was low, at around 1%. A database review\(^11\) of adults presenting to hospital with deliberate self-harm injuries determined the suicide rate within one year of presentation to the ED to be about 1%.

One study\(^6\) examined self-mutilation in opioid dependent people. The authors concluded that alcohol dependence and multiple suicide attempts were associated with self-harm and psychological dysfunction in this group was quite high.
REFERENCES SUMMARIZED

Health technology assessments
No literature identified.

Systematic reviews and meta-analyses


Randomized controlled trials
No literature identified.

Non-randomized studies


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APPENDIX – FURTHER INFORMATION:

Systematic reviews and meta-analyses – self-harm behaviour not specified


Non-randomized studies – psychological factors related to self-poisoning


Questionnaires and surveys


Review articles


Additional references

