Eating disorders, especially anorexia nervosa, are associated with an increased risk of attempted suicide in young women

Franco DL, Keel PK, Dorer DJ, *et al.* What predicts suicide attempts in women with eating disorders? *Psychol Med* 2004;**34**:843–53.

Q Does anorexia nervosa or bulimia nervosa increase the risk of suicide attempts in young women?

METHODS

Design: Prospective longitudinal study.

Follow up period: Nine years. Participants were interviewed every 6–12 months.

Setting: Massachusetts General Hospital and other area clinics in Massachusetts, USA; recruitment from October 1987 to June 1990.

People: 246 young women with anorexia nervosa or bulimia nervosa (mean age 24.8 years, 96% White, diagnosis by DSM-IV). Exclusions: non-English speaking; <12 years old; living >200 miles from study site; terminal illness; or organic mental disorder.

Risk factors: Baseline assessment and follow up were carried out by face to face diagnostic interviews and questionnaires administered by a trained assessor. At baseline, presence of eating disorder was confirmed (Structured Interview for DSM-III Personality Disorders; Eating Disorders Inventory) and current and lifetime psychiatric disorders assessed (Hopkins Symptom Checklist-90). Follow up interviews were carried out using the LIFE-EAT-II semistructured interview, which assessed symptoms of eating disorders, comorbid psychopathology, treatment, and psychosocial function. Time to first suicide attempt was calculated using Kaplan-Meier survival analysis. Cox proportional hazards ratios and multiple regression analyses were used to identify predictors of suicide attempts.

Outcomes: Suicide attempts and intent.

MAIN RESULTS

Of the 246 participants, 110 were diagnosed with bulimia nervosa and 136 with anorexia nervosa at baseline. At nine years, 15% of the young women reported at least one suicide attempt. Women with anorexia were significantly more likely to attempt suicide than women with bulimia (anorexia *v* bulimia: 22% *v* 11%, $p = 0.03$). In women with bulimia, shorter time to first suicide attempt was predicted by participation in group therapy ($p = 0.002$) or individual therapy ($p = 0.02$), early age of onset ($p = 0.008$), history of drug use disorder at baseline ($p = 0.009$), diagnosis of paranoid personality disorder at baseline ($p = 0.02$), and severity of laxative use ($p = 0.02$). In women with anorexia, shorter time to first suicide attempt was predicted by history of suicide attempts at baseline ($p = 0.009$), severity of drug use during the study ($p = 0.01$), participation in individual therapy ($p = 0.013$), use of neuroleptic medication ($p = 0.02$), and early age of onset ($p = 0.05$). Eating disorder symptoms predicted suicide attempts in women with bulimia but

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not women with anorexia. Symptoms of psychopathology, such as depression and drug abuse predicted suicide attempts in women with anorexia.

CONCLUSIONS

The eating disorders anorexia nervosa and bulimia nervosa put young women at risk for attempted suicide. Women with anorexia nervosa are more likely to attempt suicide than women with bulimia nervosa.

Commentary

Suicide is the third most frequent cause of death among teenagers and young adults. Reviews and meta-analyses have shown that suicidal behaviour is more frequent among people with eating disorders than in the general population.^{1–4} The course of illness and the follow up period is of great importance for the correct evaluation of suicidality in this class of patients.⁵ Suicide may occur not only in the late phases of the illness but in periods of symptomatic remission.

Franco *et al* assessed suicidality every 6–12 months over 8.6 years. This is a most important and innovative contribution to the international literature. This approach should be implemented in everyday clinical practice, as it provides a greater opportunity to predict and prevent suicidal behaviour. However, such an approach may work only with certain resources and with increased staff motivation. We agree with the scales employed by the authors; however scales specifically designed for suicide risk assessment should be used in future studies. The evaluation of suicidality using tools that aim to recognise the possibility of committing suicide may contribute to the definition of a suicidal spectrum among people with eating disorders.

Franco *et al*'s results are also very interesting as they found that suicide attempts were more frequent among people with anorexia than among people with bulimia. This finding may have implications for clinical practice, both for treatment and for seeking confirmation of this evidence. The generalisability of Franco *et al*'s results will depend on further longitudinal studies with similar features. One of the authors' aims was to identify predictors of suicide and suicide attempts. This should also be the aim of all mental health professionals involved in the treatment of people with eating disorders. However, future studies would benefit from a careful consideration of the diagnostic tools used, the evaluation of suicide risk and the recognition of comorbid Axis I disorders or personality disorders that may increase suicide risk dramatically.

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