Prognosis

One half of patients with anorexia nervosa fully recovered after 21 years but the other half had a chronic or lethal course


**QUESTION:** What is the long term course of anorexia nervosa?

**Design**
Inception cohort followed up for 21 years.

**Setting**
Community based study in Heidelberg, Germany.

**Patients**
84 women (mean age 21 y) meeting Feighner diagnostic criteria for anorexia nervosa with no severe somatic disorders. All women were identified while receiving inpatient treatment. At 21 years follow up, 70 patients were alive, of whom 63 (90%) completed the follow up interview.

**Assessment of prognostic factors**
Prognostic factors considered were selected based on the results of a previous 12 year follow up of these patients. Psychological, social, and medical data were collected.

**Main outcome measures**
Death; full and partial recovery; psychological and social outcomes; and change in outcome between 12 and 21 years follow up.

**Main results**
At 21 years follow up, 14 of the 84 patients (17%) had died; 12 due to causes directly related to anorexia nervosa (standardised mortality rate 9.8). When considering the 14 dead and the 63 living patients who were examined, 39 patients (51%) were fully recovered at 21 years follow up, 16 (21%) were partially recovered, and 8 (10%) still met full diagnostic criteria for anorexia nervosa. Social problems associated with a poor outcome were having a low body mass index (odds ratio [OR] 0.7, 95% CI 0.6 to 0.8) and a greater severity of social (OR 1.3, CI 1.1 to 1.4) and psychological problems (OR 1.3, CI 1.2 to 1.5) at 12 years were identified as predictors of a poor outcome at 21 years.

**Conclusion**
Approximately one half of patients with anorexia nervosa were fully recovered at 21 years but the other half had a chronic or lethal course.

**COMMENTARY**

The 21 year follow up of anorexia nervosa by Löwe et al poses a critical challenge to mental health practitioners and researchers. Consistent with previous studies, the standardised mortality rate from anorexia in this study (9.8%) was consistent with prior observations of 5% per decade and elevates anorexia nervosa to the status of most lethal of psychiatric disorders. Moreover, even with intensive inpatient treatment and a variety of treatments during the follow up interval, still only half of patients achieved a good outcome. As noted previously, body mass index remained low in the partial and poor outcome groups even 21 years after admission. Continuing low weight predicts poor outcome over time underscoring the importance of achieving a healthy body weight. Recovery status was further complicated by the presence of depression, anxiety, and psychosocial adjustment problems.

This study also provides insight into how anorexia nervosa morphs over time. Bingeing and purging were nearly ubiquitous in the deceased and poor outcome cases. Many patients met cross-sectional diagnostic criteria for eating disorders not otherwise specified (ED-NOS) at 21 years. The natural history of anorexia reported here suggests that the maintenance of a restricting profile is rare and that binging and/or purging become almost inevitable as the duration of illness lengthens. This suggests that many cases of ED-NOS may represent an end state of anorexia nervosa rather than a separate and unique eating disorder. A richer conceptualisation of eating disorders diagnoses in terms of developmental stages of symptom expression is in order.

Although one could attempt to be optimistic by focusing on the 50% recovery rate in this sample, this would be unacceptable. Clearly we have not yet developed adequate psychopharmacological or psychotherapeutic interventions that effect cure for an acceptable number of individuals with anorexia nervosa. Given the high mortality associated with this disorder, we cannot afford to be complacent. Funds and creative research energy are desperately needed to discover new and effective treatments for anorexia nervosa.

Cynthia Bulik, MA, PhD
Virginia Commonwealth University
Richmond, Virginia, USA

One half of patients with anorexia nervosa fully recovered after 21 years but the other half had a chronic or lethal course

*Evid Based Mental Health* 2002 5: 59
doi: 10.1136/ebmh.5.2.59

Updated information and services can be found at: [http://ebmh.bmj.com/content/5/2/59](http://ebmh.bmj.com/content/5/2/59)

These include:

**References**

This article cites 4 articles, 1 of which you can access for free at: [http://ebmh.bmj.com/content/5/2/59#BIBL](http://ebmh.bmj.com/content/5/2/59#BIBL)

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Topic Collections**

Articles on similar topics can be found in the following collections

- *Anorexia nervosa* (29)
- *Epidemiologic studies* (631)
- *Epidemiology* (1570)

**Notes**

To request permissions go to: [http://group.bmj.com/group/rights-licensing/permissions](http://group.bmj.com/group/rights-licensing/permissions)

To order reprints go to: [http://journals.bmj.com/cgi/reprintform](http://journals.bmj.com/cgi/reprintform)

To subscribe to BMJ go to: [http://group.bmj.com/subscribe/](http://group.bmj.com/subscribe/)