

Follow-up of treated eating disordered males and gender-specific risk factors - a prospective, controlled study

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Applicants/Authors

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Objective

Existing studies on eating disorders (ED) in adult males mostly focussed on anorexia nervosa (AN) and included small numbers of males. Results are contradicting and inconclusive. This makes it difficult to get solid empirically based findings on gender-specific characteristics of patients treated for eating disorders. Even more limited is the analysis of diagnostic subgroups. Detailed knowledge on course and outcome of EDs and risk factors of very poor outcome is indispensable for developing better prevention and intervention schedules. At this date, it is not conclusively known if eating disordered males carry other risks and risk factors than females, and if gender-specific treatment approaches are necessary.

The aim of this study was to conduct a follow-up in males after inpatient treatment for their ED and report outcome at follow-up. An additional aim was to provide a reliable estimate of mortality in EDs in males. Another aim was to identify risk factors for poor outcome.

Method

The total sample comprised 360 males treated for an ED. The sample included 157 males with AN, 83 males with bulimia nervosa (BN), and 120 males with ED not otherwise specified [ED-NOS; mostly AN or BN not meeting all diagnostic criteria, but also including binge-eating disorder (BED)] as described by the DSM-IV. Vital status could be verified for 338 males (147 AN, 81 BN, 110 ED-NOS), resulting in a high overall ascertainment rate of 94%. The narrowly defined follow-up sample (who responded by questionnaire and/or interview at follow-up) consisted of 119 males with AN and 60 males with BN. From an existing large data set of females treated in the same clinic 119 females with AN and 60 females with BN were matched to the male participants according to ED diagnosis and subtype, age at admission, and length of

follow-up. Mean length of follow-up was 5.8 years for AN, and 7.5 years for BN. Mean age at the beginning of treatment was 27.5 years for AN, and 34.6 years for BN.

Sample characteristics and potential predictors were derived from data collected at admission to inpatient treatment and from the hospital documentation.

Follow-up was conducted by a set of questionnaires and an expert diagnostic interview. ED diagnoses are reported as primary outcome. Remission was defined as absence of a diagnosis of AN, BN, BED, and ED-NOS at follow-up.

Crude mortality rate (CMR) is reported as the percentage of deceased relative to all patients with ascertained vital status in the respective group. Standardized mortality ratio (SMR) is computed by dividing the number of deceased by the number of expected deaths in the general population of the same sex and age.

Results

Mortality

CMR was 13 % in AN, 11 % in BN, and 6 % in ED-NOS. The SMR for males with AN was 5.9, for males with BN 1.9, and for males with ED-NOS 3.4. The SMRs were significantly elevated in AN and ED-NOS, but not in BN. Males with AN had a nearly sixfold increased risk of death compared to males of the same age in the general population, and they died sooner after onset of ED than males with BN or ED-NOS.

Follow-up

There were no differences in the frequency of AN and BN at follow-up between males and females treated for AN or BN. Males treated for AN had more often ED-NOS at follow-up than females, but males and females treated for BN did not differ in ED-NOS frequency at follow-up.

Remission rates were very similar in males and females, and in AN and BN (40% for males with AN; 41% for females with AN, 44% for males with BN, and 50 for females with BN).

Discussion

Our data confirm the seriousness of ED in both males and females. Males and females generally show a similar outcome of ED. Mortality is increased in males with ED, especially in AN, and very similar to mortality reported for females. Remission rates are also very similar in males and females with ED. Our data did not include assessment of drive for muscularity which may be more relevant for ED in males. Considering the

recent discussion on the female-centered diagnostic criteria and assessment instruments of ED, it seems that diagnostic criteria for ED (and assessments) need revision and possibly addition of more sophisticated gender-specific aspects. More than half of the male and female participants of our study reported an active ED at follow-up. It is unknown if males need a specific therapy different from therapy for females. But it is evident that still more efficient therapies for both genders are critically needed.

Publications derived from the project

Quadflieg, N., Strobel, C., Naab, S., Voderholzer, U., & Fichter, M. M. (2019). Mortality in males treated for an eating disorder – A large prospective study. *International Journal of Eating Disorders*, in press. DOI: 10.1002/eat.23135

Strobel, C., Quadflieg, N., Naab, S., Voderholzer, U., & Fichter, M. M. (2019). Long-term outcomes in treated males with anorexia nervosa and bulimia nervosa—A prospective, gender-matched study. *International Journal of Eating Disorders*, in press. DOI: 10.1002/eat.23

Strobel, C., Quadflieg, N., Voderholzer, U., Naab, S., & Fichter, M. M. (2018) Short- and Long-term Outcome of Males Treated for Anorexia Nervosa: A Review of the Literature. *Eating and Weight Disorders*, 23 (5), 541-552. DOI 10.1007/s40519-018-0538-6

Additional publications on gender-specific predictors and adolescents are in preparation.

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