

assessments, but had an open question where psychiatrists could note factors not surveyed. Factors suggested included: previous diagnoses, age, cognitive function, risk or history of suicide or violence, forensic history, legal status, cultural background, social networks, work history, family involvement, insight, acceptance of illness and treatment, preferences among treatments, rapport between doctor and patient, and financial resources.

While our survey was being completed, a worldwide screen of expert opinion from mental health clinicians, assessing the value of ICD-11, which is similar to DSM in its categorical approach and content, was published⁶. This global survey addressed all the categories in the ICD and DSM, exploring the relative use of ICD/DSM for administrative purposes, managing treatment, communicating with other treaters, and teaching. Our survey targeted only US psychiatrists, focused on psychotic disorders, and obtained relative rankings of the use of DSM diagnoses versus other clinical findings in choosing and guiding treatment. Thus, the two studies were partially overlapping. Consistent with our project, the authors of the global survey concluded that the ICD and DSM categories are most useful for administrative and billing purposes and for communicating with other clinicians. They are least used and substantially less useful for choosing individual treatments or advising on prognosis.

Our results suggest that, among patients with psychotic disorders, the DSM-5 diagnosis is less important than identifying other individual features of illness, especially type and severity of symptoms, but also comorbidities and some aspects of personal history. Relevant factors noted by other investigators include suicidality, recreational drug use, obstetric complications, early or recent adverse events, social cognition and neurocognition⁵. The use of these factors allows more flexibility in description than categories alone. Course can be included as well.

Notable for interpreting the responses, we only contacted clinicians at well-known academic centers. The majority (70.5%) of respondents had hospital-based practices, but this might be expected for those who treat many patients with psychotic disorders. The results represent opinions of clinicians who teach and perform research, in addition to their clinical practices. Most psychiatrists did

not respond. Nonetheless, the response rate (22.8%) was typical of online surveys⁷. Possibly, those who did respond were interested in the subject and might have thought about the matters raised. We are not suggesting that responders were representative of US psychiatrists, but it might be noted that the suggestions, made a century ago, on which ICD and DSM are based, were also from clinical observations, largely from clinicians in select sites. They were not made or since have been confirmed on the basis of other validators¹.

Lastly, an argument has been made that changes in DSM and ICD should strive to improve utility and accuracy⁸. Accuracy in choosing treatments and predicting outcome might be enhanced by incorporating factors that clinicians cite as most important into formal diagnostic systems. That these factors are already in use for making clinical decisions shows that they are practical and suggests that they may be valid. An improved system might incorporate both categorical entities and additional features, such as those provided by recognizing individual symptoms and severity of those symptoms, in new models⁹. Such models can be tried and tested, then implemented if they show advantages compared to existing systems.

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Anorexia nervosa and the long-term risk of mortality in women

Anorexia nervosa affects up to 3% of young women and has the highest mortality rate of any psychiatric disorder^{1,2}, with approximately 5% of patients dying within four years of the diagnosis¹. Severe weight loss and malnutrition can cause widespread damage to organs that may persist over time, even if anorexia nervosa is ultimately well-managed^{1,2}. However, the factors involved in the high mortality associated with anorexia nervosa remain unclear³.

Among a longitudinal cohort of 1,298,890 women from the Maintenance and Use of Data for the Study of Hospital Clientele registry⁴ in the province of Quebec, Canada, we identified women admitted to hospital for anorexia nervosa between 1989 and 2016. A comparison group of women of similar age who presented for either delivery or pregnancy termination and were representative

of the large majority of women in Quebec was also identified. We measured anorexia nervosa as a binary variable (yes, no), and included a categorical variable for the total number of anorexia admissions (0, 1, 2, ≥3 admissions) to capture disease severity.

We followed the women over time to identify in-hospital deaths up to March 31, 2018. We categorized the cause of death as anorexia nervosa, suicide, cardiovascular, pulmonary (including pneumonia), cancer, liver and other digestive disease, infectious (other than pneumonia), kidney, nervous system, diabetes and other endocrine disease, shock and organ failure, obstetric, other, or unknown causes.

We used Cox regression models to estimate hazard ratios (HRs) and 95% confidence intervals (CIs) for each cause of death, adjusted for baseline age, pre-existing morbidity (depression, anxiety,

and alcohol, tobacco or other substance use at or before cohort entry), socioeconomic deprivation, rurality, and the time period of index hospitalization. We included quadratic time interaction terms to determine associations by year of follow-up.

There were 5,169 women with anorexia nervosa in the cohort, including 227 who died during follow-up. Mortality was higher for women with anorexia than no anorexia (3.24 vs. 0.38 per 1,000 person-years). In adjusted models, anorexia was associated with 2.47 times the risk of death compared with no anorexia (95% CI: 2.01-3.04). Women with three or more anorexia admissions had 4.05 times the risk of death over time (95% CI: 2.85-5.75). Anorexia nervosa was associated with 9.01 times the risk of death at 5 years (95% CI: 7.28-11.16), 7.18 times the risk at 10 years (95% CI: 6.07-8.51), and 2.90 times the risk at 20 years (95% CI: 2.16-3.89), but was not significantly associated with mortality at 25 years of follow-up (HR=1.47, 95% CI: 0.88-2.45).

Anorexia nervosa was associated with death from suicide (HR=4.90, 95% CI: 1.93-12.46), pulmonary disease (HR=3.49, 95% CI: 1.77-6.89), diabetes and other endocrine disease (HR=7.58, 95% CI: 1.89-30.42), liver and other digestive disease (HR=3.27, 95% CI: 1.33-8.06), and shock and organ failure (HR=3.59, 95% CI: 1.23-10.49). Among pulmonary causes, anorexia was most strongly associated with death due to pneumonia (HR=8.19, 95% CI: 2.78-24.14). The cause of death was specified as anorexia nervosa for five patients (2.2%). There was no long-term association with death from cardiovascular or other causes.

Risk of death was particularly elevated for diabetes and pneumonia, disorders that may be underappreciated conditions associated with anorexia nervosa. While it is plausible that severe calorie restriction has effects on pancreatic and lung function, it is also known that women with type 1 diabetes are at greater risk of developing eating disorders⁵. Diabetic women with anorexia nervosa sometimes manipulate their insulin injections to control weight, increasing the risk of hyperglycemic episodes, diabetic ketoacidosis, and life-threatening complications such as diabetic coma⁵. Women with anorexia nervosa may be at risk of pneumonia due to food aspiration. The elevated risk of pneumonia mortality may also be due to a reduced immune response to bacterial infections, leading to delayed diagnosis or treatment and more severe pulmonary infections^{6,7}.

Suicide was also a leading cause of death. Anorexia nervosa frequently clusters with depression, anxiety, and personality disorders, as well as substance use². Alcohol use in particular is associated with a high risk of suicide attempt in patients with anorexia nervosa^{8,9}. However, some data suggest that mortality rates are elevated even in women with anorexia nervosa who do not have psychiatric comorbidities⁹. In the present study, anorexia nervosa was associated with greater mortality even after adjusting for de-

pression and anxiety, suggesting that at least some of the pathways linking anorexia nervosa with mortality are independent of comorbid mental disorders.

In contrast to the frequent involvement of the cardiovascular system in acute anorexia nervosa³, cardiovascular disease was not a leading cause of death in this analysis. In a prior study of 6,009 Swedish women, anorexia nervosa was similarly more strongly associated with suicide, respiratory and endocrine-related causes than cardiovascular death⁶. It may be that low weight due to decreased calorie intake mitigates damage to the cardiovascular system⁶.

This study has limitations. We assessed severe anorexia nervosa requiring hospitalization, not milder anorexia adequately managed in outpatient settings. We did not have information on anorexia relapse or recovery status, body mass index, physical activity, or nutrition. Cause of death data were partially missing before 2006. We used a comparison group comprised of fertile women. Our results may therefore differ from studies using the general population as a reference group.

The long-term role of anorexia nervosa in mortality has yet to be fully appreciated. In this study with 29 years of follow-up, anorexia nervosa hospitalization was associated with an increased risk of death up to 20 years later and was strongly associated with mortality due to diabetes, pneumonia and suicide. As the risk of death was most pronounced in the first two decades, earlier interventions to treat anorexia nervosa may have greatest potential for reducing harm. To improve survival and reduce morbidity, better documentation of the impact of anorexia nervosa over the life course is needed.

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The WHO EQUIP Foundational Helping Skills Trainer's Curriculum

Foundational helping skills are the provider's competencies needed to build a warm and trustworthy relationship with a client. Examples include effective verbal and non-verbal com-

munication, demonstrating empathy, rapport building, and promoting hope and expectancy of change¹.

These skills have been widely established as an essential and