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 disorders[5]. 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 coma[5]. 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 use[2]. 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 comorbidities[9]. In the present study, anorexia nervosa was associated with greater mortality even after adjusting for depression 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 nervosa[3], 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 death[6]. It may be that low weight due to decreased calorie intake mitigates damage to the cardiovascular system[6].

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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1. Meczekalski B, Podfigurna-Stopa A, Katulski K. Maturitas 2013;75:215-20.
2. Treasure J, Claudino A, Zucker N. Lancet 2010;375:583-93.
3. Himmerich H, Hotopf M, Shetty H et al. Eur Arch Psychiatry Clin Neurosci 2019;269:351-9.
4. Tith RM, Paradis G, Potter BJ et al. JAMA Psychiatry 2020;77:44-51.
5. Treasure J. Lancet Diabetes Endocrinol 2018;6:273.
6. Papadopoulos F, Ekbom A, Brandt L et al. Br J Psychiatry 2009;194:10-7.
7. Brown RF, Bartrop R, Birmingham CL. Acta Neuropsychiatr 2008;20:117-28.
8. Bulik CM, Thornton L, Pinheiro AP et al. Psychosom Med 2008;70:378-83.
9. Kask J, Ekselius L, Brandt L et al. Psychosom Med 2016;78:910-9.

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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 communication, demonstrating empathy, rapport building, and promoting hope and expectancy of change[1].

These skills have been widely established as an essential and

universal prerequisite for the delivery of any effective psychosocial or psychological care[1], and identified as core competencies required for all health workers in the forthcoming World Health Organization (WHO)'s Global Competency Framework for Universal Health Coverage[2].

Competent use of these skills by providers improves treatment outcomes for people accessing the whole range of health services, from surgery to mental health services[1,3], and use of these skills has been shown to support greater treatment compliance also outside the mental health field – for example, HIV treatment adherence[4].

The recent global experience of the COVID-19 pandemic has demonstrated that mental health and psychosocial support skills cannot be limited to mental health specialists only. Health systems will be able to better respond to public health emergencies as well as provide superior routine care if all health care providers are competent in foundational helping skills. Yet, in many health training programs, the attention to these skills and their evaluation is limited[5].

The WHO developed the Ensuring Quality in Psychological Support (EQUIP) project, which aims to strengthen quality in the delivery of psychosocial support and psychological training within the Universal Health Coverage agenda. The EQUIP platform will offer materials for trainers, supervisors, and program managers on competency-based training and assessment[6]. One such resource for trainers is the competency-based Foundational Helping Skills Trainer's Curriculum.

The formative process to develop this training package included a narrative review, identification of empirically supported common factors used across effective interventions[7], human centered design inputs, and extensive expert consultation, including experts from field sites, programme managers, and academics. Based on these contributions, a range of skills were identified. Examples include verbal and non-verbal communication skills, using culturally and age-appropriate terminology and concepts for distress, confidentiality, normalization of feelings, expression of empathy, promoting hope, and suicide risk assessment. In addition, based on the importance of attitudes in motivating caring behaviours[8], a module on attitudes toward helping others was included.

The training curriculum is in a modular format, to allow trainers to fit it to the trainees' needs based on brief competency assessments conducted throughout the training programme. The curriculum includes didactics, participatory group activities, and skill remediation techniques, which can be delivered online, face-to-face, or in a combined approach. Role-play based competency assessments[9] are conducted throughout the training to monitor progress, to determine minimum competency, and to ensure that the trainee does not engage in harmful behaviours (e.g., being dismissive or judgmental, ignoring or minimizing suicide warning signs)[9].

The EQUIP Foundational Helping Skills Trainer's Curriculum is intended to be a brief course: approximately 20 content hours, with flexibility based on the prior skill level of trainees. It is designed for implementation across a wide variety of government and non-government organization sectors, such as public health, family and community services, education, and law enforcement, with trainees such as professionals and para-professionals without prior training in mental health and psychosocial support skills.

Pilot testing of the training package is currently underway in Uganda, Nepal and Peru, assessing its feasibility, acceptability, and perceived benefit for remote and in-person delivery.

The EQUIP Foundational Helping Skills Trainer's Curriculum aims to meet an indispensable need by ensuring that the growing workforce of health care professionals and non-specialist providers are competent in foundational helping skills. This, alongside other activities, will hopefully lead to improved quality of care and will be one step closer to achieving the goal of a competent health workforce for Universal Health Coverage.

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1. Wampold BE. World Psychiatry 2015;14:270-7.
2. Mills J, Middleton JW, Schafer A et al. Hum Resour Health 2020;18:15.
3. Han JL, Pappas TN. J Surg Educ 2018;75:88-94.
4. Erb S, Letang E, Glass TR et al. HIV Med 2017;18:623-34.
5. Holmes CL, Miller H, Regeher G. Med Educ 2017;51:732-9.
6. Kohrt BA, Schafer A, Willhoite A et al. World Psychiatry 2020;19:115-6.
7. Pedersen GA, Lakshmin P, Schafer A et al. J Behav Cogn Ther 2020;30:165-86.
8. Kohrt BA, Turner EL, Rai S et al. Soc Sci Med 2020;250:112852.
9. Kohrt BA, Jordans MJD, Rai S et al. Behav Res Ther 2015;69:11-21.

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