Eating disorders in the context of preconception care: fertility specialists' knowledge, attitudes, and clinical practices

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Objective(s): To gauge fertility specialists' knowledge, clinical practices, and training needs in regard to eating disorders.
Design: Cross-sectional study.
Settings: Fertility clinics.
Participants: Eighty Australian and New Zealand fertility specialists who were members of the Fertility Society of Australia.
Intervention(s): None.
Main Outcome Measures(s): Responses to an anonymously completed online questionnaire.
Result(s): Approximately 54% of doctors correctly identified the body mass index relevant to anorexia nervosa, and 30% identified menstrual disturbances for anorexia, while 63.8% of doctors incorrectly nominated maladaptive weight control behaviors as a characteristic of binge eating disorder. While clinicians (83.7%) agreed it was important to screen for eating disorders during preconception assessments, 35% routinely screened for eating disorders and 8.8% indicated that their clinics had clinical practice guidelines for management of eating disorders. A minority of participants (13.8%) felt satisfied with their level of university training in eating disorders, 37.5% of doctors felt confident in their ability to recognize symptoms of an eating disorder, and 96.2% indicated a need for further education and clinical guidelines. On most items examined, knowledge and clinical practices regarding eating disorders did not differ according to doctor gender or years of clinical experience working as a fertility specialist.
Conclusion(s): Knowledge about eating disorders in the context of fertility treatment is important. This study highlights the uncertainty among fertility specialists in detecting features of eating disorders. The findings point to the importance of further education and training, including the development of clinical guidelines specific to fertility health care providers. (Fertil Steril® 2016;■: ■–■. ©2016 by American Society for Reproductive Medicine.)
Key Words: Eating disorders, preconception, diagnostic criteria, fertility specialist, training

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The impact of modifiable lifestyle factors such as age, smoking, drinking, caffeine, and weight status on reproductive outcomes is widely known (1, 2). Under the rubric of preconception care, however, remains the little investigated topic of eating disorders within a fertility population (3–5). Eating disorders are serious mental illnesses related to weight and shape concerns, problematic eating behaviors, and maladaptive weight control behaviors that occur in women of childbearing years (6, 7). Estimates from large population–based surveys give a lifetime prevalence of any eating disorder among adult women of approximately 6% (8, 9). Similarly, 5%–7.5% of women experience some form of eating disorder during pregnancy (10, 11). Existing research findings on the occurrence of eating disorders in women undergoing fertility treatment vary according to inpatient or community-based assessment but the occurrence has been reported to be as high as 21%, particularly when patients present with forms of ovulatory disorders (3, 4, 12–14).

The current Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) (15), outlines three primary categories of eating disorders: anorexia nervosa (AN), bulimia nervosa (BN), and binge eating disorder (BED). Women with eating disorders have a high incidence of psychiatric comorbidity impacting overall patient

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mental health and quality of life (16, 17). Both AN and BN have varied and complex physical and neuroendocrine implications and can result in pervasive multibody organ changes involving the cardiovascular, gastrointestinal, hematological, dermatological, and skeletal systems including major dysfunctions of the endocrine system and metabolic processes relevant to fertility (18). Specifically, healthy female reproductive function is directly related to a woman's optimal body weight range and energy availability, with eating disorders influencing the activity of the hypothalamic-pituitary-ovarian axis (19, 20). Women with AN or BN are further at higher risk of adverse maternal-fetal outcomes including inadequate gestational weight gain in pregnancy, increased rates of miscarriage and cesarean section, and the delivery of newborns who are small for gestational age (7, 21). Moreover, use of ovulation induction in women who are reproductively suppressed secondary to an eating disorder increases the risk of multiple pregnancies, with added pregnancy and neonatal complications (12). Postnatally, difficulties with breast feeding, lower infant growth, unsettled infant temperament, concerns with toddler nutrition, and maternal mood disorders have also been reported in women who had an eating disorder during pregnancy (22). Consequently, from a fertility specialist perspective, knowledge and recognition of eating disorders are important to infertility patient reproductive outcomes including the physical health of the prospective child.

Despite the spectrum of physical and psychological effects of eating disorders, research suggests that eating disorders often go undetected by professionals working in the health system. Barriers to the detection of eating disorders are multifactorial but appear to centralize around four main issues: first, a commonly held societal view that it is normal for women to have discontent about their body weight and shape such that weight control behaviors are deemed normative (23); second, an inclination for patients with an eating disorder to either nondisclose, minimize symptoms, or engage in concealment of their disorder from their treating doctor (24, 25); third, a tendency for some health professionals to maintain negative attitudes and reactions towards patients with an eating disorder due to a perception that eating disorders are self-inflicted, relate to negative personality attributes, and are therefore of lesser clinical importance (26–29); and fourth, a lack of knowledge among health practitioners of the physical and psychological indications of an eating disorder due to limited tertiary training (30–34). Collectively these factors can result in poorer mental health literacy about eating disorders among health professionals, serving to reduce both diagnostic confidence and the likelihood of referral to relevant mental health networks for appropriate psychological interventions (35, 36).

Research on eating disorders in the reproductive medicine field has focused on investigating the perspectives of clinicians who primarily are generalists or who have an obstetric focus rather than a preconception specialization (32, 37, 38). Therefore the aims of this study were first to examine fertility specialists' knowledge about eating disorders, second to determine preconception clinical practices and attitudes towards the assessment and management of eating disorders, and third to gauge fertility specialists' training needs.

MATERIALS AND METHODS

Participants

This study sought participation from male and female Australian and New Zealand medical fertility specialists who were members of the Fertility Society of Australia (FSA). Respondents were English speaking and were from all states of Australia and both the north and south islands of New Zealand.

Questionnaire Composition

The questionnaire "Fertility Specialists' Knowledge and Attitudes towards Eating Disorders" is an adapted version of a questionnaire developed by Jones et al. (34), who investigated knowledge and attitudes towards eating disorders in a cohort of psychiatrists. The Jones et al. (34) questionnaire content was determined from multiple sources including diagnostic criteria for AN and BN from the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) (39) and diagnostically equivalent criteria and body mass index (BMI) weight thresholds from the International Classification Diseases Manual, 10th revision (ICD-10) (40). As BED was not assessed by Jones et al. (34), for consistency of diagnostic classifications, adjunct DSM-IV (39) research criteria for BED were incorporated into our questionnaire. The decision to use the DSM-IV criteria rather than update the questionnaire with the contemporary criteria from DSM-5 (15) was to reduce the potential confound of participant unfamiliarity with the comparatively new changes to DSM-5 eating disorder diagnostic criteria at the time of initial data collection. These DSM-5 changes include the deletion of the criteria for amenorrhea and the absence of specificity of weight thresholds, criteria both known to be of importance within the context of fertility.

Our study questionnaire focused on five main domains: [1] demographic questions; [2] doctor knowledge of diagnostic criteria relating to AN, BN, and BED; [3] preconception clinical practices for assessing patient BMI and eating disorders; [4] attitudes towards clinical practices associated with eating disorders including management and referral processes; and [5] fertility specialist training needs. Response methods used included check boxes, yes/no response, and 5-point Likert-type items ranging in scale from 1 = strongly disagree to 5 = strongly agree.

Procedure

One hundred fifty fertility specialists who were registered as medical members of the FSA were sent an initial e-mail by a collaborating fertility specialist outlining the objectives of the study, details for consent, and a direct URL to access the study questionnaire for voluntary participation. The online questionnaire took approximately 10 minutes to complete, and no identifying participant details were collected. Two further e-mail reminders about the study were sent to