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Title page

The accuracy and suitability of eating disorder screening tools for Binge Eating Disorder and Bulimia Nervosa in a primary care setting: a systematic review and narrative summary

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Abstract

Background

Despite available screening tools for eating disorders (EDs), the accuracy and suitability of these in identifying Binge eating disorder (BED) and Bulimia nervosa (BN) in a primary care setting are undetermined, despite BED/BN being the most common EDs.

Aim

To evaluate the accuracy and suitability of ED screening tools for BED/BN in a primary care setting.

Design and setting

A systematic review with narrative synthesis in a primary care setting.

Method

Six databases were searched, including MEDLINE, PsycINFO, and Embase. Two independent reviewers screened studies for inclusion. Studies were included that assessed the accuracy and/or suitability of screening tools for BED/BN in primary care. Quality was assessed using the Mixed Methods Appraisal Tool. A narrative summary was created after integrating the data using a convergent segregated approach.

Results

Four studies met inclusion criteria. The included studies reported on BEDS-7, EDE-Q and SCOFF screening tools. No studies reported on the accuracy of screening tools for BED and suitability for BN. BEDS-7 and EDE-Q screening tools reported variations in their suitability in primary care. The main barrier to implementation in primary care was time constraints and a lack of trust in screening. SCOFF showed high sensitivity (97.88%–100%) for BN but had lower specificity (89.6%–94.4%), increasing false positives.

Conclusion

ED screening tools face feasibility and accuracy concerns for BED/BN in a primary care setting. Further research is needed to validate screening tools' accuracy and suitability in a primary care setting for BED and BN in the general population.

Keywords

Binge eating disorder, bulimia nervosa, primary health care, general practice, screening, systematic review, suitability, accuracy, eating disorders, identification

How this fits in

This research is highly relevant to general practice, where early identification is crucial for early intervention. Given that there is an increase in prevalence of BED/BN, with primary care providers often serving as the first point of contact or presentation for individuals with BED/BN, understanding the accuracy and suitability of screening tools for these eating disorders within the primary care setting is essential.

Introduction

Eating disorders (EDs) are serious mental health conditions characterised by disturbed eating patterns, a focus on body image, and a preoccupation with food, weight, or shape (1). The most common EDs are binge-type EDs, such as Bulimia

Nervosa (BN) and Binge Eating Disorder (BED), affecting approximately 4.2% of the global population (2,3) with suggestions of a much higher real prevalence (3). Both BED and BN are characterised by recurrent binge episodes, during which individuals consume a large amount of food in a short period of time without the ability to control the behaviour (1). BN is further characterised by compensatory behaviours such as self-induced vomiting, excessive exercise, or laxative use to counteract the potential effects of the binge episode, such as weight gain (1). While BN and Anorexia Nervosa (AN) share some common characteristics, such as a focus on weight, when looking at eating disorder symptoms dimensionally instead of categorically, BED and BN are suggested to share clinical presentations more than AN and BN (4).

Delayed identification of BED/BN could lead to reduced quality of life (5), with an increased risk of mortality and comorbidities such as obesity or depression (6–9), sub-optimal use of the healthcare system, and presents an economic burden (10–12). Hence, early identification of BED/BN is crucial. However, poorly performing screening tools can lead to overdiagnosis and overmedicalisation (13). Despite primary care being the hub for early identification (14), detection rates of BED/BN in primary care remain low (15).

Several screening tools have been developed to identify eating disorders (EDs), including BED and BN (16). The most commonly used screening tools, both in research and practice, are the EDE-Q (17) and the SCOFF (18). However, there is an inconsistency in the validity of screening tools. One systematic review reported that SCOFF have high sensitivity in young females with anorexia nervosa (AN) when compared to clinical interviews (19). When compared to EDE-Q as a benchmark,

SCOFF had lower sensitivity and specificity than Eating Disorders Screen for Primary Care and Screen for Disordered Eating (20). However, the convergence between EDE-Q and clinical interviews was low to moderate, as it both overestimated and underestimated AN and BN (21,22). This questions the efficacy of EDE-Q being used as a comparator in earlier studies.

While there is some evidence for good sensitivity of these screening tools for detecting EDs (23–25), mainly AN, more evidence is needed to understand screening accuracy in other EDs, such as BED and BN, and the potential suitability of screening tools for key stakeholders within the primary care setting. Feltner et al. conducted a systematic review which aimed to address the general accuracy of ED screening tools in a comprehensive review on primary care and the US (26). However, measures of suitability and accuracy of these tools within primary care for BED and BN were not reported on. In addition, studies were limited to the US. Hence, building on Feltner et al.'s work and the gap identified by the authors, this systematic review aims to evaluate the accuracy and suitability of ED screening tools for BED/BN in a primary care setting.

Methods

Protocol

The protocol for this review was prospectively registered with the PROSPERO database of systematic reviews (Registration Number: CRD42024595253). This systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (27).

Data sources and search strategy

The search was conducted in the following databases in August 2024: CINAHL Complete (EBSCO), Cochrane Central Register of Controlled Trials (CENTRAL), Embase, MEDLINE, PsycINFO, Global Health (OVID). Keyword search included binge*", "bulimi*", "general practi*", "primary healthcare", "screening*", and "questionnaire*" (see full search strategy in Supporting Information Appendix A). Due to the difference in MESH term availability across databases, some adaptations were made to ensure standardisation. Backwards and forward citation was implemented. Grey literature was considered for search; however, it was not included due to the limited time and resources of this study, and was judged to be unlikely to meet the quality required for inclusion in this review.

Selection criteria

Original qualitative, quantitative and mixed-method research that reported on the accuracy and/or the suitability of EDs screening tools for BED and BN in a primary care setting in peer-reviewed sources was included in this review (See Table 1. for definitions). No restriction was applied for language, year of publication, country or ED screening tool. The primary care setting included professions such as general practitioners (GPs), dentists, community pharmacists, optometrists, nurse practitioners and psychological wellbeing practitioners (PWPs) and patients of all ages with BED or BN. Studies with a true screening population sample were included. However, studies with low prevalence testing in primary care were also included to allow for a more generic understanding of the current situation. Studies using a diagnostic population were excluded. Studies focusing on secondary and tertiary care settings were excluded. Studies where non-primary care HCPs were administering the screening tools were excluded. Studies reporting exclusively on Anorexia Nervosa

(AN), Other specified feeding or eating disorders or Avoidant/restrictive food intake disorder were excluded.

Table 1. Definition of terms

Accuracy	Any objective measurement of a tool's ability to accurately detect BED/BN.
Suitability	Views and opinions of health care practitioners (HCPs) or patients on the usage of screening tools within the primary care context and/or on BED/BN

Study selection

First, title and abstracts were screened by two independent reviewers (JE, RY) using EndNote. Potentially relevant studies were subsequently retrieved and screened in full text (JE, RY). After full-text screening, potential articles were assessed for inclusion by a third and fourth independent reviewer (SK, JS). Disagreements were resolved via discussion.

Data extraction

Data from the included studies were extracted on the study-level by JE and RY. Extracted data included title, authors, year and country of publication, design, diagnostic and screening tool used, recruitment setting, sample characteristics and accuracy and suitability results.

Quality Assessment

The quality of the papers was assessed by RY, SK and JS independently using the Mixed Methods Appraisal Tool (MMAT) (28). The MMAT assesses quality using a set of questions depending on the study design. We identified the design of the studies included for data analysis and then chose the corresponding measure.

Data Analysis

Due to the amount and type of studies included, a meta-analysis was neither appropriate nor feasible for data synthesis, hence we deviated from our original protocol. Extracted data was synthesised using a convergent segregated approach as described by the Joanna Briggs Institute (29), and a narrative summary was created to describe the accuracy and suitability of EDs' screening tools reporting separately for BED and BN.

Results

Study Selection

The search results identified 3101 records, of which 1422 were duplicated. 70 studies were eligible for full-text screening, of which four studies were included in data analysis. See Figure 1. for detailed selection process.

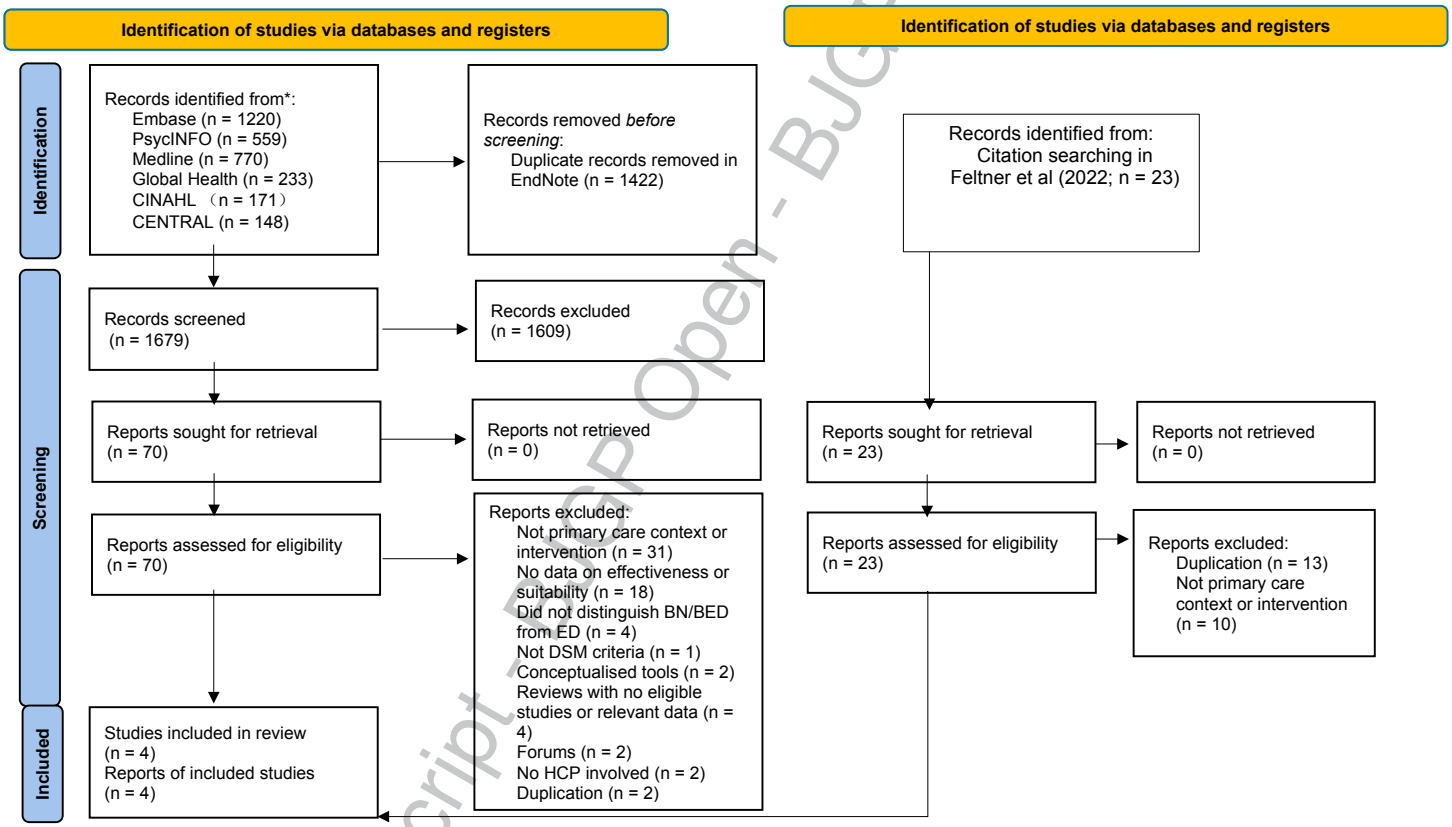

Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram.

215 **Overview of Studies**

216 The included studies were conducted in the UK (30), US (31,32) and Spain (33). Three
217 studies reported on the accuracy of screening tools using sensitivity and specificity
218 (30,32,33). Two studies reported on suitability (31,32). Two accuracy studies
219 compared screening tools to clinical interviews. See Table 2. for further details.
220

221 **Table 2.** Characteristics of included studies

Reference	Location	Tool administrator	Population	Gender (%)	Tool	Standard procedure	Condition	Data collection	Data analysis	COSMIN Dimensions
McClure et al. 2020 (31)	USA	Nurse practitioners (N=3), Registered nurse (N=1)	Adolescent family clinic attendees without ED diagnosis (N = 7)	PCP gender unavailable Patients: M (57.1%), F (42.9%)	EDE-Q	No comparison	BED	Screening: in-person survey during clinic visit; PCP views: pre- and post-implementation survey	Qualitative Analysis, not further specified	Not reported
Herman et al. 2017 (32)	USA	N/A	Primary care physicians serving adults (N=122), Psychiatrists (N=123)	PCPs: M (69.7%), F (30.3%) Psychiatrist: M (62.6%), F (37.4%)	BEDS-7	No comparison	BED	Online surveys of PCPs	Descriptive statistics	Not reported
Luck et al. 2002 (30)	UK	Primary care professional	Sequential general practice attendees (N=341)	F (100%)	SCOFF	Clinical diagnostic interview based on DSM-4 (10-15 minutes)	BN, AN, EDNOS	Cross-sectional questionnaires (2 minutes)	Comparison with clinical interview diagnosis	Not reported

Garcia-Campayo et al. 2005 (33)	Spain	Primary care professional	General practice attendees with a probable ED diagnosis assessed by GP (N=203)	F (100%)	Spanish SCOFF	Clinical Assessment in Neuro-psychiatry (SCAN)	BN, AN, EDNOS	Cross-sectional question-naires (2 minutes)	Comparison with clinical interview diagnosis	Not reported

Risk of Bias/Quality

All studies were assessed to have medium quality and a medium risk of bias (See Tables 3a and 3b).

Table 3a. Quality appraisal of included studies (Mixed methods)

Author (year)	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?	5.2. Are the different components of the study effectively integrated to answer the research question?	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?
McClure et al. 2020 (31)	Yes	Yes	Yes	Yes	Can't tell

228

229 **Table 3b.** Quality appraisal of included studies (Quantitative descriptive)

Author (year)	4.1. Is the sampling strategy relevant to address the research question?	4.2. Is the sample representative of the target population?	4.3. Are the measurements appropriate?	4.4. Is the risk of nonresponse bias low?	4.5. Is the statistical analysis appropriate to answer the research question?
Luck et al. 2002 (30)	Yes	Can't tell	Yes	Can't tell	Yes
Garcia-Campayo et al. 2005 (33)	Yes	Can't tell	Yes	Can't tell	Yes
Herman et al. 2017 (32)	Yes	No	Yes	Can't tell	Yes

Narrative Synthesis

Binge Eating Disorder (BED)

Herman et al. (32) explored the use of the BEDS-7, a condition-specific screening tool, among both HCPs in primary care and psychiatrists, with over 75% of respondents considering BEDS-7 to be either “very” or “somewhat” valuable and easy to use. According to HCPs, the primary reason for usage was to identify and initiate discussion on binge eating, while forgetfulness was the main reason for failing to use BEDS-7. Despite positive responses about usage, limited conclusions can be made about the suitability of BEDS-7 for BED. McLure et al. (31) reported similar findings on the usefulness of EDE-Q, a general ED screening tool, among HCPs in primary care in identifying BED risk factors in adolescents. However, the suitability of EDE-Q to the primary care setting was reported to be only adequate. While some HCPs acknowledged the potential positive benefits of using EDE-Q on adolescents’ health, others were unsure about the potential effects that EDE-Q integration into practice could have on patient care delivery. The main concerns about the implementation of screening into practice were stigma, lack of trust in screening, HCPs, and insufficient screening time. Only one HCP reported confidence in integrating EDE-Q without disrupting patient care. Overall, while a condition-specific tool is reported to be more useful and easier to use than a general ED screening tool, both have limitations in their implementation in practice. Hence, no firm conclusions can be made about the suitability of BEDS-7 and EDE-Q due to limited data and a limited sample.

Regarding accuracy, no studies reported on specificity and sensitivity measures for BED. Two studies (30,33) reported accuracy for Eating Disorder Not Otherwise Specified (EDNOS), which included BED in the DSM-IV. However, due to the separate

categorisation for BED in DSM-5, the statistical results did not allow for conclusions regarding the accuracy of screening for BED.

Bulimia Nervosa (BN)

No studies reported on the suitability of screening tools for BN or the primary care setting. Studies focusing on accuracy reported on sensitivity, specificity, and applicability in different patient populations. Both Garcia-Campayo et al. (33) and Luck et al. (30) reported high sensitivity of the SCOFF questionnaire (97.88%; 100%) for detecting BN, which might be due to the population used in the study. However, differences between SCOFF versions are noted with Garcia-Campayo et al. (33) reporting high specificity (94.4%) for the Spanish version with a cut-off at >2 positive responses, while Luck et al. (30) reported a lower specificity (89.6%) for the English SCOFF. However, this data did not separate the outcome for AN and BN; thus, we cannot make a strong conclusion for BN. Luck et al. (30) reported a positive predicted value of 24.4% (12.9%-39.5%) for SCOFF. Garcia-Campayo et al. (33) argued that this predictive value could be due to low ED prevalence in primary care. In two EDNOS cases, non-disclosure of symptoms resulted in missed cases. Hence, the authors (30) summarised that overidentification in this case could be acceptable, as patients who do not meet BN diagnostic criteria are harder to detect, and perhaps further questioning is needed after a positive screening result instead of automatic referral.

Despite both condition-specific and general ED screening tools being considered useful by HCPs for BED, feasibility concerns limited their perceived suitability in primary care. Similarly, with screening accuracy for BN, SCOFF demonstrated strong sensitivity but lower specificity, indicating a high risk of false positives. The lack of DSM-5-specific validation for BED screening and the limited heterogeneity in BN

screening studies highlight the need for further research to refine tool applicability across diverse primary care populations.

Discussion

Summary

This systematic review aimed to explore the accuracy and suitability of ED screening tools on BED/BN in a primary care setting. Our synthesis highlights that screening tools for BED are perceived as useful by HCPs but face feasibility challenges due to limited data on their accuracy. SCOFF showed high sensitivity and limited specificity for BN with no data on suitability. Overall, there was a limited amount of evidence available to draw strong conclusions. This could be due to limited funding for ED research (34), debates around mental health screening (35) and the focus on secondary care in this field due to prioritisation of AN and low-weight BN treatment.

Strengths and limitations

To the authors' knowledge, this is the first systematic review exploring the accuracy and suitability of ED screening tools for BED/BN in a primary care setting. A rigorous, systematic approach was used to address this, combining qualitative and quantitative literature, generating an in-depth understanding. However, the small number of eligible studies, all of which had a medium risk of bias, lowered the reliability of conclusions. The evidence was not the most balanced, with only the accuracy or suitability of tools for each condition, not allowing a comparison of the tools' performances for BN or BED. Furthermore, the differences in populations used to test the tools, combined with limited reporting of COSMIN dimensions, did not allow us to draw strong conclusions. However, it did highlight significant gaps in this field. A notable limitation was the

reliance on studies using DSM-IV criteria for BN, which do not fully align with the current DSM-5 diagnostic criteria. Future research should prioritise validating existing tools under the DSM-5 criteria and explore their use in a primary care setting, to simulate how screening can be realistically implemented in HCPs' routines. This could improve the understanding of the accuracy and suitability of screening tools for a wider population.

Comparison with existing literature

Our findings suggest that even if a screening tool is accurate, its implementation into practice might be limited. This is similar to the literature on primary care delivery, which suggests that limited consultation times available for GPs pose a barrier to implementing additional screening (36). Furthermore, Johnston et al (37) reported HCP concerns about follow-up actions after a positive screen due to potential differences in patient expectations around BED/BN management and the available pathways in their systematic review exploring the feasibility of eating disorders in primary care. This was further supported by Bryant et al (38), whose systematic review recommended that a clear post-positive screen procedure needs to be in place for effective referral and treatment. Hence, further investigation is needed into the practical integration of BED/BN screening into primary care.

Findings from this review suggest that SCOFF might not be suitable for BED/BN and for the primary care setting. This is in line with the literature, which suggests that SCOFF was developed without using a co-design framework (39), potentially making it less suitable for BED/BN and primary care. However, not using co-design in the development of tools is not unheard of, as a systematic review reported limited input

from individuals with lived experiences on clinical tool design, administration or evaluation (40). Stakeholder engagement is crucial in the development process of screening tools as it can improve accuracy, suitability, engagement and implementation into practice as seen in PHQ-9 (41). Hence, lived experience of BED/BN is important to be included in general EDs screening tools to improve suitability and potentially accuracy (42).

Our findings highlight that SCOFF produced mixed results regarding its accuracy on BN identification in primary care. In clinical samples, SCOFF has been largely sensitive (69.6%-100%) and specific (73.6%-89.6%) (43–45). However, this decreased in general population samples, where sensitivity ranges from 53.7% to 77.4%, and specificity from 60.5% to 93.5% (46–48) which is consistent with our findings. Kutz et al. (19) commented that SCOFF was initially developed and validated in care-control studies in specific and homogeneous populations with a high prevalence of ED, such as young women with AN and BN. This suggests that SCOFF might not be effective for BED in primary care in a general population, especially considering the varying demographics of general practice populations, variations in clinical strategy and governance between practices. Given that primary care settings are the first point of contact with healthcare and are the main hubs to identify BED and BN early, additional validation of SCOFF in more heterogeneous samples is needed (19,38).

Implications for Research and/or Practice

Our findings and the existing literature show that further research is needed to better understand the accuracy and suitability of ED screening tools for BED/BN in primary

356 care. However, it is important to highlight that it is the psychometric properties of
357 existing tools that need improvement, as suggested by Hay et al. (24), rather than
358 developing new tools. Based on the findings of this review, a summary of
359 recommendations is presented by the authors in Table 4.

360 **Table 4.** Recommendations based on the review

Recommendation		Explanation
Further understanding of currently available condition-specific and general ED screening tools	**Validation Studies**	The sensitivity and specificity of the BEDS-7 and EDE-Q, as well as the accuracy of the SCOFF for BED, should be evaluated in a primary care setting. Further empirical evidence is needed in the form of, for example, randomised controlled trials or large data set studies to measure the health benefits of screening for BED and BN.
	Suitability studies	There is a need to assess the needs of stakeholders (primary care staff and lived experience) to address gaps in the suitability of existing screening tools for BED and BN in primary care.
Exploring and Addressing Implementation Barriers		Further research should explore practical strategies to overcome barriers to screening implementation for eating disorders.
Development and Implementation of Screening Protocols		development of a clear post-positive screening protocol is recommended to tackle potential false-positives and barriers to screening implementation

361

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Ethical approval

Not applicable.

Data availability

Materials and data used for the conduct of this research are available from the study authors on request.

Competing interests

The authors declare no competing interests.

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References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th edn. Arlington, DC: American Psychiatric Association; 2013.

2. Galmiche M, Déchelotte P, Lambert G, Tavolacci MP. Prevalence of eating disorders over the 2000–2018 period: a systematic literature review. Am J Clin Nutr. 2019;109(5):1402–13.

3. Santomauro DF, Melen S, Mitchison D, et al. The hidden burden of eating disorders: an extension of estimates from the Global Burden of Disease Study 2019. Lancet Psychiatry. 2021;8(4):320–8.

4. Williamson DA, Gleaves DH, Stewart TM. Categorical versus dimensional models of eating disorders: An examination of the evidence. Int J Eat Disord. 2005;37(1):1–10.

5. Sheehan DV, Herman BK. The Psychological and Medical Factors Associated With Untreated Binge Eating Disorder. Prim Care Companion CNS Disord. 2015;17(2):27178.

6. Waller G, Schmidt U, Treasure J, et al. Problems across care pathways in specialist adult eating disorder services. Psychiatr Bull. 2009 Jan;33(1):26–9.

7. Wassenaar E, Friedman J, Mehler PS. Medical Complications of Binge Eating Disorder. Psychiatr Clin North Am. 2019;42(2):275–86.

8. Tith RM, Paradis G, Potter BJ, et al. Association of Bulimia Nervosa With Long-term Risk of Cardiovascular Disease and Mortality Among Women. JAMA Psychiatry. 2020;77(1):44–51.

9. Baenas I, Etxandi M, Fernández-Aranda F. Medical complications in anorexia and bulimia nervosa. Med Clínica Engl Ed. 2024;162(2):67–72.

10. Tannous WK, Hay P, Girosi F, et al. The economic cost of bulimia nervosa and binge eating disorder: a population-based study. Psychol Med. 2022;52(16):3924–38.

11. Streatfeild J, Hickson J, Austin SB, et al. Social and economic cost of eating disorders in the United States: Evidence to inform policy action. Int J Eat Disord. 2021;54(5):851–68.

12. Lee SM, Hong M, Park S, et al. Economic burden of eating disorders in South Korea. J Eat Disord. 2021;9(1):30.

13. Grimes DA, Schulz KF. Uses and abuses of screening tests. The Lancet. 2002;359(9309):881–4.

14. Ivancic L, Maguire S, Miskovic-Wheatley J, et al. Prevalence and management of people with eating disorders presenting to primary care: A national study. Aust N Z J Psychiatry. 2021;55(11):1089–100.

15. Hoek HW, van Hoeken D. Review of the prevalence and incidence of eating disorders. Int J Eat Disord. 2003;34(4):383–96.

16. House ET, Lister NB, Seidler AL, et al. Identifying eating disorders in adolescents and adults with overweight or obesity: A systematic review of screening questionnaires. Int J Eat Disord. 2022;55(9):1171–93.

17. Fairburn CG, Beglin SJ. Assessment of eating disorders: Interview or self-report questionnaire? Int J Eat Disord. 1994;16(4):363–70.

18. Morgan JF, Reid F, Lacey JH. The SCOFF questionnaire: assessment of a new screening tool for eating disorders. BMJ. 1999;319(7223):1467–8.

19. Kutz AM, Marsh AG, Gunderson CG, et al. Eating Disorder Screening: a Systematic Review and Meta-analysis of Diagnostic Test Characteristics of the SCOFF. J Gen Intern Med. 2020;35(3):885–93.

20. Maguen S, Hebenstreit C, Li Y, et al. Screen for Disordered Eating: Improving the accuracy of eating disorder screening in primary care. Gen Hosp Psychiatry. 2018;50:20–5.

21. Wolk SL, Loeb KL, Walsh BT. Assessment of patients with anorexia nervosa: Interview versus self-report. Int J Eat Disord. 2005;37(2):92–9.

22. Allen KL, Byrne SM, Lampard A, et al. Confirmatory factor analysis of the Eating Disorder Examination-Questionnaire (EDE-Q). Eat Behav. 2011;12(2):143–51.

23. Iragorri N, Spackman E. Assessing the value of screening tools: reviewing the challenges and opportunities of cost-effectiveness analysis. Public Health Rev. 2018;39(1):17.

24. Hay P, Hart LM, Wade TD. Beyond screening in primary practice settings: Time to stop fiddling while Rome is burning. Int J Eat Disord. 2022;55(9):1194–201.

25. Knopf A. USPSTF says not enough evidence to support screening for eating disorders. Brown Univ Child Adolesc Psychopharmacol Update. 2022;24(5):4–6.

26. Feltner C, Peat C, Reddy S, et al. Screening for Eating Disorders in Adolescents and Adults: Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA. 2022;327(11):1068–82.

27. Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

28. Hong, Q.N., Pluye, P., Fàbregues, S., et al. (2018). Mixed Methods Appraisal Tool (MMAT), version 2018.

29. 8.2 Concepts and considerations for mixed methods systematic reviews - JBI Manual for Evidence Synthesis - JBI Global Wiki [Internet]. [cited 2025]. Available from: https://jbi-global-wiki.refined.site/space/MANUAL/355829239/8.2+Concepts+and+considerations+for+mixed+methods+systematic+reviews

30. Luck AJ, MorganLuck JF, Reid F, et al. The SCOFF questionnaire and clinical interview for eating disorders in general practice: comparative study. BMJ. 2002;325(7367):755–6.

31. McClure S. Screening for Identification of Binge Eating Disorder in Adolescents [Internet] [D.N.P.]. 2020 [cited 2025]. Available from: https://www.proquest.com/docview/2454186259/abstract/C2CA271FE6B54300PQ/1

32. Herman BK, Deal LS, Kando JC, et al. Use and Value of the 7-Item Binge Eating Disorder Screener in Clinical Practice. Prim Care Companion CNS Disord [Internet]. 2017.

33. Garcia-Campayo J, Sanz-Carrillo C, Ibañez JA, et al. Validation of the Spanish version of the SCOFF questionnaire for the screening of eating disorders in primary care. J Psychosom Res. 2005;59(2):51–5.

34. Schmidt U, Adan R, Böhm I, et al. Eating disorders: the big issue. Lancet Psychiatry. 2016;3(4):313–5.

35. Thombs BD, Coyne JC, Cuijpers P, et al. Rethinking recommendations for screening for depression in primary care. CMAJ Can Med Assoc J. 2012;184(4):413–8.

36. Wade TD, Johnson C, Cadman K, Cook L. Turning eating disorders screening in primary practice into treatment: A clinical practice approach. Int J Eat Disord. 2022;55(9):1259–63.

37. Johnston O, Fornai G, Cabrini S, Kendrick T. Feasibility and acceptability of screening for eating disorders in primary care. Fam Pract. 2007;24(5):511–7.

38. Bryant E, Spielman K, Le A, et al. Screening, assessment and diagnosis in the eating disorders: findings from a rapid review. J Eat Disord. 2022;10(1):78.

39. Morgan JF, Reid F, Lacey JH. The SCOFF questionnaire: assessment of a new screening tool for eating disorders. BMJ. 1999;319(7223):1467–8.

40. Baines R, Donovan J, Regan de Bere S, et al. Patient and public involvement in the design, administration and evaluation of patient feedback tools, an example in psychiatry: a systematic review and critical interpretative synthesis. J Health Serv Res Policy. 2019;24(2):130–42.

41. Seeralan T, Härter M, Koschnitzke C, et al. Patient involvement in developing a patient-targeted feedback intervention after depression screening in primary care within the randomized controlled trial GET.FEEDBACK.GP. Health Expect. 2021;24(S1):95–112.

42. Papastavrou Brooks C, Kafle E, Butt N, et al. Co-producing principles to guide health research: an illustrative case study from an eating disorder research clinic. Res Involv Engagem. 2023;9(1):84.

43. Hill LS, Reid F, Morgan JF, Lacey JH. SCOFF, the development of an eating disorder screening questionnaire. Int J Eat Disord. 2010;43(4):344–51.

44. Baudet ML, Montastier E, Mesthe P, et al. The SCOFF score: A screening tool for eating disorders in family practice. E-SPEN J. 2013;8(3):e86–9.

45. Maguen S, Hebenstreit C, Li Y, et al. Screen for Disordered Eating: Improving the accuracy of eating disorder screening in primary care. Gen Hosp Psychiatry. 2018;50:20–5.

46. Solmi F, Hatch SL, Hotopf M, et al. Validation of the SCOFF questionnaire for eating disorders in a multiethnic general population sample. Int J Eat Disord. 2015;48(3):312–6.

47. Wan Wahida WMZ, Lai PSM, Abdul Hadi H. Validity and reliability of the english version of the sick, control, one stone, fat, food (SCOFF) in Malaysia. Clin Nutr ESPEN. 2017;18:55–8.

48. Bryant E, Miskovic-Wheatley J, Touyz SW, et al. Identification of high risk and early stage eating disorders: first validation of a digital screening tool. J Eat Disord. 2021;9(1):109.