RESEARCH

Patients with eating disorders

How well are family physicians managing them?

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ABSTRACT

OBJECTIVE To assess the attitudes and behaviour of family physicians toward patients with eating disorders (EDs) and to assess these physicians' ongoing learning needs.

DESIGN Confidential survey by mail.

SETTING Family practices in London, Ont.

PARTICIPANTS Two hundred thirty-six general FPs.

MAIN OUTCOME MEASURES Proportion of FPs seeing patients with EDs, screening and management practices, learning needs.

RESULTS Survey response rate was 87.7%; 64% of respondents were male, 36% were female, and 54% had completed a family medicine residency program. Overall, FPs were more comfortable with diagnosis, and less comfortable with management, of EDs. Most respondents shared care with other professionals, usually psychiatrists and nutritionists. Female physicians had identified a larger number of ED patients in their practices and were more likely to screen routinely for EDs. Three quarters of FPs rated their undergraduate training in EDs as poor, and 59% thought their postgraduate training was poor. Outpatient services, diagnostic issues, screening needs, and management planning were identified as important learning needs. Family physicians thought these needs could be best addressed in interactive workshops or peer-led case-discussion groups.

CONCLUSION Family physicians are important in first-line treatment of EDs, but many barriers prevent effective diagnosis and management. Validated screening tools and management strategies could assist FPs in caring for patients with EDs.

RÉSUMÉ

OBJECTIF Examiner les attitudes et comportements des médecins de famille à l'égard des patients qui présentent des troubles du comportement alimentaire (TCA) et déterminer les besoins de formation additionnelle de ces médecins.

TYPE D'ÉTUDE Enquête confidentielle par correspondance.

CONTEXTE : Les cabinets de médecine familiale de London, Ontario.

PARTICIPANTS Deux cent trente-six médecins de famille (MF) non spécialisés.

PRINCIPALES MESURES DE RÉSULTATS Proportion des médecins recevant des patients souffrant de TCA, modes habituels de dépistage et de traitement, besoins de formation.

RÉSULTATS Le taux de réponse à l'enquête était de 87,7%; parmi les répondants, 64% étaient des hommes, 36% des femmes et 54% avaient complété un programme de résidence en médecine familiale. Dans l'ensemble, les MF étaient plus à l'aise avec le diagnostic de TCA mais ils l'étaient moins avec le traitement. La plupart des répondants traitaient les patients en association avec d'autres professionnels, habituellement des psychiatres et des nutritionnistes. Parmi les MF, les femmes avaient diagnostiqué plus de cas de TCA au cours de leur pratique et elles faisaient plus volontiers le dépistage de cette affection. Les trois-quarts des MF jugeaient leur formation en TCA insuffisante au premier cycle et 59% avaient une opinion semblable de leur formation post-doctorale. Parmi les besoins de formation les plus importants, mentionnons les services de consultation externe, le problème du diagnostic, le besoin de dépistage et la planification du traitement. Les MF consultés considèrent que des ateliers interactifs ou des groupes de discussion animés par des pairs seraient la meilleure façon de combler ces lacunes.

CONCLUSION Les MF ont un rôle important à jouer dans le traitement de première ligne des TCA, mais plusieurs obstacles les empêchent de poser un diagnostic et d'instaurer un traitement adéquats. Des méthodes de dépistage et des stratégies de traitement validées pourrait aider les MF à mieux traiter les patients souffrant de TCA.

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Eating disorders (EDs) are a common and underrecognized source of psychological and physical morbidity and mortality. Potentially life-threatening medical complications and disruptions in social functioning, family life, and mood are common.

Estimates of prevalence vary with the population studied, but anorexia nervosa (AN) affects approximately 1% of female adolescents, and bulimia nervosa (BN) anywhere from 3% to 15%.[1,2] Many more girls and women do not fit these diagnostic categories, but still have disordered eating behaviours and the resulting complications. Men are also affected, but at a rate 5% to 10% that of women.[3] The prevalence of BN in particular has increased over the last 30 years,[4] possibly because the disorder is increasingly recognized, especially among men.

Family physicians are often an important first contact in detection and treatment of EDs.[3] They know their patients well and sometimes detect changes in behaviour early on, before disordered eating becomes entrenched. Eating disorders are difficult to detect. Patients are sometimes in denial of their illness; in the case of AN, behaviours and resultant weight loss are often ego-syntonic, and patients do not see them as a problem. With BN, patients can be ashamed, can be reluctant to admit their behaviour, and do not always exhibit obvious changes in weight.[5,6] Treatment programs can be difficult to access because they are far away and expensive.

What physicians report

Relatively little literature directly addresses the needs of family physicians in managing these complicated patients. In 1996, Bursten et al[6] published the results of a survey of Ohio family practitioners' experiences with BN. Their results showed that 30% of family physicians who responded had never diagnosed an ED, and most of the remainder shared care with other health professionals. Younger and female physicians were more likely to have bulimic patients. The study was limited to BN and did not directly address family physicians' learning needs. A British study of general practice from 1988 to 1993 showed that 80% of AN cases and 60% of BN cases were referred to secondary care.[4]

Current training programs could be inadequate for preparing family physicians to manage EDs. A 1987 US study[7] surveyed physicians in various disciplines about their training in adolescent medicine. Approximately 70% identified their training in EDs as being insufficient, but only 15% wanted additional training.[7] In 1998, British general practice trainees were asked to assess their clinical competence in all areas of psychiatry, both before and after a 6-month psychiatric placement. All aspects of competence improved, except for the ability to diagnose EDs.[8] A recent Canadian study designed to evaluate the effectiveness of mental health training in a family practice residency program assessed physician confidence in handling 23 psychiatric issues, but did not address EDs.[9] Bryant-Waugh et al challenged a group of physicians to make diagnoses on a series of case vignettes, two of which were AN. One third of pediatricians suggested AN within their differential diagnoses compared with only 2% of primary care physicians.[10]

Family physicians are unlikely to screen for EDs routinely. A retrospective chart audit of primary care practitioners in 1996 revealed that, during periodic health examinations of young women, nurse practitioners were much more likely to ask about eating behaviours or to perform nutritional assessments than were physicians.[11] Despite the existence of validated, relatively simple screening tools, family physicians are unlikely to screen for these disorders during periodic health examinations.[12,13] The reasons for this oversight are unclear, but could be due to a lack of awareness, poor training, or a perception that "once the cat is out of the bag," there are few resources family physicians can rely upon to provide treatment.

Practice patterns of Canadian family physicians with regard to ED patients are unknown. This is the first survey to address such practice patterns in a Canadian setting.

Objectives

Our study assessed attitudes and behaviour of family physicians caring for patients with EDs. Specifically, we asked the following questions.

- What proportion of London, Ont, family physicians see ED patients?

Dr Boulé *is an emergency physician at St Joseph's Health Centre in London, Ont. This work was undertaken while he was a resident in the family medicine program at the University of Western Ontario.* †**Dr McSherry** *died January 22, 2002. Among his many achievements, he served as Chief of Family Medicine at the London Health Sciences Centre and as a Professor in the Departments of Family Medicine and Psychiatry at the University of Western Ontario. He practised family medicine at the Victoria Family Medical Centre in London, providing comprehensive care for many eating disorder patients.*

- How are those patients managed?
- Do family physicians routinely screen for these disorders?
- Are they comfortable diagnosing and managing these conditions?
- Do family physicians require further training and, if so, what type?
- Do answers to these questions vary with physicians' sex, years in practice, training programs, or practice styles?

METHODS

A 22-point questionnaire, modeled after a previously validated survey instrument,[6] assessed family physicians' level of comfort with ED patients, practice patterns, type of training, and demographic information. Our survey differed from the original study in that it was shorter and attempted to assess physicians' attitudes and learning needs. The survey was pilot-tested on residents and physicians at our centre, and ethics approval was obtained. In November 1999 the survey was mailed to all general family practitioners in London (n=236). This was not a random sample, but rather the total number of family or general practitioners in practice because the behaviours of these physicians with regard to EDs were unknown. Specialty physicians, or practitioners who were known to restrict their practices to subspecialty fields, were excluded. Using the Dillman Total Design Method,[14] reminder notices and survey packages were sent in January and February 2000 to physicians who had not responded.

Data were analyzed using Epi Info to achieve such descriptive statistics as percentages, frequencies, and means and such tests of significance as χ^2. A *P* value of $<.05$ was considered significant.

RESULTS

Response rate was 87.7%: 129 respondents (63.9%) were male; 73 (36.1%) were female (**Table 1**). A significantly larger number of male physicians had been in practice for more than 30 years (20.9% versus 2.7% of female physicians [$P<.001$]). Most physicians saw between 100 and 200 patients weekly.

Fifty-four percent of respondents had completed a 2-year CCFP residency program. Thirty-three percent had completed a general internship, and the remainder identified other training programs: internal medicine, general surgery, pediatrics, and others. Eleven percent had a special interest in psychotherapy, but only one respondent had had specialized psychiatry training.

Table 1. Demographic characteristics of respondents

CHARACTERISTICS	NUMBER (%)
SEX	
Male	129 (63.9)
Female	73 (36.1)
AGE	
25-34	22 (10.9)
35-44	76 (37.8)
45-54	58 (28.9)
55-64	33 (16.4)
≥65	12 (6.0)
YEARS IN PRACTICE	
≤10	53 (26.2)
11-20	61 (30.2)
21-30	59 (29.2)
>30	29 (14.4)
PATIENTS PER WEEK	
≤50	14 (6.9)
51-100	37 (18.1)
101-150	95 (46.6)
151-200	49 (24.0)
>200	9 (4.4)
TRAINING PROGRAM	
CCFP residency	111 (54.1)
General internship	69 (33.7)
Other	25 (12.2)

Most physicians were caring for between one and five ED patients, and most had had one to 10 patients during their careers. Thirty-nine physicians (19.3%) had no ED patients, and six (3.0%) had never seen an ED patient. More male physicians had no current ED patients than female physicians, and female physicians were more likely to have had more than 10 ($P=.001$) (**Figure 1**). Female physicians were more likely to have had more than 20 ED patients ($P=.02$) during their careers. Although this study was not designed to measure prevalence, a rough estimate of the total number of ED patients in London who are known to their family physicians is between 500 and 1100.

Physicians who had been in practice more than 20 years were more likely to have no current ED patients ($P<.001$) or to have seen none during their careers ($P=.01$). Younger physicians, those in practice less than 10 years, tended to fall into the middle range, whereas physicians who had been practising

for between 11 and 20 years had seen the largest group of ED patients. Physicians trained through CCFP residencies were least likely to have no current ED patients, compared with physicians who completed general internships or other programs ($P < .001$). This difference is maintained when sex is controlled for.

When asked how often they screen for patients with EDs, 9.3% of physicians responded never, 24.9% often, 25.4% routinely, and 40.5% only if clinically indicated. More male physicians either never screen for EDs or look for them only if they have some reason to suspect them ($P = .02$). Female physicians were more likely to screen often or routinely (**Figure 2**). Screening practices did not vary significantly with years in practice or type of training program.

Physicians rated their comfort level with diagnosis and management of EDs (**Figure 3**). Overall, respondents were more comfortable with diagnosis and less comfortable with management. Comfort level did not vary significantly with years in practice, sex, or type of training program.

Few family physicians in London manage all aspects of care for their patients (3.6%), and few refer all aspects of care (7.1%). Most physicians (89.3%) share care with other health professionals; psychiatrists, nutritionists, and psychologists are most frequently consulted.

Most physicians rated the quality of their undergraduate and postgraduate training in EDs as poor (**Figure 4**). Level of satisfaction did not change significantly with type of training. Physicians were asked to rank issues about which they wanted more information. The most important learning issues were outpatient services, diagnostic methods, management planning, and screening tools. Inpatient management, nutritional assessment, and pharmacotherapy were less popular. When asked how they would prefer to acquire this information, physicians identified interactive workshops, peer-led case-discussion

Figure 1. Sex of physicians currently treating patients with eating disorders

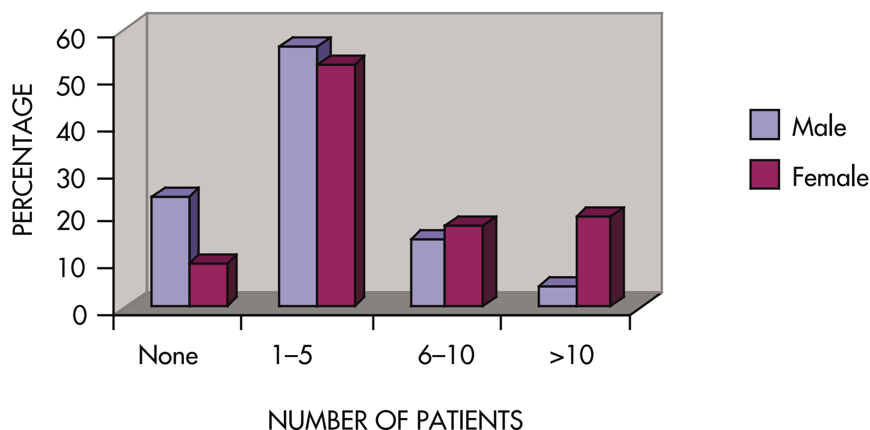
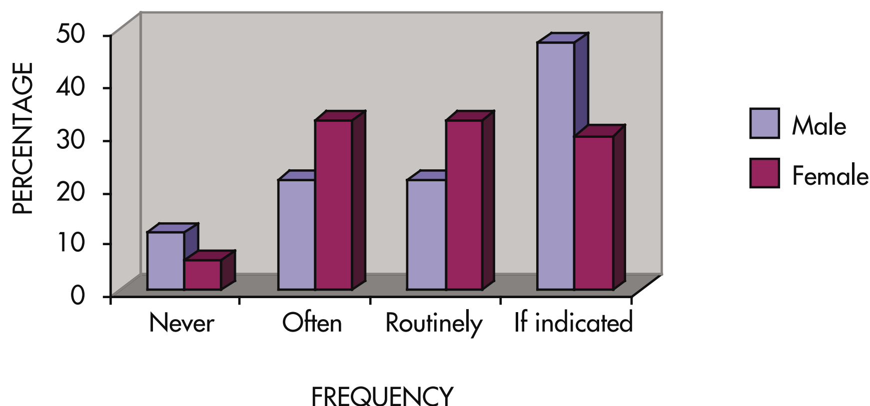


Figure 2. Screening practices



groups, and formal lectures. Journal articles, standardized patients, and Internet resources were less popular. Very few people believed that they could increase their knowledge by repeating medical school!

DISCUSSION

The high response rate (87.7%) to our survey is due in part to the methods,[14] but also reflects the difficulty physicians have in managing ED patients and the need for further education. Respondents practised in an urban centre with a large university and college population; therefore our results might not be generalizable to other communities.

Some family physicians in London (19%) had no patients with EDs in their practices. A smaller number (3%) had never seen a patient with an ED. Given the relatively high prevalence of EDs in the population, it is likely that many cases are unrecognized. Either the diagnosis has not been made, or

Figure 3. Physicians' comfort with diagnosis and management of eating disorders

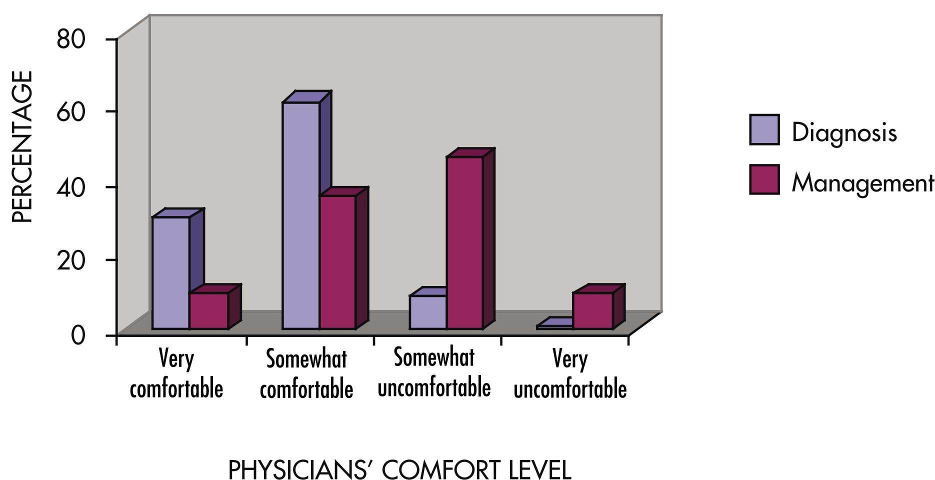
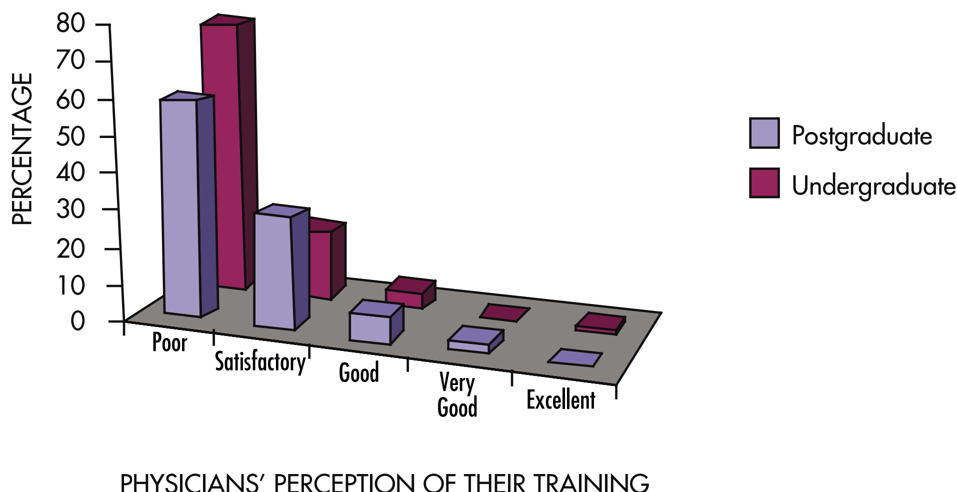


Figure 4. Quality of physicians' training in eating disorders



these patients are cared for by other health professionals.

As previous research shows,[6] younger female physicians tend to see a higher number of ED patients. The reasons for this are probably multifactorial. Female patients, particularly adolescents, are more inclined to visit female physicians. As well, female physicians could be more aware of EDs simply because the disease is more prevalent in women. It is difficult to sort out the independent effects of age, years in practice, sex, and training program, as younger physicians are more likely to be female and trained through CCFP residencies. However, CCFP residency training alone did not predict physicians' having a higher number of ED patients.

Male physicians were less likely to screen routinely for EDs, but rather relied on clinical indicators before attempting to make a diagnosis. Female physicians were more likely to screen for EDs during periodic health examinations, and relied less on clinical signs and symptoms. As discussed, EDs often have no overt signs, particularly in the case of bulimia. It seems reasonable to assume that undetected cases could be discovered by routine screening. Simple, validated screening tools, such as the SCOFF questionnaire (**Table 2**),[13] are easy to remember and administer, and have high sensitivity and specificity for both AN and BN. Use of these tools during periodic health examinations in populations at risk could improve the detection rate and perhaps prognosis.

Family physicians are more comfortable with diagnosis and less comfortable with management of EDs. This could reflect an ability to make the diagnosis, but difficulty in knowing what to do next. These disorders are complex, frequently have comorbidity, are relapsing and remitting, and can be too time-consuming to deal with in family practice.[1,5]

Table 2. SCOFF questionnaire screening tool: *Patients receive one point for every yes; a score of 2 or more indicates a likely case of anorexia nervosa or bulimia nervosa with a sensitivity of 100% and a specificity of 87.5%.*

Sick: Do you make yourself *sick* because you feel uncomfortably full?

Control: Do you worry you have lost *control* over how much you eat?

One stone: Have you recently lost more than *one stone* (6.3 kg, or 14 lbs) in a 3-month period?

Fat: Do you believe yourself to be *fat* when other people say you are too thin?

Food: Would you say that *food* dominates your life?

Particularly when inpatient assessment is required, family physicians simply do not have the necessary resources. Treatment programs are difficult to access because they are usually available only in large urban centres and have long waiting lists.

Satisfaction with undergraduate and postgraduate training programs was overwhelmingly low, and did not vary significantly with the type of training. As was previously seen, even a 6-month psychiatric placement is inadequate preparation for managing these disorders.[8] Given the breadth of family medicine, it is probably unrealistic to expect that proficiency in managing such complex conditions can be obtained during a 2-year residency program. Perhaps recognizing the lack of readily available services, family physicians identified outpatient services as an important learning issue. As well, screening, diagnosis, and management planning were rated important. Most physicians preferred interactive workshops and case discussions to further their knowledge in these areas. Developing case-based educational programs to address these issues could effectively improve awareness of EDs, lead to earlier diagnosis, and ultimately improve prognosis and management.

CONCLUSION

This is the first comprehensive survey of family physicians' practice patterns and learning needs regarding EDs in Canada. Most London family physicians are seeing patients with EDs and share care with other health professionals. Current training programs are inadequate preparation for managing these disorders in practice, and most physicians are not routinely screening for EDs despite the existence of useful screening tools. Given the difficulty of accessing specialized resources, responsibility for the care of these patients will increasingly fall on family physicians, and continued education could improve the quality of that care.

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Contributors

Dr Boulé *was responsible for background research, study design, study implementation, data collection, and data analysis and was principal author of the manuscript.* **Dr McSherry** *was responsible for study conception, study design, data analysis, and manuscript review.*

Editor's key points

- This is the first comprehensive survey of family physicians' attitudes and behaviour toward patients with eating disorders (EDs) in Canada and of these physicians' learning needs.
- A survey of all family doctors in the London, Ont, area showed that most were treating one to five ED patients. Response rate was 88%.
- Female family doctors had more ED patients in their practices and were more likely to screen for them routinely. Family doctors were more comfortable with diagnosing and less comfortable with managing EDs. Some shared care with psychiatrists and nutritionists.
- Most FPs rated their training as weak but were interested in learning about outpatient services, screening tools, and management planning.

Points de repère du rédacteur

- Cet article décrit la première enquête détaillée portant sur les attitudes et comportements des médecins de famille (MF) pratiquant au Canada envers les patients qui souffrent de troubles du comportement alimentaire (TCA) et sur les besoins en formation de ces médecins.
- Cette enquête effectuée auprès de tous les MF de la région de London, Ontario a montré que la plupart d'entre eux traitaient de un à cinq patients souffrant de TCA. Le taux de réponse était de 88%.
- Parmi les MF, les femmes avaient plus de patients souffrant de TCA dans leur clientèle et faisaient plus régulièrement du dépistage pour ce problème. Les MF étaient plus à l'aise avec le diagnostic de TCA, mais moins avec le traitement. Certains partageaient les soins avec des psychiatres et des nutritionnistes.
- La plupart jugeaient leur formation insuffisante, mais se montraient intéressés à se renseigner sur les services de consultation externe, les méthodes de dépistage et la façon de planifier le traitement.

Competing interests

None declared

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References

1. McSherry JA. Eating disorders in family practice. *Can J Diagnosis* 1996;(Dec):53-60.
2. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 4th ed. Washington, DC: American Psychiatric Association Press; 1994.
3. Wilhelm KA, Clarke SD. Eating disorders from a primary care perspective. *Med J Aust* 1998;168:458-63.
4. Turnbull S, Ward A, Treasure J, Jick H, Derby L. The demand for eating disorder care: an epidemiological study using the general practice research database. *Br J Psychiatry* 1996;169:705-12.
5. McGilley BM, Pryor TL. Assessment and treatment of bulimia nervosa. *Am Fam Physician* 1998;57(11):2743-50.
6. Bursten MS, Gabel LL, Brose JA, Monk JS. Detecting and treating bulimia nervosa: how involved are family physicians? *J Am Board Fam Pract* 1996;9(4):241-8.
7. Blum R. Physicians' assessment of deficiencies and desire for training in adolescent care. *J Med Educ* 1987;62(5):401-7.
8. Williams K. Self-assessment of clinical competence by general practitioner trainees before and after a six-month psychiatric placement. *Br J Gen Pract* 1998;48:1387-90.
9. Bethune C, Worrall G, Freake D, Church E. No psychiatry? Assessment of family medicine residents' training in mental health issues. *Can Fam Physician* 1999;45:2636-41.
10. Bryant-Waugh RJ, Lask BD, Shafran RL, Fosson AR. Do doctors recognize eating disorders in children? *Arch Dis Child* 1992;67:103-5.
11. Maradiegue A, Cecelic EK, Bozzelli MJ, Frances G. Do primary care providers screen for eating disorders? *Gastroenterol Nurs* 1996;19(2):65-9.
12. Freund KM, Graham SM, Lesky LG, Moskowitz MA. Detection of bulimia in a primary care setting. *J Gen Intern Med* 1993;8:236-42.
13. Morgan JF, Reid F, Lacey JH. The SCOFF questionnaire: assessment of a new screening tool for eating disorders. *BMJ* 1999;319:1467-8.
14. Dillman DA. *Mail and telephone surveys: the total design method*. Philadelphia, Pa: John Wiley and Sons Inc; 1978.

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