

Cultural differences in eating disorders with particular emphasis on British South Asian communities

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Abstract

Eating disorders have historically been considered "culture-bound" phenomena, confined to Western societies and, specifically, young White females with, predominantly, anorexia nervosa. Eating disorder research tended to align with these perceptions and, until relatively recently, few studies had been conducted to establish the prevalence of eating disorders in non-Western countries. Evidence from epidemiological surveys, undertaken largely in the last three decades, have shown that eating disorders are present in African, Asian, Middle Eastern and South American societies and, in many cases, the prevalence estimates are comparable to those in the West. However, there is evidence to suggest that precipitating factors, presentations and cultural perceptions of eating disorders differ between sociocultural contexts. This may result in underdiagnosis of eating disorders in non-White individuals and may be a barrier to successful management. These considerations are exemplified by studies in the South Asian population in the UK which have shown a different symptom profile than that found in White individuals. Clinicians who are not attuned to these cultural differences may fail to recognise an eating disorder diagnosis. South Asian populations may present with somatic concerns and the absence of "fat phobia". Culture-specific familial expectations, religious observances and issues of self-identity may have a greater role in the development and maintenance of eating pathologies in this, and other, minority ethnic groups. Greater awareness of these factors among clinicians would increase the prospects for recognition, diagnosis and successful outcomes.

Keywords: prevalence, minority ethnic, risk factors, presentation, body image

1. Introduction

Historically, eating disorders have been considered a culture-bound phenomenon associated specifically with Western societies and, predominantly, with White girls and young women belonging to the middle and upper socioeconomic classes (1). The widely held misconception that eating disorders are much less common, or absent, in other sociocultural settings led Beat, the national eating disorder charity in the UK, to campaign for greater recognition of eating disorders, disordered eating and body image concerns in other demographic groups.

In a recent landmark position paper by Landor et al. (2), the authors emphasised how body image is shaped by "multiple axes of oppression that exist within systemic and structural systems, ultimately privileging certain bodies above others", and described the development of the Sociocultural-Intersectionality Body Image framework. The levels of the framework, which address historical, contemporary and sociopolitical contexts, were designed to go beyond "white supremacy" to make body image research and practice applicable, and relevant, to other ethnicities, and more fully to "understand the body image experiences of those with racialised and minoritised bodies to challenge inequities" (2).

The COVID-19 pandemic further exacerbated the existing health inequalities in the recognition, referral and treatment of eating disorders. Data from NHS England (3) demonstrated an increase in hospital admissions among Asian and British Asian groups of 62% between 2018/19 and 2020/21, a proportionally higher increase than for other ethnicities including White British (43.5%) and Black African (34%) over the same period. Detailed figures for the Asian and British Asian groups showed the increase in admissions for 2020/21 compared with 2018/19 was 51% for people of Pakistani ethnicity and 49% for people of Indian ethnicity, suggesting that South Asians in particular, who make up the largest ethnic minority group in the UK, are presenting in increasing numbers to acute eating disorder services. Such data suggest that prevention and early intervention needs to be prioritised in people from these backgrounds.

This article summarises recent research on eating disorders in non-Western countries and in minority ethnic groups in majority White populations. In section 3, research conducted in the last three decades on eating disorders and body image concerns in the South Asian population in the UK is examined in greater detail.

2. Eating disorders in non-Western cultures

Consistent with the historic characterisation of eating disorders as a culture-bound, Western-centric phenomenon (1, 4, 5), much of the English language eating disorder literature has, until relatively recently, focused almost exclusively on Western White populations, predominantly young, middle-to-upper-class females with anorexia nervosa (AN) (1, 5, 6). More recently, however, increased eating disorder research in previously neglected cultures has suggested that, contrary to earlier perceptions, eating disorders are prevalent in all societies and among all demographic groups, and that eating disorder typologies that have long been recognised in Western countries are similarly represented in non-Western countries (4, 7). Moreover, evidence suggests that the prevalence of eating disorders in non-Western countries and among non-White ethnic groups has increased over the three or four decades covered by the research (1, 8–13), in line with, or exceeding, that in the White population (14–16). Epidemiological data for major global regions including Eastern Europe, Latin America, South Asia, Africa, the Middle East and the Pacific Islands remain sparse (9, 17–19).

Studies have described both marked similarities and important differences between cultural contexts in eating disorder prevalence, presentation, risk factors and outcomes (1, 4, 5). Findings are inconsistent (1, 9) and comparisons between countries are confounded by methodological differences between the studies (1, 20). Few studies have compared epidemiological data directly across different cultural contexts (9). More commonly, comparisons have focused on ethnic minority populations within individual Western countries, predominantly the United States and the UK. These have suggested that ethnic minorities have a generally lower risk of developing an eating disorder (1). However, some studies have found no difference between White and other ethnicities (9, 21, 22), and others have even found a higher level of eating disorders, disordered eating and unhealthy eating attitudes in specific minority ethnic populations. For example, higher rates have been found among school-age females of South Asian heritage in the UK (23, 24), and among Hispanic American and African American women in the US (25–28). In a recent cross-sectional study in a national sample of 286,720 young adults in the US (29), statistically significantly higher rates of current probable eating disorders were reported for Asian/Asian American, Hispanic/Latinx, Native Hawaiian/Pacific Islander and Middle Eastern/Arab/Arab American groups than for White individuals (odds ratios = 1.3, 1.3, 2.1 and 1.5, respectively; all $p < 0.001$). The rate of current probable eating disorders in Black/African American individuals was lower than that in White individuals (odds ratio = 0.8; $p < 0.001$). Where lower rates have been reported among ethnic minorities in clinical samples, an additional potential confounding factor is the lower likelihood of referral in these groups, suggesting the possibility of underdiagnosis (30, 31).

2.1 Prevalence and incidence of eating disorders in non-Western cultures

Irrespective of the specific cultural context, studies have tended to focus on demographic subgroups considered to be at greatest risk, typically adolescent or young adult females, implying that prevalence and incidence data for the general population in many countries are limited (20).

2.1.1 Estimates of lifetime prevalence

A meta-analysis published in 2013 (15) reported estimates of lifetime prevalence from cross-cultural studies in the general population but the analysis was based on data from a relatively small pool of studies ($n = 15$) with a narrow geographical distribution limited primarily to the United States, Western Europe, South Korea, Brazil, Mexico and New Zealand. Overall, the estimated lifetime prevalence for any eating disorder was 1.01% (95% confidence interval (CI): 0.54–1.89), with a higher lifetime prevalence reported for binge eating disorder (2.22%, 95% CI: 1.78–2.76) than for bulimia nervosa (BN) (0.81%, 95% CI: 0.59–1.09) and AN (0.21%, 95% CI: 0.11–0.38). The comparison of lifetime prevalence between Western and non-Western countries was notably limited by South Korea being the only non-Western country for which data were available but suggested a six-fold higher prevalence in the group of Western countries (1.29% vs 0.21%; $p < 0.001$). A previous systematic review published nearly a decade earlier (20) reported eating disorder prevalences from a methodologically disparate group of studies in diverse population-based and clinic-based samples. The prevalence of AN in these studies was between 0.1% and 5.7% in Western countries and between 0.002% and 0.9% in non-Western countries. The prevalence of BN was between 0% and 7.3% in Western countries and 0.46% and 3.2% in non-Western countries. The authors of the review did not differentiate figures for different groups or point prevalence figures from those for lifetime prevalence. Without this context, the data are difficult to interpret meaningfully.

2.2.2 Estimates of point prevalence

A meta-analysis published in 2022 investigated the global point prevalence of eating disorders and disordered eating specifically among university students based on data from studies that used standard screening measures including the EAT-26 (Eating Attitude Test), EAT-40, EDE-Q (Eating Disorder Examination Questionnaire) and SCOFF (Sick, Control, One Stone, Fat, Food) (14). The overall analysis included 89 studies from 40 countries and found a prevalence of 19.7% (95% CI: 17.9–21.6%) for any screen-based disordered eating (SBDE). Among the seven countries for which the most data were available, prevalence was highest in the United States (37.1%), followed by Lebanon (33.2%), Palestine (32.8%), Spain (31.7%), Saudi Arabia (21.2%), France (21.0%) and India (18.1%). Analysis based on a grouped

comparison of "Western" and "non-Western" countries found a numerically higher prevalence of SBDE in non-Western countries (18.4% vs 20.9%), but the difference was not statistically significant.

More recently, an analysis of data from the 2017 Global Burden of Disease Study (16) reported age-standardised point prevalences for any eating disorder per 100,000 population by global region. Estimates for 2017 (per 100,000 population) were 807.1 for Australasia, 525.2 for Western Europe, 463.5 for high-income North America and 404.8 for high-income Asia Pacific, compared with 140.9 for Southeast Asia, 249.8 for the Caribbean, 205.7 for North Africa and the Middle East and 270.8 for Central Latin America. Eating disorder point prevalence and disability-adjusted life-years increased in all global regions between 1990 and 2017, with the exception of Central Sub-Saharan Africa.

None of these analyses compared prevalence between non-Western countries and ethnic minority populations in Western countries.

Table 1 summarises general population prevalence estimates from original studies, reviews and meta-analyses published in the last 25 years. Although far from comprehensive, these studies are illustrative of the wider literature and, saliently, have reported prevalence rates for some non-Western countries that are broadly commensurate with, and in some cases higher than, those reported in Western countries.

For example, reported point prevalence estimates for AN ranged from <0.1% in Kuwait (32), 0.1% in Latin America (Argentina, Brazil, Chile, Colombia, Mexico and Venezuela) (33) and 0.8% in Malaysia (34) and Iran (35), to as high as 4.8% in Japan (36), compared with <1–4% in recent studies in European countries (37, 38) and 0.05% in a nationally representative sample of adults (aged ≥18 years) in the US (39).

Point prevalence rates for BN were 0.7% in Brazil (40), 0.87% in African countries (19), 1.0% in Japan (36) and Saudi Arabia (41), 1.2% in Latin America (33), 1.4% in Malaysia (34) and 6.2% in Iran (35), compared with recent estimates from studies in the West of 0.3% in the US (42), 0.4% in Australia (43) and <1–2% in European countries (37, 38).

Conversely, estimates of point prevalence for binge eating disorder were just 0.1% in Malaysia (34) compared with 1.4% in Brazil (40), 2.1% in Saudi Arabia (41) and 3.5% in Latin America (33), whereas recent estimates have suggested point prevalence of between 0.31–1.2% in European countries (42, 44), 1.0% in New Zealand (42) and 0.4–1.2% in the US (39, 42).

As mentioned previously, these findings should be interpreted with caution in light of the methodological differences between studies; the data do not support direct comparisons between studies. It has also been questioned whether the standard screening and diagnostic assessment scales for eating disorders developed in Western countries are appropriate for non-Western populations (5, 9, 45–47) and, correspondingly, whether the findings from studies that have employed these scales in non-Western contexts are reliable.

2.2 Factors associated with development of eating disorders in non-Western cultures

Notwithstanding these considerations, the results summarised in Table 1 appear to contradict the historic perception of eating disorders as an almost entirely Western cultural phenomenon, predicated on the Western idealisation of the "thin" body type (6, 48). An extension of this theory proposes that the increase in eating disorders observed in non-Western countries over recent decades can be explained largely by exposure in these countries to Western culture, specifically notions of the "thin ideal" and "body instrumentality" as a means of self-actualisation (5, 7), and, further, that eating disorder prevalence to a substantial degree corresponds to the extent of "Westernisation" in a given country.

These ideas were exemplified in the case of Japan, a society that underwent a rapid process of Westernisation in the latter half of the 20th century, and in which the prevalence of eating disorders reported in studies in the 1980s, 1990s and 2000s showed a consistent increase, broadly commensurate with that in the West (4, 5, 7, 48–52).

Similarly, studies in ethnic minorities and immigrants in Western countries have focused on the degree of "acculturation", that is, adoption of the values of a different, or host, culture, to explain the relative risk of developing an eating disorder for individuals belonging to these groups (53–55). According to this idea, individuals from non-Western cultures, which might have widely contrasting ideals with respect to body type, are at increasing risk of developing an eating disorder the greater their exposure to, and adoption of, perceived Western cultural norms (4–6, 26, 56, 57).

Multiple studies, both in individuals in non-Western countries and among immigrants to Western countries, have provided evidence for this hypothesis (4, 7, 58–66). However, the overarching theory has been questioned as a result of studies suggesting a similar, or higher, prevalence of eating disorders, disordered eating and body image concerns in non-Western settings (4, 67–72) and in ethnic minority groups in Western countries, including among recent immigrants (73–77). There is also increasing evidence that the precipitating factors associated with the onset of eating disorders in these groups may be distinct from those that characterise eating disorders in White populations (1, 5, 7, 78–82). In particular, the "fat phobia" or preoccupation with an ideal "thin" body type that is thought to underpin the development of eating disorders in the majority of cases in Western White individuals may be a less central concern, or completely absent, in those who are not White (7, 71, 83–86). Instead, other psychological and/or somatic impetus-

Author	Year	Study type/data source	Country/Region	N	Age range (yrs)	Eating disorder	Assessment scale	Prevalence	
								Measure	Estimate
Al-Hadi (41)	2022	Saudi National Mental Health Survey	Saudi Arabia	4,004	15-65	Any ED	CIDI 3.0	Lifetime	6.1%
						AN			0.6%
						BN			2.8%
						BED			2.6%
						Any ED		12-month	3.2%
Appolinario (40)						BN			1.0%
						BED			2.1%
	2022	Cross-sectional, population-based survey	Brazil	2,297	18-60	BN	QEW-5	Point	0.7%
						BED			1.4%
	2022	Randomised selection online survey	Malaysia	818	18-73	AN	SWED	Point	0.8%
Chua (34)						BN			1.4%
						BED			0.1%
						ARFID			4.8%
						OSFED			51.4%
	2022	Data from GBD study (2019)	MENA ¹	NA	NA	AN	DSM or ICD	Point	49.3/100,000
Safiri (32)			Kuwait ²						78.7/100,000
			Afghanistan ³						29.2/100,000
	2020	Data from GBD study (2017)	Global	NA	NA	Any ED	DSM or ICD	Point	203.2/100,000
			H-I North America						463.4/100,000
			H-I Asia Pacific						404.8/100,000
Wu (16)			Australasia						807.1/100,000
			Western Europe						525.2/100,000
			Southeast Asia						140.9/100,000
			Central Latin America						270.8/100,000
			Caribbean						249.8/100,000
Kolar (33)			MENA						205.7/100,000
			Central Sub-Saharan Africa						116.2/100,000
			Oceania						108.6/100,000
	2016	Systematic review and meta-analysis	Latin America ⁴	10,840	10-28	AN	Various	Point	0.1%
				14,816	10 to adult (≥ 18)	BN			1.2%
				10,363	12 to adult (≥ 18)	BED			3.5%

Author	Year	Study type/data source	Country/Region	N	Age range (yrs)	Eating disorder	Assessment scale	Prevalence	
								Measure	Estimate
Van Hoeken (19)	2016	Review	Africa	1,476	NA	AN BN	DSM-IV	Point	0% 0.87%
Kessler (42)	2013	WHO Community Mental Health Surveys	Global ¹⁵	24,124	≥ 18	EDNOS BN	CIDI	Lifetime	4.45% 1.0%
			Colombia						0.4%
			Brazil						2.0%
			Belgium						1.0%
			Italy						0.1%
			New Zealand						1.3%
			United States						1.0%
			Global					12-month	0.4%
			Colombia						0.2%
			Brazil						0.9%
			Belgium						0.3%
			Italy						0.0%
			New Zealand						0.5%
			United States						0.3%
			Global			BED		Lifetime	1.9%
			Colombia						0.9%
			Brazil						4.7%
			Belgium						1.2%
			Italy						0.7%
			New Zealand						1.9%
			United States						2.6%
			Global					12-month	0.8%
			Colombia						0.3%
			Brazil						1.8%
			Belgium						0.7%
			Italy						0.2%
			New Zealand						1.0%
			United States						1.2%

Author	Year	Study type/data source	Country/Region	N	Age range (yrs)	Eating disorder	Assessment scale	Prevalence	
								Measure	Estimate
Qian (15)	2013	Systematic review	Global ⁶	35,247	≥ 15	Any ED	DSM or ICD	Lifetime	1.01%
			Western countries	28,972					1.29%
			South Korea	6,275					0.21%
			Global	38,544		AN			0.21%
			Western countries	25,705					0.32%
			South Korea	11,375					0.13%
Garrusi (35)			Global	59,683		BN			0.81%
			Western countries	44,192					0.90%
			South Korea	6,275					0.05%
	2012	Cross-sectional, population-based survey	Iran	1,181	14-55	Any ED	EDDS	Point	11.5%
						AN			0.8%
						BN			6.2%
Larrañaga (92)						ST-AN			1.4%
						ST-BED			35.0%
	2012	Prospective population-based study	Spain	NA	≥ 15	Any ED	NA	20-year	82.8/100,000
						AN			18.6/100,000
						BN			25.7/100,000
						EDNOS			38.3/100,000
Preti (44)	2009	Cross-sectional, population-based survey	Europe ⁷	4,139	≥ 18	Any ED	CIDI 3.0	Lifetime	2.51%
						AN			0.48%
						BN			0.51%
						BED			1.12%
						ST-BED			0.72%
						Any BE			2.15%
K-Rahkonen (93)						Any ED		12-month	0.56%
						AN			0.0%
						BN			0.15%
						BED			0.31%
						ST-BED			0.09%
	2007	Longitudinal cohort study	Finland	2,881 (F)	24-26	Any BE	SCID	Lifetime	2.2%

Author	Year	Study type/data source	Country/Region	N	Age range (yrs)	Eating disorder	Assessment scale	Prevalence	
								Measure	Estimate
Nakamura (36)	2000	Prospective cross-sectional study	Japan	NA	12-57	AN	DSM-IV	Point	4.8%
						BN			1.0%

Table 1. Prevalence estimates for eating disorders in general population samples.

Abbreviations: AN = Anorexia nervosa; ARFID = Avoidant/restrictive food intake disorder; BE = Binge eating; BED = Bulimia nervosa; CIDI = Composite International Diagnostic Interview; DSM = Diagnostic and Statistical Manual of Mental Disorders; ED = Eating disorder; EDDS = Eating Disorder Diagnostic Scale; EDNOS = Eating disorder not otherwise specified; GBD = Global Burden of Disease; HI = High-income; ICD = International Classification of Diseases; MENA = Middle East and North Africa; NA = Not applicable; OSFED = Other specified feeding or eating disorder; QEW = Questionnaire on Eating and Weight Patterns; SCID = Structured Clinical Interview for DSM-IV; ST = Subthreshold; SWED = Stanford-Washington Eating Disorder Screen; WHO = World Health Organization

Notes: **1.** Afghanistan, Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, Türkiye, United Arab Emirates, Yemen **2.** Country with highest prevalence **3.** Country with lowest prevalence **4.** Argentina, Brazil, Chile, Colombia, Mexico, Venezuela **5.** Belgium, Brazil, Colombia, France, Germany, Italy, Mexico, the Netherlands, New Zealand, Northern Ireland, Portugal, Romania, Spain, United States **6.** Latin America, New Zealand, South Korea, United States, Western Europe **7.** Belgium, France, Germany, Italy, the Netherlands, Spain

es might be more relevant, for example, familial pressures, conflict due to bicultural identity, competitive impulses, desire for conformity with the perceived norms of the host society, religious observances or low motivation to eat due to feelings of "fullness" or lack of hunger (6, 7, 26, 87).

Alternative explanations for the worldwide increase in eating disorders and body dissatisfaction have implicated globalisation, industrialisation and urbanisation and the attendant changes in socioeconomic status, sociocultural trends and traditional family and societal roles, in particular for women, rather than Westernisation per se (1, 4-6, 17, 20, 88-90). As such, the increased prevalence of eating disorders may be considered a feature of "cultures in transition" (4). It has been suggested that this influence is particularly apparent where sociocultural change takes place over short timeframes, whether this be societal change in rapidly developing economies or on the individual level among recent immigrants to Western countries (91). As important as social and cultural factors may be in creating a set of normative, if unrealistic, values for physical appearance, compliance with which may contribute to eating disorder susceptibility, individual risk factors and their interaction with societal influences are likely to have an equally determining role.

A comprehensive review of these factors is beyond the scope of this article, but some of the underlying ideas are discussed further in the next section in the context of eating disorder research in South Asian ethnic minority groups in the UK.

3. Eating disorders in South Asian ethnic groups in the UK

Clinical work in East London, which has a large British South Asian (mainly Bangladeshi) community (94, 95), led to one of the current authors conducting a service evaluation to better understand the presentations of eating disorders in this group. An initial exploratory evaluation (96) investigated the ethnicities of 215 users presenting to the East London Community Eating Disorder Service for Children and Young People between January 2017 and January 2019. Of the 215 service users, 84 (39.1%) were Asian, of which 55 (25.6% of the total sample) were Bangladeshi; 70 (32.6%) were White, of which 43 (20.0% of the total sample) identified as White British; 12 (5.6%) were Black; and 35 (16.3%) were from other ethnic groups. Eating disorder diagnostic categories and symptom profiles differed across ethnicities. It was concluded that the findings suggested the need for a re-examination of eating disorder stereotypes, specifically the prevailing Western White bias in presumed risk, and for greater awareness of ethnicity-specific presentations.

Research exploring body dissatisfaction in the South Asian population in the UK has historically been limited. However, over the past three decades, there have been efforts to investigate differences in prevalence, presentation and aetiology between South Asian ethnic groups and the White British population. For example, a study conducted in 1991 in schoolgirls in the northern city of Bradford found that those from a South Asian background had a more than five times greater risk of bulimic symptoms than their White counterparts (3.4% and 0.6%, respectively) (97). Similarly, in a study conducted in South Asian young people in Bolton, those identifying as female and Muslim scored higher on the EAT-26 eating pathology measure than White females (mean scores of 10.4 and 8.91, respectively). However, the White group had notably higher scores on the bulimic symptom subscale than the South Asian group (1.31 and 0.57, respectively) (98). A subsequent paper reported that adolescent Asian females in the UK showed high levels of eating psychopathology and were more likely to fast than their White peers, but were less likely to exhibit binge eating behaviour (99). Results from subsequent research in East London were only partially consistent with these findings; Bhugra and Bhui (100) observed that South Asian teenagers were more likely than teenagers from either White or African-Caribbean backgrounds to experience "abnormal eating behaviours", but found that these were indicative of sub-clinical bulimia, showing patterns of compulsive eating, dietary restraint and the perception that "food dominated their lives",

and suggested, as had previously been proposed, the existence of "ethnic differences in the aetiology of these conditions" (101). More recently, the South East London Community Health (SELCoH) study explored eating pathology in individuals in South East London and concluded that people of South Asian descent were more likely to exhibit bulimic pathology than their White counterparts (73). Broader Asian ethnicity was associated with purging, loss of control eating and preoccupation with food.

Four qualitative studies have been conducted in which potential factors associated with the differing eating disorder presentations in South Asian groups in the UK, and barriers and facilitators to accessing eating disorder services, have been explored (30, 102-104). These studies recruited South Asian participants from similar geographical areas as the quantitative prevalence studies (predominantly the Midlands and northern England (97, 98)), specifically Leicestershire and Birmingham (30, 102), Greater Manchester (103) and Yorkshire (104). The findings have begun to illuminate the often complex, interacting factors which influence the body image and disordered eating behaviours of South Asian women, and shortcomings in cultural understanding in current eating disorder service provision. Common themes such as the importance of navigating identity, unique South Asian family dynamics (often centred around marriage and reputation), the symbolic meaning of food and the shame and stigma surrounding mental health issues compared to the prestige of good physical health, were consistently reported in all four studies. The distinct presentation of body dissatisfaction and disordered eating among South Asian individuals was also highlighted, for example, "loss of appetite" rather than overt "fear of fatness" (102).

Hoque explored how body image and eating disorders were recognised and understood within the South Asian cultural context and found that ease or difficulty in accessing eating disorder services was influenced by the inherently critical tendencies in Asian society, parental response, self-agency and individual effectiveness in seeking help (102). Self-referral for help with disordered eating in minority ethnic groups is typically low; only 36% of those identified as having symptoms of disordered eating in the SELCoH study had sought professional help in the previous 12 months (73).

Mishra et al. (104) explored sociocultural influences on body image in South Asian women and found that navigating (often marriage-related) appearance pressures from elders, negotiating cultural and societal standards across different aspects of the individual's cultural identity, the representation of South Asian women in the wider societal context and forms of healing from the pressures imposed on South Asian women were important factors. While these studies explored influences on the development of body image and disordered eating in the general South Asian population, none focused specifically on the perspective of individuals in the age groups considered at greatest risk, namely adolescents and young adults, who were the main focus of the quantitative prevalence studies. An earlier retrospective case series drawn from this population, however, found similar patterns in motivating factors for AN to those reported by Hoque et al. (105). Specifically, British South Asian adolescent females presenting to psychiatric clinics with weight loss or AN were statistically significantly more likely to report loss of appetite ($p = 0.01$) and less likely to report fat phobia ($p = 0.032$) and weight preoccupation ($p = 0.001$) in connection with their eating disorder than matched White British peers (105).

Despite the findings which suggest a higher prevalence of disordered eating in South Asian populations compared with other ethnicities, particularly for bulimic spectrum disorders, overall referrals from members of this community to specialist eating disorder services are still lower than for other groups (31, 106-108). In a study that explored potential barriers to treatment access among South Asians in Leicester, themes such as differing views of thinness, the role of the family, lack of knowledge of eating disorders, stigma and concerns over confidentiality when approaching primary care services were prevalent (30). Where minority ethnic individuals do seek help, the differing presentations of body dissatisfaction and disordered eating described earlier may present a challenge to diagnosis (102).

Comparable studies conducted in minority ethnic South Asian populations in other countries have identified common themes. For example, a study conducted in the US found similar sociocultural pressures to those reported in the UK, with South Asian women describing being subject to weight stigma from multiple sources, in particular older female relatives (109). Participants reported competitive pressure to achieve body and appearance ideals including light skin, dark black hair and minimal body hair, and to marry at a young age (109). These findings suggest that cultural nuances should be considered in the discourse surrounding cognitive dissonance-based interventions. More generally, greater awareness among clinicians of culture-specific factors is likely to increase the prospects for recognition and effective management.

In this section, we have focused on studies in South Asian groups because of the relatively extensive research in this population. However, the findings that suggest distinct eating disorder presentations and precipitating factors are likely to be more generally applicable to other minority ethnic groups (see previous section). Similarly, the challenges to diagnosis and management identified among South Asians in the UK and US may also be relevant to other ethnicities, suggesting the need for greater awareness among clinicians and for further research into the effectiveness of management strategies in non-Western cultural settings.

Summary

Contrary to historic perceptions, eating disorders are not "culture-bound" phenomena predominantly confined to young White female populations in Western countries, but occur at similar rates in minority ethnic groups and in the general populations of non-Western countries. AN, BN and binge eating disorder have been documented in Asia, Africa, South America and the Middle East, as well as in individuals of Asian, African, Latinx, Hispanic and Middle Eastern ethnicities in Europe, the US and Australia.

Despite comparable point prevalence rates for eating disorders in Western and non-Western countries, and between White and non-White groups within Western societies, differences exist in cultural attitudes to food, body image perceptions and precipitating factors for eating disorders that may complicate diagnosis in minority ethnic groups and confound effective management.

Although research in this previously neglected area has increased markedly in recent decades, further studies are needed to better understand eating disorders across ethnicities, particularly regarding assessment, risk factors and potential adaptations to established interventions. For example, one of the authors (EC) is conducting work on symptom profiling of eating disorders within the Bangladeshi population. This research aims to inform the development of a clinical tool to aid earlier identification of eating disorders in this group. Similar initiatives are needed to enhance clinicians' awareness of the varying presentations of eating disorders across diverse populations. Such awareness would improve the prospects for earlier recognition, diagnosis and treatment, ultimately leading to better outcomes.

Box 1. Key points

1. Research on eating disorders in non-Western countries is historically limited.
2. Eating disorders are not limited to White Western populations and occur at similar rates in minority ethnic groups and in individuals native to non-Western countries.
3. Eating disorders may have distinct presentations among non-White ethnicities, for example, "non-fat-phobic" anorexia nervosa.
4. There is uncertainty as to whether eating disorder screening, assessment and diagnostic tools developed in Western cultural contexts are reliable in other populations.
5. Diagnoses may be missed if clinicians do not recognise cultural differences in eating disorder presentations and modify criteria for diagnosis accordingly.
6. Further research on the characteristics, risk factors, assessment and interventions for eating disorders in non-Western populations is needed.

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