

Anorexia nervosa in Hong Kong: a Chinese perspective

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SYNOPSIS A prospective study of sixteen Chinese anorexic patients in Hong Kong indicates that they were single young females who came from lower social class, exhibited severe self-induced weight loss, rigid maintenance of low body weight and amenorrhoea. Weight reduction was primarily by dietary restriction. The typical bulimic syndrome and major depression were uncommon. There were multiple aetiological factors, but no pre-morbid obesity and little pressure to pursue slimness for beauty. Instead of displaying an intense fear of obesity and a distorted body image, patients more commonly attributed poor food intake to abdominal bloating. As such, they only partially fulfilled current criteria for diagnosis. It is argued that such clinical patterns arise logically from their sociocultural backgrounds, but may gradually change with Westernization.

INTRODUCTION

Anorexia nervosa (AN) is a multifactorial condition which varies by geographic distribution and by cultural background (Pumariega, 1986; Toro *et al.* 1988). It is thought to be culture-bound to Western society (Prince, 1985), and is rare among Chinese communities (Lee *et al.* 1989). Although evidence exists that both the prevalence and manifestations of AN may change with Westernization (Nasser, 1986; Mumford & Whitehouse, 1988*a*; Russell & Treasure, 1989), few efforts have been made to compare the clinical profiles of anorexic patients among different cultures (Steinhausen, 1985).

Kleinman (1987) cautioned that psychiatrists are inclined towards exaggerating similarities and 'discovering universals' in mental disorders by applying 'standardized' diagnostic techniques to classify indigenous phenomena. As a result, 'atypical' cases tend to be prematurely dismissed. Ironically it is these cases which would allow fashionable aetiological theories and therapeutic approaches to be examined in broader cross-cultural perspective. For example, three Chinese AN patients previously reported

by the author were atypical in not exhibiting an 'intense fear of obesity' and 'distorted body image' (DBI) (Lee *et al.* 1989), which are regarded as obligatory diagnostic and prognostic factors for AN (Bruch, 1962; Casper *et al.* 1979; American Psychiatric Association, 1980 & 1987). It is possible that such clinical patterns arise from specific Chinese concepts of food and bodily perception, with which AN is intimately associated.

The Chinese concern for food and diet can historically be traced back to at least 2000 years, and continues to survive among modern Chinese today. In contrast to the modern Western emphasis on dieting and fitness, there is an old Chinese proverb that 'food is heaven', and the Confucian belief that 'eating and sex are part of human nature'. As a result, Chinese culture has developed its cuisines to a very high level of complexity and sophistication. Food is intertwined with a variety of social meanings and has been used to treat and prevent specific symptoms. When taken in a *Yin-Yang* balanced manner, it is believed to promote longevity (Koo, 1984).

As regards bodily perception in accordance with Confucian precepts, external physical appearance is less important than success in social role performance for the development of self-esteem and happiness among Chinese females.

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This differs from modern Western culture, in which slimness becomes an important prerequisite for female beauty and weight is even described to be woman's 'normative obsession' – fear of obesity apparently attains a phobic degree and becomes a national idiom of distress among normal as well as anorexic females (Brumberg, 1988). In contrast, obesity may be admired as signs of wealth, success and secondary sexual characteristics in non-Western countries (Furnham & Alibhai, 1983; Nasser, 1986). Chinese gods of luck and wealth, for example, are almost always depicted as being fat, and greeting a Chinese with 'You have put on weight recently' is regarded as a compliment. Thus, friends and relatives of Chinese AN patients are unlikely to praise their anorexic shape and dietary control as in the West. There is actually a stigma towards thinness, which is associated with ill health and bad luck.

In the context of such cultural differences, this study describes sixteen Chinese AN patients in Hong Kong and examines their clinical, diagnostic and aetiological aspects.

METHOD

Sixteen patients have been treated and studied prospectively over a period of 5 years (1985 to 1990). Thirteen patients were treated in the Psychiatric Unit of our teaching hospital, while three patients received treatment in another unit academically linked with us. A standardized sheet on the clinical, aetiological, investigatory and treatment aspects of the disorder was used for semi-structured interview. Except for one (age of onset 26) and four other patients (weight loss 19–24%), they satisfied Feighner's criteria for diagnosis (Feighner *et al.* 1972). Due to the inconspicuity of an intense fear of obesity and DBI, they only partially fulfilled the DSM-III-R (American Psychiatric Association, 1987).

RESULTS

I Principal clinical data (see Table 1)

(a) Sex, Age, Onset & Referral

All subjects were female with a mean age of onset of menarche at 12.8. Their eating disorder (defined by disturbed eating behaviour and

noticeable weight loss) began at a mean age of 18.1, and psychiatric referral was made 2 years later. Typically they presented with weight loss and/or amenorrhoea to non-psychiatric doctors (mainly gynaecological and medical), where extensive investigations (e.g. upper endoscopy, lower enema, ultrasonography of the abdomen, and brain CAT scan) were performed.

(b) Methods of weight reduction and bulimia

Dietary restriction was the sole or chief method of weight reduction. Patients usually continued to eat at the same times as their families (a usual Chinese custom), and their food refusal readily elicited a great amount of futile coaxing and trepidation from the mother. This might be a non-confrontational style of expressing emotional hostility suitable for a girl in a Chinese family because it did not clash with traditional Confucian values on filial piety and demure behaviour in girls (Ho, 1986). Though not committed to the ideological principles of vegetarianism in the West, our patients commonly exhibited fat, meat and carbohydrate avoidance and preference for vegetables or fruits. Light exercise occurred in 11 patients, but hyperactivity (e.g. continuous pacing, diffuse restlessness or jogging) which was thought to be a cardinal feature of AN (Kron *et al.* 1978), was largely absent. This is perhaps not surprising when one considers that the emphasis on physical fitness and athleticism is comparatively recent in the West (Brumberg, 1988).

Binges involved high-carbohydrate processed foods (e.g. biscuits), were mild (e.g. 150 gm of biscuits and 100 g of cake at one time) in four (after treatment in two) and moderate (e.g. 200 g of biscuits and 500 g of bread at one time) in two patients who were nurses. They were not usually clandestine (Russell, 1979), tended to substitute regular meals, and might be encouraged by relatives who were concerned with patients' emaciation. Usually they were preceded by boredom and followed by dysphoria and severe restriction of food in the next 1–2 days. Vomiting occurred 'occasionally' and 'spontaneously', and marked weight fluctuations were absent. The use of laxatives was rare, and there was no abuse of weight-controlling drugs.

(c) Body weight

The mean original body weight of 44.5 kg is near

Table 1. Summary of principal clinical data

	Mean	S.D.
Age of onset of illness (years)	18.1	4.09
Mean age at referral (years)	20	4.54
Menarche (years)	12.8	1.29
Height (cm)	156.3	4.47
BMI (kg/m ²)		
Original	18.98	1.57
At referral	13.22	1.90
Weight (kg)		
Original	44.5	8.24
At referral	32.1	4.08
Desired	43.3	3.98
Ideal	46.6	1.76
Weight loss (%) below		
Original weight	30.6	8.40
Ideal weight	30.9	9.21
Method of losing weight	Number of patients	
Restriction	16	
Exercise	11	
Vomiting	2	
Laxative	1	
Bingeing	6	

the 'threshold body weight' of about 45 kg described in the West (Crisp, 1980). The mean Body Mass Index (BMI: 18.98 originally and 13.22 kg/m⁻² at referral) shows that the subjects were previously slim, and very emaciated at presentation. The mean weight loss at referral was 30.9%.

(d) Physical and laboratory findings

All had secondary amenorrhea concurrent with or subsequent to dieting and weight loss. In clinical interviews, the most consistent complaint was a varying degree of abdominal discomfort (present in 15 patients and usually epigastric in location) which occurred after eating even a slight amount of food and 'made further intake difficult'. However, psychosocial problems were usually uncovered on deeper exploration. There were physical findings secondary to emaciation (e.g. lanugo, dry skin, cold extremities, low blood pressure, bradycardia, ankle oedema), but signs of chronic vomiting were absent. Investigation results (e.g. complete blood picture, ESR, renal and liver functions, glucose, thyroid function) closely paralleled patterns reported in the West, but electrolyte imbalance such as hypokalemia was not detected. LHRH and TRH stimulation tests showed a hypothalamic pattern of endocrine disturbance.

II Psychosocial data

(a) Marital status, social class, education and occupation

All of the patients were single. When they were classified by paternal occupation, only one patient came from the middle social class, while the rest belonged to a lower social class. The mean years of education was 10.56 (S.D. = 1.50). Seven were secondary school students, three were nurses and the rest were mixed in occupation. They were comparable to normal females of this background in Hong Kong. 'High risk' subjects engaged in ballet or modelling (Crisp, 1980) were absent.

(b) Family position and history of weight or mental disorder

The mean number of siblings was 3.81 (mean birth rank = 2.3), which is usual in this generation of people in Hong Kong. Five of them were the youngest child. There was no family history of weight, mood or other mental disorders.

(c) Previous Western exposure

All patients were locally born and had no overseas exposure in the past.

III Aetiological factors

(a) Personality features

Twelve patients completed the Minnesota Multiphasic Personality Inventory (MMPI). The mean profile revealed abnormal elevations on depression (2), schizophrenia (8), paranoia (6) and psychasthenia (7) subscales. This indicated underlying depression, anger, anxiety, social inadequacy, dependency, perfectionism, mistrust, concern over somatic complaints and sexual difficulties. Clinically, patients tended to be introverted, with few friends. None was judged to have abnormally low intelligence.

(b) Other aetiological factors

Apart from the lack of pre-morbid obesity and the cultural pressure to pursue slimness, aetiological factors were multiple and interactive (Garfinkel *et al.* 1987). In order of frequency, these include examination pressure, loss of relationships, overprotective mother, parental conflicts, sibling rivalry, physical illness or

stigma, and distant father. Deafness, scoliosis, acne and round face were the physical factors identified in four patients, and seemed to act through lowering their self-esteem. Being teased as overweight was recalled by four patients, and may indicate growing Western influence on Chinese girls in Hong Kong.

(c) *Past history and fear of obesity and DBI*

No patient had pre-morbid obesity, and the mean original weight (44.5 kg) was actually less than the ideal body weight (46.6 kg). Fear of obesity was obvious in 3, mild in 8 and entirely absent in 5 patients. It was usually understandable, and an 'intense fear of obesity' was inconspicuous. When questioned, patients typically admitted to their emaciation and did not feel that they were fat. DBI was difficult to assess (Hsu & Sobkiewicz, 1991), and was judged by clinical interview, difference in ideal and desired body weights, and patients' drawings. With this caveat, it was found to be weakly present in seven patients. This is unlikely to be due to linguistic difficulty in the enquiry of psychopathology because the Chinese language has an adequate lexicon to express fear of obesity and DBI. Besides, the same result was obtained when several bilingual patients were interviewed in English. Although fear of obesity and DBI among Western AN patients may initially be denied and only emerge later in treatment (Crisp, 1980), this did not occur in our patients.

(d) *Sexual activity, substance abuse and stealing*

All patients had never had sexual intercourse, and ten of them had no experience in heterosexual dating. This is unusual for girls of a comparable background in Hong Kong, and may reflect psychosexual immaturity (Crisp, 1980). Stealing occurred in four patients, but there was no history of other impulsive behaviours such as substance abuse.

(e) *Other psychiatric diagnoses*

Clinically, mild to moderate dysphoria occurred in seven patients, but melancholic features were rare, and no diagnosis of major depression was made. This corresponded to a study in Taiwan where ten out of twelve Chinese patients with eating disorders exhibited depressive symp-

toms, but no diagnosis of either major depression or dysthymia was made (Tseng *et al.* 1989). This may suggest that AN in Chinese is less likely to be associated with major depression compared with in the West (Katz, 1987). Whether this is due to different diagnostic criteria used over various depressive diseases (a problem of inter-rater reliability) or their lower prevalence among Chinese (Xu, 1987) is uncertain. A follow-up study may clarify this issue. No psychosis was observed.

IV Brief treatment and outcome data

Thirteen patients required in-patient treatment which was multimodal, involving nutritional counselling, nursing support, psychotherapy and rarely medications. No specific attempt was made to modify DBI, which was not an outstanding focus in therapy. Weight loss appeared ego-syntonic, and a varying amount of resistance towards weight gain was almost always present, frequently in the form of abdominal bloating, complaints of 'no appetite' and a 'let-me-be' attitude of stubborn defiance (Crisp, 1980). Abdominal fullness usually resolved in patients who responded to treatment, during which their psychosocial distress frequently overshadowed their somatic concern. Despite the facade of co-operation to please health staff, authoritarian behavioural treatments often led to increased power struggles and disruption of rapport. Outcome (1-5 years) appears variable. Suboptimal body weight, amenorrhea and unsatisfactory social relationships occur in some patients.

DISCUSSION

The clinical features of our anorexics resemble Western patients in several respects. These include occurrence in young females (male or postmenopausal anorexics are still unknown in Hong Kong), most of whom had introverted personalities, rigid maintenance of low body weight, amenorrhea and various aetiological factors (Crisp, 1980). In contrast to Western reports, however, this sample of patients came overwhelmingly from the lower social class. As attitudes and values towards ideal body shape vary with social class and degree of Westernization (Nasser, 1986), the following discussion based on a limited case study may not apply to

all Chinese AN patients. However, this problem seems difficult to avoid in view of the rarity of the disorder in Hong Kong.

All patients had a period of management by other medical specialists before referral to psychiatrists. This reflects the low level of recognition of AN and probably the stigma of mental illness in Hong Kong. In fact, our patients usually had not heard of AN as a psychiatric disorder and were thus not 'me-too' anorexics (Bruch, 1985). However, they received medical attention soon after onset. This implies that emaciation and amenorrhea were not tolerated in Chinese culture which interprets plumpness and fertility as possible signs of good health.

Chinese girls in Hong Kong are typically slim, and the mean ideal weight (46.1 kg) of our patients differs from the corresponding standard weight (53.2 kg) for an English girl of the same age and height by a sizeable difference of 8.7 kg (Crisp, 1980). Hence, the commonly used criterion of 25% loss from the original body weight (Feighner *et al.* 1972; American Psychiatric Association, 1980) will only identify severe cases, and exclude four of our patients who were not clinically 'mild'. The 15% criterion in the DSM-III-R or a BMI of 16 or less as proposed in the ICD-10 is therefore more appropriate for Chinese, especially if early detection is required. Besides, owing to low awareness, anorexics of pre-pubertal onset may be under-recognized in Hong Kong, as they may be dismissed as 'primary amenorrhea' or growth arrest (WHO, 1987).

Our patients came predominantly from the lower social class. This finding may represent an illness behaviour related to the stigma of seeking psychiatric help, which caused selection bias. It may also originate from the lack of a primary goal of pursuing thinness for beauty, a reflection of Western middle class values, in the aetiology of AN among Hong Kong Chinese. This is supported by the finding of a similarly low incidence of AN in the blacks who have more obesity but less of its fear compared with the whites (Holden & Robinson, 1988).

Despite our patients' interest in food and eating, they lost weight primarily by dietary restriction. Vomiting and purging were inconspicuous even in the six patients who exhibited overeating. Ong & Tsoi (1982) found a similar

lack of vomiting and purging in Chinese anorexics in Singapore, and ascribed this to their having a less severe form of AN. But some of our patients remained steadfast restrictors despite their chronicity and severity. This would necessitate extreme self-control in Chinese society where not eating (especially tasty food) may be regarded as perplexing and even 'anti-social'. As these patients were not less severe than Western bulimic patients, there could be other reasons for the mild degree of bulimia.

Obesity is a powerful predictor for bulimic disorders (Garfinkel *et al.* 1987) but is rare in Hong Kong, where less weight control and bulimic behaviours are thus expected. Besides, vomiting is a learned weight control technique whose occurrence appears to be related to increased 'health education' in the mass media, modelling, or even 'the doctor putting the idea into the patient's mind' (Chiodo & Latimer, 1983). For example, Arab AN patients commonly dieted by fasting, and were reported to have no bulimic, vomiting and purging behaviour in Cairo compared with in London, where the bulimic syndrome was speculated to be 'socially contagious' (Nasser, 1986). It is possible that a similar process of social learning may have affected three of our bulimic patients who were nurses and therefore had access to medical information on how AN 'normally' presented itself.

Advertising on AN is considered a cultural risk factor for the disorder (Toro *et al.* 1988), but the media in Hong Kong have conveyed the opposite message for a number of female singing stars who felt they should be gaining weight instead. Moreover, the Chinese way of upbringing in which young children are taught 'not to waste food remaining in the bowl because every single grain of rice is grown through a great deal of hard work' (doing so is believed to bring bad luck) may discourage vomiting and purging. As with bulimic Asian girls in Bradford (Mumford & Whitehouse, 1988b), our patients did not usually binge secretively. This may be related to the greater acceptance of overeating in the Chinese family, where children are brought up to show filial love by eating more in front of their parents. There is less guilt associated with bingeing, and thus less urge to vomit. Understandably, vomiting which typically involves large amounts of high-calorie food is more likely

to occur in wealthy societies with an abundance of food. Indeed, AN is reported to be increasingly common in Japan, where bulimia, vomiting and purging occurred in 36–54% of patients (Suematsu *et al.* 1985).

A binge is believed to be precipitated by excessive restraint and involves an exhibitionistic display of the lack of control (Bruch, 1985). Unlike restrictors, bulimics are consistently found to be cognitively impulsive, emotionally labile and prone to multiple reckless behaviours (Lacey & Evans, 1986). Although important themes in the West are individual control and fear of non-control (Ritenbaugh, 1982), the opposite Confucian paradigms of social restraint, propriety and moderation (Ho, 1986) are more conducive to the development of restrictors (Casper, 1990) among Chinese. Besides, vomiting or purging is a means by which a Western anorexic rids herself of severe guilt that occurs after eating high-calorie food which is widely publicized as 'bad and forbidden' (Brumberg, 1988). Though rare, AN among blacks and Chinese living in and exposed to the food culture of Western countries present with vomiting and purging too (Pumariega *et al.* 1984; Kope & Sack, 1987). But the Chinese diet is generally lower in fat and higher in fibre content and, taken in an energy-balanced fashion, is a positive way of keeping healthy (Koo, 1984). This will cause less guilt and need to vomit 'unclean food'. Historically, Gull (1874) also remarked that a voracious appetite was 'exceptional', and vomiting was rare in early series of anorexic patients (Kay & Leigh, 1954; Russell & Treasure, 1989). With Westernization, however, more Chinese anorexics may develop the typical bulimic syndrome according to a continuum model of eating disorders (Russell & Treasure, 1989).

The very small difference (1.2 kg) between the original and desired body weights strengthens the clinical observation that an 'intense fear of obesity' and DBI are inconspicuous. Indeed, these symptoms had previously been reported to be absent among AN patients in Hong Kong, Singapore (Ong & Tsoi, 1982; Chiu, 1989; Lee *et al.* 1989) and even India (Khandelwal & Saxena, 1990). From a Western diagnostic viewpoint, should they be regarded as having conversion disorders (Fairburn & Garner, 1986) or depressive disorders where 'weight loss can

occur, but there is no disturbance of body image or intense fear of obesity' (American Psychiatric Association, 1987)? Is AN a culture-bound syndrome (Prince, 1985)?

Body image is a complex concept with no accepted definitions. It involves not only the visual perception of one's physical self, but also personality, feeling states, interoceptive stimuli, and dialectical social interactions (Warah, 1989). Clinically, DBI is a controversial entity that may be obvious, mild, latent or absent. Under the influence of 'standardized diagnostic criteria' such as the DSM-III which may contribute to particular theoretical preoccupations about how AN patients should present, its ease of detection may depend on the thoroughness with which the clinician looks for it in the dialectical process of illness negotiation (Swartz, 1987). Furthermore, the difficulties inherent in its assessment have led to little meaningful research, especially in perceptual studies (Hsu & Sobkiewicz, 1991).

Although correction of DBI is regarded as a 'precondition to recovery' (Bruch, 1962), its direct confrontation should paradoxically be avoided in treatment (Garner & Garfinkel, 1981), and the usefulness of body-image therapy remains uncertain. Bruch (1962) commented on the AN girl's 'vigour and stubbornness with which the often gruesome appearance is defended as normal and right', suggesting that DBI may be based on denial of illness rather than a real perceptual disorder. It gives AN patients a sense of purpose and motivation, as admitting to their thinness may evoke conflictual consequences (Casper *et al.* 1979). Moreover, it occurs in most normal and obese Western girls, black AN subjects living in Western countries and discharged 'recovered' anorexics. This indicates that it may be a metaphor of distress (Kleinman, 1987) in the 'anorexic climate' of Western culture, in which a depressed young female is likely to become obsessed with body shape, diet and seek defensive self-control in AN (Ritenbaugh, 1982). On the other hand, DBI may be absent in older atypical (Shisslak *et al.* 1989) and male anorexics (Fichter & Daser, 1987) because of the lack of social pressure for them to be thin. In view of the above, interest in DBI is likely to wane. In fact, it has been made less noticeable in the DSM-III-R, is not required in the proposed ICD-10, and is recently suggested to be abandoned altogether (Hsu & Sobkiewicz, 1991).

In cross-cultural research, a more abstract construct will increase the precision of detecting inter-ethnic differences, but only at the cost of diminished meaningfulness of comparison across cultures (Hui & Triandis, 1985). Thus, severe weight loss and amenorrhea are 'biological data' common to patients with morbid self-starvation in all age and cultures, while intense fear of obesity and DBI are more abstract 'biomedical categories' (Ritenbaugh, 1982). Unlike the former, the latter are culture-bound explanatory constructs which provide a special paradigm for how Western AN patients are to be regarded and treated (Swartz, 1987). Accordingly, it may be necessary to modify diagnostic definitions of AN to accommodate its culture-specific manifestations. Rollins & Piazza (1978) suggested flexible diagnostic criteria that DBI may be expressed at differing levels of abstraction, including situations where 'patients will express the DBI through complaints of a sensation of fullness or a mass in the abdomen, or fantasies of a thing inside'. This appears relevant to diagnosing AN in many Chinese patients, for whom less culturally laden constructs such as 'rigid self-control', 'addiction to starvation' (Brumberg, 1988) and 'weight phobia' (Crisp, 1980) may be worthy of further study.

From a historical perspective AN existed before there was a mass preoccupation with dieting and a slim female body, but the meaning of its changing patterns has to be decoded within particular historical and cultural contexts (Brumberg, 1988). Thus, early writings usually made no mention of DBI or deliberate dieting for fitness, but denial, anger, rigid self-control and biological features of AN were comparably present (Laseque, 1873; Gull, 1874; Loudon, 1984; Silverman, 1983, 1989). Besides, bulimia did not occur in 50% of AN patients as it does today (Fairburn & Garner, 1986). Thus AN patients of the past are phenomenologically anachronisms by modern diagnostic standard. In particular, the prominence of dyspepsia in many of our patients is reminiscent of 'apepsia hysterica' (Gull, 1874) and 'a painful digestion accompanied with flatulence' described in AN patients of the nineteenth century (Silverman, 1983, 1989), when doctors emphasized physical diagnosis and reinforced somatization as an approved mode of expressing distress. Our patients' physical presentation should therefore

be understood in the context of the Chinese to somatize dysphoria, and may represent a metaphor of distress sanctioned in Chinese society. Recently, Warah (1989) reiterated that more work on body image in AN should be done on internal states misperception, which may be reinforced in Chinese culture just as body size misperception has been amplified in Western culture. Indeed, AN patients may overestimate their gastric fullness (Robinson, 1989) and therefore experience distortion of gastric sensations in a way akin to expressing DBI (Rollins & Piazza, 1978).

A culture-bound syndrome should symbolize the core meaning of a particular culture (Ritenbaugh, 1982). AN as it is currently defined clearly does not epitomize the Chinese acceptance of plumpness and preoccupation with food (Lee *et al.* 1989). It might, therefore, be Western ethnocentric projection that anorexics in Chinese society should have the 'typical' Western presentation. From an etic (culture-general) perspective, our patients will be classified as 'atypical' or 'subthreshold' cases (Fairburn & Garner, 1986). From an emic (culture-specific) stance, however, it is understandable that AN patients in Chinese society do not exhibit an intense fear of obesity or DBI, but frequently complain of 'epigastric fullness' instead. In contrast to the DSM-III and DSM-III-R criteria, the proposed ICD-10 diagnostic guidelines do not require DBI and may appear less culture-bound. These stipulate that patients possess a specific psychopathology of a dread of fatness and/or flabbiness of body contour as an intrusive overvalued idea', and 'impose a low weight threshold on herself'. However, this emphasis on a dread of fatness may still be unsuitable for many Chinese anorexics. Therefore, more cultural sensitivity is suggested for the forthcoming DSM-IV in order to achieve a more universal definition of AN. In summary, intense fear of obesity and DBI are quintessentially culture-bound concepts, but other salient features of AN are not necessarily so.

Although there is a general reluctance to examine cultural issues in one's own culture (Murphy, 1977), imposing the criteria of 'intense fear of obesity' and DBI on Chinese AN patients in Hong Kong may be an example of a 'category fallacy', which is the inappropriate imposition of Western categories in societies for which they

lack coherence and validity (Kleinman, 1987). Over the past four decades, in fact AN has changed from an isolated, idiosyncratic disease to become more commonplace, blurred in its clinical picture, and may ultimately lose its specific psychodynamic meaning (Bruch, 1985; Brumberg, 1988). Such changes in frequency and presentation may also occur in Hong Kong as it continues to become more Westernized. This may have already happened in Japan, where anorexic and bulimic patients are rapidly increasing and reported to have 'fear of fatness almost unexceptionally' (Kasahara, 1988).

In a study recently published in Taiwan, Tseng *et al.* (1989) asserted that all eleven female and one male Chinese patients with eating disorders fulfilled DSM-III criteria, which explicitly required fear of fatness and DBI for diagnosis. However, they did not comment on the applicability of DSM-III or other diagnostic criteria in their patients. In contrast to our patients, these were a heterogeneous mixture of DSM-III restrictive AN ($N = 2$), bulimic AN ($N = 5$) and bulimia ($N = 5$), from upper and middle social class, more educated (mean years of education = 14.2), and pre-morbidly heavier (mean body weight = 58.9 kg, mean body height = 160.3 cm, BMI = 22.93 kg/m²). No mention was made as to whether they had previous Western exposure, but the higher social class and body weight are both recognized risk factors for eating disorders, and may contribute to more Western clinical patterns. Similarly, it is plausible that anorexics from higher social class in Hong Kong may exhibit intracultural diversity by manifesting typical Western features. This possibility may be supported by the recent finding that somatization, once thought to be relatively specific to non-Western cultures, may be more related to socio-economic class and education than ethnicity (Lipsedge, 1990). Thus, although no official reports can be found from mainland China (Lee *et al.* 1989), it will be interesting to study AN in its non-Westernized rural regions, where more archaic clinical forms may be found. Finally, whether different biological mechanisms (Russell & Treasure, 1989) operate among different cultures and account for cross-cultural variations remains to be investigated. It appears that, like their doctors, AN patients are also inescapably a product of their age and culture. As AN evolves over time

and place, so too must the means for identifying it.

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