The Slimming Movement: Implications for Clinical Understanding and Interventions

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LEE: ***The Slimming Movement: Implications for Clinical Understanding and Interventions.*** *While obesity poses significant health risks, extreme slimming may also bring about grave physical and psychosocial morbidity. Factors contributing to our current slimming movement are highlighted. Effective interventions to achieve healthy slimming are suggested. In addition, the clinician is cautioned to be alert to common eating problems including anorexia nervosa, bulimia nervosa, binging and purging. Underlying the diverse presentations of eating problems are self esteem difficulties, dysphoric mood, personality problems, family and peer pressures, and deeply entrenched over idealization of the thin ideal body image. Early diagnosis and intervention for the population at risk is advocated. The deceptively simple medical advice on weight reduction needs to be tampered with caution and balanced with considerations of the unique background and psychosocial profile of the vulnerable patient groups. (J HK Coll Cardiol 2006;14(Suppl 2):B20-B25)*

Slimming, eating disorders, psychological interventions

摘要

肥胖對身體健康構成威脅，與此同時，極端的纖體方法同樣能引致身體及心理社交上的損害。本文討論促成時下纖體運動的因素，並提出達致健康纖體的有效干預。此外，醫護人員應對幾種普遍的飲食失調問題有所警覺，例如厭食症、貪食症、及狂食後再清除等。儘管各樣飲食失調問題有不同的表徵，卻有共同的潛在誘因：缺乏自尊，心情煩躁，性格問題，家庭與朋輩壓力，以及對身體形象持有一個根深蒂固的信念：纖瘦便是完美。對於具備這些風險的人士，需要得到及早診斷及治療。醫護人員向易受影響的病人提出減輕體重的建議前，更須小心考慮及平衡病人的背景及各項心理社交因素。

關鍵詞：纖體　飲食失調　心理干預

Introduction

The prevalence of obesity has been steadily growing. The World Health Organization (WHO) named obesity as a "global epidemic" (WHO 1998).[1] One billion adults worldwide are estimated to be overweight, including 300 million being obese.[2] The National Heart, Lung, and Blood Institute of the National Institutes of Health noted that the risks of heart disease, type 2 diabetes, sleep apnea, osteoarthritis, and asthma are strongly associated with BMI.[3] The good news, however, is that intentional weight reduction of even a modest 5-10% of body weight is associated with healthy reductions in blood pressure, lipids and other metabolic abnormalities.[4] Effective programmes for attaining healthy weight have been well tried out with modest positive results.

On the other hand, a parallel, but potentially health damaging movement towards slimming is also evident. The standard of beauty or "ideal" physical appearance has changed steadily yet perceptibly over the past few decades. In Chinese communities, beauty is no longer associated, as in historic times, with round and prominent bodily features. In the west too, plumpness, once regarded as the definition of beauty in the 19th century, is being shunned. Jeffcoate[5] noted

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Walter Scott's description of a "mercantile" lady as being "fat, fair, and forty", no longer holds true in the eyes of the modern population.

Times have changed. With ease of communication and traveling, the world has become practically "flat"[6] due to its highly interconnected global changes. In terms of body image, the sociocultural forces in Hong Kong today, similar to those of the west, converge on the thin-ideal, rendering ultra-slimness as being equivalent to beauty, especially in women. Beyond aesthetics, the importance of appearance is also espoused by many as a prerequisite for societal success.[7] Attractive people are regarded as having more socially desirable traits and positive life outcomes compared to their less attractive counterparts.[8] Women thus confront with increasing societal pressures to achieve an ultraslender body to the extent that "a moderate degree of body dissatisfaction is now normative".[9] Being overweight is seen by some as personal weakness and a potential stigma. Some individuals reportedly develop such disgust over their plumpness that they insist never to wear tight clothes. Some go to such extremes of dressing and undressing in the dark, avoiding mirrors, and taking a shower wearing a chemise, so they would not need to face up to themselves![10,11] While maintaining a balanced weight through proper diet, appropriate exercise and regular physical mobility is an important feature of a healthy lifestyle, the medical community is sometimes confronted with the paradoxical effects of extreme weight consciousness – variants of eating disorders becoming prevalent especially in the young vulnerable female population. Extreme weight consciousness in vulnerable populations, instead of fostering health, may unfortunately serve to promote erratic eating habits, maintain dysphoric emotions, and perpetuate unhealthy behaviours. The two aims of this paper is to firstly review intervention approaches in fostering healthy weight reduction and secondly to alert the reader to issues and pathology of over-slimming.

Approaches to Weight Reduction

Interventions for obesity characteristically focused on lifestyle modification of diet, exercise, and promotion of healthy behaviours. Probably due to the additional advantage of group support and pressure, as well as opportunities for sharing strategies, group based programmes promised better results over individual therapies.[12] Group programmes consist of health talks, instructions on practice of self-monitoring skills, decreasing energy intake, increasing energy expenditure, and overcoming barriers in adhering to lifestyle changes.[13] Throughout the group sessions, emphasis is also placed on maintenance of sustained and optimal motivation through a predominant focus on successes rather than failures. A positive and accepting atmosphere is fostered in group meetings. Once the therapeutic endpoints are established, even with temporary setbacks, a problem solving over a blaming stance is emphasized. A standard programme runs for six months with weekly or biweekly sessions of about 90 minutes. A number of recent reviews have indicated that group programmes usually achieve weight losses of 7-10% of the participants' body weight at baseline.[14] However, beyond the initial group therapy, extended contacts with a therapist for another year would consolidate progress further.[13,14] The therapeutic goals, as a general rule, extend beyond the initial progress to a focus on maintenance of such gains through sustained lifestyle and dietary changes which would eventually become the participants' usual way of living. In essence, successful participants are expected to continue with an adherence to a low-caloric diet, regularly monitor their body weight, and routinely expend 2500-3300 calories per week in physical activity.[15]

To enhance effectiveness, important success ingredients had been highlighted. Specific rather than general advice is advocated. For example, provision of specific, structured meal plans including recipes, menus and grocery lists making up a diet of 1200-1500 calories per day leads to more effective weight reduction than simple advice to keep to a similar caloric consumption with no additional structure.[14,15] Recently available data also pointed to the beneficial use of meal replacement products, i.e. portion controlled, formulated products with appropriate nutritional balance. All in all, adherence and successful maintenance is best promoted through making advice simple, specific and practical.

In terms of exercise, the success regime should be flexible and low in structure, so that barriers to physical activity can be reduced, and common problems

such as lack of time, mood or energy could be circumvented. Type of exercise is less crucial than the actual amount of exercise in maintaining long-term weight gain.[16] To add up to the required amount, individuals should be encouraged to adopt a creative and varied approach including exercises at home, or in multiple short bouts, and to capitalize on short exercise opportunities built into their routine life (e.g. walking stairs instead of taking lifts, getting off a few bus stops early to walk home, taking on more regular cleaning chores at home, and even not using the TV remote controller). Rigid reliance on programmed physical activity, i.e. clearing discrete period of time for intensive workout, may sometimes serve as a deterrent factor for those with less keen motivation. Instead, lifestyle re-structuring and activities, which can be equally beneficial, should be encouraged and jointly worked out with participants.[17]

Pharmacotherapy and more drastic surgical interventions are advocated for the more severely obese. Fabricatore and Wadden[18] noted that seven medications have so far been approved by the Food and Drug Administration for treatment of obesity. Two of the medications (Sibutramine and Orlistat) were approved for long-term use. Sibutramine works as a serotonin-norepinephrine reuptake inhibitor which acts to limit food intake by decreasing hunger and increasing satiety, while Orlistat acts on the digestive tract by blocking absorption fat. While efficacious, the STORM trial[19] on 605 obese participants indicated that long term consumption of the medications are needed to maintain effective weight loss. One of the contraindications for many obese individuals is obviously cost considerations.

Bariatric surgery had also been beneficially used with individuals with extreme obesity. The aims of surgery were to produce a smaller stomach resulting in restriction in food intake or to create a bypass of the small intestine to reduce absorption. While risks of surgery had been documented, at least one recent study[20] had pointed to the risk of surgery being lower than the risk of not having it for the extremely vulnerable population. The five year mortality of patients with morbid obesity matched for age, sex, and age of morbid obesity onset, was <1% of patients for those who had surgery compared to >6% for whose who did not have surgery.

To increase the effectiveness of healthy weight reduction programmes, Crawford[21] commented on the need for population strategies with an emphasis on changing our current environment which "promotes excessive food intake and discourages physical activity". Crawford's suggestions included modifying building designs to encourage the use of stairs, making neighbourhoods more walkable, promoting active transport with safer footpaths and bicycle lanes, improving food labeling to help customers make more informed choices, and extending the range of healthy foods in schools and work cafeterias.

Having reviewed conventional approaches to weight reduction, it is also important to note that emotional adjustment may also stand in the way of success. Lewis[22] noted that "major reasons for comparative lack of success may be failure to enable the individual overweight person to deal with emotional problems about body shape, an individual's low confidence in ability to control weight, and lack of attention to the complex array of associated psychological factors". Personal factors leading to continual bulimic binges or pathological slimming will be reviewed.

Eating Disorders

Eating disorders are increasingly common in vulnerable populations who characteristically exhibit an extreme striving for an unrealistically low body mass. The affected population, predominantly females, present with anorexia, bulimia, and binge eating, at the average onset age of 18.[23] The peak age of onset for eating disorders coincides with pubertal development associated with fickle self esteem and increase concerns over physical appearance. Pervasive societal pressures compound the difficulties. The ideal body weight of women portrayed in the media has steadily decreased in recent times.[24] From 1959 onwards, a significant and continuing decrease in the average weight-to-height ratio of the Playboy centerfolds as well as in the Miss America contestants has been noted.[25] Beauty pageant contestants showed a consistent decrease in recent times in their weight compared to the normative weight for their height and age group.[26] There are increasing

number of dieting articles and advertisements in women's magazines, newspapers and mass media. In this connection, Schwartz et al.[27] reported an increase in eating disorders along the shrinking ideal, which is not accounted for by biological or personality models of eating disorders.

Bruce[28] (1973) described the eating disordered person's "relentless pursuit of thinness" and being imprisoned in their "golden cage". Russell[29] (1979) portrayed bulimics as having "morbid fear of becoming fat". In the modern day diagnosis of DSM-IV,[30] anorexia nervosa and bulimia nervosa are well described.

The diagnostic features of anorexia nervosa as stipulated in the DSM-IV[30] are:

A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected.
B. Intense fear of gaining weight or becoming fat, even though underweight.
C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

In contrast, individuals with bulimia nervosa are described as:

A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
   (1) eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances;
   (2) a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
B. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives; diuretics; enemas; or other medications; fasting; or excessive exercise.

Common psychopathological features underlie the apparent differences between those who fast incessantly and those who cannot control their impulsive binging. Fairburn[10] regarded the central thinking disturbance in both disorders as a "characteristic set of attitudes and values concerning body shape and weight. Thinness and weight loss are idealized and sought after, and there are strenuous attempts to avoid weight gain and 'fatness'". Self proclaimed "fatness" in the vulnerable population, is often a gross distortion of the reality, while others tend to equate their "feeling" of being fat with "actual" fatness in total disregard for actual weight. Fairburn[11] further noted that many such patients harbour long-standing negative self-evaluations, with pervasive insecurity about their abilities in multiple domains of their lives. Through becoming thinner, a quest which seems deceptively easy and focused, the patients hope to achieve a better view of themselves and prove themselves worthy. The secondary effects of the eating disorder spectrum (e.g., undue preoccupation with thoughts about food, eating, shape, weight, self-induced vomiting, over-exercising and laxative misuse) result from the two central features noted above, i.e. a) overwhelming concerns about weight and body shape and b) poor self esteem. Unfortunately, the intense quest to maintain low caloric intake with severe limits on food consumption puts patients under a continuous physiological pressure to eat, and predisposes them to binge eating. A "brittle" pattern of eating ensues and feeds into a vicious cycle where extreme control periodically gives in to outbreaks of binge eating; prompting further sense of failure and worthlessness, depressed mood; in turn intensifying subsequent urge to increase food restriction (as punitive and compensatory mechanisms); in time reverting to lapses and giving in to further binging; thereby maintaining the original low self-esteem and poor self worth. As a means to absolve guilt and undo the overeating, patients gradually equip themselves with a host of maladaptive practices revolving around self-induced vomiting and innovative means of purging.

Comfort eating especially when depressed or under stress also perpetuates eating disorders. Kendler et al.[31] noted not only that bulimics were more likely afflicted with depressed mood than controls, but also

that binges were associated with depressed mood. Binge eating had been thought to modulate and reduce depression through distraction.[32] Pike et al.,[33] however, noted that many bulimics reported being unhappy prior to binge eating. However, while some bulimics believe that binging and purging may reduce negative affect, some researchers had in fact reported contrary findings. Johnson and Larson[34] noted that immediately prior to a binge, bulimics felt irritable and inadequate. During the binge, however, negative mood further increased, accompanied by heightened feelings of inadequacy, guilt and shame.

The Vulnerable Populations

Young females with low self esteem, fickle self identity, and depressive mood are particularly at risk for developing eating disorders through the initial seemingly innocuous pathway of fulfilling the thin-ideal quest sanctioned by society and sometimes even the medical community. Likewise, female youths with a strong degree of body dissatisfaction and internalization of sociocultural pressure to be thin stand a higher risk of developing eating disorders. Individuals with weight problems and strongly held internalized ideals of thinness often had chronic body dissatisfaction. Bardone-Cone[35] noted that the combination of perfectionism, erroneous weight perception, and low self-efficacy prospectively predicted binge eating. Apart from individual vulnerability, societal and social pressures are also influential. Certain subcultures may magnify such sociocultural pressures. For example, eating pathology was more prevalent in subgroups where the value of appearance and public scrutiny is heightened, e.g. in dancing, modeling, musical and acting professionals compared to controls.[36] Eating disorders had also been noted to be overly represented in females with higher socioeconomic status.[37] Early and contemporary family influences may also exert a powerful impact. Family members of eating-disordered youths had been reported to be hyperconscious of weight and appearance.[38] Costanzo et al.[38] reported parents of highly restrained eaters as being more focused on dieting and physical attractiveness than controls. Peer group influence is also not to be underestimated. The index episode of extreme dieting was often associated with suggestions from friends to lose weight.[39] Binge eating and purging in subjects was highly associated with similar binging and purging of a close friend.[39,40]

Concluding Comments

The seemingly simple task of keeping a balanced diet and healthy body weight sometimes transcends common sense. Successful weight reduction approaches need to be multi-focused and to creatively span across individual, dietary, exercise, mood to environmental manipulations. However, the causes, and metabolic associations, of fatness (and extreme slimness) are extremely complex, and are often influenced by idiosyncratic, social and economic factors. A simple advice to vulnerable individuals, taken distortedly, may lead to aggravation of pre-existing problems. Jeffcoate[5] rightly noted that "While we have to examine critically the risks of obesity, we should look equally critically at the risks associated with its management - with iatrogenic food denial. In recommending weight loss to our patients, there is a possibility that we may sometimes do more harm than good". Apart from healthy lifestyles and advice on weight management, the female population, in particular, needs regular reminders to expand their perspective of self worth beyond appearance and body mass. Early diagnosis and intervention for those at risk for developing eating disorders or becoming unhealthily slim should be emphasized. Those with obvious depressive mood, low self esteem, high perfectionism, strong fixation on appearance and idealization of the slimming culture are particularly at risk. Alertness to inherent risk of eating disorders needs to be promoted in the vulnerable population by authoritative medical advice. In promoting healthy weight attainment, the extreme slimming culture needs however, to be undermined. Healthy savoring and enjoyment of food is to be promoted rather than shunned. A sensible lifestyle of regular physical activity, balanced diet, robust self esteem, and maintenance of a stable weight profile is preferred over either that of a sedentary lifestyle or an extreme fixation on losing weight rapidly.

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