

Fattening practices among Moroccan Saharawi women

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الممارسات التي تؤدّي للسمنة بين الصحراويات المغربيات

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الخلاصة: لدراسة السمنة في البيئة الصحراوية المغربية، تم الاستفسار من 249 من النساء عما يرغبن أن تكون عليه قودهن وممارساتهن الغذائية. وقد أبدى معظم النساء (90.4% منهن) رغبتهن بزيادة أوزانهن في الوقت الحاضر أو في وقت مَضَى. ولزيادة الوزن تلجأ النسوة إلى قضاء فترة التسمين (التبلاخ) لمدة لا تقل عن 40 يوماً، يُفَرَطَنَ فيها في تناول الطعام مع إنقاص النشاط البدني وتناول الوجبات التقليدية. كما يستعملن فاتحات الشهية مثل الحَلْبَة أو التحاميل الشعبية أو الأدوية. وقد استخدم بعض النسوة الكورتيكوستيروئيدات ليكسبن الوزن بسرعة. وتوضح الدراسة مدى الحاجة للتثقيف الصحي حول أخطار السمنة وأخطار استخدام الستيروئيدات في هذا المجتمع المحلي.

ABSTRACT To study obesity in Moroccan Saharawi culture, 249 women were questioned about their desired body size and diet practices. The majority of women (90.4%) reported wanting to gain weight currently or at some time in the past. To gain weight, women used a fattening period (tablah) of at least 40 days of overeating with a reduction of physical activity and special traditional meals. Appetite enhancers (therapeutic drugs or fenugreek) and traditional suppositories were also used. Some women used corticosteroids to gain weight rapidly. The study highlights the need for health education about the dangers of obesity and steroid use in this culture.

Pratiques des femmes sahraouies au Maroc pour engraisser

RÉSUMÉ Afin d'étudier l'obésité dans la culture sahraouie au Maroc, on a interrogé 249 femmes sur le corps qu'elles souhaitaient avoir et sur leurs pratiques alimentaires. La majorité des femmes (90,4 %) ont déclaré vouloir prendre du poids au moment de l'étude ou l'avoir voulu à un moment donné dans le passé. Pour prendre du poids, les femmes utilisaient une période d'engraissement (tablah) d'au moins 40 jours de suralimentation avec une activité physique réduite et des repas traditionnels spéciaux. Des stimulateurs d'appétit (médicaments thérapeutiques ou fenugrec) et des suppositoires traditionnels étaient également utilisés. Certaines femmes utilisaient des corticostéroïdes pour prendre du poids rapidement. La présente étude souligne la nécessité d'une éducation sanitaire concernant les dangers de l'obésité et de l'utilisation des stéroïdes dans cette culture.

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Introduction

As a precursor of a variety of chronic diseases, obesity is a major cause of preventable morbidity and mortality [1], and its management is a complex issue that includes a wide range of cultural and psychosocial factors [2]. Several studies have indicated that there is a strong association between self-perceived weight status and weight control behaviour [3,4]. However, the desirability of a particular body size is not simply an autonomous, individual choice, but is mediated by cultural factors. In many industrialized countries there is a desire to lose weight that may be accompanied by dieting or calorie restriction, use of diuretics, vomiting or exercise [5]. Paradoxically, in many developing world communities, fatness is culturally associated with beauty, prosperity, health and prestige [6–8], and thinness is perceived to be a sign of ill health or poverty. Thus fattening rituals are sometimes practised, for example in some Pacific societies where women overfeed to induce body weight gain [8].

In Morocco, existing studies have reported that the prevalence of overweight and obesity has increased greatly during recent years and that the increase is greatest among women, half of whom are overweight or obese [9–11]. However, the etiology of obesity in Morocco is not well understood, especially in some ethnic groups. The present study was designed to investigate perceptions of desired body size and the diet practices used to lose or to gain weight among Moroccan Saharawi women.

Methods

Participants

The survey was conducted between October 2001 and April 2002 on a sample of 249 urban non-pregnant women aged 15 to 70

years old, from Laayoune, a city in the south of Morocco. The sample was selected from women who visited public health centres during an immunization campaign. Only women of Saharawi origin and without any previous systemic diseases were eligible for this investigation. A number of criteria were used to identify women as belonging to the Saharawi ethnic group: their communication skills in Hassaniyya dialects, their traditional clothing and the history of their family's residence. Saharawi ethnic groups, characterized by the Hassaniyya dialect, have been a traditionally nomadic population undergoing a rapid process of urbanization and all Saharawi women, from the age of puberty, are expected to dress traditionally. All participants were interviewed face-to-face by an interviewer who belonged to this Saharawi ethnic group. Informed consent was obtained verbally from each participant before they took part in the survey.

Data collection

Body weight and height were measured while the participants wore light clothing with no shoes using a portable scale and a metric tape adhered to a wall. Body mass index (BMI) was calculated as weight (kg)/height (m²). The World Health Organization (WHO) definitions were used for underweight (BMI < 18.5 kg/m²), normal weight (18.5 ≤ BMI < 25 kg/m²), overweight (25 ≤ BMI < 30 kg/m²) and obesity (BMI ≥ 30 kg/m²) [12].

All participants were interviewed face-to-face by an interviewer from the same ethnic group. A discussion guide was developed including questions on socio-demographic characteristics, satisfaction with their body size, dietary history and practical behaviours used to lose or to gain body weight. The sociodemographic characteristics were: marital status (married,

divorced, widowed or single) and education level (never attended school, attended primary school or secondary school). To determine the perceptions of body weight, participants were invited to answer the following questions: Have you wanted to gain weight in the past? Do you want to gain weight now? Do you want to lose weight now? Participants were asked to describe any actions that they have taken to lose or gain body weight. All fattening practices used by the women were recorded, as well as other details such as portion size, frequency of eating, food composition and food preparation techniques.

Results

A total of 249 women were interviewed, with a mean age of 36.8 years. Most were married, divorced or widowed (79.9%) and two-thirds were illiterate (62.2%) (Table 1). The mean BMI was 29.6 kg/m² and 30% of women were overweight and 49% were obese.

Table 1 Sociodemographic characteristics of the study sample (n = 249 women)

Variable	Value	
	Mean (SD)	Range
Age (years)	36.8 (11.8)	15.0–70.0
BMI (kg/m ²)	29.6 (5.3)	17.3–41.4
	No.	%
Marital status		
Single	50	20.1
Married	166	66.7
Divorced	19	7.6
Widow	14	5.6
Education		
Never attended school	155	62.2
Primary school	47	18.9
Secondary school	47	18.9

At the time of the survey, despite the high prevalence of obesity in this population, a large majority of women (79.9%) described their weight as appropriate (199/249) and only 50 described it as inappropriate (8 desired to lose weight and 42 desired to gain it). Among the 199, 175 had wanted to gain weight in the past and 168 of them had used a fattening practice before.

Over 90% of the women were dissatisfied with their body size (225/249). Among the 8 women (2.4%) who wanted to be lighter, 2 were overweight and 6 were obese; only 2 obese women had made a previous attempt at losing weight using exercise activity and dieting. The majority of women wanted to gain weight rather than to lose it; 217 women reported that they had tried to gain weight at some time and 42 of them still desired to gain weight at the time of the survey. This desire to gain weight was in most cases accompanied by practising certain behaviours (Table 2). Only 12 women reported desiring to gain weight without practising any fattening behaviour whereas 168 women reported that they had already used (in the past) some fattening practices to grow fat, and at the survey time, 37 women were currently practising these.

Drugs, overfeeding and restriction of physical activity were 3 of the ways used by women to achieve their goal (fattening). The use of medications was an important

Table 2 Fattening practices used by Saharawi women desiring to gain weight gain

Practice	In the past (n = 175)	Currently (n = 42)
Appetite stimulant	71 (40.6)	3 (7.1)
Overeating	56 (32.0)	30 (71.4)
Corticosteroids	41 (23.4)	4 (9.5)
Other	7 (4.0)	5 (11.9)

alternative to gain weight in this population. Among women desiring to gain weight 40.6% had taken in the past and 7.1% were currently taking a therapeutic or traditional medication that increased hunger. Also, 23.4% of these women had taken in the past and 9.5% were currently taking drugs promoting weight gain as a side-effect (such as corticosteroids). In fact, in addition to the therapeutic medication, the women reported that some seeds such as fenugreek (*halba*) consumed directly or added to dishes have been used to stimulate hunger. It is important to note that in some of these women even though they knew there were risks accompanying drug use, they had used them because it allowed them to gain weight quickly. In addition, women used some traditional suppositories called *ligue*, composed of dates mixed with seeds and medicinal plants, specifically for increasing their peripheral fat.

With regard to the role of dietary intake, some women said that prior to marriage they had gone through a fattening period of at least 40 days of intentional overeating with a high reduction of physical activity, traditionally called *tablah*. This period could last longer until they achieved the goal of gaining weight. Information on diet consumed during this period of weight gain showed that the types of food traditionally used in the past had changed with the move to a more urban lifestyle. The older women whose lifestyle was formerly nomadic used only the consumption of a large quantity of camel milk that could reach up to 10 litres a day. Whereas after settling in an urban area, the women used several alternative foods in this traditional fattening period such as the soup and couscous of barley, the liver, fat and meat of camel, olive oil, and sugared milk and rice. On the other hand, other women used special traditional meals (*ajjna* and *lahssa*) as a supplement

consumed at least twice a day, particularly before breakfast and after dinner. These meals (*ajjna* and *lahssa*) are prepared from a mixture of several foods, seeds and medicinal plants. These 2 traditional meals differ by the presence of the date in *ajjna* replaced by honey in *lahssa*, and by the type of medicinal plants used in each meal.

Discussion

Cultural ideas on what is desirable and attractive have important implications in the development of body image and may influence practices to achieve or maintain this particular body image. The results of this study highlight the role of sociocultural factors in the maintenance of traditional values about the desirability of body weight. Indeed, in spite of the high prevalence of overweight and obesity in this group of women, a large majority of them described their weight as appropriate. Walker has reported that in African cultures, obesity in women is regarded with far less disfavour than in industrialized countries and, accordingly, there is only a limited incentive in obese African women to reduce their weight [13]. This agrees with our observations in this population. In addition, even among the 6 overweight and obese women in this study who desired to lose weight only 2 had taken part in dieting or sports activities. The attitudes to weight loss in this Saharawi population are attributed to the cultural acceptance of fatness and the ignorance of the health risks associated with overweight and obesity.

It has been reported that even when black women perceive themselves as being overweight, they still consider themselves physically attractive [14]. Fatness was often considered as prestigious in Cameroon, and as having an effect on getting alliances or

finding a marriage partner in Indian society [7]. It is also reported that in the Tahiti and Nauru Pacific societies, where fattening is associated with beauty and fertility, the women overfeed and undertake little activity in order to grow fat [8]. In this study sample, the majority of Saharawi women desired to gain weight during their life, especially those of normal weight. This is a result of an association of beauty with overweight. Also, it is important to note that from puberty, the Saharawi culture obliges women to dress in traditional clothes, and there is a belief that this traditional clothing style requires a heavier body. Although the impact of obesity on health was mentioned by some women, the women's desirable body image was determined by the socially acceptable body type rather than a healthy body. All these data highlight the great sociocultural pressure experienced by the thinner women considered not to have the cultural ideal beauty standard and may explain the high prevalence of overweight observed in young Saharawi women who could easily develop obesity at any time after early adulthood.

Sedentary lifestyles and high-fat, energy-dense diets are reported to be among the principal causes of the accelerating problem of obesity worldwide [15]. This study also highlights the sociocultural factors that affect dietary lifestyle behaviours. Indeed, the desire to gain weight expressed by Saharawi women motivates them even to use weight-gain methods that are unhealthy. Discussions about weight gain across a Saharawi women's life-cycle showed that in this society there are periods of culturally acceptable fattening characterized by overeating and reduction of physical activity. The women had entered the fattening period as a preparation for marriage. Overeating and sedentary behaviour are the traditional methods of gaining weight

in this population. Previously, in nomadic lifestyles, Saharawi women consumed a large quantity of whole camel milk as well as certain seeds and medicinal plants. After settling in an urban area where camel milk is not readily available, it is replaced by a variety of foods such as fat, meat and camel liver and meals prepared from barley flour and olive oil. In addition to fenugreek seeds consumed directly or added to dishes and to special traditional meals consumed as a supplement, Saharawi women used drugs to induce weight gain. What is serious in this population is not so much the utilization of drugs stimulating the appetite but that the drugs used are known to have repercussions on health. Corticosteroids, especially when taken for a prolonged period, can cause many other side-effects in addition to weight gain, such as osteoporosis [16,17]. In addition to the utilization of corticosteroids to increase their body weight rapidly, Saharawi women used traditional suppositories to increase their peripheral fat.

We conclude that steps need to be taken to prevent obesity in this population in order to limit the occurrence of more serious conditions. Any attempts at prevention require a change in social and cultural norms of beauty. Thus, interventions aiming at obesity prevention or management should primarily inform the population about the danger of corticosteroid utilization without a medical prescription, and educating Saharawi people about health issues related to overweight and obesity.

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