resting metabolic rate *precede* obesity? With the advent of certain new technologies, particularly the availability of whole body direct calorimetry, these questions could be answered.

Studies in England and the United States have shown that obese subjects often have lower resting metabolic rates that persist after weight reduction, that people with a high genetic propensity for obesity often show this decreased resting metabolism *before* they become obese, and that these people are more likely to regain their weight after weight reduction.³ What remains unknown, however, is the mechanism by which resting metabolic rate is lower in many obese people.

These observations have led to a new approach to the treatment of obesity: the attempt to increase resting metabolic rate. The pharmaceutical industry is hard at work trying to develop drugs that can increase resting metabolism without having undesirable side effects. To date, no such drugs are available.

Clearly, we have come a long way in the last 30 years in understanding the nature of obesity. Our fundamental treatment, however, remains the same: restricting caloric intake, increasing caloric expenditure with exercise, or both. Two articles in this issue of the Journal are concerned with weight gain. ^{4,5} One establishes that increasing exercise after smoking cessation will help to prevent or, at least, minimize the inevitable weight gain that

follows. The other demonstrates that the most probable cause of increased weight in the poorer segments of society is the inability to purchase lower caloric foods, which are more expensive. Neither of these studies concerns obesity per se; rather, they seek ways to prevent weight gain in certain populations. Not surprisingly, they focus on caloric intake and exercise, our main methods for treating or preventing obesity.

Today, we can define obesity at the tissue and cellular level. We understand many of the health risks of obesity. We can identify many obese and potentially obese people by their lower resting metabolic rates, but our treatment and preventive measures are essentially the same as they were a hundred years ago.

Perhaps that is as it should be, for there is little doubt that as our society consumes more calories and expends fewer, we become fatter. Perhaps the real challenge for the public health community is to find ways to encourage better eating habits and more exercise among the general public. In this regard, we must applaud the US Department of Health and Human Services' national health objectives for the year 2000. In particular, the "five a day" initiative aims to "increase complex carbohydrate and fibercontaining foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits."6 In line with the thinking of the late Geoffrey Rose,⁷ the decline in mean weight that is a reasonable expectation from the substitution of lower-calorie foods and a diminution of fats also is likely to reduce the frequencies of the upper extreme of the weight curve.

Myron Winick Columbia University College of Physicians and Surgeons New York, NY

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Topics for Our Times: Can We Learn from the Care of Persons with Mental Illness in Developing Countries?

Psychiatric care throughout the world, while endeavoring to treat many of the same disorders, sometimes differs as much in its modes of treatment as cultures differ in their values.¹ Styles of therapy differ. A variety of providers—primary care doctors, psychiatrists, nurses, health workers, traditional healers, or priests—deliver treatment and rehabilitation, depending on the locale.

A common denominator distinguishing the care of psychiatric patients in most developing countries from care in the United States is the extensive involvement of the patient's family. In many developing countries, traditional healing of the mentally ill explicitly involves family participation. In South Africa, for example, a traditional healer may require the entire family to be present for a ritual

intended for communication with the ancestors to reduce symptoms in the mentally ill family member. In the Patagonia region of Argentina, a *curandero* employs the power of multiple family members joined in prayer to treat an ill patient.

Likewise, in modern psychiatric care, families often participate in treatment. The family's role in hospital care in India provides a striking illustration. In Indian psychiatric hospitals, family members often stay in the hospital with their patient-relative. The relatives feed, bathe, and otherwise care for the patient. In the United States, by contrast, the task of caregiving in the hospital falls to paid hospital staff, and the patient's contact with family members may be limited to occasional visits.

When medical resources are scarce, often there are no institutions other than the family that can assume responsibility. This critical unit of society may grow as new marriages extend the network. Family members can remain within the group umbrella and retain the responsibilities accompanying their roles in the family, which may be modified in the presence of illness.²

Implications for Treatment

There are many potential benefits to close family involvement, from the onset of illness, in the day-to-day support of the patient and the prescribed treatment. Let us return to the example of the family's role in hospital care in India. First, because all of the families at the hospital

reside in such close proximity to one another, the patients and their relatives have the opportunity to meet, talk to, and observe other families in situations similar to their own. This sharing of experiences and knowledge probably serves not only to reassure the family that there are others in their situation, but also to influence how the family understands and deals with their sick relative. Second, the patients may benefit from having mentally healthy relatives with whom they can interact in addition to other mentally ill individuals. Third, when doctors are prepared to offer the family members training in how to care for their sick relative, the training can be "in vivo."

Family caregiving in India emerged partly for economic reasons. Simply put, family care reduces the number of nurses and nonmedical personnel required; yet the medical benefits of family involvement also have been articulated. Dr Vidva Sagar, the devoted medical superintendent of the Punjab Mental Hospital in Amritsar in the 1950s, was among the first to advocate family caregiving. He took in entire families along with the mentally ill patients, at times supplementing the extra cost out of his own pocket. His work, and that of others who followed, exemplified the therapeutic implications described above. Desjarlais et al.3 argue that "family involvement is rooted in Indian cultural understandings which dictate that someone other than the sick person make decisions about care." Whether for cultural reasons or purely from necessity, doctors foster and support the family's involvement.

The potential benefits are no less after the patient returns home. As described in one region of Tanzania,4 the proximity of family, whether in the same household or casting a watchful eye in the same village, may ensure that the patient maintains activities of daily living. The brothers' wives may cook for the patient. Other aspects of care include the family's facilitation of medication compliance and rehabilitation. Families are, in fact, essential to community-based rehabilitation programs. Originally developed for the physically disabled, community-based psychosocial treatment and rehabilitation now is being applied to care of the mentally ill in developing countries.⁵ In this approach, families learn about the illness and what should be done for the patient. Simple activities based in the home and carried out under the supervision of the family often become the stepping stone to self-sufficiency for families and patients.

In China, the impact of family involvement in the care of schizophrenia recently has been examined. The family's role in society was skillfully adapted for a family intervention that was tested in a prospective cohort study among schizophrenic men. Compared with men receiving standard care, men receiving family intervention showed lower readmission rates.6 In another example, in some rural areas of China, "guardianship networks" have been created in which a guardian (usually a family member) is assigned to encourage medication compliance, watch for prodromal symptoms of the disorder, alert health care professionals to decompensation, and "prevent the patient from being socially disruptive."7 When compared with control patients, patients participating in guardianship programs have been found to have lower rates of hospital admission, fewer psychiatric symptoms, and less disruptive behavior.

For at least one disorder, schizophrenia, there are grounds to hypothesize that the participation of the family has offset the disadvantages of care in developing countries. Differences have long been observed between the course of schizophrenia in developing countries such as India and industrialized countries such as the United States. Despite the dearth of mental hospital beds and other known treatments for schizophrenia in the developing countries, studies have often found schizophrenia to be associated with less impairment and less disability in developing than in industrialized countries.8 However, the factors that account for these differences remain elusive. Could the family's close involvement in the treatment process provide part of the answer?

Implications for the United States

Positive benefits of family interventions in the treatment of schizophrenia now have been demonstrated in the United States and other developed countries.9 These interventions generally help the family to understand the illness and to develop effective ways of responding to the patient's needs and demands. A recent study extended the concept to a more broadly conceived family support structure.10 Groups of families met together with one or two clinicians, working to solve various problems encountered during the course of the illness and to develop various coping methods for them. In a randomized clinical trial, these "multiple family groups" did, in fact, lengthen remission time and improve patient functioning. The positive effects were hypothesized to be due to the enlargement and strengthening of the patient's and family's social interactions and support. The clinicians observed that "the relatives and patients gradually became more open, cooperative, and personally involved across family boundaries as the groups continued to meet." 10(p686)

However, the impact of integrating the family into the delivery of treatment has not yet been systematically tried and tested in the United States. The nature of such strategies should be influenced by cultural factors and by the desires of patients themselves for more or less involvement of the family of origin. Unlike in developing countries, individuals in the United States who are mentally ill often do not live with family. In addition, in countries such as the United States where mental health resources frequently are available, family interventions can enrich the care of the patient but should not substitute for care by mental health professionals. Nonetheless, in this aspect of treatment, perhaps we can learn from the experience of countries that are poor in material resources but may be rich in some other ways. It is said that necessity is the mother of invention; perhaps out of necessity, developing countries have invented something from which we can learn a great deal.

Ezra Susser
Pamela Collins
Division of Epidemiology and
Community Psychiatry
New York State Psychiatric Institute and
Columbia University College of
Physicians and Surgeons
New York, NY

Bella Schanzer Columbia University College of Physicians and Surgeons New York, NY

Vijoy K. Varma
Department of Psychiatry
Postgraduate Institute of
Medical Education and Research
Chandigarh, India

Martin Gittelman New York Medical College New York, NY

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APHA Announces Search for Executive Director

APHA has begun a national search to find an Executive Director. We are seeking a proven public health professional who will share the national leadership of our association with volunteer leadership, as well as plan and direct the supporting activities of approximately 70 APHA staffpersons. Our Search Committee plans to present finalist candidates to the APHA Executive Board expeditiously. This is a Washington, DC-based position.

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