

Nutritional problems in adults

SELMA FREIRE DE CARVALHO DA CUNHA

Involvement and enablement of health teams: a report on experiences

THIS ARTICLE aims to report experiences that demonstrate the need to enable health teams and implement protocols for community nutritional assistance and monitoring.

The first experience was an extension project carried out in 2003 and 2004 with 21 medical and nursing students from the Triângulo Mineiro Federal University. The Home Nutritional Assistance Program [Programa de Atendimento Nutricional Domiciliar – PAND] aimed to guide caretakers and provide nutritional assistance to patients who required specialized or customized home care, with special attention given to those discharged from hospital with nasal enteral probe.

The initial stages of the PAND included preparing educational material for families and caretakers, enabling the team and developing follow-up protocols to establish proper procedures. With training, students became skilled in inserting and affixing probes, and were able to instruct patients and families on how to prepare and infuse the diet, to purchase or adapt materials already available in their homes, and to properly arrange the furniture in the patient's bedroom to make it more functional. Students also become responsible for monitoring the state of patients in accordance with a previously established protocol, allowing the early identification of eventual complications.

The second experience took place from 2002 to 2004. It was a dental assistance program for babies developed by the dental surgeon of a team from the Family Health Program [Programa de Saúde da Família – PSF] in the city of Uberaba. The program involved and enabled the team's professionals – doctor, nurse, assistant nurses, community agents – who were unacquainted with dental care and unaware of the importance of educational/preventive oral health measures for children this age. The team heeded the idea and several problems were identified, including the lack of equipment and funds to acquire them.

At participative meetings with community groups, the team explained the benefits of the project and its desire to implement it. This was followed by the establishment of partnerships: students from a welding school concocted

and manufactured a brand for the project; sewing students prepared cloth material; a printing house designed and donated educational leaflets; the local supermarket donated toothbrushes and assured their periodical replacement; a pharmacy donated cavity prevention preparation. Dental care protocols were drafted, the project was launched, and in a short time became a model for infant dental assistance. Because of this success, the city government requested that the dentists of the other 44 PSF teams of the city also receive the same training and implement the project in their areas.

We have found, in these topical experiences, that success was the result of the involvement of team members, keenly aware of the possible benefits for the community. Without their adherence, the projects would not have had impact. Success can also be attributed to their professional skills and a clear knowledge of their assignments. Involvement and enablement were overriding factors in both projects, which, to be successful, depended on the perception of the importance (“Why should I do this?”) and clarity (“How should I do it?”) of the procedures.

Is the team qualified to provide community nutritional assistance to adults and the elderly?

The interest and goodwill of the team members are evident in community services they provide to adults and the elderly. However, these professionals also bring their own concepts and amateur information, which does not always correspond to reality. Overall, doctors and nurses have scant knowledge of nutrition, since in Brazil there are few medical and nursing schools that pay attention to this area. Furthermore, few community assistance services include a nutritionist.

Brazil has many renowned researchers in the areas of food and nutrition. Unfortunately, in most situations, these professionals have no close contact with those who deal directly with the community. Many are trained to work in tertiary health services and use sophisticated nutritional assessment techniques, but, in general, few clinical experts can express their knowledge ways that can be applied to primary health care services.

Proposal for nutritional assistance protocols

The concomitant incidence of overweight, obesity, and underweight in Brazilian adults, both men and women, is well documented. Numerous initiatives have attempted to deal with this difficult alimentary situation. Our proposal is to create clear, structured, and feasible nutritional assistance and follow-up protocols, adapted to local needs and resources.

Protocol for patients in danger of malnutrition

The protocol shown on Figure 1 exemplifies some routines to assist adults and the elderly in danger of malnutrition. This scheme makes it possible

to assess the risk of malnutrition using easily obtainable data, such as the body mass index (BMI), histories of weight loss over a three- to six-month period, and information on insufficient food intake. For instance, individuals with BMI =20 and no history of weight loss will have 0 points, that is, they face no nutritional risk at the time of evaluation (which should be repeated every year if he or she is member of a risk group – for instance, the elderly). If their total point sum is 1, the risk of being undernourished is slight, and the evaluation should be repeated within one to six months, followed by nutritional guidance if needed. If they total 2 or more points, the risk of malnutrition is high and, in this case, treatment should be initiated, with nutritional guidance and supplementation if necessary.

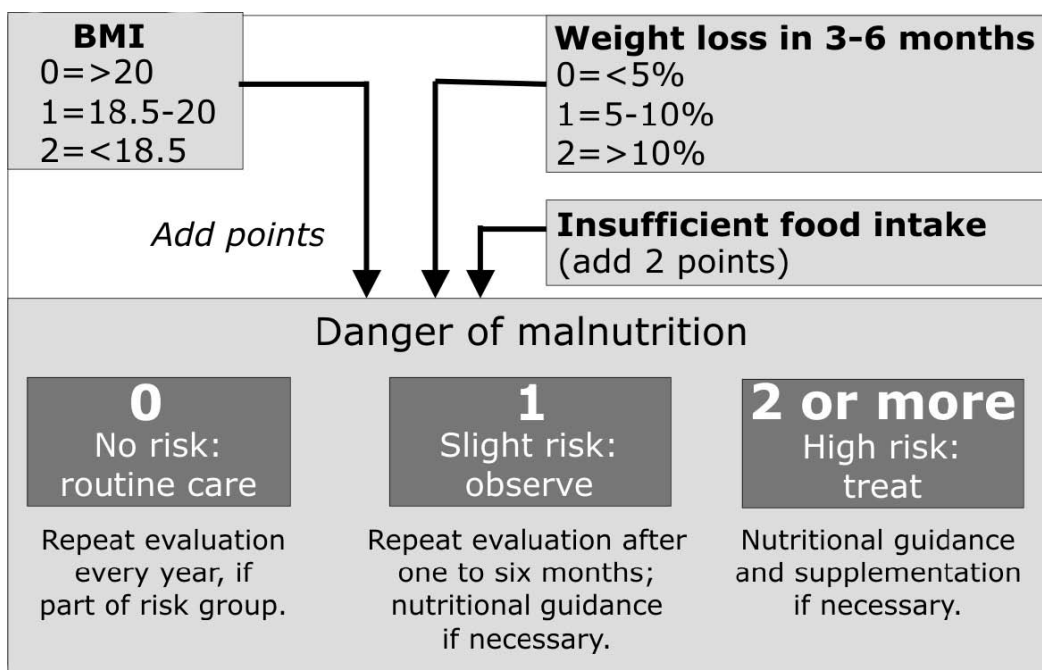


Figure 1 - Procedural Protocol for adults and the elderly in danger of malnutrition

Protocol for overweight or obese adults

It is important to have well-defined criteria to identify overweight or obesity. The BMI is a functional metric that can be used for its swiftness and ease of calculation, as well as for having significant correlation with body fat, morbidity, and mortality. The BMI is an estimate to determine if a person can have health problems because of overweight. A BMI above 30, for instance, implies greater risk. The combination of BMI and waistline measurement has been used to identify the danger of metabolic complications. For patients with BMI over 40, waistline measurement may be unnecessary, because BMI-only assessment is enough to indicate high health risk.

Table 1
Risk of comorbidities for adult men and women,
according to classification by BMI and waistline measurement

Classification	BMI	Additional risk of comorbidities	
		Waistline measurement (cm)	
		Men ≤ 102 Women ≤ 88	Men ≤ 102 Women ≤ 88
Normal weight	18.5 to 24.9	Normal	Slight
Overweight	25.0 to 29.9	Slight	Moderate
Obesity: degree 1	30.0 to 34.9	Moderate	High
Obesity: degree 2	35.0 to 39.9	High	Very high
Obesity: degree 3	≤ 40	Very high	

The initial assessment of overweight or obese individuals should include questions to determine the etiology of obesity, as well as the individual motivation to follow the treatment, as shown on Frame 1, below.

Frame 1
Initial assessment of overweight or obese individual

<p>Assessment of the etiology of obesity</p> <ul style="list-style-type: none"> ▪ Chronology of weight gain ▪ Family history of obesity ▪ Lifestyle changes ▪ Pattern of habitual physical activity ▪ Habitual alimentary pattern ▪ Pattern of alcohol consumption ▪ Conditions that contribute to obesity ▪ Current medications <p>Assessment of patient's motivation</p> <ul style="list-style-type: none"> ▪ Reasons and motivation to lose weight ▪ Previous attempts to lose weight ▪ Support from family and friends ▪ Awareness of the risks of obesity and the benefits of weight loss ▪ Availability of time ▪ Potential barriers to adapting to changes

According to the International Obesity Task Force, the choice of strategies to treat obesity should take into account the BMI and the presence or absence of associate risk factors, as shown on Table 2.

Table 2
Criteria for selecting strategies in the treatment of obesity according to the BMI and the presence or absence of risk factors

	BMI cutoff values			
	25.0 to 29.9	30.0 to 34.9	35.0 to 39.9	>40.0
No risk factor	Maintain weight, healthy diet, exercise.	Lose from 5 to 10% of body weight.	Lose more than 10% of body weight; usually drugs are necessary.	Lose 20 to 30% or body weight. If unsuccessful, forward to specialist or consider the possibility of surgical treatment.
With risk factor	Focus on diet, exercising and behavioral change. After 3 unsuccessful months, propose a slight energy deficit to lose 5 to 10 kilos in 24 weeks. If still unsuccessful, consider the possibility of drug treatment.	Focus on diet, exercising and behavioral change. After 12 unsuccessful weeks, consider the possibility of drug treatment.	Loss of 20 to 30% of body weight. If unsuccessful, forward to specialist or consider the possibility of surgical treatment.	

Source: The International Obesity Task Force, 2006.

Conclusion

Nutritional public health problems are huge and require several concurrent approaches, especially preventive ones. With its focused approach, our proposal aims to guide professionals involved in community assistance. The experiences that we presented here show that it is possible and necessary for community health services adopt protocols based on simple technical resources and well-defined diagnostic criteria. It is necessary to implement protocols for triage, assistance, and monitoring that clearly express the diagnostic criteria, specify procedures for initial evaluation and indicate therapeutic strategies in different conditions.

Bibliography

AMERICAN DIETETIC ASSOCIATION. Addressing world hunger, malnutrition, and food insecurity. *Journal of the American Dietetic Association*, v. 103, n. 8, p. 1046-57, 2003.

CUNHA, S. F. C.; SANTANA, C. S.; BARBOSA L.; MONTEIRO, J. P.; CUNHA, D. F. Obesidade entre médicos: dados de ingestão alimentar e estilo de vida. *Revista Brasileira de Clínica & Terapêutica*, v. 24, p. 91-5, 1998.

INTERNATIONAL OBESITY TASK FORCE. Available at: <<http://www.iotf.org>>. Accessed on May 2006.

IOANNIDES-DEMOS, L. L.; PROIETTO, J.; MCNEIL, J. J. Pharmacotherapy for obesity. *Drugs*, v. 65, n. 10, p. 1391-418, 2005.

MCMAHON, M. M.; BISTRIAN, B. R. The physiology of nutritional assessment and therapy in protein-calorie malnutrition. *Disease-a-Month*, v. 36, n. 7, p. 379-417, 1990.

NATIONAL HEART, LUNG AND BLOOD INSTITUTE, NORTH AMERICAN ASSOCIATION FOR THE STUDY OF OBESITY. The practical guide: identification, evaluation, and treatment of overweight and obesity in adults. *NIH Publication*, 2000.

SARLIO-LAHTENKORVA, S.; STUNKARD, A.; RISSANEN, A. Psychosocial factors and quality of life in obesity. *International Journal of Obesity and Related Metabolic Disorders*, v. 19, n. 6, 1S-5S, 1995.

ABSTRACT – This paper reports experiences that seek to strengthen health team capabilities, and the importance of nutritional care protocols for adults and the elderly. It describes two successful local health assistance experiences, with the close participation of health teams and a clear definition of action strategies. In this context, local nutritional care can be optimized by a set of protocols, clear diagnostic criteria, definitions for initial assessment procedures, different therapeutic approaches, and follow-up strategies adapted to local conditions.

KEYWORDS – Nutritional care. Adults and elderly. Malnutrition. Obesity. Evaluation protocols.

Selma Freire de Carvalho da Cunha is a clinical nutrologist and faculty member of the Medical Clinic Department of the Ribeirão Preto Medical School of the University of São Paulo. @ - sfreire@fmrp.usp.br.

This text has been translated by Carlos Malferrari. The original in Portuguese – “Problemas nutricionais em adultos” – is available at http://www.scielo.br/scielo.php/script_sci_serial/lng_pt/pid_0103-4014/nrm_iso.

Received on 5.22.2006 and accepted on 7.10.2006.