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An urgent need to strengthen nutrition education among medical students in India

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EDITORIAL

ABSTRACT

Nutrition plays an important role in human health but is not adequately emphasized among medical students. India suffers from the problems of both under and over-nutrition. There is increasing emphasis on nutrition education among medical students in developing nations. Many United States medical schools offer an online nutrition module in medicine to students. The author mentions possible suggestions for starting a nutrition module in Indian medical schools.

Key Words

India, Medical students, Nutrition

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Proper nutrition plays an important role in maintaining health and in disease prevention and treatment. Recognizing the vital role played by nutrition there have been educational programs targeted at the general public with the objective of promoting proper eating habits and improving nutrition. Patients expect doctors to provide guidance regarding diet and physical activity. However physicians often do not feel comfortable, capable and confident of providing nutrition counselling to their patients.¹ A possible reason could be inadequate knowledge about nutrition and nutrition interventions.

India with its large population and wide disparities in socioeconomic and living standards has to deal with the problems of both under-nutrition and over nutrition and obesity among its residents.² The authors of a recent article mention poverty and under-nutrition coexist in India and poor quality of the diet is associated with retardation of childhood growth and significant deficiency of micronutrients.² Access to food is closely correlated with poverty and inequality. Another article mentions protein energy malnutrition is a major problem in the country³ and the prevalence of stunting among under fives is 48% and the underweight prevalence is 42.5%.³ Obesity and dyslipidemia are also emerging as major public health problems among South Asians and Indians.⁴ The prevalence of obesity is higher among women compared to men and is greater in

urban areas. Among obese Indians there is a high prevalence of abdominal obesity and fat deposition at ectopic sites which predisposes to insulin resistance and metabolic syndrome. There are a number of factors which predispose Indian women to obesity ranging from sedentary behavior, imbalanced diets, postpartum weight gain and cultural issues.⁵

In developed nations recently there has been emphasis on nutrition education in medical schools. A recent survey in Europe showed that nutrition education in some form or the other was required in about 68.8% of medical schools surveyed and on an average about 23.68 hours of nutrition education was provided.⁶ In Nigeria the need for nutrition education in medical schools and approaches that could be used to integrate nutrition in medical school curricula was examined.⁷ A survey conducted among medical schools in the United States (US) concluded that the number of physicians interested in nutrition appears to be declining and fewer hours are devoted to nutrition in medical schools.⁸ In the US, the University of North Carolina at Chapel Hill has been offering a nutrition in medicine (NIM) online module free of charge to medical schools since 1995.¹ The authors and the developers of the module mention competencies in nutrition for graduating medical students.¹ These are grouped together into foundation in nutrition science, nutrition assessment, prevention, disease treatment, and nutrition therapy. Ninety out of 156 US medical and osteopathic

schools were using the NIM curriculum in 2010 and many international schools are also using the same.

Recognizing the importance of nutrition in the education of medical students, the Xavier University School of Medicine (XUSOM), Aruba offers a nutrition module for all second semester medical students. As part of this system the online NIM module has also been offered to students since the last two semesters. The online module can be tailored to individual school requirements by selecting specific topics to be included. The module also includes quizzes at the end of each topic. The developers also offer modules for practicing physicians.

The NIM module though primarily tailored to a US context could be offered to students in Indian medical schools. I was unable to find descriptions of separate nutrition modules or curricular initiatives with regard to nutrition in Indian medical schools. There are a number of public health and other initiatives to promote better nutrition in the country and the National Institute of Nutrition in Hyderabad has expertise in nutrition which can be utilized by medical schools. Collaboration with nutritionists and inputs from public health specialists will be useful. I believe the NIM module supplemented by local knowledge and inputs can be a good first step. Effective nutrition education to medical students in addition to improving the health of patients and the community can improve their personal eating habits. Incorporation of nutrition education within the second year cardiovascular curriculum was associated with improved heart healthy eating habits and the authors suggested that students with a healthier diet are more likely to recommend the same to their patients.⁹ Incorporation of nutrition education in Indian medical schools will have a positive effect on the nutrition and health of the population and equip medical professionals with the knowledge and skills to deal with the problems of both under and over-nutrition in the country.

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