

Final year medical students' knowledge of practical nutrition

D Parker MRCP **P M Emmett** BSc **K W Heaton** MD FRCP *University Department of Medicine, Bristol Royal Infirmary, Bristol BS2 8HW*

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Summary

An entire final-class of medical students was set a 6-part question on dietary advice to patients as commonly seen in general practice. The marks were scored by a formal, agreed system. Eighty-two per cent failed though only 2% failed the whole exam. The teaching of practical nutrition needs to be improved.

Introduction

Public concern about nutrition is high and rising and patients often want advice about their eating habits. Dietitians are in short supply and, in any case, patients are likely to heed their advice less than that of doctors. Since diet plays a major role in the treatment of many common diseases it is desirable that, when they qualify, doctors should have a reasonable working knowledge of practical nutrition. We have assessed this in an entire final year class of students.

Methods

As part of the Medicine paper of the Final MB examination, 119 students were asked the following (30 minutes allowed for all six answers).

'What dietary advice would you give to the following patients? (1) A 64-year-old man with mild diabetes. (2) A 44-year-old man with plasma cholesterol 8.0 mmol/l. (3) A 32-year-old man with blood pressure of 150/95 on repeated measurement. (4) A 38-year-old woman who believes her tiredness is due to a food allergy. (5) A thin but otherwise fit boy of 16 years who is self-conscious about his physique. (6) A 42-year-old man with frequent heartburn and acid regurgitation.'

The answers were marked in accordance with University regulations by the physician who had set the question. Under similar conditions the students were examined on other aspects of medicine and on surgery, obstetrics and gynaecology, mental health, child health, ophthalmology and ENT.

Results

The marks were normally distributed in all subjects. The average mark obtained with the nutrition

question was 50.1%. The average mark for medicine overall was 60.9%, and for all the other subjects combined was 58.1%.

Forty-nine students (41%) failed the nutrition question, that is scored less than 50%. Only one student failed Medicine overall and two failed the examination overall.

Provoked by these results, we devised an objective mark-scheme to the nutrition question in case the original examiner had been unfair. A set of model answers was prepared with three elements to each answer: 'essential' points, each awarded 3 marks, 'desirable' points, worth 2 marks and 'fine' points, worth 1 mark. The draft answers were discussed with three interested consultant physicians, a general practitioner and two senior dietitians and revised to obtain as nearly as possible a consensus. All 119 scripts were then marked again using the new scheme. The results were again normally distributed. The average mark obtained was 40.5% and now 98 candidates failed the question (82%).

Discussion

The data show that in a cohort of final year medical students whose knowledge of other aspects of medicine was quite adequate, knowledge of practical human nutrition was sadly lacking. Reports suggest the situation is likely to be as bad in other medical schools^{1,2}. With the current strain on resources in hospital dietetics departments and the increasing emphasis on the nutritional prevention of disease, this situation of ignorance should not be allowed to continue. We advocate formal teaching in practical nutrition for all medical students.

References

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