Recognition of make and flavour of chocolates among 76 doctors and nurses at two hospitals. Values are mean recognition scores unless stated otherwise

Grade	Make	Flavour	Total score	Coffee creme recognition (%)
Preregistration house officer (n=16)	4.9	2	6.9	81
Post-registration house officer (n=11)	6.9	4.8	11.7	100
Senior house officer (n=5)	6.2	3.2	9.4	80
Registrar (n=15)	5.5	2.5	8	87
Consultant (n=12)	2	2.2	4.2	67
Nurse (n=17)	7.2	5.1	12.3	88

Maximum score of 12 each for make and flavour, 24 for total score.

between grade differences for total chocolate scores ($F=8.3$, $P<0.01$, $df=4$). Post hoc analyses (the Newman Keuls procedure) showed that scores for the post-registration house officers were significantly better than scores for the preregistration house officers, registrars, and consultants. In addition, a significant inverse correlation existed between years post registration and total scores for chocolate recognition (Pearson's $r = -0.47$, $P<0.01$). The nurses performed as well as the post-registration house officers. The "coffee creme" chocolate was recognised by most subjects at all grades.

Comment

There seems to be a steep learning curve for chocolate recognition during the preregistration house officer year. This is true for many other medical skills and is likely to be related to exposure time. It is difficult to deduce whether the learning process for chocolate recognition is an active or passive one, but it is obviously important to the house officer. It is unlikely to be acquired from, or taught by, more senior

colleagues because our study suggests that this skill deteriorates with increasing seniority.

This apparent "fall out" of information regarding chocolates has been shown for other more orthodox aspects of medical knowledge—for example, management of hypertension.¹ Despite the poor performances of senior staff, however, this group certainly knew which chocolates they liked and which they did not, despite being unable to specifically recognise them. Terms such as "yucky one" or "yummy one" and "nice one" were commonly used by the senior registrars and consultants interviewed. Perhaps an analogy can be drawn with the acquisition of a more instinctive approach to medical problems as clinicians become more senior. Many consultants have been heard to say, "I don't know what's wrong with this patient, but he's definitely sick!" The other major finding was the almost universal recognition (and dislike) of the coffee creme. The reason for this is unclear, but in our experience this skill probably extends beyond the medical profession.

Finally, consultants beware, managers have already expressed an interest in the chocolate recognition score as a surrogate measure of time spent on the wards.

Funding: None.

Conflict of interest: None.

Answers to chocolate quiz: A: brazilnut caramel (Roses); B: strawberry delight (Black Magic); C: coconut éclair (Quality Street); D: nougat (Milk Tray); E: wafer sandwich (Dairy Box); F: coffee creme (Roses); G: truffle shell (Milk Tray); H: toffee penny (Quality Street); I: truffle and nougat (Black Magic); J: caramel cup (Dairy Box); K: orange cream (Black Magic); L: fudge (Quality Street).

1 Sackett DL, Haynes RB, Guyatt GH, Tugwell P. *Clinical epidemiology: a basic science for clinical medicine*. 2nd ed. Little, Brown, 1991:305-7.

Increasing handicaps in hospital medicine: two point cross sectional study of golfing activity among doctors

John M Eagles, George B Rhind

Royal Cornhill
Hospital, Aberdeen
AB25 2ZH

John M Eagles,
consultant psychiatrist

Roodlands
Hospital,
Haddington
EH41 3PF

George B Rhind,
consultant physician

Correspondence to:
Dr Eagles
j.eagles@abdn.ac.uk

BMJ 1997;315:1656-7

Hospital consultants are often characterised by the media, and sometimes even by apparently well informed government ministers, as neglecting patients for private practice or the golf course. We investigated playing golf as a source of patient neglect.

Subjects, methods, and results

The study comprised a postal questionnaire of male medical graduates of 1977 from Aberdeen and Glasgow Universities. Subjects were surveyed about their golfing histories, including their golfing profile as a final year student and their recent golfing behaviour and aptitudes. Using general practitioners as a comparison group whom we presumed would be too stressed and overworked since government reforms¹ to play much golf at all, we investigated the degree to which golf occupied the lives of hospital consultants.

The cohort comprised 134 subjects, the 52 male graduates of Aberdeen and the 82 male graduates of Glasgow whose addresses could be found in the medi-

cal directory of 1995. The overall response rate was 99/134 (74%). A significantly higher proportion of Aberdeen graduates responded (44/52 (85%) *v* 55/82 (67%); odds ratio 2.70 (95% confidence interval 1.04 to 7.21)), and more Aberdeen than Glasgow respondents had played golf as undergraduates (26/44 (59%) *v* 20/54 (37%); odds ratio 2.46 (1.01 to 6.05)).

Surprisingly, general practitioners were more likely to have played at university, to be current golfers, and to be members of golf clubs, and they currently played more often than consultants (table). When expected scores on a par 72 course as final year students and at the time of survey were compared, general practitioners' scores decreased by a mean of 3.9 (–1.0 to –6.8) while consultants' scores increased by a mean of 0.8 (–2.7 to 4.2).

Comment

Over recent years general practitioners have shouldered many of the tasks associated with government

reforms, which are widely assumed to be the cause of stress, disillusionment, burnout, and early retirement.^{1 2} However, we found that many general practitioners played a lot of golf—a sport that we believe does nothing other than increase stress—and wonder whether golf might be the main culprit. People who play golf often should beware of developing overtraining syndrome, which is characterised by a “depressed psychological profile”³ and increased susceptibility to infection.⁴ A focal dystonia (popularly termed the yips) destroys the putting stroke in a quarter of people who play golf frequently, often with profound psychological consequences.⁵ These factors may impair health and insight to the extent that people seek early retirement with the hope of playing more golf and reducing stress, when exactly the opposite effect is likely to occur.

The association between golfing at university and becoming a general practitioner is puzzling. Do sporting habits and aptitudes influence career choice, or do golf and general practice draw on similar constitutional traits?

As graduates of Aberdeen University (JME) and of Glasgow University (GBR), so we could not agree on the reasons for the differences between our classmates’ responses. Are Aberdeen graduates more energetic and dependable? Or are Glasgow graduates generally too industrious to play golf at university or to reply to frivolous questionnaires? Further research is required.

We conclude that hospital consultants seldom join golf clubs, do not play golf often, and their prowess deteriorates from that as undergraduates. While some might blame the introduction of compulsory audit, increased continuing medical education, the Calman changes, involvement in management, and general escalation in health service bureaucracy without meaningful increases in consultant numbers, it seems more likely to be due to engaging in large amounts of private

Questionnaire survey of golfing careers of male hospital consultants and general practitioners who graduated from Aberdeen or Glasgow University in 1977

Positive response to question	Proportion (%) of consultants	Proportion (%) of general practitioners	Odds ratio (95% CI)*
Have you ever played golf?	28/47 (60)	42/52 (81)	2.85 (1.06 to 7.78)
Did you play golf at university?	17/46 (37)†	29/52 (56)	2.15 (0.89 to 5.26)
Do you currently play golf?	18/47 (38)	35/52 (67)	3.32 (1.34 to 8.28)
Are you a member of a golf club?	9/47 (19)	29/52 (56)	5.53 (1.97 to 14.73)
Playing among current golfers: twice a month or more	4/18 (22)	20/35 (57)	4.67 (1.11 to 21.20)
Average score improving between graduation and survey?‡	4/13 (31)	12/25 (48)	2.08 (0.42 to 10.89)

*General practitioners v consultants.

†One consultant did not complete this question.

‡In 1995.

practice or to laziness, or both. To avoid becoming as stressed as their colleagues in general practice, however, hospital doctors would do well to ignore the illusory allure of golf to which general practitioners have so sadly fallen prey.

We are grateful to all respondents and to Sybil McLeod for processing of the data. Katie Eagles, Jane Eagles, and Jennifer Affleck acted as clerical assistants.

Funding: None.

Conflict of interests: JME and GBR are full time NHS consultants but have made every effort to report the findings objectively.

- 1 Sutherland VJ, Cooper CL. Job stress, satisfaction, and mental health among general practitioners before and after introduction of new contract. *BMJ* 1993;304:1545-8.
- 2 Kirwan M, Armstrong D. Investigation of burnout in a sample of British general practitioners. *Br J Gen Pract* 1995;45:259-60.
- 3 Fry RW, Morton AR, Keast D. Overtraining in athletes: an update. *Sports Med* 1991;12:32-65.
- 4 Fitzgerald L. Overtraining increases the susceptibility to infection. *Int J Sports Med* 1991;12(suppl 1):5-8.
- 5 McDaniel KD, Cummings JL, Shain S. The “Yips”: a focal dystonia of golfers. *Neurology* 1989;39:192-5.

The colon in medicine: nothing to do with the intestinal tract

Hamish Cameron, Annette Robertson

Recent work on systematic reviews led us to reflect on the titles of many medical papers and then wonder why there seemed to be more colons about than before. We report our efforts to explore this gut feeling.

Methods and results

We recorded the number of titles containing at least one colon in the first 100 original or short reports in the *BMJ*, *Lancet*, and *New England Journal of Medicine* every five years from 1970 to 1995. This produced a colon index by year and by editor. The colon indices were subjected to several exploratory tests—the χ^2 test, the F test, and Student’s *t* test.

All three journals started with a low index, and over time the *Lancet* and *BMJ* more often included colons in their titles (figure). The χ^2 test on the number of titles

with a colon *v* the number without was not significantly different in 1970 but was significant in 1995 ($\chi^2 = 26.34$, *df* = 2, *P* < 0.0005). There were also significant differences between the journals—*BMJ v Lancet* ($\chi^2 = 5.10$, *df* = 1, *P* < 0.025), *BMJ v New England Journal of Medicine* ($\chi^2 = 25.99$, *df* = 1, *P* < 0.005), and *Lancet v New England Journal of Medicine* ($\chi^2 = 11.64$, *df* = 1, *P* < 0.005).

The *BMJ* maintained the highest index throughout the study, peaking at 26 in 1990, when one in four papers included a colon in their title, while the *New England Journal of Medicine* had only one colon. The *New England Journal of Medicine* and the *Lancet* used other methods to break up titles: leading (spacing) and secondary titles of different print sizes, an occasional full stop, and dashes. There was a significant difference between the slopes of colon index over time (*F* = 13.37,

Medical Affairs
Department, Zeneca
Pharmaceuticals,
Alderley Park,
Macclesfield,
Cheshire
SK10 4TG
Hamish Cameron,
head of medical
affairs
Annette Robertson,
statistician

Correspondence to:
Dr Cameron

BMJ 1997;315:1657-8