Relation between teaching on various subjects necessary for accident and emergency work and senior house officers' clinical confidence

Subject	Doctor had received teaching: Yes	Doctor had received teaching: No	Mean score for confidence among those who: Had received teaching	Mean score for confidence among those who: Had not received teaching	Significance
Gynaecology	21	39	7	5	NS
Ear, nose, and throat	35	25	5	5	NS
Dermatology	14	46	2	4	NS
Psychiatry	19	41	5	3	$\chi^2=6{\cdot}77$, $p<0{\cdot}01$
Ophthalmology	30	30	7	6	$\chi^2=5{\cdot}87$, $p<0{\cdot}05$
Maxillofacial	15	45	4	4	NS
Paediatrics	31	29	6	5	$\chi^2=5{\cdot}99$, $p<0{\cdot}05$
Urology	18	42	7	6	NS
General medicine	37	23	7	7	NS
General surgery	25	35	7	6	NS

0 = No confidence, 9 = confident.

and emergency work provided them with valuable experience for their chosen careers.

Comment

Although these results are based solely on perceptions (a criticism levelled at a similar study of trainee general practitioners[2]) and we did not assess the doctors' skills or confidence objectively, we believe that the results highlight deficiencies in the teaching provided. The amount of teaching received each week (one to two hours) correlated well with the figure of 1·68 hours cited elsewhere.[3]

Teaching significantly altered the doctors' confidence in psychiatry, ophthalmology, and paediatrics, which parallels the findings of other studies.[4] The doctors had all had recent experience in medicine and surgery from their house jobs, which may explain why teaching did not alter their confidence in these subjects. Experience of other subjects is usually limited to undergraduate teaching, and we were surprised that the effect of teaching was significant in only three subjects. Possible explanations for this are the small numbers who received teaching and the fact that lectures have little effect on practical skills. When teaching occurred it was restricted to one lecture per subject during the six month post, which may be insufficient to raise confidence appreciably.

We believe that the teaching of junior accident and emergency staff could be improved considerably. A comprehensive introductory course should be provided in conjunction with both formal and informal teaching concentrating on the most important and life threatening conditions. We found large gaps in the content of formal teaching. There is scope for the development of a national training programme in accident and emergency for undergraduates and postgraduates.[5]

1 Yates D, Wakeford R. The training of junior doctors for accident and emergency work: a case for urgent treatment? *Injury* 1985;**14**:456-60.
2 Reeve H, Bowman A. Hospital training for general practice: views of trainees in the North Western region. *Br Med J* 1989;**298**:1432-4.
3 Review Body on Doctors' and Dentists' Remuneration. *Seventeenth report*. London: HMSO, 1987.
4 Hughes G. A prospective survey of senior house officers as they begin work in an accident and emergency department. *British Journal of Accident and Emergency Medicine* 1988;**3**:10-1.
5 Council for Postgraduate Medical Education in England and Wales. *The problems of the senior house officer*. London: CPME, 1987.

(Accepted 4 October 1989)

Diving practices of scuba divers with asthma

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Br Med J 1990;**300**:166

Many doctors believe that people with asthma should not dive because of the risk of sections of the lung being incompletely ventilated; as the diver ascends the sections may fail to empty sufficiently, resulting in pneumothorax and possibly cerebral gas embolism. The Health and Safety Executive has banned people with asthma from working as commercial divers, and the British Sub-Aqua Club recommends that amateurs with allergic asthma should not dive if they have wheezed in the past 48 hours. We failed to find any reports of studies of asthmatic divers.

Subjects, methods, and results

We circulated an anonymous questionnaire for divers with asthma in the magazine *Diver*, which has a circulation of 38 000. It was designed to examine the diving careers of the respondents and their history of asthma. As well as asking about age, sex, and qualifications the questionnaire asked how soon respondents thought they could dive after an attack of asthma and whether they had dived after this time.

We received replies from 104 divers (91 men and 13 women). One hundred of these divers were aged 16-40 and had been diving for six years or less; the whole group had logged 12 864 dives. Eighty nine of the respondents had had asthma since childhood, 70 wheezed less than 12 times a year, and 22 wheezed daily. Precipitants of asthma included, in descending order of frequency, upper respiratory tract infections, pollen, exercise, and cold air.

Surprisingly, 54 respondents had no idea how soon they could return to diving after wheezing (table). Nine who wheezed daily thought that it was safe to dive one hour after wheezing; they had logged 1241 trouble free dives. No cases of pneumothorax or gas embolism had occurred, but one diver had had decompression sickness on two occasions. Ninety six repondents had taken β_2 agonists before diving "just in case," and 29 were taking prophylactic drugs (17 inhaled steroids and 13 sodium cromoglycate).

Response of divers with asthma when asked how soon after wheezing they thought it was safe to dive

	No of respondents
−1 Hour	9
−2 Hours	7
−5 Hours	
−12 Hours	5
−24 Hours	14
−48 Hours	8
−1 Week	4
−2 Weeks	2
−1 Month	1
Did not know	54

Comment

The United Kingdom has no legislation to control scuba diving by amateurs. It would seem reasonable to provide safe guidelines for people with asthma rather than state that they should not dive, a recommendation that many are likely to ignore. Our 104 respondents had completed over 12 000 dives without sustaining pneumothorax or cerebral gas embolism. Our study may have missed divers with asthma who had problems, but we contacted the regulatory bodies for diving and other interested parties and did not elicit any case of asthma having caused problems.

It is disturbing that over half of the respondents did not know the current recommendations for safe diving and that one fifth had dived within 12 hours of wheezing. This suggests that the doctors undertaking medicals for diving are not giving sufficient advice, and we believe that only suitably qualified doctors should be used for such medicals, as is the case for commercial divers. Most of the divers' asthma was precipitated by cold air, exercise, and allergy yet nobody admitted to having had an attack of asthma while diving. It is surprising that neither the cold dry air from the aqualung nor the exercise entailed in diving precipitated an attack. Our study suggests that the British Sub-Aqua Club's recommendation to divers—not to dive within 48 hours of wheezing—is safe.

(Accepted 8 November 1989)