
International Perspectives

Graduate Training for General Practice in Scotland

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The original trainee practitioner scheme in the United Kingdom was launched in 1948 when the National Health Service started. It allowed certain selected family doctors to employ another doctor in training for a year. Although the trainee was employed by the trainer, the former's salary was reimbursed and the trainer received a grant. It was soon felt that a single year in practice after the preregistration year in hospital was insufficient, and, in 1952, the first joint training scheme was set up in Inverness. Since then numerous such schemes have grown up in Britain, all following a broadly similar pattern.

The present graduate (vocational) training schemes are for three years after registration, and consist of two years in hospital posts and one year as a trainee in a training practice. The hospital component is usually split into four six-month junior jobs, which are service posts recognized as appropriate for trainees in general practice. In addition, half-day release courses may be organized throughout the three years. Alternatively, a doctor can arrange his own hospital jobs before applying to join a training practice as a trainee for one year.

In the late 1960s, committees were set up in the different parts of the United Kingdom to coordinate all postgraduate medical education; in Scotland this is now done by the Scottish Council for Postgraduate Medical Education. In the early 1970s, the Council recommended the appointment of advisers in general practice to the universities. The advisers were usually part-time appointments in the postgraduate dean's department, and were

otherwise family doctors practicing in the community. There are four Scottish regional advisers attached to the four clinical medical schools in Scotland.

In most universities these arrangements came into being before departments of general practice were established in the medical schools. As a result these departments are primarily concerned with undergraduate teaching, and are much smaller than their counterparts in North America which are responsible for most of the postgraduate training in family medicine.¹ In the United Kingdom this training depends on general practitioners in the community, under the direction of postgraduate advisers, who may not even be members of the nearest university department of general practice.

In 1976, a Joint Committee on Postgraduate Training for General Practice was set up to coordinate standards for graduate training programs throughout Britain. This Joint Committee includes representatives from the Royal College of General Practitioners, the postgraduate deans, and the regional advisers in general practice. The Joint Committee has issued guidelines on the selection of trainers and suitable hospital posts. All regions in the United Kingdom and the armed forces are visited by panels from the Joint Committee with the responsibility for recognizing graduate training schemes and training practices, and for making recommendations to the postgraduate deans and their regional advisers in general practice.

The postgraduate office at Glasgow University

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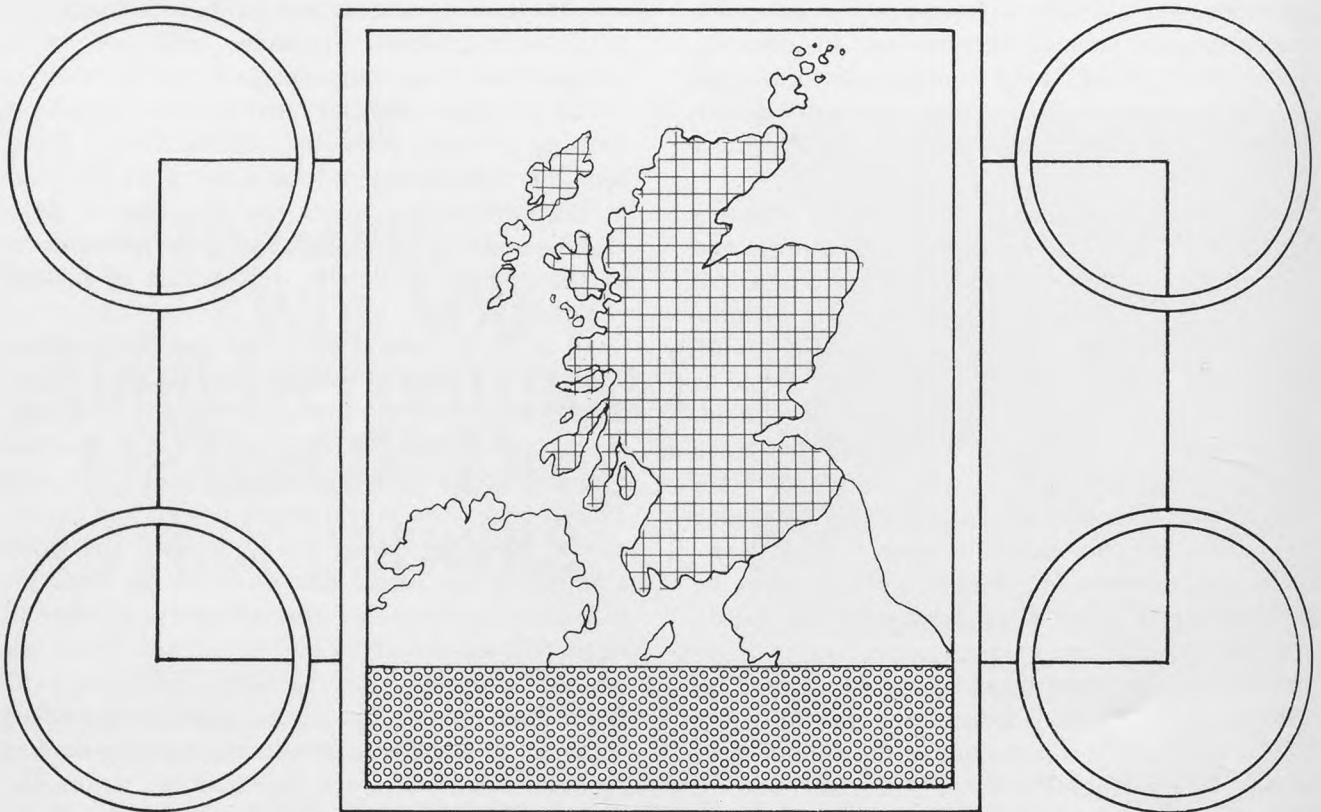
coordinates training schemes based on ten different hospital groups in the West of Scotland. These schemes cater to about 40 trainees each year, and offer a variety of hospital rotations and practice experience. In addition, there are a further 40 trainees in the West of Scotland who have arranged their own hospital jobs, but are spending a year in a training practice. There are approximately 2,900 principals in general practice in Scotland, of whom almost one in ten will be a recognized trainer. Only about two thirds of these training practices will actually have a trainee in any one year,² but this may change in 1981 when it becomes mandatory to have been vocationally trained in order to become a principal in general practice in the United Kingdom.

A comparison of the experience of family medicine residents in Ontario and general practice trainees in the West of Scotland indicated that the latter had much less supervision than the former, but that the Scottish trainees were seeing far more patients during their year in practice.³ Graduate

training in Scotland is longer than the equivalent residency programs in North America, and has a larger hospital component particularly with the compulsory preregistration year in the United Kingdom. Both the hospital and general practice components of British graduate training tend to be more oriented toward a service commitment than primarily concerned with training. As such, graduate training in Scotland and the United Kingdom is more an apprenticeship than the supervised residency programs of North America.

References

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Self-Assessment in Family Practice

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This section of The Journal is designed to present clinical problems which focus on patient management, problem-solving, and other elements integral to family medicine. The intent of this section is aimed more at teaching and learning than self-assessment as an evaluation or scoring device. Reinforcement of major teaching points is therefore included through the further discussion and supplemental references which appear on the following pages. Critical comments relating to these self-assessment materials are invited and should be submitted as Letters to the Editor.

Each of the following questions contains five possible answers. Select the one best answer (A, B, C, D, or E).

Seven-year-old L. M. is brought to your office by her mother, who tells of her daughter's sore throat and fever of three days' duration. The child's temperature is 38.3 C (101 F), there is a purulent exudate on the tonsils, and moderate cervical adenopathy is present. Streptococcal disease is prevalent in the community, and the office laboratory in your family practice group reports that 42 percent of recent throat cultures have shown group A beta hemolytic streptococci.

1. Which of the following statements is not true?
 - A. Streptococcal pharyngitis is more common in children than in adults.
 - B. Group A streptococci can be cultured from the throat in about one third of children with pharyngitis.
 - C. An antibody rise occurs in about one half of children with a positive culture for group A beta hemolytic streptococci.
 - D. The risk of rheumatic fever developing is related to the magnitude of antibody response.
 - E. Delaying treatment for two to three days greatly increases the risk of rheumatic fever.
2. The most cost effective management of the streptococcal pharyngitis during an epidemic is oral

penicillin therapy for which of the following?

- A. Only patients with group A streptococci positive throat cultures
 - B. All pharyngitis patients
 - C. None of the patients
 - D. All pharyngitis patients and all family contacts
 - E. None of the above
3. All but which of the following would be appropriate antibiotic therapy of streptococcal pharyngitis in the penicillin-allergic patient?
 - A. Erythromycin
 - B. Tetracycline
 - C. Lincomycin
 - D. Clindamycin
 - E. All of the above
 4. Which of the following statements concerning continuing care of streptococcal disease is not true?
 - A. About one week after a ten-day course of oral antibiotic or about five to six weeks after intramuscular benzathine penicillin therapy, both the index case and the family members with positive cultures should have repeat throat cultures.
 - B. If repeat throat cultures are negative one can assume that treatment has been adequate.
 - C. A positive repeat throat culture may indicate treatment failure, a chronic carrier state, or recurrent infection.
 - D. Repeat therapy may be with intramuscular benzathine penicillin G or oral antibiotics.

- E. Reculture is unnecessary if the patient is asymptomatic following the repeat course of therapy.
5. A major reason for recurrence of streptococcal pharyngitis is failure to take the antibiotic as prescribed. Which of the following statements concerning compliance is true?
 - A. Interviewing parents is a reliable way to assess drug utilization.
 - B. Most patients complete the ten-day course of therapy prescribed for streptococcal sore throat.
 - C. There is no difference in compliance according to socioeconomic group.
 - D. Compliance can be assessed by examination of anti-microbial activity of the urine, by pill count, or by weighing medication.
 - E. There is no relationship between the physician stressing the importance of taking medication and subsequent patient compliance.
 6. All but which of the following would be appropriate patient education advice for the family regarding streptococcal pharyngitis?
 - A. Tonsillectomy is recommended in instances of antibiotic treatment failure.
 - B. Adequately treated recurrences, no matter how frequent, are not hazardous.
 - C. Recurring attacks of streptococcal pharyngitis generally be-

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come less frequent with age.

D. Nonspecific measures such as vitamin use, gargles, and extra

sleep are ineffective in prevention of streptococcal pharyngitis.

E. Failure to re-treat clinical re-

lapses may lead to the development of complications and spread of infection.

Answers and Discussion

1.E. According to Wannamaker, group A Streptococci are found in the throats of 35 percent of children with pharyngitis. An antibody rise is found in about one half of those with a positive culture, and these individuals are at risk of developing non-suppurative complications.¹ Treatment delayed as long as nine days does not greatly change the risk of rheumatic fever.²

2.B. According to Tompkins et al, strategy B is most cost effective. In the face of endemic streptococcal infection it is medically most effective and least costly to treat all pharyngitis patients with penicillin. Strategy A—treating only patients with group A beta hemolytic streptococci throat cultures—is optimal when the throat culture yield is between 5 and 20 percent. Strategy C—treating none of the patients—is appropriate below a five percent yield. It is unclear whether it is cost effective to treat asymptomatic group A streptococcal positive contacts of infective patients even though as many as 50 percent of family contacts of children (12 years and younger) with symptomatic streptococcal pharyngitis will have positive throat cultures. The strategies described are based upon an analysis by decision tree. For the individual patient it is possible that the choice of the most cost effective treatment strategy could be based on the patient's clinical findings.³

3.B. Erythromycin (40 mg/kg/24 hr), lincomycin (40 mg/kg/24 hr), or clindamycin (30 mg/kg/24 hr) may

be used to treat streptococcal pharyngitis in the penicillin-allergic patient. Tetracyclines and sulfonamides should not be used for treatment of streptococcal disease.⁴

4.E. A repeat culture is recommended even if no symptoms are present following an initial ten-day course of therapy. Specimens should be taken from both the index case and family members with positive cultures. A negative repeat culture would be sufficient evidence of adequate therapy while a repeat culture positive for beta hemolytic streptococci might indicate treatment failure of the acute infection, a chronic carrier state, or recurrent infection with another strain. A repeat culture should be obtained following a second course of therapy.⁵

5.D. Bergman and Werner have found interviewing parents to be an unreliable way of assessing drug utilization: eighty-three percent of parents interviewed reported that all doses had been given, even though over one half of the patients in their study had stopped taking the drug after the third day.⁷ Studies have shown generally greater compliance in the private clinic group than in the inner-city hospital clinic.⁷ Compliance can be assessed by urinalysis, pill count, or medication weight. The importance of physician enthusiasm cannot be understated; when particular effort is made to stress the importance of taking medication, patient compliance and therapeutic success increase significantly.⁷

6.A. Tonsillectomy is a major surgical procedure which should be undertaken only for specific indications. Clinical relapses of streptococcal pharyngitis should be re-treated. With adequate treatment, recurrences are no more hazardous than the original disease. The patient and parents can be reassured with reasonable confidence that the incidence of streptococcal pharyngitis generally decreases with age. In the meantime, vitamin loading, gargling, and sleeping longer than necessary for other children offers no protection against streptococcal pharyngitis.⁷

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