PERSONAL EXPERIENCE

A self-employed training scheme in orthopaedic surgery

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Birmingham

The high cost of medical education is borne by state, parent, charity or part-time earnings, the proportion varying throughout the world. Where part-time earnings are essential, prolonged vocational training for general practice is not an economic proposition (Wilson, 1969). On the other hand, state-financed schemes tend to be stereotyped and closely controlled.

A three-month scheme is described using part-time self-employment to ‘work a passage’, and which provided a maintenance salary while attending a personally chosen course of study. Such schemes are not common in the United Kingdom, but for short periods enable the flexibility of self-employment to supplement more conventional programmes.

The aim was to learn those aspects of non-operative orthopaedic surgery including physiotherapy which are relevant to general practice, and at the same time attend three unrelated vocational seminars.

Financial possibilities
The financial possibilities were as follows:

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<th>TABLE I</th>
<th>FINANCIAL POSSIBILITIES (PRIOR TO 1 APRIL, 1972)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locum appointment</td>
<td>5 hours</td>
</tr>
<tr>
<td>House officer</td>
<td>£4.36*</td>
</tr>
<tr>
<td>Senior house officer</td>
<td>£5.43*</td>
</tr>
<tr>
<td>Registrar</td>
<td>£6.50*</td>
</tr>
<tr>
<td>Clinical assistant</td>
<td>£9.92*</td>
</tr>
<tr>
<td>Physiotherapy aide</td>
<td>£3.07†</td>
</tr>
<tr>
<td>Physiotherapy porter</td>
<td>£2.16</td>
</tr>
<tr>
<td>Medical deputizing service**</td>
<td>£7.50*</td>
</tr>
</tbody>
</table>

*These grades are considered to be self-employed and pay the whole National Insurance contribution (currently £1.50); for others the contribution is shared between employer and employee.
†Special rates for workers not exceeding 12 hours a week.
**The service referred to is Birmingham Locums Ltd., 305a Wheeler St., Birmingham B19 2EU, which offers a general practitioner locum service at similar rates. Other services also operate in the area.

I selected three sessions (10½ hours) a week as locum clinical assistant in the accident and emergency department of a large general hospital, earning £17 net per week (£22.50 basic, £2.60 tax, £1.40 superannuation, £1.50 self-employment national insurance).

Timetable
With support from the clinical tutor, the timetable was arranged thus:

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TABLE II
Timetable

<table>
<thead>
<tr>
<th></th>
<th>Morning</th>
<th>Afternoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Accident and Emergency.</td>
<td>Physiotherapy.</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Accident and Emergency.</td>
<td>Accident and Emergency.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Orthopaedic outpatients.</td>
<td>Physiotherapy. Group work seminar.</td>
</tr>
<tr>
<td>Thursday</td>
<td>Orthopaedic outpatients.</td>
<td>Orientation seminar.</td>
</tr>
<tr>
<td>Friday</td>
<td>Orthopaedic outpatients.</td>
<td>Administration seminar.</td>
</tr>
</tbody>
</table>

1. **Accident and emergency department** (three sessions)
The work flow diagram below illustrates the administrative complexity as well as the wide scope of work.

![Diagram](image)

*Figure 1
Referral paths to accident department.*
*Certain hospitals may refer patients to the accident department, e.g. a psychiatric patient after attempted suicide.*

More valuable experience would have been obtained if efficient exchange of information between these units had occurred. A regular fortnightly conference of team members to discuss standardization of techniques and cases of interest would have been useful. Formal demonstration of emergency equipment and procedures for occasional and short-term workers like me, was occasionally omitted.

Work in the department included the immediate management of major and minor injuries sustained in road traffic accidents, industrial accidents, falls from a height, burns, sprains, crushes, fractures, lacerations, collapses, abscesses and the whole range of common clinical conditions, all of which provided valuable training for an intending general practitioner.

2. **Orthopaedic outpatient department**
Attendance at orthopaedic outpatient clinics did more than refresh distant undergraduate memories. Experience of practical value was gained by observation, questioning and active
participation free from the threat of impending examinations. Conservative methods of treatment still form the cornerstone of orthopaedic practice, but the indications for operative management of osteoarthritis, rheumatoid arthritis, neurological and congenital abnormalities are rapidly widening. Unawareness of the availability of non-pharmacological methods results in prolonged unnecessary courses of analgesics in general practice.

3. Physiotherapy department
A small number of visits to the physiotherapy department attached to the outpatient clinic soon revealed the scope of treatment available for common disorders.

I spent much longer noticing landmarks of bony deformities, limitations of joint movement, the direction and distortion of muscle actions as patients performed graduated corrective exercises under supervision. The management of respiratory, neurological, post-operative and geriatric cases was observed. I attended antenatal and postnatal classes, a trauma rehabilitation unit, and an amputee limb-fitting centre.

4. Orientation to general practice seminar (one session).
Lectures and discussions designed for the trainee-assistant included such topics as record keeping, practice premises, local medical committees, co-operation with pharmacists, the occupational health services, abortion, oral medicine, and general practice psychiatry.

5. Administration, economics and manpower seminar (one session).
Medical and non-medical members drawn from all branches of the health service presented papers for discussion on manpower resources, community nursing, the demand for medical care, the allocation of finance, budgetary control, health centres, group practice, content of contracts, complaints procedures, industrial relations, the managerial role, hospital planning, and the integration of the health services.

6. Group work seminar (half a session).
Spontaneous interaction between members, with occasional interruption for tuition, demonstrated such group mechanisms as pairing, dependence, leadership and valency, illustrating their application to family situations, staff inter-relationships, and the behaviour of committees.

Discussion
The value of self-employed vocational training is shown for a limited period to supply omissions in training, or to repeat a topic in which one feels inadequate. There is freedom of choice in planning, and flexibility once planned, but learning is subject to self-supervision and self-evaluation. The tutors received no recompense and the information was hospital-orientated.

Reference

Appendix
Courses and centres attended.
1. 'Orientation to General Practice'. Details from the Board of Graduate Studies, University of Birmingham Medical School, Metchley Park Rd., Birmingham 15.
2. 'Health Service Administration'. Department of Extramural Studies, 58 Edgbaston Park Rd., Birmingham 15. (The fees for this course were kindly paid by Birmingham Regional Hospital Board).
3. 'Group Work and the Social Services'. Department of Extramural Studies as above.
4. Accident and Emergency Department, Selly Oak Hospital, Raddlebarn Rd., Birmingham 29.
5. Orthopaedic outpatient department, Royal Orthopaedic Hospital, Broad St., Birmingham 15.
6. School of Physiotherapy, Royal Orthopaedic Hospital, Bristol Road South, Birmingham 31.
   The following departments of physiotherapy:
   - Birmingham Accident Hospital
   - East Birmingham Hospital (chest and general branches).
   - Moseley Hall Hospital, Birmingham 13.
   - Royal Orthopaedic Hospital, Birmingham 15.
   - Royal Orthopaedic Hospital, Birmingham 31.
   - Queen Elizabeth Hospital, Birmingham 15.
   - Sorrento Maternity Hospital, Birmingham 13.

7. Artificial Limb and Appliance Centre, Oak Tree Lane, Birmingham 29.

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