PART I

Intensive coronary care

Nursing experiences in an intensive coronary care unit

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Building

We moved into a new Medical Department 2 years ago, but it was not designed to contain a Coronary Intensive Care Unit. The planning was completed 4 years earlier when Coronary Intensive Care Units were unknown in regional hospitals. Thus, yet again, a hospital building has been outdated as soon as completed.

In our building it has been possible to adapt a corner of the general ward with a spare nursing station opposite a four-bed bay and two single rooms adjacent. Extra wiring has been installed to supply six electrical sockets per bed. Although workable, this arrangement entails noise and disturbance due to being part of the busy thoroughfare to the general ward. I feel strongly that a Coronary Intensive Care Unit should be separate and quiet. Nevertheless, some benefits result from being surrounded by the general ward:

(a) The coronary patients fell less frightened at seeing ordinary ward activities going on around them.

(b) Potentially worrying patients—such as a recovery from cardiac arrest—can convalesce in the immediately adjacent general ward and be near the resuscitation equipment.

Medical staff

We have many problems produced directly by shortage of junior medical staff. Our House Physician has to be shared with the Sister of the general ward with twenty-four beds and, inevitably, we are in constant competition for his services. The Coronary Unit has 400 patients per year passing through and the general ward some 600 medical emergencies per year. Also, this same house doctor may be covering at times another general ward and he is clearly kept far too busy.

To spread out this heavy medical load, it is necessary that the entire Coronary Intensive Care Unit move up or down a floor every 3 months to work with a different house physician and medical team. These moves produce much upset. The delicate equipment is unnecessarily bumped about, various supporting services—porters, telephone operators, radiographers and anaesthetists—take some days to adjust to the new location, or a cardiac arrest call routine may misfire from lack of realization of the change of siting of resuscitation equipment. In my personal opinion I have no doubt that a Coronary Intensive Care Unit should remain in one place and be supported by a proper allocation of medical staff.

Nursing staff

These are all Staff Nurses or senior students who have requested to work on the Unit. The nursing work is of a comprehensive type which must be enjoyed and not just tolerated. Each new nurse has to be trained individually on:

(a) The setting up of ECG monitoring.
(b) The identification of arrhythmias.
(c) The taking of an ECG recording.
(d) The standard treatment of arrhythmias.
(e) Becoming fully conversant with all emergency procedures including defibrillation, intubation, administering intravenous fluids and collecting intravenous samples, and also
(f) Be drilled in at least once daily checking and maintaining of the Unit equipment and large drug stock—for never is there time or excuse for breakdown during an emergency.

Each nurse becomes a specialist in this work. (Most countries accept this as fact and pay the Coronary Care Nurse accordingly.) Staff shortages are always a threatening problem, but it is the quality as well as the quantity that has to be kept up to run the Unit smoothly and efficiently 24 hr/day, every single day of the year.

From time to time the medical staff and I have given courses on Coronary Intensive Care to interest some of our nurses in training to join the Unit after
passing their State Examinations. A certificate should be available at the end of 6 months work, and this also will help in recruitment.

The patients
They have the natural problems of feeling ill and being in pain but also they are often frightened and bewildered as well—by the equipment, the intensity of nursing and the frequent tests. They are restricted to bed, have intravenous needles in the hand, are not allowed to smoke and are on a diet.

It is most important that both medical and nursing staff put the patient clearly in the picture right at the start and encourage him that he will be in the Unit only a short time and that his condition should rapidly improve.

Tight control has to be kept on visiting relatives. They must not tire the patient and two brief visits a day by one or two close relatives is enough. Relatives must be prevented from conveying their anxiety to patients. A doctor must be available to speak to them. Employers can often be aggressive and difficult—demanding to know the patient's diagnosis and long-term prognosis. They will even pretend to be relatives in order to gain information and I have known employers to send a letter of notice to a patient in the Coronary Intensive Care Unit. All telephone enquiries must be dealt with in a brief and non-committal way.

Since the start of the Unit, patients with severe pain have been relieved by injections of diamorphine (heroin). There are good medical reasons for selecting this drug. In recent months we have had some unusual patients complaining bitterly of severe cardiac chest pain but usually showing a normal ECG. They have demanded frequent injections for relief. We realized that these are drug addicts and that the word must have got round that we give heroin. The descriptions of their chest pain are so accurate for cardiac pain that we think they have been given medical tuition about it. Indeed one patient feigned a cardiac arrest which responded very nicely to the first external cardiac massage. In view of all this we have changed our routine and use first for relief of pain, Fortral (pentazocine) which is usually effective and not addictive. It certainly does not please drug addicts, who promptly discharge themselves.

Cardiac arrest
When a cardiac arrest occurs—and there is no doctor on the Unit—the Staff Nurse moves to the bedside and gives three or four vigorous external cardiac massages. If there is no response and the monitor shows ventricular fibrillation, the Staff Nurse proceeds to bring up the resuscitation trolley and gives a defibrillation shock as quickly as possible. Meanwhile, another nurse will have put out the cardiac arrest call via the telephone operator who will transmit over the short-wave radio system. If another nurse is not immediately to hand the Staff Nurse can press down a self-locking rocker switch present by each bed which sounds off alarm bells for help over two general wards on the same floor. On most occasions medical help arrives so quickly that the Staff Nurses rarely have the responsibility of defibrillation (a little to their disappointment sometimes). At least three patients owe their lives solely to the prompt and competent action by a Staff Nurse. These episodes of cardiac arrest often greatly upset the other patients who tend to form friendships quickly with one another, though surprisingly, not every patient is disturbed—they seem to have a 'built-in defence' of the type 'It can't happen to me'.

When the time comes for the patient to leave the Unit and go to a general ward, he may be apprehensive over losing the constant observation and attention. He is soothed by being told he is making excellent progress and that the dangerous period is over. After leaving hospital, many of our patients contact us to express their thanks—some calling personally, others writing and some sending gifts or donations to buy equipment for the Unit. Their stay in the Unit clearly makes a great impression on them. This is very encouraging to the nursing staff and we have the satisfaction of knowing we are making some reduction in the mortality of this common and dangerous disease.
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Postgrad Med J 1971 47: 3-4
doi: 10.1136/pgmj.47.543.3

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