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Current topics

Neonatal intensive care and stress

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Stressful situations are common to all kinds of intensive care[1] but probably the most difficult and stressful of all, one in which practical, moral, and ethical problems abound,[2 3] is that of the newborn. Today, so much more is known and medical technology has become so sophisticated that specialisation into narrower and more highly technical fields has become necessary. Acutely ill babies survive very much longer, yet the number of appropriately trained nurses and doctors has not kept pace with the increase in work load. Many neonatal units are continually undermanned and substitute medical and nursing help has become difficult or impossible to find. Although abundant evidence is available,[1 4–11] and no fewer than 6 UK reports have made recommendations concerning the structure, staffing, and equipping of such units in the last 10 years,[12–16] remarkably little has been done to improve the lot of the doctors and nurses in this specialty.

Nurses

After the period of general training nurses may now choose a field of interest in which to specialise—for example intensive care. It will not be known if the individuals possess the particular aptitude, emotional stability, and general stamina until they actually take part. The turnover of nurses in neonatal intensive care is high[3 4 7] and a few, even during training, recognise that they are not temperamentally suited to the emergency nature of intensive care and do not complete the course. The illness rate of intensive care staff is high and there exists a recognisable 'burn out' syndrome in both nurses and doctors.[10] The various factors found to be of significance in the production of stress—patient's age, death and prognosis, need for parental support, work load in relation to staffing, insufficient medical and technical knowledge[5]—are all common to neonatal intensive care and are reason enough for this finding. There is often an early 'induction crisis' loss[7] although nurses leave the specialty for less arduous work even after some years[4 7 10] by which time one might have expected them to have become 'adjusted'.

Another aspect of intensive baby care which is particularly stressful is the impact of the sudden loss of a baby,[4–6 8 11] particularly after a long struggle. On page 108 Astbury and Yu[11] identify sudden death and clinical relapse as principal items for intensity of stress both for nurses and doctors. Apart from the disappointment felt by medical and nursing staff there is the emotional reaction in the parents which has to be thoughtfully handled. Not all nurses can observe or assist in the grief reaction and it must be realised that a regional referral intensive care baby unit (ICBU) has one of the highest mortality rates of any single hospital unit in the NHS.

Another factor which has not been given adequate attention is the effect of modern training methods on the work load of service staff. After a while the trainee of the past became a useful member of the ward team but this is no longer so. Although trainees are at times used (unofficially) as 'staff', they are of little value in highly sophisticated areas of care and in fact constitute an extra liability. Trainees should not be regarded in any way as helpful in the ICBU and additional tutors should be provided for their instruction so that staff time for patient care is not eroded.

It is suspected that some of these staffing problems relate to the experience of the nurse during training and the early days of responsibility as a staff nurse. Even the centres offering intensive nursing courses can be very short staffed especially at nights and during weekends. Thus during holiday periods or because of illness the work load in a busy unit can become intolerable. The responsibility forced on inexperienced nurses is unfair to them and hazardous to the baby, yet this happens frequently and nurses are deeply concerned that they are unable to give optimum care.

For the foregoing reasons and perhaps because of an apparent increasing unwillingness among younger nurses to expose themselves to such stresses for any

length of time[17] recruitment to this specialty is becoming increasingly difficult. Preliminary results of a survey being conducted by the BPA/BAPS Joint Standing Committee on Paediatric Nursing indicate that 45% of ICBUs in the UK are currently understaffed because the establishment is either inadequate or underfilled or both. In fact, much of the success of intensive care in the newborn today is due to a small number of dedicated nurses, often of long service who seem remarkably able to stay the pace and appear to have a special aptitude and a unique tolerance.[4] But even they admit to becoming 'worn down' at times.

What can be done to lessen the stress and encourage recruitment? Financial incentives, already offered to nurses in psychiatry, are now being considered for other specialties. However, a financial lead relating to intensive baby care certification (in addition to paediatrics) while being very acceptable is unlikely to resolve the problem.[5] Ways of relieving the strain for the ICBU team as a whole are discussed below, but for the nurses there are several ways in which stress can be alleviated. These include recognition of their levels of skill, being given responsibility for 'a baby' rather than a 'task', playing a more active part in deciding if the unit can accept more patients, especially from outside units,[4 6] being present at parent counselling, having more understanding by senior nurses of the difference between intensive baby care and other forms of nursing, having a choice of time off and holidays, and even a choice of footwear.[6] The stress of ICBU administrative responsibility[9] has not been recognised officially and senior nurses may not be able to keep up the pace or keep up to date. For those nursing full time in intensive care the option of early retirement without too heavy a financial penalty should be available.

Doctors

Evidence of the fatigue syndrome in both senior and junior medical staff has now been recorded.[4 10 11] Although senior staff, with their other duties, may not spend as much time actually in the intensive care unit the relentless load of responsibility which cannot be shared, the anxieties of making life and death decisions almost every day, and the concern over long-term handicap in survivors[4] eventually over the years take their toll. The signs of 'burn-out'[10] in senior staff include preoccupation with activities which make them less available, over reliance on junior staff, inflexibility and resistance to change, and even at times a reluctance to visit the unit; some consultants who have left intensive care for other types of practice admit relief at having been able to opt out. The fact that little has been said to date about this in the UK could be because the majority of neonatologists are still young, but the syndrome exists and is at last being discussed openly.

Neonatologists are under continual pressure since they are, together with their obstetric colleagues, the only specialist clinicians whose success or failure is constantly open to public scrutiny. While perinatal mortality figures should never influence clinical management, administrators—many of whom still do not appreciate how different the work of an ICBU is—quote these figures. They do so perhaps to the acute embarrassment of the paediatricians whose results often have little to do with their own personal ability or devotion. Competitiveness, which, when kept within bounds can be beneficial, may merely add to the stress since improved standards of care are becoming progressively harder to maintain with the current staffing structure and financial restrictions.

Many consultants caring for the newborn have been, and some still are, single handed and the pressure of 'emergency' admissions 24 hours a day 7 days a week is relentless. Even in fairly well-staffed units continual changes in junior medical staff mean that the unit no sooner settles into a routine with registrars capable of the high technical standards required, when they rotate or leave and the anxieties of training a new team start all over again. Rapid rotation of medical staff because of the training programmes and the 'all change' timing of junior staff appointments may mean that as many as three-quarters of the doctors on a unit may change on the same day and the quality of care will inevitably fall. This stressful period is not unique to baby care since all hospital units have similar problems but their importance is obviously much greater here than in most other specialties. Staggering the change-over period can sometimes help but it is seldom possible because of the NHS appointment system. Changes of staff periods are full of anxiety,[4 10] as nurses and doctors discover each other's strengths and weaknesses[1] and while the inexperienced learn the essentials of life-saving in labour room and nursery. Feelings of inadequacy lead at times to aggression especially in those who feel they 'ought to know' and 'be able to cope'. Thus many seniors feel obliged to be constantly available and Astbury and Yu[11] found conflict with family life to be a major problem.[3]

The young neonatologist taking up his consultancy at present looks forward to some 30 years of concern about neonatal death and long-term handicap.[4] While the follow-up clinic brings much reward for the work of the ICBU team, disappointment over the results of intensive effort are fairly common. All doctors have to give bad news to patients, but there is

something particularly tragic in having to tell parents that their baby starts life at a disadvantage.

Where senior medical staff are concerned the feasibility of the suggestion made in the Scottish document[15] should be considered. In brief, this suggests that there should be at least 3 consultants caring for babies in any regional intensive or special care unit. The most senior should be virtually full time and in administrative charge; a second young consultant, who should be entirely devoted to the unit (not assuming all the other duties of a consultant), should hold the post for a limited period of 4 to 5 years; and the third should devote at least one-third of his time to neonatology retaining sufficient expertise to take 'on-call' duty. The second member of this team devoting all of his time to the unit would be able to provide continuity of care, quality control, and training for junior staff, and would be ideally placed to engage in medium- or long-term research. It is believed that some of these consultants, at the end of this 5-year period, would wish to move to another field while a few would continue a full-time career in neonatology. In this way it would be possible to provide neonatology with an adequate number of young consultants for service needs and obviate undue stress falling on anyone during very long periods of time, as can occur at present. It would seem reasonable that the early retirement option offered to psychiatrists should be available to consultants who have done at least 20 years in this specialty.

Although junior medical staff are exposed to the stress of the ICBU for a fairly short time they too can be seen to go through several phases. The tempo and emergency nature of work in an ICBU is sufficiently unlike their previous experience that it often takes them by surprise.[11] The adjustment period takes several weeks and sometimes considerably longer. Some doctors never adapt and can never be relied on to recognise problems in time and to act accordingly. They take as little part in the ward activities as possible and lean heavily on their colleagues.[1] Major issues can develop from trivia and they are generally a disturbing influence on the ward. Their anxieties show in the development of problems with doctor and nurse relationships, such relationships being ranked highly as a potential stress factor.[5 11] Others settle in and become valuable members of the team for periods differing from a few weeks[4] to several months before they show signs of 'burn-out'.[10] Relationships begin to suffer, mistakes are made, record keeping and clerical work get behind schedule, and there is a discernible loss of enthusiasm. Ideally, the doctor who does not adapt or who 'burns-out' early should be able to rotate with his colleagues for respite or replacement but this is seldom possible. They have therefore to be 'carried', it is to be hoped with periods of 'recovery', until their tour of duty is over.

In the last few years much has been done to improve the lot of all registrars regarding time off, study and annual leave, but with no increase in establishment so that, as with the nursing staff, the stress for those on duty can reach unacceptably high proportions. In order to ensure statutory time off medical staff not currently assigned to the ICBU have to be scheduled for duty with a subsequent loss of continuity of care and a lowering of the standards—a frequent source of anxiety for the nurses and the consultants in charge.

The team

Successful intensive baby care is essentially a matter of team work. It is not surprising therefore that many of the recommendations for easing the tension and stress affect doctors, nurses, social workers, health visitors, parents, and even a delegated psychiatrist[4] in small or large numbers. Mental health days, retreats, psychosocial rounds and case conferences, and 'staff problem' groups[1 4 10] have been suggested and are regarded by some as more important than such practical problems as the use of complex equipment.[5] However, many also feel that more understanding of what was being done and why, and familiarisation with the technical aspects of care would help.[4–6 9 10] While adequate time off[6 10] and well planned vacations are considered important, rotation of staff to other wards or to the community for rest periods seems of doubtful value.[4 6] Some do not want to return to intensive care[6] and the 'edge' and expertise may be lost, making return and re-training difficult. Without an increase in establishment, a reduction of working hours cannot be contemplated since this merely puts additional stress on those who remain.

Lengthy periods of study leave are not advised, but half-day or day release for refresher seminars has been found to help nurses to retain their confidence and keep up to date in what is still a fairly rapidly changing subject. For all staff, standardised operational guidelines help to ensure confidence that the right thing is being done.[10]

The situation has not been made any easier with the emergence of self-appointed groups who now monitor, in clandestine fashion, the care given to babies in hospital. No matter how well considered and well intentioned their actions may be, doctors and nurses are now continually under a threat which is making an already difficult task almost intolerable. Neonatologists are not at the present time free to exercise the principles and code of practice laid down

in the BMA's *Handbook of medical ethics* and are having to make decisions contrary to the wishes of parents.

The message seems clear: too much of the hard work and strain is falling on too few, who often have inadequate resources. The most obvious single way of improving the situation is to implement the recommendations of the BPA/RCOG Joint Liaison Committee (unpublished data, 1978) and the Joint Working Party on Standards of Perinatal Care in Scotland.[15] We know what is needed, but to expect improvement without changes in staff and facilities is both unrealistic and unjust on those struggling to maintain standards, let alone improve them. Without change many of the foregoing suggestions for easing the stress cannot be realised. We either accept our world ranking in this field or do something tangible to change it!

Much of the work of intensive baby care is of course satisfying and rewarding, provided one has not reached the point of physical or emotional exhaustion. We trust that in time things will improve, and until they do we can but hope that there are sufficient young men and women willing to take up the challenge of neonatology despite these difficult circumstances.

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