infant
for neonatal and paediatric healthcare professionals

Do we need a radical change in NICU staffing?

Over the past decade or so there has been a dramatic shift in those who deliver neonatal care from the traditional well demarcated roles of junior doctor and neonatal nurse to an increasingly blurred and devolved system also utilising other healthcare professionals. Early in my career junior doctors undertook all clinical care for newborn infants from inserting lines and chest drains to intubation, ventilation, neonatal transport and the first examination for all newborn infants. Most of these traditional junior doctor roles are now shared with extended role or advanced neonatal nurse practitioners (ANNPs). In many hospitals routine newborn checks are now undertaken by midwives and retinopathy screening and immunisations are co-ordinated and managed by nursing staff. There have been many drivers for the changes that have occurred so far, but are further changes to the delivery of care given by medical staff required?

The traditional model of a small number of consultants supported by a large number of junior staff, mostly in training, meant that the majority of medical care each week was delivered by staff with relatively little neonatal training, working long hours. Over the last decade there has been increased intensity of work with a greater number of extremely low birthweight infants and those with complex problems which demand higher levels of knowledge and skill. Clinical governance and the development of neonatal networks have begun to drive the centralisation of neonatal intensive care into fewer busier units. The European Working Time Directive of 2004 reduced the maximum hours worked and increased the numbers of junior doctors, so limiting experience. Some hospitals have looked at using ANNPs to support junior doctor rotas with varying degrees of success. Across the UK there are many small units delivering infrequent intensive care but supported by large numbers of less than fully trained medical staff. This cannot be considered satisfactory.

Since the amalgamation of the Senior Registrar and Registrar grades into one, under the Calman system, the Department of Health has looked at the amalgamation of all training grades into a single 'run through' grade under the banner of Modernising Medical Careers. This comes into force in August 2007 and all trainees will be in an eight year programme. However in 2009 the final stage of the EWTD ruling, reducing the maximum hours of work to 48 per week, will come into force for all doctors, so exacerbating the problem.

It has been estimated that to maintain appropriate ratio of daytime to 'out-of hours' working, each neonatal intensive care unit will need 11 junior and 11 middle grade staff. So how are these posts to be filled? One way is the traditional expansion of junior doctors. If all these posts are placed in the training system, then there will be a very large number of neonatologists looking for consultant posts, that are unlikely to be available, leading to unemployment. If non training posts are created (clinical fellows) then these are likely to be unattractive as further career progression will be limited.

Another possible solution is a further expansion of ANNPs. Over the last decade there has been a rapid expansion in numbers of ANNPs and many who have wished to develop their skills have done so. The demand for ANNP courses has now fallen and a number have been cancelled. It is likely that there will only be a small number of additional ANNPs who might be want to contribute to a 24/7 service rota. Reduction in the number of hospitals delivering neonatal intensive care may be feasible in large urban areas, but much less so in more rural parts. Reconfiguration is a very slow process but may help in the longer term.

So can quality neonatal care be delivered without training excessive numbers of neonatologists whilst maintaining a 48 hour working week and preserving work life balance?

One suggestion is that the number of training posts should be limited to provide only the number of neonatologists required to fill vacant posts. This might be about 25% of the current junior doctor posts. The remaining middle and junior posts could be filled in part by trained neonatologists who continue to be resident on call replacing the current middle grade staff. ANNPs might take on some of the roles but current working patterns would need to change to enable integration of the different professional groups. The concept of having fully trained neonatologists delivering the care 24/7 is an appealing one with unsurpassed quality of care for the infants, especially out of hours, and supervision for those in training. Has this idea been tried? In October 2006 the Royal Free and Hampstead NHS Trust advertised for 10 paediatric consultants to replace their middle grade posts. A number of other hospitals have developed job plans that include consultants being resident on call. Would all consultants deliver this type of care? At present it would seem unlikely. This model would allow progression to the role of the traditional consultant after a number of years. If this is the future for staffing neonatal intensive care then a truly radical change will have happened.

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