How many inpatient paediatric units do we need?

EDITOR.—In his article on paediatric inpatient units, Professor Taylor claims that many present paediatric units are too small to provide safe and cost effective care, do not meet required standards, and should be combined into larger units providing specialist children’s services. We would disagree with him, at least with regard to rural communities.

In many small district general hospitals a very high standard of care is offered, frequently directed by the consultant and often at great personal cost. The service shares many of the better aspects of primary care delivered by staff who know the families and their backgrounds. Professor Taylor stresses the value of a good relationship with the tertiary centres; where this exists children can be referred to superspecialists when indicated. He does, however, make a good case for continuing update and education for all staff and the need for clinical commitments to be such that study and development of appropriate skills are possible.

In a country area almost all acute admissions are at the request of a general practitioner. The request to admit is not undertaken without thought, although the reason is rarely that the disease is life-threatening; parental anxiety, inexhaustion, exhaustion, lack of transport or telephone, or even inability to carry out instructions may all be factors. Is it feasible that a visiting service could overcome these difficulties?

If rural units were to be amalgamated for financial reasons, children in Cumbria, for example, could have to travel 40 miles for inpatient care even if lucky enough to be left with a day centre. As most acute admissions occur in the evening and at weekends, few could be observed locally, even for a few hours. A massive increase in funding of the ambulance service, roads, and public transport would be needed. Sick children would need to travel for an hour before assessment by a paediatrician and family disruption would be extreme.

It would be a brave obstetrician who considered offering a service where unforeseen complications in even ‘low risk’ deliveries were the responsibility of obstetric staff or even nurse practitioners, if the nearest paediatric support was 40 miles away.

Professor Taylor’s sad experience of district general hospital care for children is not universal. Even in today’s climate of rising expectations and workload, some units are proud to provide a local and appropriate service. The equation should be restated; it is not ‘quality versus access’ but ‘quality AND access versus financial expediency’.

How many inpatient paediatric units do we need?

1 Taylor B. How many inpatient paediatric units do we need? Arch Dis Child 1994; 71: 360-4.

Using the words of Professor Taylor’s article, I am a street corner Jack of all trades paediatrician. Our district general hospital is too small, with just 112 schools in our catchment area, just 2400 deliveries on one site; just one community paediatrician (with no on-call or acute duties); and just one paediatric psychiatrist.

This size does, however, allow me to know most of the GPs; most of the areas where children live; and most residents know where to find us. I also know all my senior house officers and while I don’t write many papers, I do train plenty of GP trainees who, after parents, provide most of the medical health care needs of children. I work with my consultative colleagues to provide a consultant based service which sounds a bit like Calman to me.

Children don’t seem to mind being seen by a street corner consultant rather than a training grade, and their parents seem happy too. It doesn’t worry me too much that I haven’t forgotten how to put a drip up, intubate, or that I can still remember what it is like to be a senior house officer. It can even seem holistic at times.

I believe you can somehow retain these local services and yet remove inpatient facilities is not something to be taken for granted. Nor is it necessarily true that bigger centres are better.

There are some data that show that big units do some intensive care services better and are it rare for us not to use those services; but that doesn’t mean that all inpatient services are better centralised. I would venture to suggest that in submitting work for publication all centres tend to report only that which is favourable to themselves. If a small centre does better, for some reason it is always ascribed to a healthier population than in the urban areas. In general, big centres seem emotionally cold, the staff look miserable, they tend not to stay, and are hard to recruit. It might even be said that such centres appeal mainly to microbes and professors.

We do have a duty to face quality issues and I would never support a unit that did not subscribe to an audit of their outcomes. My own view is that health care, like cow muck, works best if you spread it about.

Reviewing earlier diagnoses of chromosome

EDITOR.—We describe a 15 year old Asian girl who was originally diagnosed as having trisomy 13 at birth. This diagnosis was reviewed because of her prolonged survival. She was the youngest child of unrelated parents. She had been born at term after a threatened miscarriage at 3 months and her birth weight was 3370 g. She had multiple congenital abnormalities consistent with trisomy 14 which was confirmed by cytogenetic studies. Karyotype studies at that time were normal in her siblings and parents. Her mother had 11 pregnancies with five miscarriages. All three pregnancies in a maternal aunt showed abortions at 4 and 5 months. Chromosomal analysis was repeated and this showed the presence in all cells of an additional marker chromosome, which was shown by fluorescent in situ hybridisation (FISH) studies to be a derivative chromosome 14 from a 4;14 translocation. The proband’s mother and maternal aunt were subsequently shown to carry an apparently balanced translocation between chromosomes 4 and 14; 46,XX(4;14) (q13-3q21-2). Her father’s karyotype was normal.

Our case shows the importance of reviewing in patient records, as well as the importance of this match not the survival pattern associated with the reported chromosomal abnormality.
Eighty six per cent of cases of trisomy 13 died by 1 year, but translocation and mosaic cases may survive longer.1 Rare reports of pro-
longed survival in trisomy 132 3 and misdiag-
nosis of proximal trisomy 14 as trisomy 134 exist. The increasing sophistication of cyto-
genetic analysis with improved techniques including FISH may detect anomalies which could earlier have gone undetected. In this case, the history of multiple miscarriages in the mother and aunt was also suggestive of a chromosomal rearrangement. Therefore, chromosome investigations should be repeated on children where the clinical pic-
ture does not fit the chromosomal diagnosis.

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Child pedestrian traffic safety – do
health beliefs influence behaviour?

EDITOR–I was delighted to read the author-

ative study by Sissons Joshi et al5 not simply because it lends support to the applicability of
the Australian6 and American7 findings with
respect to cycle helmet use but also, and in particular, its promotion of the idea that
presenting young people simply with the facts
may not be enough. We need to ensure that
our young audience see accident prevention
as applying to them in particular, and not just
to the next child.

We have similarly seen this here at
Tadworth as a problem for young people with
respect to pedestrian safety. The majority of
the referrals to our children's head injury unit
come from injuries incurred as a product of
pedestrian accidents. In this country we have
the worst record for child pedestrian fatality
in Europe for the 10-14 year age group.8

In an attempt to counter this a number of
successful graduates from our rehabilitation
programme have gone into schools to recount
first hand their experiences, as a way of
driving home the point that accidents happen
to anyone. We have found, in our initial
follow up of 134 students, that the impact
in bringing home the message in this way
influencing beliefs has been very great.

The conclusion we have drawn from this
programme is that young people speaking from
direct experience to other young people
carry far more credibility in influencing beliefs
than can be accomplished simply with the
presentation of a road traffic expert, doctor,
or teacher. We would agree, therefore, whole-
heartedly with the observation of Dr Sissons
Joshi et al that effective health education in
this area should look, not just to provide
information, but rather that the presentation
of that information should be done in a way
that a young audience can identify directly
with what is being discussed.

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'Toddler's fracture'? A recognised entity

EDITOR–The term 'toddler's fracture' was first
used in 1964 to describe an undisplaced oblique fracture of the distal tibia in children
aged 9 months-3 years.1 Although this entity
is well known to radiologists it may have
escaped the attention of paediatricians.

The clinical features typically follow mild
trauma, such as tripping while walking or run-
ning, or falling from a modest height.
Abnormality in gait is the most common
presenting feature and localised increase in
temperature and tenderness over the tibia is
the most consistent physical findings.

Because of the mild nature of the symptoms and trivial
injury, there could be unusual delay in
seeking medical advice. The characteristic
radiological finding is a faint oblique radio-
lucent line crossing the lower third of the
tibial shaft. Lateral and frontal views may not
detect the fractures, but internal oblique view
is the most sensitive.

In the review of spiral fractures of tibia in
children and their relevance in child abuse,
Mellick and Ressor concluded they were
more likely to be accidental than non-
accidental and used the term childhood
accidental spiral tibial fracture.2 Tenenbein
et al came to the conclusion that a spiral frac-
ture of the tibia in non-accidental injury
would usually occur in the upper two thirds
of the tibial shaft, rather than the lower third
of the tibial shaft.3

Bone in young children is highly elastic because of its high cartilaginous content. This
may be an important factor in this condition.
The affected leg of a child who suddenly trips
while running is subject to sudden deceler-
ation of the leg while the upper part of the body
and the other leg is still in motion. This
in conjunction with the compression force
carried by the weight of the child, generates
the shearing force to cause the fracture.

The peristeum acts as a splint and prevents
displacement.

Failure to diagnose toddler's fracture may
lead to unnecessary child protection investi-
gations. Occasionally the condition may be
confused with osteomyelitis.

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