Heroes of adversity

Our very human default position when it comes to public sector healthcare delivery is to bemoan the inefficiencies, corruption, cadre deployment and financial mismanagement that beset and befuddle the best intentions of the truly vocation-driven healthcare professional. It can easily blind us to the tremendous creativity and innovation that many of our public sector colleagues display when rising to the challenges posed by these realities – and by the shift in funding away from the tertiary sector to the primary health sector. Izindaba has profiled many such uplifting stories and this month focuses on Tygerberg Hospital's neonatology team, who have halved deaths of underweight newborn babies in their facility by creating intelligent, alert and highly practical alternatives to the overworked and scarce life-saving ventilators in a hugely shrunken paediatric intensive care unit.[1] It's so replicable that secondary and district hospitals across the Western Cape are ordering the relatively inexpensive home-built nasal continuous positive airways pressure (nCPAP) machines from Tygerberg's workshop and adopting their holistic best-practice mother and child treatment protocols. Result? Hundreds of tiny lives saved annually. Extrapolate the possibilities by considering just one cherry-picked fact: nationally in the first *five months* of 2010, some 8 000 infant deaths were recorded in the public sector.

Time for that 'flu shot

This issue offers the usual recommendations for influenza vaccination ahead of the winter season.[2] According to a recent report,[3] the vaccine is useful in only approximately 60% of recipients, and least useful in persons over 65; nevertheless, Osterholm, chief author of the report, says: 'Use this vaccine … the safety profile is actually quite good. But we have oversold it. Use it – but just know it's not going to work nearly as well as everyone says.'[4] There is also useful guidance for antiviral chemotherapy in the form of oseltamivir or zanamivir, to which novel influenza A (H1N1) and H3N2 and B influenza viruses remain largely sensitive; recent World Health Organization recommendations advise treatment immediately on suspicion of infection for high-risk (severely immuno-compromised) individuals exposed to influenza with a 5-day course.

Hazards of spinal anaesthesia

For the first time, the *Report on Confidential Enquiries into Maternal Deaths in South Africa* (2008 - 2010) documents an increasing number of deaths associated with spinal anaesthesia for caesarean section (CS).[5] Because of the misconception that spinal anaesthesia is inherently safe, it is administered by doctors neither fully trained nor competent in the management of anaesthetic complications. Worse, the decision to use it is made not because it is the optimal form of anaesthesia for a given situation, but because it is the only form the doctor feels 'competent' to provide. Compounding the problem is the belief that the patient, once anaesthetised, can be left to be monitored by medically unqualified personnel and the doctor freed to perform the surgery. This 'abandonment' of the patient was the direct cause of death in 6% of 92 anaesthetic deaths documented in the 2008 - 2010 report.

Units that cannot monitor and stabilise their patients during any anaesthetic (of whatever variety) by a doctor (who must not be given the additional tasks of assisting at the surgery or resuscitating the baby) should be referring their operative obstetric cases to the nearest available unit that can.

Childhood cancer in Ivory Coast

As an African medical journal, the *SAMJ* welcomes the opportunity to publish original research from other countries in Africa. A collaborative study from colleagues at Tygerberg Hospital and the departments of Pediatrics and Haematology at the University Hospital of Treichville, Abidjan, offers insight into the status of oncology services in Côte d'Ivoire.[6]

A survey carried out among children (<18 years of age) over the decade January 1995 - December 2004 showed that Burkitt's lymphoma was the most common malignancy (73.6%), followed by nephroblastoma (14.5%) and acute leukaemia (4%). An abdominal mass and swelling of the jaw were the most common clinical presentations. As might be expected, delay in diagnosis was common, resulting in delay in treatment – almost 40% died due to advanced disease shortly after admission. Half of the patients were lost to follow-up. The overall survival rate was only 10%.

But there is good news. In 2004, the Pediatric Hematology Oncology Unit in Côte d'Ivoire joined the Franco-African Group of Paediatric Oncology. Treatment now follows established common protocols, chemotherapy is free, and there is access to sophisticated radiology.

Retinopathy of prematurity (ROP)

SA has become part of the so-called 'third epidemic of ROP' as more premature infants survive with improved neonatal care. As in other middle-income countries, babies of higher birth weight are at risk, because units that treat these infants may not have the skills or equipment to monitor oxygen appropriately. In addition, resources to identify infants at risk for ROP may be inadequate.

Centres in SA academic institutions have appropriate neonatal care facilities and are able to screen their high-risk infants. As a result, they have an acceptably low incidence of ROP. This is not the case in smaller, less well-resourced hospitals, for which, however, research offers useful pointers in terms of those infants who should be screened.[7]

A consensus guideline by paediatricians, neonatologists and ophthalmologists in both state and private practice[8] is published for the SA context and is intended to ensure appropriate neonatal care of infants at risk. A screening protocol is proposed.

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