CME: Sexual health

Sexual health is a topic that is seldom discussed, and hardly covered in the current medical curriculum. However, the World Health Organization (WHO) has said that sexual health is one of the basic rights of every person. This issue of CME, compiled by Megan Campbell and Dan Stein, addresses sexual health in the South African (SA) context, from a community perspective. Research shows that people are reluctant to bring up sexual health concerns with their doctors, and hope and expect that the doctor will address these issues as part of holistic care. There are few centres of excellence for sexual health in low- and middle-income countries, which is where most of the world's population live, and such resources are badly needed. Few SA doctors currently receive the training required to address sexual dysfunction comprehensively, and there are no accredited SA training programmes in this area. This gap is also pertinent to the lesbian, gay, bisexual, transgender and intersex community. We hope that this issue of CME will start to fill some of these gaps.

Evidence for a founder effect for Parkinson's disease in SA Afrikaners

Afrikaners, a unique ethnic group mainly descended from Dutch, German and French settlers to SA in the 17th and 18th centuries, suffer several disorders that occur at relatively high frequencies owing to founder gene effects. Some of these diseases can be traced back to specific founder couples.

Research at the Movement Disorders Clinic at Tygerberg Hospital in Cape Town has shown that Parkinson's disease (PD) can be added to this list, with 40 PD families identified in which there was only a single most recent ancestral couple common to all of the families.[1] An accompanying editorial[2] outlines the promise that the identification of mutations such as these holds for understanding the cause of the disease and the mechanisms of cell injury and death, and for developing appropriate therapies.

Insulin receptor substrate-1 Gly972Arg variant and type 2 DM

In contrast, a direct genetic basis, specifically carriage of Gly972Arg (the most common single-nucleotide polymorphism in the insulin receptor substrate (*IRS1*) gene), associated with a 25% increased risk for developing diabetes, does not account for the high prevalence of type 2 diabetes mellitus (T2DM) in the mixed-ancestry population of SA. In Vergotine *et al.*'s study,[3] the first of its kind in Africa, 237 participants (24.7%) had T2DM. The overall prevalence of *IRS1* Gly972Arg was 7.9%, with a higher occurrence of the variant found in non-diabetics, and it was not associated with obesity, insulin resistance/sensitivity or T2DM.

Our children deserve better

As part of student in-service training programmes, the Department of Optometry of the University of Johannesburg supplements the rudimentary optometry services to the community in one of the poorer suburbs of the city. In their Forum article, Mathee *et al.*[4] report a high level of undiagnosed optometric need. Poorer urban communities, perhaps surprisingly, have limited availability of public sector eye-care services, and cannot manage the high costs of consultations, spectacles and transport. The simple provision of spectacles provided dramatic improvements in quality of life for schoolchildren and adults, transforming their school performance and earning power, respectively. The experience of this clinic raises the issue of access and availability of eye-care services in urban SA.

Uncorrected visual impairment in urban children is of particular concern. Poor vision has obvious detrimental impacts on children's learning ability. Similarly, poor vision limits adults' ability to fulfil their potential for health and productivity.

The burden of otitis media

The burden and characteristics of otitis media differ greatly between developed and developing regions. India and sub-Saharan Africa (SSA) account for most deaths from complications arising from otitis media. The incidence of acute otitis media is several-fold higher in SSA than in the rest of the world, and SSA has the second-highest incidence of chronic suppurative otitis media (CSOM).

A study at a primary healthcare clinic[5] employed otomicroscopy to ascertain the point prevalence of otitis media in a paediatric population in a public health clinic in Diepsloot, a densely populated settlement north of Johannesburg. The prevalence of CSOM for the total paediatric sample was 6.6%, which is classified by the WHO as high. The CSOM prevalence of 9.3% measured among 6 - 15-year-olds in the current study would be rated as the highest prevalence, according to the WHO classification system. In a recent study on the otological, audiological and bacteriological findings in children with CSOM in an SA tertiary hospital, HIV infection was present in 54.6% of participants with CSOM. Many of the risk factors that are attributed to high rates of CSOM could be identified in the population sampled, including short-term breastfeeding, overcrowding, poor hygiene, poor nutrition, and exposure to tobacco, wood and charcoal smoke.

Measures that may reduce the burden of otitis media include routine otological screening of schoolchildren and increased referral of children with recurrent ear disease for specialist opinion.

Hypotension and hypoxaemia in blunt traumatic brain injury

Each year, ~89 000 (180/100 000) new cases of head injury are reported in SA. Most patients are in the economically active population.

Hypotension and hypoxaemia significantly increase morbidity and mortality after traumatic brain injury (TBI). Cerebral tissue is particularly vulnerable to these secondary insults immediately after a TBI, emphasising the importance of prehospital care.

Most TBIs are followed by an epsiode of apnoea, even if just for a brief period. Hypoxaemia was associated with a near-doubling in mortality from 27% to 50%.

The prevalence of hypotension and hypoxaemia associated with TBI in the greater Johannesburg area reported by Stassen and Welzel[6] is comparable with that observed in international studies. Hypotension was associated with midazolam dosage and the presence of injuries that could result in significant haemorrhage. Similarly, hypoxaemia was associated with injuries to the chest. This study highlights the need for the development of a national TBI protocol for prehospital care providers that is based on sound clinical evidence and can guide decision-making on the most appropriate interventions in the prehospital setting to optimise outcome.

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