Negotiating the minefield of ‘evidence-based’ medicine

In two stories this month, Izindaba reports on how easily we can be fooled by the catch-all phrase ‘evidence-based medicine’, and gives the actual (not manipulated or misrepresented) science behind a seemingly esoteric therapeutic tool called ‘mindfulness’. The first comes from a presentation by Stellenbosch ethicist Professor Keymanthri Moodley at the 16th National Family Practitioners Conference in Observatory, Cape Town, last month, and the second from a talk at the same conference by Dr Simon Whitesman, a trailblazer in integrative medicine in South Africa. Whitesman cited some compelling magnetic resonance imaging studies on the meditating brains of veteran monks, plus an Italian trial comparing the metabolic complications in a cohort of diabetic patients under the care of highly empathic physicians versus those in a cohort seeing physicians with moderate or low empathy scores. The results may muddle some of us towards ‘ubuntu-like’ introspection that could do our practices (and well-being) a great deal of good, not to mention helping us serve our patients better.

Mackart offers additional, harder, insights into medicine as (in Osler’s words) ‘a science of uncertainty and an art of probability’, and reminds us in ‘Evidence-based medicine – are we boiling the frog?’ that ‘evidence is population based and may not be applicable to the individual, and blind adherence to this concept may cause harm. We must not abandon clinical experience and judgement in favour of a series of inanimate data points.’

Diabetes care in South Africa – two ends of the spectrum

An editorial6 from two diabetologists contextualises two papers7,8 on management of type 1 diabetes. One deals with a group of well-controlled young people who, receiving their care in the private sector, have access to the new therapeutic agents, are provided with home blood glucose testing apparatus, and are guided by multidisciplinary diabetes care teams. The other reports on outcomes in a less fortunate group of patients treated in the public sector who use inexpensive insulin with little or no access to self-monitoring of blood glucose.

In Africa, diabetes is fast emerging as an important non-communicable disease, and the ‘where’ of diabetes care has a powerful influence on outcomes. A rise in postprandial glucose is an independent risk factor for cardiovascular events and a predictor of macro- and microvascular disease. Diabetic retinopathy (DR) offers a ‘window’ on the microvascular system of individual diabetics. A Forum article informs us of a practical and pragmatic screening programme for DR developed by the Ophthalmological Society of Southern Africa, aimed at catching patients at primary care level and referring them for specialist treatment before sight is lost.11

Prevention of co-enrolment in clinical trials in South Africa

HIV-positive patients can be lured into simultaneously enrolling in more than one HIV treatment trial, believing that they will receive better healthcare (the benefits accruing from study participation include free confidential HIV counselling and testing, complete blood tests, gynaecological examinations, family planning and referral for care to local hospitals) and greater financial reward. Participant co-enrolment threatens the validity of HIV studies and risks the health of participants (e.g. from drug toxicity). Harichund and colleagues from the HIV Prevention Research Unit, Medical Research Council, Durban, have developed an elegant tool – not unlike that which we encounter on arrival in foreign countries – that uses fingerprint-based biometric technology to identify participants.

ENT – not just tonsils and grommets

An editorial9 and three papers10-12 offer insight into the practice of otorhinolaryngology in this country. Much in the news lately, and featured in the May SAMJ in the context of cancer of the cervix, oncogenic human papillomavirus (HPV type 16) is now linked to oropharyngeal squamous carcinoma, with a prevalence in oropharyngeal cancer, especially tonsillar cancer, as high as 90%. Chronic otitis media remains a vexing problem among our children, often present for years before definitive ENT treatment. Not surprisingly, there is a high complication rate. Some of the lateness of presentation may reflect the fact that treatment of chronic otitis media (CO) is protocol driven and generally initiated at primary healthcare level. CO is, moreover, difficult to treat, and until now there has been a lack of local studies focusing on the bacteriology and antimicrobial sensitivities. Meyer and colleagues13, 14 and Tiede et al.15 have shown that the most common organisms isolated were Proteus mirabilis and Pseudomonas aeruginosa. According to the current Department of Health guideline, amoxicillin (or co-trimoxazole for patients allergic to penicillin) is the recommended treatment. But amoxicillin is a poor choice of antibiotic, given that the organisms cultured were susceptible mainly to fluoroquinolones and aminoglycosides with topical fluoroquinolone eardrops; the latter are as effective as aminoglycoside drops and without risk of ototoxicity.

Over 80% of HIV-infected individuals will present with ENT symptoms. A prospective study among HIV-infected ENT outpatients16 revealed that when all presenting conditions were classified according to the World Health Organization (WHO) stages I - V HIV disease classification, the top five manifestations were adenoid hypertrophy/hyperplasia (stage I), cervical lymphadenopathy (stage I), chronic supplicative otitis media (stage II), otitis media with effusion (stage II), and sensorineural hearing loss (stage II). The study is the only one to have documented parotid gland cystic enlargement, revealing that this is an early (WHO stage I or II) manifestation, when immunity is well preserved. Parotid enlargement is recognised as a stigma of HIV, and patients are motivated to seek a diagnosis and possible cosmetic treatment. The good news is that, whereas a few years ago the clinic handled mainly advanced WHO stage IV manifestations and unusual opportunistic AIDS-related infections, these are now rarely seen. There is now better awareness of HIV/AIDS disease manifestations among patients, together with large-scale HIV counselling and testing services and a commendable national ARV public rollout programme.

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