

Silicosis claim to boost primary health care?

Minerals, especially gold, turned South Africa into the economic powerhouse of the sub-continent, but only in the past decade has the cost in human lives and health begun to be measured and mining houses made to pay.

Izindaba's Chris Bateman looks at what could be a seismic event for the gold mining industry: a class action made possible by a landmark Constitutional Court ruling last year allowing lung-diseased former miners to sue their ex-employers under common law. Until this ruling, they had been constrained by two 'archaic' inter-acting laws that limited claims and acted as a virtual government subsidy to the mining industry, adding a huge financial burden to workers' families and the public health system. Now not only do affected miners have a better chance of accessing appropriate health care (and the surviving families of getting compensation), but the entire primary health care system stands to get a much-needed boost as the envisaged Silicosis Relief Trust expands an existing network of private GPs, supports public health facilities (including mortuaries), and strengthens existing tuberculosis field work. Out-of-court settlements for asbestosis total R1.1 billion since 2003 – creating trusts and health care networks that will need major scaling-up if the current 'super' claim succeeds.¹

Skin closure for caesarean section

A variety of suture materials and skin staples (SS) are used for skin closure after caesarean section (CS). Some of these suture materials have been associated with lower infection rates, reduced pain, improved cosmetic outcomes and cost-effectiveness. Chunder and colleagues² report on their study to determine wound complication rates following the use of suture materials and staples for skin closure.

SS are easier to use and are associated with a three- to fourfold reduction in time for skin closure. However, they are more expensive than suture materials and it is reported that SS are more painful and result in a poorer cosmetic appearance.

The overall rate of wound complications following CS in Chunder *et al.*'s study was 7% compared with rates of 0 - 25% in other studies. Lower wound complication rates are reported (including by them) when the subcutaneous layer was sutured before top skin closure. In keeping with the findings of reviews and meta-analyses, they found that wound complications were significantly greater when SS were used. They therefore recommend that SS not be used for CS skin closure in district hospitals.

Helicobacter pylori eradication therapy

Helicobacter pylori is the most common cause of chronic gastritis and peptic ulcer disease and a risk factor for gastric adenocarcinoma and mucosa-associated lymphoid tissue lymphoma. First-line triple therapy for eradication comprises a proton pump inhibitor (PPI) and two of the following antibiotics: clarithromycin, metronidazole and amoxicillin. However, consensus on the length of treatment is lacking. Sokwala and colleagues³ in Kenya compared 7-day and 14-day regimens to determine the optimal duration of triple therapy for *H. pylori* eradication.

Increasing antimicrobial resistance has resulted in falling eradication rates with standard therapies. Clinicians must stress the

importance of taking the medications as prescribed to minimise the likelihood of antibiotic resistance developing, as this is a major cause of treatment failure. The prevalence of *H. pylori* antimicrobial resistance shows regional variation within and between countries, and the use of alternative antibiotics based on local resistance rates may improve eradication rates.

Compliance with antimicrobial therapy is improved with short-duration therapy. This is particularly relevant with *H. pylori* eradication regimens because side-effects such as diarrhoea or taste disturbance can lead to discontinuation of therapy in some patients. The authors' finding that 1-week and 2-week triple treatments are similar in terms of efficacy, safety and patient compliance therefore has valuable clinical implications.

Aminoglycoside-induced hearing loss

Multidrug-resistant tuberculosis (MDR TB, i.e. *Mycobacterium tuberculosis* resistant to both isoniazid and rifampicin with or without other drug resistance) is an increasing problem, especially in sub-Saharan Africa, where the significant increase in MDR-TB has been linked to the human immunodeficiency virus (HIV) epidemic. The second-line injectable drugs (amikacin, kanamycin, capreomycin) have significant adverse effects, especially ototoxicity and nephrotoxicity. Unlike nephrotoxicity, ototoxicity is permanent.

Harris and colleagues⁴ investigated the incidence of ototoxicity in HIV-positive and HIV-negative patients with MDR-TB and provide clinical guidelines relating to ototoxicity. They studied MDR-TB patients with normal hearing and middle ear status at baseline, at Brooklyn Chest Hospital in Cape Town. Fifty-seven per cent developed high-frequency hearing loss. HIV-positive patients (70%) were more likely to develop hearing loss than HIV-negative patients (42%).

Owing to the long half-life of aminoglycosides in cochlear tissue, patients should be monitored for up to about 6 months after completion of MDR therapy. The authors conclude that auditory monitoring and auditory rehabilitation should be an integral part of the package of care of MDR-TB patients.

UCT 100th anniversary issue

The part two of this issue of *SAMJ* comprises contributions from the University of Cape Town Faculty of Health Sciences. Material ranges from historical and reflective to many research papers. The scale of the exercise required the appointment of a section editor, Professor Jane Seggie, who spent a sabbatical at the journal managing the exercise. We wish the faculty everything of the best for the next 100 years!

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1. Bateman C. Silicosis; 10 000 gold miners getting set to sue. *S Afr Med J* 2012;102(6):338-340.
2. Chunder A, Devjee J, Khedun SM, Moodley J, Esterhuizen T. A randomised controlled trial of suture material used for caesarean section skin closure: Do wound infection rates differ? *S Afr Med J* 2012;102(6):374-376.
3. Sokwala A, Shah MV, Devani S, Yonga G. *Helicobacter pylori* eradication: A randomised comparative trial of 7-day versus 14-day triple therapy. *S Afr Med J* 2012;102(6):368-371.
4. Harris T, Barden S, Schaaf HS, Peteresen L, de Jong G, Fagan H. Aminoglycoside-induced hearing loss in HIV-positive and HIV-negative multidrug-resistant tuberculosis patients. *S Afr Med J* 2012;102(6):363-366.