

EDITOR'S CHOICE

CME: Fits, faints and funny turns

Fits, faints and funny turns represent a common reason for presentation to the general practitioner or emergency department. Patients often present a diagnostic dilemma for the clinician, and the consultation is frequently dissatisfying for both doctor and patient. The key to a satisfactory evaluation is a structured approach, premised on a clear and comprehensive history focused on prior comorbidities, the context of the episode, precipitating factors, situational factors before the episode, the onset and evolution of the episode, and events occurring after it. A detailed and carefully elicited medical history allows the clinician to confirm the diagnosis, delineate the underlying mechanism, and identify features that may suggest a high risk of recurrence, injury or death.

In this issue of CME we offer a series of articles on approaches to common causes of fits, faints and funny turns in adults. The underlying mechanisms for such episodes are emphasised, and the busy clinician is provided with a sound and simplified approach to clinical evaluation and management.

Non-communicable diseases in South Africa

The rising prevalence of non-communicable diseases (NCDs) is a major challenge to health systems worldwide, with multimorbidity the norm for people with chronic diseases. Health systems tend, however, to be configured for individual diseases. South Africa (SA) faces a rise in NCDs in both her rural and urban populations, driven by an increase in tobacco use, physical inactivity and unhealthy diets,

and – yet to fully emerge – HIV (and HAART), that will place a heavy burden on primary care services.

Primary care in the public sector is nurse-led, with nurses seeing over 85% of patients, with support from doctors. Nurses working at primary care clinics often do not have the necessary skills or capacity to deal adequately with NCDs. Chronic diseases and risk factors are often undiagnosed and inadequately treated, resulting in high levels of poor control and morbidity.

Several articles in this issue of *SAMJ* deal with SA's looming burden of NCDs now that the HIV/AIDS epidemic nears some sort of control and is becoming just another chronic condition.

Given the 'drivers' of HIV, as alluded to in my editorial,^[1] it is impossible to publish an edition that does not offer insights into this continuing but preventable infection and the infections it begets. If HIV is to gain chronic condition status, much is required of our nurse-led primary clinics (as pointed out above), and the authors of the 'Forum' article^[2] on **improving access to antiretrovirals (ARVs) in rural South Africa** stress that adoption of a chronic disease management model for HIV requires extended task shifting, decentralisation and new approaches to distribution of ARVs. Implementation, particularly in rural clinics, depends on new legal flexibilities for nurse prescribing and breaking the impasse between the national (and provincial) departments of health, which wish to see nurses recognised as authorised prescribers and able to issue prescriptions to be dispensed by pharmacists or pharmacist's assistants, and the South African Pharmacy Council, which holds that nurses are not authorised prescribers.

The Medicines Control Council (as custodians of the Medicines Act) and the South African Nursing Council (whose legislation permits public sector nurses to 'supply' medicines) need to step up and give clear and positive direction. The SA Pharmacy Council is urged to pragmatically interpret existing legislation to provide for the recognition of nurses as authorised prescribers. Finally, the National Department of Health needs to ensure continuous availability of safe and appropriate regimens and formulations of ARVs for all eligible patients.

Returning to NCDs proper, the issue of tobacco use is unavoidable. Tobacco is the second leading risk factor for the global burden of disease, causing six million deaths annually. In their editorial 'Turbo-charging tobacco control in South Africa', Yach and Alexander^[3] confirm SA's rather proud record regarding its global leadership role in tobacco control since the 1990s. While globally the prevalence of smoking among adults decreased between 1980 and 2012 from 41% to 31% for men and from 11% to 6% for women, tobacco use among girls is increasing in many countries, and unless effectively addressed will result in increased risk for the next generation of women.

The latest study on tobacco use in SA, reported by Reddy *et al.*,^[4] shows that a quarter of adults and young people smoke. While men have a higher prevalence of smoking than women, girls are catching up. Smoking prevalence differs greatly by race: 40% of coloured people smoke tobacco, as do a third of coloured women, nearly five times the prevalence among all SA women.

Tobacco control remains a critical priority, and an aggressive educational programme is required. Attempts to quit smoking tobacco were significantly associated with having been advised to do so during a visit to a healthcare provider or having noticed health warnings on tobacco packages. Disappointingly, surprisingly few current smokers (only 29%) reported having been so advised. As the South African National Health and Nutrition Examination Survey suggests,^[4] health professionals need to redouble their efforts to advise their patients against tobacco use. The *SAMJ* has carried a debate on e-cigarettes,^[5,6] with evidence increasingly showing^[3] that they offer an opportunity to improve public health, reduce global deaths attributable to tobacco use, and reduce healthcare expenditure.

Regarding NCD management, the study by Folb *et al.*^[7] on multimorbidity, control and treatment of NCDs among primary care attenders in the Western Cape Province evaluated the effects of the Primary Care 101 programme on the quality and outcomes of care for hypertension, diabetes, chronic respiratory disease and depression in 38 primary clinics. The analysis showed an impressive NCD 'multiplier' effect – 47% of participants in the hypertension group also had diabetes, 84% of participants with diabetes also had hypertension, and 22% of participants with hypertension or diabetes also had chronic respiratory disease.

The study confirmed previous reports of poor control and treatment of NCDs. The high levels of multimorbidity signal the need for primary care services to provide integrated NCD care, with management of NCDs and multimorbidity factored into clinical training. After a decade of focusing on scaling up antiretroviral therapy programmes, primary care management of NCDs, including mental health, needs to be prioritised and requires similar investment to address the burden.

Anterior chamber paracentesis to improve diagnosis and treatment of infectious uveitis

Infectious uveitis is a significant cause of blindness in SA, especially among HIV-infected individuals, who have increased susceptibility to ocular infections and may present with more severe disease. The visual outcome of uveitis depends on early clinical and laboratory diagnosis to guide therapeutic intervention. Schaftenaar *et al.*^[8] show that analysis of aqueous humor, obtained at very limited risk by anterior chamber paracentesis, provides a diagnosis and optimal treatment.

Human papillomavirus genotypes and clinical management of genital warts

It is well known that persistent infection with human papillomavirus (HPV) is the precursor to development of cervical cancer. HPV is also associated with genital warts and other types of anogenital neoplasia, including penile, anal and oropharyngeal tumours. HIV infection is an important risk factor for HPV infection and persistence. In their Cape Town study, Tayib *et al.*^[9] found that almost 80% of patients were HIV-positive. Genital warts are strongly linked to sexual behaviour (in this study the majority of women were sexually active and had had more than one sexual partner), and weakly associated with cigarette smoking (cigarette smoking is biologically associated with decreased antiviral immune cells in the cervical epithelium).

Carcinogenic nitrosamines in traditional beer as the cause of oesophageal squamous cell carcinoma in black South Africans

The abovementioned article^[10] is published as a tribute to work pioneered by Prof. Charles Isaacson (1929 - 2014) and his contributions in the field of anatomical pathology. *Fusarium moniliforme*, which grows freely on maize, produces a toxin, fumonisin, that reduces nitrates to nitrites and synthesises nitrosamines in the presence of secondary amines. The aetiological role of carcinogenic N-nitrosamines, just as Isaacson hypothesised in 2005, is confirmed in a study that is the first to demonstrate their presence in six out of six traditional beer samples. The decline in the incidence of carcinoma of the oesophagus to one-fifth of the peak in the 1980s probably reflects diminished consumption of traditional beer.

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