Clinical Review identifies issues in the medical literature of interest to clinicians in Africa. Essential references are given at the end of each section.

**Responding to health risks**

Prevention of diseases through modifying risk is a worthy aim that should hold a major place in the focus of most healthcare professionals, but particularly those who work in primary care. It may be that I have been noticing an increasing emphasis on risk factors, in relation to a range of problems and conditions, in the literature that I scan, simply because I have been giving more attention to it myself, or because I have a Masters’ student embarking on a study looking at the risks associated with mothers giving birth prior to arrival at a healthcare facility. Whatever the reason, there have been a number of interesting articles published recently on the issue of health risks that I want to highlight.

Walker et al recently published a systematic review to identify randomised controlled trials of cancer risk assessment tools used in primary care.1 The rationale behind such tools is that risk-stratified screening for cancer as opposed to population-based cancer screening programmes (e.g. for breast, colorectal and cervical cancer) is being proposed as a way of reducing both harm and costs by focusing on populations at higher risk of cancer. Risk-stratified cancer prevention requires risk assessment tools that can be used in primary care to identify those most likely to benefit from such a programme by estimating a person’s likelihood of developing different cancers by assessing a combination of genetic, environmental and behavioural risk factors, including risk factors. The review included 11 trials of 7 risk tools. The findings of the review suggest that cancer risk assessment tools improve the accuracy of patients’ risk perception and knowledge without causing an increase in cancer-specific anxiety. Health promotion messages within the tools positively influenced behaviour change, especially in terms of changes in diet and physical activity. They also increase intentions to have cancer screening, but it was not clear if they lead to actual increased screening activity.

I want to digress slightly from risk factors to share an important article on screening for cervical cancer, the commonest cancer amongst African women. Fallala and Mash report on the safety, acceptability and feasibility of visual inspection with acetic acid (VIA) followed by definitive management (using cryotherapy or a loop electrical excision procedure) at a single visit for the prevention of cancer of the cervix in Zimbabwe.2 Visual inspection with acetic acid (VIA) has been suggested as an alternative method of screening for cervical disease, with a similar sensitivity to Pap smears for the detection of high grade cervical lesions in HIV-infected women, and a number of resource-limited countries are expending cervical cancer screening using the VIA screening method.3 The important conclusion of the Zimbabwe study was that the service was feasible to sustain over time despite the constraints of the context; there were no service-related treatment postponements and the clinic staff and facility were able to meet the demand for the service. They followed up after one year and outcomes suggested that treatment had been effective. This is in keeping with another recent study describing the VIA programme of the Cervical Cancer Prevention Programme in Zambia.4 Primary care clinicians in Africa would be well-advised to become familiar with and support such screening programmes.

Returning to risk factors, there have been articles published on a wide range of different problems. I will highlight but a few. Rodriguez and Agbo looked at risk factors for pulmonary tuberculosis (PTB) amongst HIV-positive patients in Mpumalanga, South Africa.5 Single marital status, living in dusty outdoor environment, and moderate to heavy alcohol consumption were strongly associated with an increased risk of PTB among HIV-positive patients. On the other hand, age, gender, educational and employment status, overcrowding, previous medical history of PTB or treatment, and a family history of PTB were shown not to be associated with PTB. These findings may not be generalisable, but make the point that it is wise to understand the specific risk factors in a particular context so that targeted interventions can be developed.

The issue of hypertension in relation to HIV is important. In rural South Africa, where there is a high prevalence of both HIV and hypertension, it is inevitable that some people will be affected by both conditions, but no interaction was found between these in a recent cross-sectional study.6 However, the presence of HIV has an adverse effect on high-density lipoprotein cholesterol and triglycerides, suggesting that people living with HIV may be at increased risk of cardiovascular disease, so that screening for such is essential in these patients. However, a Ugandan study amongst young adults found that hypertension was significantly associated with the older age-group, male sex and obesity, but there was a significantly lower prevalence of hypertension among participants with HIV,7 suggesting that blood pressure measurement is not an effective way to identify cardiovascular risk in HIV positive patients.

On a different note, a study looking at unintended births among unmarried adolescent girls in Nigeria found that adolescent girls from households headed by young adults were more likely to experience adolescent pregnancy than those from households headed by older adults. Older adults were more likely to be wealthier and have higher educational status, which decreased unintended births. Interestingly, adolescent girls from female-headed households were also less likely to experience unwanted pregnancy.8

What about risks in children? Van der Linde et al looked at risks for communication delays in infants from underserved communities attending primary healthcare
facilities in Tshwane district, South Africa. Communication delays were present in 13% of infants, and more than one-third were at risk of developing communication delays in future. Infants with two or more siblings, born from mothers aged 18–29 years who own their house, had a 39% chance of presenting with communication delays. The authors argue that preventative strategies such as the implementation of a risk profile and a communication development screen should be implemented. This study highlights the importance of developmental screening in primary care, which is not given sufficient attention by clinicians. In South Africa the only nationally implemented developmental screening tool is integrated as part of the Road to Health Booklet, but a recent study indicated it failed to identify more than half the infants at risk of delays or disorders, thus making it ineffective. The authors of the latter study suggest that the Parents’ Evaluation of Developmental Status tool provides an alternative, validated screening tool that is cost-effective in resource constrained environments because it is parent administered. Clinicians working in primary care, obstetrics and paediatrics should take a lead in ensuring that effective screening programmes are introduced into African communities in order to prevent the substantial burden of developmental disability. The earlier cited study on hypertension in young patients in Uganda referred to a low level of awareness of the condition amongst people identified with hypertension. A study in the Western Cape, South Africa, investigated the knowledge and perceptions about risk for cardiovascular disease (CVD) in a low-income peri-urban community, using focus group discussions. Participants’ knowledge of CVD and its risk factors varied, but most were familiar with cardiovascular conditions such as hypertension and stroke, and with some lifestyle factors that cause CVD such as high-fat diets and excessive alcohol consumption. However, understanding of the concept of risk was poor. The authors describe their perception of risk as a binary concept: a cardiovascular event was either going to happen or not, depending on high- or low-risk; the lack of primary understanding of risk prevented an evaluation of different narrative and visual methods of presenting risk as originally intended in the study.

It is thus crucial that primary care clinicians address issues of risk in a way that patients understand and that leads to impacts on their behaviour. But how do we do this? Malan et al published an exploratory study that describes a model for training primary care providers providing individual brief behaviour change counselling using a standardised approach as part of everyday primary care. They designed a new training programme based on a conceptual model that combined the commonly used 5As (ask, alert, assess, assist and arrange) with a guiding style derived from motivational interviewing. This eight-hour training programme for either clinical nurse practitioners or primary care doctors combined theory, modelling and simulated practice with feedback. The outcomes have yet to be evaluated, but the paper highlights the importance of giving attention to equipping clinicians to be effective in addressing the issues of risk with patients.

Responding to disability

I want to return to some of the issues highlighted when discussing communication difficulties by touching on three articles that have recently brought the issue of disability into focus; the first of these specifically related to communication disability. A commentary from Fiji noted that people with communication disability (PWCD) are more likely to be excluded from society, and denied their basic human rights, than other people, even those with another disability. In describing the drivers for change at three levels, the authors point out that at the micro level it is service providers in the education and health sectors, working together with consumer representatives and the general community, that need to drive the change. They note that prior to school entry, services for children with speech, language and literacy difficulties are the responsibility of the Fijian Ministry of Health, but the provision of specialist rehabilitation services for PWCD is not presently a primary goal of the ministry, whose focus is on reducing child mortality rates. Thus speech-language pathology services are not currently available to support children prior to school entry, nor at any time for adults who have acquired communication and/or swallowing difficulties. It is likely that this is common in Africa. Once again, linking to what was said about developmental screening, we as clinicians need to become advocates for our patients and communities, and thus should support the development of such services.

It is not only children who are affected. A study in Mpumalanga, South Africa, found that the experience of living with a disability in a rural area is associated with discrimination, social exclusion, isolation and barriers to accessing services. Barriers to service provision extend beyond physical obstacles, and include a variety of sociocultural and sociopolitical barriers. Unless these are considered, policies and service models are only able to provide limited support to people with disabilities living in rural areas.

One strategy for addressing disability care and support that has been used in many developing countries is through community-based rehabilitation, with training and development of community disability workers (CDWs). Lorenzo et al analysed the work of CDWs in three southern African countries to demonstrate the competencies that these workers acquired to make a significant contribution to social justice for persons with disabilities and their families. They found that the CDWs demonstrated competencies in three main areas: integrated management of health conditions and impairments within a family focus; negotiating for disability-inclusive community development; and coordinated and efficient intersectoral management. (These should be familiar to family physicians, though the context is slightly different.) The CDWs were committed to fighting the inequalities and social injustices that persons with disabilities experienced, and they facilitate the multiple transitions experienced by the families at different stages of the disabled person’s development. It is critical that clinicians interact with and support CDWs in such efforts.

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References