Malignant melanoma and the sun

When doctors are asked whether the sun plays a role in the aetiology of malignant melanoma, most of us will respond in the affirmative. Isaacson and Ramsay[1] conclude that the jury is still out on this controversial topic, but provide strong evidence supporting the contrary view. Many publications seem to point to the sun as the culprit for increased risk of melanoma but others showed no such evidence; most concur that sunscreens block the mutagenic UV-B rays, but do not prevent melanoma.

In the darkly pigmented black people of South Africa, 80% of melanomas occur on the sole of the foot. The frequency of melanoma of the foot varies according to skin pigmentation, the lowest occurring in white-skinned people, intermediate in subjects with intermediate skin pigmentation, and the highest in black-skinned people.

Chromatid breaks indicative of a decreased ability to repair DNA damage caused by UV-B exposure is a factor in the development of basal cell and squamous carcinoma, but not melanoma. No research has answered the provocative question of why albinos, who are totally unprotected from the sun, develop squamous and basal cell carcinomas, but rarely melanomas.

Melanoma risk is 30 - 70 times higher in individuals with a significant family history compared with the general population. However, sporadic melanoma accounts for well over 90% of melanoma cases. Genetic factors therefore play a major role in familial melanoma, but a more subtle role in the common sporadic melanomas where an increased risk is present in individuals with combinations of alleles and genotypes that confer susceptibility.

AIDS is warfare

Some readers of the *SAMJ* have objected to the perceived excessive coverage of HIV/AIDS by the journal, while serious commentators have bewailed inadequate responses by government in dealing with the pandemic. Observers note that the statistics paint a horrendous picture that would result in total mobilisation of the nation if similar figures were the result of armed conflict. Papers in this *SAMJ* add further evidence of the seriousness of the situation.

Women are dying at a young age. Mortality data in South Africa are generally unreliable, especially in rural areas, and there are few systematically collected data on cause or number of deaths. Mashego and colleagues[2] therefore set out to establish mortality rates and cause of death in a rural community in KwaZulu-Natal. Based on AIDS-defining criteria, 42% of deaths were attributable to AIDS and 7% to violence or accident. Pulmonary tuberculosis, the most common AIDS-related symptom, was reported in 44%. AIDS-related mortality was found to be impacting significantly on the small rural community. Young women between the ages of 20 and 34 years and young men between the ages of 25 and 44 had the highest rate of AIDS-related deaths.

We have lost touch with child mortality. In their editorial Debbie Bradshaw and Rob Dorrington[3] provide discouraging proof of the inadequacy of the child mortality statistics in South Africa. Data are out of date and unreliable, including under-representation of deaths of children of mothers who have died of AIDS. But not knowing the exact level of child mortality is not grounds for complacency. All indications are that child mortality in South Africa is too high for a middle-income country and that it has been increasing. Reliable measurement of child mortality is an essential component of the effort of reducing child mortality and government is urged to improve the vital statistics system.

Per-patient costs for ART can be reduced. Harling, Bekker and Wood[4] provide some welcome good news in the fight against AIDS. They showed that the increase in scale of the operation for the provision of ART at an established clinic allowed economies of scale to be reaped. Evidence that the clinical outcomes were not affected suggests that the reduction in cost per patient is not due to a reduced standard of care.

Post-exposure HIV prophylaxis for rape survivors is likely to be negatively impacted upon by the latest version of the sexual offences Bill, report Killian and colleagues.[5] The vast majority of rapes go unreported and few women attend health care services after rape, with many believing that their actions will not lead to punishment of the perpetrator. They found that in 14% two or more perpetrators were involved, thus increasing the chances of becoming HIV infected. For many rape survivors in South Africa, rape means a death sentence. More efficient services and increased conviction rates of perpetrators of sexual assault will ultimately go a long way to preventing new HIV infection.

Dog bites in children

Dwyer, Douglas and Van As investigated dog bites in children.[6] Children under 6 years of age, because of their small size, were more likely to sustain injuries to the head, face or neck, and older children injuries to the perineum, buttocks, legs or feet.

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1. Isaacson C, Ramsay M. Does the sun play a role in the aetiology of malignant melanoma? (Controversies in Medicine). *S Afr Med J* 2007; 97: 568-571 (this issue).
2. Mashego M, Johnson D, Frohlich J, Carrara H, Abdool Karim Q. High AIDS-related mortality among young women in rural KwaZulu-Natal. *S Afr Med J* 2007; 97: 587-592 (this issue).
3. Bradshaw D, Dorrington R. Child mortality in South Africa – we have lost touch (Editorial). S Afr Med J 2007; 97: 582-583 (this issue).
4. Harling G, Bekker LG, Wood R. Cost of a dedicated ART clinic. *S Afr Med J* 2007; 97: 593-596 (this issue).
5. Killian S, Suliman S, Fakier N, Seedat S. Rape survivors and the provision of HIV post-exposure prophylaxis (Scientific Letter). *S Afr Med J* 2007; 97: 585-586 (this issue).
6. Dwyer JP, Douglas TS, Van As AB. Dog bite injuries in children – a review of data from a South African paediatric trauma unit. *S Afr Med J* 2007; 97: 597-600 (this issue).