Africa has contributed substantial knowledge to the understanding of certain risk factors for cancer, such as the role of several infectious agents (eg, viruses, bacteria, and parasites), aflatoxins, and certain lifestyle factors. Although the relative importance of many lifestyle factors is becoming better understood in developed countries, there is more genetic diversity between populations in Africa than between Africans and other indigenous peoples. As a result of the long evolutionary history in Africa, there is more genetic diversity between populations in the African continent, than between Africans and other people in the world. Not only do populations in Africa vary considerably with respect to their genes, but Africa shows a wide range of environments—eg, climatic, vegetative [12 of 16 vegetation zones are represented in Africa], and zoological (including microorganisms and parasites). One might, thus, expect a wide diversity of human-cancer patterns, the study of which would develop our understanding of their causes.

We review the causes and control for a specific group of the most common cancers in Africa. These cancers were selected for review on the basis of several factors. Data from Africa have contributed to an understanding of the aetiology of these cancers, and in the case of hepatocellular and cervical cancers, there are interventions that work. For the others, geographical and ethnic patterns suggest that there are lifestyle factors (figure 1) that contribute to their aetiology, which might differ in relative importance from those in developed countries. Additionally, certain tobacco-related cancers and HIV-related cancers (in addition to Kaposis sarcoma) are discussed, because these are likely to increase over time as both these epidemics develop.

Cancer of the cervix uteri
Cancer of the cervix is common in sub-Saharan Africa, although relatively less so in north Africa. Oncogenic human papilloma viruses (HPV) are now recognised as a necessary cause of cervical cancer. HPV subtypes 16 and 18 are responsible for 72% of cervical cancers in Africa, with other subtypes (especially 33, 31, 52, and 58) causing the remainder. Other sexually transmitted infections, especially Chlamydia trachomatis, which causes chronic cervicovaginal inflammation, might increase the risk of cervical cancer independently of HPV.

Additional independent risk factors have been documented, such as increasing number of pregnancies, oral contraceptives, and smoking. Epidemiological studies on cancer of the cervix in Africa have similar findings to those done in developed countries, in terms of number of partners, level of education, high parity, and steroid contraceptives. Genital hygiene, alcohol, and...