Failing to numb the pain: The untreated epidemic

Africa, especially sub-Saharan Africa, carries a significant burden of communicable and non-communicable diseases. The relative distribution of these is projected to shift by 2030.[1] By 2012, 25 million people in the sub-region were living with HIV/AIDS, comprising 70.8% of the global disease burden.[2] Regionally, cancer is an emerging public health problem.[3] In 2008 there were 715 000 new cases and 542 000 cancer-related deaths in Africa. This is projected to nearly double by 2030 due to population growth and ageing,[4] with 36% of cancers infection-related, twice the global average.[5]

With this significant disease burden, compounded by other life-limiting illnesses, a clear public health argument exists for the availability of pain- and symptom-relieving medicines to enhance the quality of life of millions of affected people, maximise the clinical benefit of available treatments, and ensure freedom from unnecessary suffering.[6] Indeed, effective pain alleviation is a central pillar of the World Health Organization (WHO's) enhanced public health approach for developing palliative care services[7] and well established in its three-step analgesic ladder.[8]

In mid-September 2013, the first session of the African Ministers of Health on palliative care was held at the joint conference of the African Palliative Care Association/Hospice Palliative Care Association of South Africa, in Johannesburg, South Africa (SA). Delegates underscored this argument by adopting a consensus statement proposing, as part of six objectives:

'The use of the already established global and regional frameworks provided by the African Union and World Health Organization, to ensure availability of, and access to, essential medicines and technologies for the treatment of pain and other symptoms being experienced by so many in Africa, including children. This includes the procurement and distribution of morphine, to ensure greater availability and access of this main opioid for the management of moderate to severe pain.'[9]

However, despite advances in provision on the continent,[10] millions of people cannot access palliative care in general and effective pain medicines specifically, despite the significant prevalence of pain among those with life-limiting diagnoses. For example, Namisango *et al.*[11] found that among 302 ambulatory HIV/AIDS patients in Uganda, 47% reported pain in the seven days prior to the survey, while pain was a symptom at the time of diagnosis for 68%, and 27% reported severe pain on a 0-to-10 numeric scale, with a resultant debilitating effect on quality of life. These prevalence figures were echoed by Harding *et al.*,[12] who reported a seven-day period prevalence of pain at 82.6% among 224 HIV-infected patients in five palliative care centres in SA and Uganda. Similarly, Mphahlele *et al.*[13] compared predominantly black African and female HIV-positive patients attending rural and metropolitan outpatient clinics in SA and found that 72% of rural and 56% of metropolitan participants reported having pain at the time of interview which was comparably moderate to severe in intensity among both populations.

Because of the very high prevalence of cancer patients presenting with advanced and incurable disease, to clinical services with limited infrastructure, many affected Africans endure a painful and distressing death. Indeed, Harding *et al.*'s[14] investigation of symptom prevalence and burden among advanced cancer patients in two African countries found that among 112 patients, pain was the most prevalent of a mean of 18 symptoms (87.5%), and ranked as most severe (23.2%).

In spite of this overwhelming need, in many African countries access to even the simplest pain-relieving medication is restricted. While many countries have shown an increase in opioid consumption since 2000, all African countries, apart from SA, have very low consumption levels, as defined by the International Narcotics Control Board, with a defined daily dose of less than 200 mg/day/100 000 people.[15] Many barriers hamper the availability and accessibility of effective pain medications. Harding *et al.*'s[16] study of drug availability and prescribing practices in 12 sub-Saharan African countries found that, in addition to problems accessing non-opioids, less than half of the responding 62 service facilities were prescribing opioids of any strength.

The striking gulf between clinical need and available supply of effective medicines in Africa was recently highlighted by an international study reporting that, globally, governments are leaving hundreds of millions of cancer patients to suffer needlessly because of their failure to ensure adequate access to pain-relieving medicines.[17] Published in the *Annals of Oncology*, the paper by Cleary *et al.*[17] is the product of the International Collaborative Project to Evaluate the Availability and Accessibility of Opioids for the Management of Cancer Pain.[18] Initiated by the European Society for Medical Oncology, the study was co-ordinated with the European Association for Palliative Care, the Pain and Policies Study Group at the US-based University of Wisconsin Carbone Cancer Center, the Union for International Cancer Control and the WHO, and assisted by the co-operation and participation of a further 17 international oncology and palliative care organisations, including the Uganda-based African Palliative Care Association.

With data gathered between December 2010 and July 2012, 156 reports were submitted to the study team by experts in 76 countries and 25 Indian states, representing 58% of countries and 83% of 5.7 billion of the people living in Africa, Asia, the Middle East, Latin and Central America and the Caribbean. The African report incorporates data from 25 of the 52 countries surveyed, and covers 744 million of the region's 1 127 million people (66%).

The researchers found that codeine and morphine were the primary medicines on formulary, with no one country having all seven of the formulations considered essential for the relief of cancer pain: codeine, immediate- and slow-release oral morphine, injectable morphine, oral oxycodone, oral methadone and transdermal fentanyl.[19] Six countries (Côte d'Ivoire, Liberia, Libya, Rwanda, Sierra Leone and Tunisia) reported that they had no immediate-release morphine, four had no sustained-release morphine (Libya, Sierra Leone, Tanzania and Zimbabwe), and two had no injectable morphine (Ethiopia and Malawi). Only 15 countries had all oral immediate-release, oral sustained-release and injectable morphine available. Sierra Leone and Tanzania had the most limited formulary, with only two medications on formulary.

In approximately half the countries, most of the medicines were free. Otherwise the full cost of medications was borne by patients.

Regulatory barriers, with evidence of over-regulation that impedes patient care, were widespread. Most countries used a wide number of regulatory restriction types to limit the accessibility of opioids, ranging from two in Botswana and Namibia, to seven in Egypt and Mauritius. More specifically, the majority of countries (16/25) required special authorisation for outpatients with cancer pain to receive an opioid prescription, and similar restrictions were reported in 14 countries for inpatients and in 11 countries even for hospice patients. Only six countries (Côte d'Ivoire, Malawi, Mauritius,

Nigeria, Tanzania and Zimbabwe) allowed cancer patients to receive opioid medications without requiring registration or a special permit.

Lastly, while few countries had restrictions limiting physician prescribing, three (Egypt, Liberia and Morocco) required a special permit for family doctors and surgeons and even for oncologists. Prescription limitations were commonplace and ten countries did not allow physicians to prescribe more than two weeks' supply of opioid analgesics to a patient.

The survey demonstrates that in many countries across Africa, government regulations are undermining the ability to provide pain relief to cancer patients, as well as those with other life-limiting illnesses.

Many other issues affect the availability and use of appropriate pain-relieving medicines on the continent. These include problems of supply and distribution, a misplaced 'opiophobia' among both patients and providers, a related limited understanding of how and when to use opioids, and the restriction of prescribing powers to doctors, rather than extending them (as in Uganda) to appropriately trained nurses working in rural areas.

Nevertheless, there is a growing recognition among national governments of the importance of palliative care and access to effective pain relief, as illustrated by the African Union's issuance of a common position statement on controlled substances and access to pain management medicines in October 2012,[20] and the consensus statement of the health ministers meeting in 2013.[9] However, this can only be translated into action if and when known obstacles – such as the restrictive regulatory barriers described in the survey[17] – are addressed as part of the systems-strengthening agenda. If not, the untreated epidemic of pain will continue.

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