

Botswana

Botswana¹ (population 1.77 million)² is a landlocked country in Southern Africa that covers an area of 600,000 square kilometres. Its boundaries border Zambia, Zimbabwe, South Africa, Namibia and Angola. Formerly the British protectorate of Bechuanaland, Botswana adopted its new name on independence in 1966. The economy, one of the most robust on the continent, is dominated by diamond mining.



According to the United Nations human development index (HDI), Botswana is ranked 128/177 countries worldwide (value 0.589)³ and 10/45 African countries for which an index is available. This places Botswana in the group of countries with medium human development.

PALLIATIVE CARE SERVICE PROVISION

Current services

Botswana is in the unusual position of being an African country that is not financially resource poor. It is poor, however, in specialised human resources, and notably in the field of palliative care.

In Botswana palliative care is delivered by three organisations: Holy Cross Hospice, Gaborone; Ramotswa Hospice at Home; and the Light and Courage Centre, Francistown (Table 1):

Table 1 Palliative care provision in Botswana, 2004

<i>Adult Services</i>								
	<i>Freestanding unit</i>	<i>Hospital unit</i>	<i>Hospital support team</i>		<i>Home care</i>	<i>Day care</i>	<i>Clinic/Drop-in centre</i>	<i>Grand Total</i>
Holy Cross Hospice, Gaborone					1	1	1	3
Ramotswa Hospice at Home, Ramotswa		1			1	1	1	4
Light and Courage Centre, Francistown					1	1	1	3
Total services:		1			3	3	3	10

Holy Cross Hospice. This faith-based organisation was founded in 1994 as a day care centre and to provide home-based care in response to the AIDS epidemic. It now offers home based services, day care for adults and orphans, and includes a drop-in

centre for patients. In March 2004, 30 adults and 7 orphans were registered with the day care centre.

Ramotswa Hospice at Home (Bamalete Lutheran Hospital). The hospice was founded in 1992, initially to provide day care for the elderly and chronically ill. It soon became used for HIV positive patients and for some cancer patients. The hospice operates a home-based care service, offering nursing and counselling to approximately 48 patients at any one time. Daily respite care is available when necessary. A day care centre operates twice weekly where patients are fed; they can also partake in occupational pursuits such as beadwork and sewing.

Light and Courage Centre. The service was established as a day care centre in 1998 by the Francistown Multisectoral AIDS Committee as a response to the growing AIDS crisis. The Centre had, by September 2003, provided day care and support to more than 210 registered clients who have an AIDS-defining illness. Those who are asymptomatic are able to access information and counselling but are not considered as day care clients. A maximum of 40 clients at any one time receive holistic care from this faith-based organisation. Home visits are limited to those who would normally attend the day centre but are too unwell.

Reimbursement and funding for services

Holy Cross Hospice has received funding from community donations, international organisations and embassies - NORAD, Norwegian Church Aids and the US Embassy – in addition to a grant from the Botswana government. A 2-year grant was provided by the Bristol Myers Foundation (2001-2003) to develop core services and systems. All services are free.

Ramotswa Hospice at Home depends for its funding on the hospital to which it is attached; that in turn obtains faith-based funds for its operations and receives contributions from the Botswana government. All donations for the hospice are channelled through the hospital administration. Services are provided free to patients.

Light and Courage Centre is supported by a large number of donations from individuals, local businesses and international donors. The Centre has mainly been dependent on government funding and commits to fulfil government economic and social policies. Major donors include the Francistown City Council (*children's programme*), UNAIDS (*income generation*), the government of New Zealand (*Printing costs*), the government of Japan (*vehicle*), Skillshare Africa (*staff costs*) and the government of Botswana - African Comprehensive HIV/AIDS Partnerships/ Botswana Network of AIDS Service Organisations (*general running expenses and equipment*).

Opioid availability and consumption

The International Narcotics Control Board⁴ has published the following figures for the consumption of narcotic drugs in Botswana: codeine 3kg; morphine 1 kg; pethidine 2kg.

For the years 2000-2002, the average defined daily dose consumption of morphine for statistical purposes (S-DDD)⁵ in Botswana was 22. This compares with other African countries as follows: Swaziland 1; Egypt 2; Uganda 4; Zimbabwe 13; Namibia 73;

South Africa 103. Thirty one countries reported no morphine consumption during 2000-2002 (Table 2).

Table 2 Average daily consumption of defined daily doses (for statistical purposes) of morphine per million inhabitants, 2000-2002: countries of Africa



Source: International Narcotics Control Board *Narcotic Drugs: Estimated World Requirements for 2004. Statistics for 2002*. New York: United Nations, 2004.

Since 2002, morphine has been used in the adult oncology ward at the Princess Marina Hospital, yet pain control in the general health system is limited to pethidine and paracetamol based treatments. Syringe drivers are not common.

Holy Cross Hospice provides some medications for its patients. Only mild analgesics (paracetamol) are used for pain relief.

Light and Courage Centre is supportive of anti-retroviral therapy but does not offer opioid treatments.

Ramotswa Hospice has a weekly visit from the hospital doctor who prescribes morphine as necessary.

National and professional organisations

The following organisations feature prominently in Botswana:

African Comprehensive HIV/AIDS Partnerships (ACHAP)

This is a joint initiative between the Government of Botswana, the Bill & Melinda Gates Foundation, and the Merck Company Foundation/Merck & Co., Inc. to prevent and treat HIV/AIDS in Botswana. It is unique in that it is a public/private partnership in development. ACHAP's focus is to support the goals of the government to decrease HIV incidence and significantly increase the rate of diagnosis and treatment of HIV/AIDS in Botswana by rapidly advancing prevention programmes, healthcare access, patient management and treatment of HIV. The partnership was formally announced on July 10th 2000. Both donor foundations are dedicating \$50 million over 5 years towards the project. Merck also donates two antiretroviral medicines for the treatment programmes.⁶

Bristol Myers Foundation

This organisation funds the KITSO⁷ programme which operates the first paediatric AIDS clinic in Africa. The clinic is based at Princess Marina Hospital and opened in June 2003.

The World Health Organisation (WHO)

The WHO is currently involved in a community health approach to palliative care for HIV/AIDS and cancer patients in Africa. This joint project - involving the five countries of Botswana, Ethiopia, Tanzania, Uganda and Zimbabwe - seeks to improve the quality of life of HIV/AIDS and cancer patients in sub-Saharan Africa by developing comprehensive palliative care programmes through a community health approach. The project contains four major elements: team building, situation analysis, needs assessment and action plans.

In its project report 2004, WHO noted that Botswana's strengths lay in factors such as: the community home-based care programme; policies already in place (for care and support, for ARVs); and the commitment of government. Weakness included: the lack of trained human resources; lack of understanding of palliative care among health providers; inadequate capacity to train for palliative care; shortage of health professionals and social workers; increased burden of care/ burnout among caregivers;

and an inadequate number of hospices, halfway houses and day care centres. Crucially, the report states;

Botswana has relatively more resources and better health infrastructure than the other countries involved in this project, but has not reached a health status in accordance with its level of resources.⁸

Botswana Network of AIDS Service Organisations (BONASO)

Non-governmental and community based organisations are invited to submit proposals to BONASO for review. BONASO assists in identifying innovative grass roots level ideas that may be scaled up or adopted in other communities.

There is no national hospice/palliative care body in Botswana and there are no known twinning arrangements.

President’s Emergency Plan for AIDS Relief (PEPFAR)

During his state of the Union address in 2003, President Bush announced his PEPFAR initiative; this groundbreaking intervention encompasses HIV/AIDS activities in more than 75 countries and focuses on 15 countries worldwide – of which Botswana is one of 12 in Africa – to develop integrated care and treatment programmes (Table 3). Over the next 5 years, PEPFAR is donating a total of US \$15 billion, of which 15% is earmarked for palliative care. This has dramatically changed the palliative care landscape in Africa, as bids for new initiatives are attracting the funding for implementation. Four main areas are targeted:

- prevention of HIV transmission
- treatment of AIDS and associated conditions
- palliative care for HIV infected individuals
- care for AIDS orphans and other vulnerable children

Table 3 Countries of Africa involved in PEPFAR, the Diana, Princess of Wales memorial Fund (Diana Fund) and WHO projects

PEPFAR	DIANA FUND	WHO
Botswana,		Botswana
Cote d' Ivoire,		
Ethiopia,	Ethiopia	Ethiopia
Kenya,	Kenya	
	Malawi	
Mozambique,		
Namibia,		
Nigeria,		
Rwanda,	Rwanda	
South Africa,	South Africa	
Tanzania,	Tanzania	Tanzania
Uganda	Uganda	Uganda
	Zimbabwe	Zimbabwe
Zambia	Zambia	

In 2004, Botswana was allocated \$17.9 million to support a HIV/AIDS comprehensive treatment, care and prevention programme.⁹

Palliative care coverage

Holy Cross Hospice covers 3 areas around Gaborone: Tlokweng, Old Naledi and urban Gaborone (population approximately 300 000).

Ramotswa Hospice serves the Ramotswa area only (population 25 700).

Light and Courage Centre services Francistown (population 100 000).

Education and training

Ministry of Health/WHO. A palliative care conference was hosted in Gaborone in 2002.

Ministry of Health/ACHAP. The national ARV programme was launched in January 2002; eleven sites are currently operational with a further 21 planned to be active by the end of 2004. A programme offering training for home-based care programmes is run by the Ministry, and implemented by the city councils. These services are not considered palliative care.

Holy Cross Hospice. This hospice does not provide training. Training of volunteers was undertaken by a trainer from South Africa. Bristol Myers funding helped develop a model which may be used to train more volunteers. Palliative care knowledge is obtained from the limited literature resources that are currently available.

Light and Courage Centre. The Centre provides training and education not only to its own clients and their caregivers, but also to members of the community to reduce the stigma associated with AIDS. Community members are educated in issues relating to HIV/AIDS through presentations and workshops at schools, public awareness campaigns, and through the drop-in service available to all members of the public wanting information and advice. Training in crafts is provided for patients and family carers. A teacher provided by the Ministry of Education offers literacy lessons for clients. Computer lessons have been offered by a volunteer Methodist Minister who has since joined the staff.

Ramotswa Hospice at Home. Staff have received training in monitoring ARV treatments by the Ministry of Health and ACHAP. One member of staff attended a terminal care nursing and bereavement course in Swaziland in September 1994. No other hospice or hospital member of staff has any palliative care training. There is some sharing of knowledge with occasional visits to hospices in South Africa. Training of volunteers and caregivers is done by the staff.

African Comprehensive HIV/AIDS Partnerships. HIV/AIDS sector staff have been trained in project management, proposal writing, monitoring and evaluation by ACHAP which provides the National AIDS Coordinating Agency (NACA) with financial, logistical, technical and administrative support.

Palliative care workforce capacity

Holy Cross Hospice has the following full time staff:

1 director, health administrator; 3 nurses; 1 day care manager (nurse trained); 2 social workers; 3 drivers; 1 accounts officer; 1 receptionist; 1 administrative assistant 1 cleaner. In addition, there are 2 volunteer doctors who attend the clinic at the day centre and are on call for advice. Fifteen volunteers work 5 days a week from 8.00am to 1.00pm in the centre kitchen and in the community. They receive a stipend for this work.

Light and Courage Centre is headed by 1 coordinator assisted by 2 nurses/development workers who are responsible for the day to day operations of the Centre and the medical assessment of the clients. There is a financial administrator. A social worker helps to assess clients and links with clinic social workers to provide practical needs for clients. Other staff include: a driver/general assistant; a welfare educator; a craft teacher; a cook; an assistant cook/cleaner; and a gardener.

Ramotswa Hospice at Home has staff salaries paid by the Bamalete Lutheran Hospital (BLH) that receives a grant from the government of Botswana. All staff are full time and comprise: 1 administrator/principal registered nurse; 1 administrative assistant/family nurse practitioner; 2 senior registered nurses/counsellors; 1 senior registered nurse at the day centre; 1 registered nurse/counsellor; and 1 cleaner. A hospital-based doctor is scheduled to attend the day care clinic each Thursday. There are 12 volunteers working with the home-based team and 3 volunteers working at the hospice centre. All are part time and receive a stipend. The hospice staff are rotated throughout the hospital and are not permanently located at the hospice.

HISTORY AND DEVELOPMENT OF PALLIATIVE CARE

Narrative history of palliative care

Botswana's public health system coped effectively with most of the basic health needs of the nation until the HIV/AIDS epidemic hit the country about a decade ago. Specialist oncology treatments, including radiotherapy and chemotherapy were introduced by the private sector as late as 1999. Two years later (2001), the first oncology ward was opened at Princess Marina Hospital. There are no official cancer statistics but experienced health professionals estimate the most common cancers to be Kaposi's sarcoma and cancers of the cervix, prostate, lung, breast and head and neck.^{10, 11}

Despite Botswana's dynamic and aggressive approach to treating AIDS, there are gaps in the field of palliative care provision for patients living with other terminal conditions. The Ministry of Health does not provide palliative care support for people dying from cancers, AIDS and other illnesses, although there are signs of increasing interest in this field. Whilst effective pain control with the use of morphine was introduced into the adult oncology ward in 2001, pain control in the health system is limited.

Ideas of witchcraft are common and are generally directed at women – who are often blamed for the death of a husband or relative. Cultural understandings identify an external cause of an illness. For example: cancer of the oesophagus is attributed to eating something that has caused choking. Use of both traditional and allopathic care is common.

Holy Cross Hospice. In 1994, concerned members of the community, the Anglican Church and Dr Moffat (Superintendent of Princess Marina Hospital and an Anglican

priest) drafted a constitution to establish an organisation which was hoped would address the growing threat of AIDS in Gaborone. In October 1995 the registered Holy Cross Hospice established itself on donated land. An Australian nurse, sponsored by the Episcopalian Church in the USA and linked to the Anglican Church in Botswana, was the first nurse at the Hospice. She networked with the clinics and the Princess Marina Hospital - and accompanied doctors on their rounds in the community. Terminally ill patients were referred to the centre. NORAD donated a vehicle to enable home-based care to be delivered. Language was a barrier, however, and soon afterwards a Botswana nurse was employed. Gradually, more staff were employed and local volunteers began to help in the kitchen and by sewing and craft-making. At that time about 10 patients were registered, mainly suffering from symptomatic HIV. Volunteers from the Anglican Church in the UK also offered practical help.

Funding has been a constant problem and several nurses have resigned due to poor salaries. 'Nurses were paid less than government hospitals, and as it's a stressful job anyway there was little incentive to stay'.¹² The service now sustains a drop-in centre, day care centre and home based care. It continues to look after children orphaned by the deaths of either or both parent(s) who were registered hospice patients.

Light and Courage Centre. In 1998, in response to the ever-increasing number of infected individuals in Francistown, the Light and Courage Centre was established by the Francistown Multisectoral AIDS Committee (DMSAC) as a day centre to provide support and information to community members infected and affected by HIV/AIDS. The roots of the present Centre lie with the appointment of Ms Angelina Magaga as Acting Coordinator in March 2000 and the arrival in July 2000 of Mrs Olwen Donald as Nurse/Development Worker.

In May 2001 the facilities were handed over to the Light and Courage Centre Trust, a community based organization managed by a Board of Trustees drawn from both the business sector and the wider community of Francistown (Deed of Trust No. 482 /2000 dated 30 November 2000). DMSAC, however, is still responsible for the co-ordination of all HIV/AIDS activities and is therefore still involved with, and supportive of, the Centre.¹³

The Centre is mindful of the increasing number of persons who could benefit from its services - and that it is the only one of its kind in Francistown. The organisation, therefore, is in the process of acquiring more land and extending its facilities to expand its programme.

Ramotswa Hospice at Home. Christa Kiebelstein, a nurse who worked with the Bamalete Lutheran Hospital and Dr. Ian Kennedy, shared a vision of establishing a hospice at the hospital. The latter was the medical superintendent at the hospital and according to Kiebelstein 'has been shaping the medical landscape in Botswana during his 30 years service as MO.'¹⁴

The Matron of the hospital at that time was Mrs Johanna Kalake. 'She played a very important part as Matron of the BLH. at Ramotswa in getting the hospice on the way. She has retired as Matron, but lives in Ramotswa just near the Bamalete Lutheran Hospital. She is now 64 years old, but still working at a clinic of the District Council.'¹⁴

This hospice started by caring for the elderly and chronically ill but was rapidly adapted to providing care for HIV positive patients as well. Cancer patients comprise

a significant proportion of the registered patients. The hospital provides the referral system for the hospice. Patients who have incurable cancer or who have been diagnosed HIV positive are advised to go to the hospice, situated in the grounds of the hospital. The main focus is on home care although those who require facilities and care unavailable at home are brought daily for respite care. Baths, medical care, occupational interests and re-hydration are available.

Hospice success stories

Holy Cross Hospice believes it is successful in helping people cope with their chronic illnesses by helping them accept their condition.

Light and Courage Centre lists several achievements including capacity building and efficient operating systems. The organisation's networking relationships ensure good community coverage. Patients have been helped to return to productive and economically viable activities and the centre believes it has been instrumental in reducing stigma and discrimination for AIDS patients. Craft activities augment income generation and the drop-in centre is regarded as an effective means of disseminating information to the population. Significantly the holistic model is replicated by other organisations which recognise its value.

Ramotswa Hospice feels its success lies in the continuity of care provided. Bereavement support is offered after the death of the patient, particularly when children are involved. Helping patients adhere to their ARV programme brings great rewards. 'Many people are recovering, that's why we have a very small number of patients here at the moment - because a lot of them have recovered and they have gone back to work'.¹⁵

PUBLIC HEALTH CONTEXT

Population

Botswana has an estimated population of 1.77 million of which 85% subscribe to indigenous beliefs and 15% are Christian.

Epidemiology

In Botswana, the WHO World Health Report (2003) indicates an adult mortality¹⁶ rate per 1000 population of 786 for males and 745 for females. Life expectancy for males is 40.2; for females 40.6. Healthy life expectancy is 36.0 for males; 35.4 for females.¹⁷

In a report (2004)¹⁸ that focuses on a community health approach to palliative care in five African countries, the WHO noted that the prevalence of HIV/AIDS in adults is higher in Botswana (38.8% in 2002) than other project countries (Ethiopia, Tanzania, Uganda, and Zimbabwe). The prevalence of HIV/AIDS, however, is higher in the other four countries than most countries in the world. In the project countries, Kaposi's sarcoma is among the most common cancers because of its association with AIDS. Head and neck cancer and lymphoma are common in males and, like most developing countries, the most common cancers in females are cancers of the cervix and breast.

HIV/AIDS is a huge burden for sub-Saharan Africa. Throughout the region in 2003, an estimated 23-27 million people were thought to be living with the disease which also caused up to 2.5 million deaths. This represents a huge loss and impacts significantly on health systems and social and family structures.¹⁹

At the end of 2003, UNAIDS suggested that up to 380,000 adults and children were living with HIV in Botswana, and that up 43,000 AIDS-related deaths had occurred during this year (Table 5).

Table 5 Country HIV and AIDS estimates, end 2003

Adult (15-49) HIV prevalence rate	37.3% (range: 35.5%-39.1%)
Adults (15-49) living with HIV	330 000 (range: 310 000-340 000)
Adults and children (0-49) living with HIV	350 000 (range: 330 000-380 000)
Women (15-49) living with HIV	190 000 (range: 180 000-190 000)
AIDS deaths (adults and children) in 2003	33 000 (range: 25 000-43 000)

Source: UNAIDS 2004 report on the global AIDS epidemic

UNAIDS reports:

Since the first HIV/AIDS case diagnosis in 1985, the overall prevalence rate has risen dramatically. Surveillance results show a rise from 18.1% in 1992 to 35.7% in 1998 and 37.3% in 2003.

In 2003, in more than two thirds of the country the prevalence was over 30%, and in over one third of the country it exceeded 40%. The highest prevalence is among 25–29-year-old adults. Prevalence in the older age groups appears to be increasing, while prevalence among 15–19-year-olds has remained fairly stable.

The government, driven by the president's efforts, has put in place a strong multisectoral response through the National AIDS Council (NAC). The National AIDS Coordinating Agency (NACA) provides technical support to the NAC and coordinates the national response. Strong political commitment has led to the integration of HIV/AIDS into national development planning and budgeting (National Development Plan 9). The National Strategic Plan on HIV/AIDS (2003–2009) was developed to foster a broad-based mechanism to achieve an expanded multisectoral response.

To effectively monitor and evaluate the response, the Botswana HIV Response Information Management System was developed. The system seeks to gather data from all levels of the response. Civil society and the private sector have become increasingly involved in the national response, and in 2003 the private sector coordination unit was set up by the NACA with key support from the UN and other development partners. The Country Coordinating Mechanism, originally established to manage the Global Fund resources, was mandated to manage additional donor funds, PEPFAR in particular.²⁰

Health care system

In 2001, the total per capita expenditure on health care was Intl \$381 (6.6% of GDP).²¹ Among the countries of Africa, this figure falls within a spending range of Intl \$652 in South Africa (8.6% of GDP) and Intl \$12 in the Democratic Republic of Congo (3.5% of GDP). At 2.0% the smallest spending as a percentage of GDP is in Equatorial Guinea (Tables 6 and 7).

The WHO overall health system performance score places Botswana 169/191 countries. This composite measure of overall health system attainment²² is based on a country's goals relating to health, responsiveness, and fairness in financing. The measure varies widely across countries and is highly correlated with general levels of human development as captured in the human development index.

Concluding the country report on Botswana, WHO note:

The demand for palliative care services in Botswana is increasing - primarily due to the expanding HIV/AIDS epidemic and secondly due to chronic diseases, such as cancer. While current palliative care services have been found to be somewhat inadequate in this investigation, the gaps to be bridged have been identified and the government of Botswana is committed to providing quality health care services to its entire population. The government has already established a suitable base for strengthening palliative care services by its primary health care delivery system, CHBC programme, national HIV/AIDS activities, National Drug Act, cancer management protocols, and strong partnership among the government, civil society and private sector.²³

Political economy

GDP per capita is Intl \$5,747. This falls within the range of \$8,272 (Libya) and \$346 (Democratic Republic of the Congo) in the countries of Africa (Table 8).

Botswana has maintained one of the world's highest growth rates since independence in 1966. Through fiscal discipline and sound management, Botswana has transformed itself from one of the poorest countries in the world to a middle-income country with a per capita GDP of \$8,800 in 2003. Two major investment services rank Botswana as the best credit risk in Africa. Diamond mining has fueled much of the expansion and currently accounts for more than one-third of GDP and for nine-tenths of export earnings. Tourism, subsistence farming, and cattle raising are other key sectors. On the downside, the government must deal with high rates of unemployment and poverty. Unemployment officially is 21%, but unofficial estimates place it closer to 40%. HIV/AIDS infection rates are the highest in the world and threaten Botswana's impressive economic gains. Long-term prospects are overshadowed by the expected levelling off in diamond mining production.²⁴

Tables 6 and 7 Total health expenditure (Intl \$) per capita and as a percentage of GDP: countries of Africa, 2001

Table 6 Health expenditure (Intl \$) per capita: Africa		Table 7 Health expenditure (Intl \$) as a percentage of GDP: Africa	
South Africa	652	South Africa	8.6
Tunisia	463	Kenya	7.8
Botswana	381	Malawi	7.8
Namibia	342	Djibouti	7.0
Libya	239	Namibia	7.0
Morocco	199	Botswana	6.6
Gabon	197	Gambia	6.4
Algeria	169	Tunisia	6.4
Swaziland	167	Côte d'Ivoire	6.2
Egypt	153	Zimbabwe	6.2
Zimbabwe	142	Guinea-Bissau	5.9
Côte d'Ivoire	127	Mozambique	5.9
Liberia	127	Uganda	5.9
Kenya	114	Eritrea	5.7
Equatorial Guinea	106	Zambia	5.7
Lesotho	101	Lesotho	5.5
Djibouti	90	Rwanda	5.5
Gambia	78	Morocco	5.1
Angola	70	Senegal	4.8
Senegal	63	Ghana	4.7
Guinea	61	Central African Republic	4.5
Ghana	60	Sudan	4.5
Central African Republic	58	Angola	4.4
Uganda	57	Benin	4.4
Zambia	52	Utd Rep of Tanzania	4.4
Mozambique	47	Liberia	4.3
Mauritania	45	Mali	4.3
Togo	45	Sierra Leone	4.3
Rwanda	44	Algeria	4.1
Cameroon	42	Egypt	3.9
Benin	39	Niger	3.7
Malawi	39	Burundi	3.6
Sudan	39	Ethiopia	3.6
Guinea-Bissau	37	Gabon	3.6
Eritrea	36	Mauritania	3.6
Nigeria	31	Dem Rep of the Congo	3.5
Mali	30	Guinea	3.5
Burkina Faso	27	Nigeria	3.4
Sierra Leone	26	Cameroon	3.3
Utd Rep of Tanzania	26	Swaziland	3.3
Congo	22	Burkina Faso	3.0
Niger	22	Libya	2.9
Burundi	19	Togo	2.8
Chad	17	Chad	2.6
Ethiopia	14	Somalia	2.6
Dem Rep of the Congo	12	Congo	2.1
Somalia		Equatorial Guinea	2.0

Source WHO World Health Report 2003

Table 8 GDP per capita (Intl \$): countries of Africa, 2001

Country	GDP per capita Intl \$
Libya	8272
South Africa	7538
Tunisia	7138
Botswana	5747
Gabon	5514
Equatorial Guinea	5239
Swaziland	5029
Namibia	4918
Algeria	4104
Egypt	3901
Morocco	3887
Liberia	2965
Zimbabwe	2271
Côte d'Ivoire	2045
Lesotho	1844
Guinea	1752
Togo	1608
Angola	1578
Kenya	1452
Senegal	1323
Central African Republic	1289
Djibouti	1288
Ghana	1272
Cameroon	1269
Mauritania	1257
Gambia	1214
Sudan	1112
Congo	1036
Uganda	964
Nigeria	915
Zambia	906
Benin	888
Burkina Faso	886
Mozambique	805
Rwanda	799
Mali	700
Chad	656
Guinea-Bissau	630
Eritrea	629
Sierra Leone	606
Niger	604
Utd Rep of Tanzania	599
Burundi	529
Malawi	501
Ethiopia	382
Dem Rep of the Congo	346
Somalia	

Source WHO

ETHICAL ISSUES

FURTHER READING

Berkhof F. HIV/AIDS and education in Botswana: the stay alive programme. *Perspectives in Education* Jun 2003;21(2): 167-174.

Campbell EK, Rakgoasi SD. Condom use among youths in Botswana in the era of HIV and AIDS. *Social Development Issues* 2002;24(1): 56-67.

Durham D, Klaitz F. Funerals and the public space of sentiment in Botswana. *Journal of Southern African Studies* 2002;28(4): 777-796.

Harding R, Higginson IR (2004) *Palliative Care in Sub-Saharan Africa: An Appraisal*. London: Diana, Princess of Wales Memorial Fund. See: www.theworkcontinues.org/pressroom/6_3.publications.htm

Harding R, Stewart K, Marconi K, O'Neill JF, Higginson IJ (2003) Current HIV/AIDS end-of-life care in Sub-Saharan Africa: a survey of models, services, challenges and priorities. *BMC Public Health* Oct 3:33. See: <http://www.biomedcentral.com/1471-2458/3/33>

Hunter S (2003) *Black Death: AIDS in Africa*. Basingstoke: Palgrave Macmillan.

Livingston J. Reconfiguring old age: elderly women and concerns over care in south eastern Botswana. *Medical Anthropology* Jul-Sep 2003; 22(3): 205-232.

Norr KF, Norr JL, McElmurry BJ, Tlou S, Moeti MR. Impact of peer group education on HIV prevention among women in Botswana. *Health Care Women Int* 2004 Mar, 25:210-26.

Saugestad S, Suzman J. The inconvenient indigenous. Remote areas development in Botswana, donor assistance and the first people of the Kalahari [review]. *Journal of Southern African Studies* 2002;28(4): 850-851.

Stjernswärd J, Clark D. Palliative medicine – a global perspective. In: D Doyle, G Hanks, N Cherny, K Calman (eds.) *Oxford Textbook of Palliative Medicine*. Oxford: Oxford University Press, 2003.

Taylor I. As good as it gets? Botswana's 'democratic development.' *Journal of Contemporary African Studies* May 2003;21(2): 215-231.

REFERENCES

¹ We are grateful to Jennifer Hunt for her contribution to this country report.

² WHO statistics 200-2002.

³ Report of the United Nations Development Programme, 2004 (HDI for 2002). Launched by the United Nations in 1990, the Human Development Index measures a country's achievements in three aspects of human development: longevity, knowledge, and a decent standard of living. It was created to re-emphasize that people and their lives should be the ultimate criteria for assessing the development of a country, not economic growth. Current values range from 0.956 (Norway, 1/177 countries) to 0.273 (Sierra Leone, 177/177 countries). Countries fall into one of three groups: countries 1-55=high development; 56-141=medium development; 142-177=low development. See: http://hdr.undp.org/statistics/data/indic/indic_8_1_1.html

⁴ International Narcotics Control Board (2004) *Narcotic Drugs: estimated world requirements for 2004. Statistics for 2002*. New York: United Nations, 2004.

⁵ 'The term *defined daily doses for statistical purposes* (S-DDD) replaces the term *defined daily doses* previously used by the Board. The S-DDDs are technical units of measurement for the purposes of statistical analysis and are not recommended prescription doses. Certain narcotic drugs may be used in certain countries for different treatments or in accordance with different medical practices, and therefore a different daily dose could be more appropriate.' International Narcotics Control Board. *Narcotic Drugs: estimated world requirements for 2004. Statistics for 2002*.

⁶ Adapted from African Comprehensive HIV/AIDS Partnerships draft report: Background information. Updated February 2003.

⁷ KITSO is a collaboration of the Botswana Ministry of Health and the Botswana-HAI Partnership for HIV Research and Education, made possible through support from the African Comprehensive HIV/AIDS Partnerships.

The name of this program was designed to incorporate the culture of Botswana and to capture the groundbreaking nature of this collaborative educational effort. While English is the official language of Botswana, the language of Setswana is an important element of the country's proud heritage. In the title of the program, "kitso" is the Setswana word for "knowledge." KITSO AIDS also stands for "Knowledge, Innovation, and Training Shall Overcome AIDS. See: <http://www.aids.harvard.edu/kitso/>

⁸ WHO report: Community Health Approach to Palliative Care for HIV/AIDS Patients, 2004:8. Available to download at: <http://whqlibdoc.who.int/publications/2004/9241591498.pdf>

⁹ See: http://www.usaid.gov/our_work/global_health/aids/Countries/africa/us_botswana.pdf

¹⁰ Personal communication: Dr. Paleske – 27 February 2004.

¹¹ Personal communication: Sr. Cecilia Tommy – 29 Feb 2004.

¹² Personal communication: Josephine Makate – 24 Feb 2004.

¹³ Chairperson's report for general Meeting Dec 2000-Sept 2003.

¹⁴ Personal communication: Christa Kiebelstein – 5Feb 2004.

¹⁵ Personal communication: Katsetse Maruaeng – 27 Feb 2004.

¹⁶ This refers to adult mortality risk, which is defined as the probability of dying between 15 and 59 years.

¹⁷ See: WHO statistics for Botswana at: <http://www.who.int/countries/bwa/en/>

¹⁸ WHO report: Community Health Approach to Palliative Care for HIV/AIDS Patients, 2004: 21. Available to download at:
<http://whqlibdoc.who.int/publications/2004/9241591498.pdf>

¹⁹ UNAIDS. 2004 Report on the global AIDS epidemic. See:
<http://www.unaids.org/Unaids/EN/Geographical+area/By+Region/Sub-Saharan+Africa.asp>

²⁰ See

<http://www.unaids.org/Unaids/EN/Geographical+area/by+country/botswana.asp>

²¹ Total health expenditure per capita is the per capita amount of the sum of Public Health Expenditure (PHE) and Private Expenditure on Health (PvtHE). The international dollar is a common currency unit that takes into account differences in the relative purchasing power of various currencies. Figures expressed in international dollars are calculated using purchasing power parities (PPP), which are rates of currency conversion constructed to account for differences in price level between countries.

<http://www3.who.int/whosis/country/compare.cfm?country=s&indicator=strPcTotEOHinIntD2000&language=english>

²² Tandon A, Murray CLJ, Lauer JA, Evans DB. Measuring overall health system performance for 191 Countries. GPE Discussion Paper Series: No 30; WHO

²³ WHO report: Community Health Approach to Palliative Care for HIV/AIDS Patients, 2004: 41. Available to download at:
<http://whqlibdoc.who.int/publications/2004/9241591498.pdf>

²⁴ See: <http://www.cia.gov/cia/publications/factbook/geos/bc.html>