

REVIEW OF THE STATUS OF PALLIATIVE CARE IN TEN SOUTHERN AFRICAN COUNTRIES

**AFRICAN PALLIATIVE CARE
ASSOCIATION**

AIM

This study aims to provide an up-to-date comprehensive analysis of the status of palliative care development in ten Southern African countries to address information deficits and development needs of each country.

ABSTRACT

Background

Several studies have been published reporting the status of palliative care in different countries in Africa, but none on the comparative status of the discipline in Southern Africa. This report provides a summary of the current situation. The aim of this project was to collect up-to-date information on the degree of palliative care development in a number of targeted countries to address existing information deficits and establish development needs in each country to influence the progress of palliative care in the region.

Methods

This was a descriptive, cross-sectional comparative review of the current status of, and access to, palliative care services, education programmes, and supportive policy initiatives and frameworks in ten focus Southern African countries. The study was based upon two data collection methods: (i) a review of existing literature, both peer-reviewed and grey, and; (ii) a semi-structured survey of key informant expert in each country.

Results

The study provides an overview of the status of palliative care in Southern Africa according to the World Health Organization public health strategy for palliative care: policies, drug availability, education, and service implementation. The results demonstrate significant variation among the targeted countries and that strategies to support and develop palliative care require specific, tailored approaches in each.

Conclusion

The results from this mapping study provide a broad appreciation of the current status of palliative care in Southern Africa that is anticipated to help influence the progress of palliative care service and activity development in the region.

INTRODUCTION

Since 2009 the Open Society Initiative of Southern Africa (OSISA), in collaboration with the International Palliative Care Initiative (IPCI) at the Open Society Foundations New York, has supported the development of palliative care in Southern Africa.¹

This work entailed a review of national policies, implementation documents and strategic plans (including national health plans and strategies, HIV/AIDS national strategies, home-based care plans, essential medicines lists, policies and other relevant health policies) to identify and assess the opportunities, gaps, strengths and weakness and gender issues involved that could be addressed or strengthened to integrate palliative care into national policy frameworks.² The study, which was conducted in 2010-11, found four key thematic findings: limited access to care by marginalised groups (i.e., disabled persons, prisoners, the aged, children and sexual minority groups); gender imbalances that inhibit access to care (i.e., power differentials between men and women)³; the gender of carers and the impact of the carer role, and; human rights issues preventing access to palliative care.

Among a range of conclusions, the report stated that: (i) opioid availability was a serious impediment to the expansion of palliative care, as was the lack of education and awareness among health providers about palliative care generally and pain control particularly; (ii) emphasis on developing policies to facilitate the integration of palliative care into health systems should be mirrored in implementation strategies to minimise the gap between formal instruments and practical realities; (iii) building palliative care capacity in health centres and in the home was a priority if the region was to manage the HIV epidemic; (iv) expanding the availability of, and accessibility to, pain medications in urban and rural areas was necessary to help patients benefit from palliative care, with the emphasis on home-based palliative care contrasting with the reality of limited effective domiciliary pain management; (v) palliative care was not integrated fully into mainstream health systems; and (vi) it was vital to address the needs of marginalised populations with limited voices to request help, with training required to enable practitioners to incorporate the needs of minority groups in their routine assessments.

The review concluded that in all ten countries, there was minimal inclusion of palliative care, including gender and the right to pain relief in national legislation. Consequently, the report recommended:

¹ Definitions of what constitutes the sub-regions of Africa varies, with some agencies using geographic, political, economic and additional criteria. Consequently, there is variation in the following discussion of the number of countries in a particular region.

² African Palliative Care Association. *Palliative care in Southern Africa: review of current policies and opportunities for scaling up care*. Kampala: African Palliative Care Association, 2012.

³ Distinct gender-related issues were highlighted in a supplementary report: African Palliative Care Association. *Review of national policies and national implementation frameworks in ten African countries: An in-depth study to assess opportunities and gaps that can be addressed or strengthened to support gender and palliative care issues at the national level*. Kampala: African Palliative Care Association, 2011.

- An expanded understanding of gender issues to embrace sexual minorities is imperative if the HIV epidemic particularly was to be addressed comprehensively;
- An explicit commitment to all human rights to be embedded in policy and programmatic documents to clarify the link between the promotion of strategies, activities and individuals' daily lives;
- Palliative care (as defined by the World Health Organization [WHO]) to be integrated into policies and documents as appropriate, referencing the needs of women, children, vulnerable populations,⁴ minorities and all requiring a holistic approach to living with life-limiting illnesses;
- Safe and consistent opioid supplies need to be guaranteed; relevant policies should detail steps taken by the concerned authorities (i.e., national competent authority) for the effective procurement and supply of pain-relieving medicines, particularly oral morphine;
- Review of the current rules and regulations regarding opioid use, particularly oral morphine, to ensure the increased availability of, and access to, such medicines by patients in need;
- Provision of technical assistance to the Ministries of Health to incorporate palliative care into current health strategies, and;
- Encouragement of Ministries of Health to develop national guidelines for the use of opioids in line with international recommendations to ensure their safe and effective use.

Since that report's publication, palliative care development has occurred to varying degrees and in differing areas, from policy innovation to service development, in ten of the OSISA target nations: Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe.

Given these developments, OSISA and IPCI recognized they do not have a comprehensive appreciation of the current status of palliative care development in the sub-region. They therefore contracted the African Palliative Care Association (APCA) and the African Palliative Care Research Network (APCRN) to undertake a review of palliative care in the ten OSISA/IPCI focus countries to contribute to available information on the status of palliative care in these countries and inform future financial investments and service development planning. This report provides the findings and recommendations arising from the review.

CONTEXT

(i) Africa

The second largest continent, Africa covers 30.2 million km² (11.7 million sq mi), 20 per cent of the global land area. Its estimated 1,072 million (m) inhabitants, amounting to 15.2 per cent of

⁴ 'Vulnerable populations' are often referred to as a separate group of people with unique experiences of palliative care. Stienstra D, Chochinov HM. Palliative care for vulnerable populations. *Palliative and Supportive Care* 2012; 10: 37-42.

the world's total population,⁵ are distributed across five regions and 54 fully recognized states: Eastern Africa (17 nations; 342m); Central Africa (9; 134m); Northern Africa (7; 213m); Southern Africa (5; 59m)⁶; Western Africa (16; 324m).

Figure: 1. Countries of Africa



Used with permission: African Palliative Care Association, Kampala, Uganda.⁷

⁵ Population Reference Bureau. 2012 World Population Data Sheet. Washington DC: Population Reference Bureau, 2012.

⁶ See footnote 1. The 10 target countries covered by this report (which excludes South Africa, whose population equals 53m) have a combined population of 168.2m.

⁷ Given its recent independence, South Sudan is omitted from this figure.

Africa is characterised by a significant burden of communicable and non-communicable diseases (NCDs), especially in sub-Saharan Africa, the relative distribution of which is projected to shift by 2030,⁸ assuming that the epidemiological transition in developing regions continues on the continent. By 2013, 24.7 million (m) people in the sub-region were living with HIV/AIDS, 70.6 percent of the global disease burden.⁹ Regionally cancer is an emerging public health problem.¹⁰ In 2008 there were 715,000 new cases and 542,000 cancer-related deaths in Africa, projected to nearly double (1.28m new cases and 970,000 deaths) by 2030 due to population growth and aging,¹¹ with 36% of cancers infection-related, twice the global average.¹² Additionally, in 2010 there were 259,500 new cases and 2.1m tuberculosis (TB)-related deaths,¹³ with the continent accounting for 80% of all TB cases among people living with HIV.¹⁴ Based upon this infectious and NCD disease burden, it is estimated that while globally the number of adult and child patients in need of end-of-life palliative care is 20.4m, in Africa it is estimated this figure is 1.8m, 346,203 of which are for cancer.¹⁵

Palliative care

Palliative care services started in Africa over 30 years ago with the founding of the Island Hospice and Bereavement Service in Harare, Zimbabwe.^{16,17} Driven by pioneering advocates, the discipline evolved outside mainstream government health systems, among faith- and secular-based agencies. Consequently, despite positive advances over the last decade, including an increased number of service providers,^{18,19,20} provision of palliative care on the continent remains inconsistent, largely still provided from isolated centres with restricted geographic and population coverage rather than meaningfully and systematically integrated into healthcare structures.

Recent reviews have, however, shown positive developments. For example, a survey of hospice and palliative care services on the continent in 2006 found that 44.7% (21 of 47) of African countries had no identified hospice or palliative care activity and that only 8.5% (n = 4) could be classified as having services approaching some measure of integration with

⁸ Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med* 2006; 3: e442.

⁹ Joint United Nations Programme on HIV/AIDS. *The Gap Report*. Geneva: UNAIDS, 2014.

¹⁰ Jemal A, Bray F, Forman D, O'Brien M, Ferlay J, Center M, Parkin DM. Cancer burden in Africa and opportunities for prevention. *Cancer* 2012; 118: 4372-4384.

¹¹ Ferlay J, Shin H-R, Bray F, Forman D, Mathers C, Parkin DM. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. *Int J Cancer* 2010; 127: 2893-2917.

¹² Parkin DM. The global health burden of infection-associated cancers in the year 2002. *Int J Cancer* 2006; 118: 3030-3044.

¹³ United Nations. The Millennium Development Goals Report 2012. New York: United Nations, 2012. www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf.

¹⁴ World Health Organization. *Global Tuberculosis Report*. Geneva: World Health Organization, 2012.

¹⁵ Connor SR, Bermedo MCS. *Global Atlas of Palliative Care at the End of Life*. World Health Organization / Worldwide Palliative Care Alliance, Geneva / London, 2014.

¹⁶ Mwangi-Powell FN, Downing J, Powell RA, Kiyange F, Ddungu H (2015) Palliative care in Africa. In: Ferrell BR & Coyle N (Eds.) *Textbook of Palliative Nursing*, 4th Edition. New York: Oxford University Press, pp.118-1129.

¹⁷ Wright M, Clark D. *Hospice and Palliative Care in Africa: A review of developments and challenges*. Oxford: Oxford University Press, 2006.

¹⁸ Grant L, Brown J, Leng M, Bettega N, Murray SA. Palliative care making a difference in rural Uganda, Kenya and Malawi: Three rapid evaluation field studies. *BMC Palliat Care* 2011; 10: 8.

¹⁹ Lynch T, Connor S, Clark D. Mapping levels of palliative care development: a global update. *J Pain Symptom Manage* 2013; 45: 1094-106.

²⁰ Powell RA, Mwangi-Powell FN, Kiyange F, Radbruch L, Harding R. Palliative care development in Africa: How we can provide enough quality care? *BMJ Supportive and Palliative Care* 2011; 1: 113-114.

mainstream service providers.²¹ This number was even lower for children's services, with 81% of surveyed countries having no identified palliative care activity.²² In contrast, a follow-up review of developments undertaken by the World Hospice and Palliative Care Alliance (WHPCA) in 2011 revealed that Sub-Saharan Africa has shown the most notable changes in service development, with nine countries moving from group 1/2 (no known activity/capacity building) to group 3a (isolated provision).²³ A subsequent global mapping of palliative care developments in 2014 by the World Health Organization and the WHPCA revealed additional positive developments in Africa.²⁴

Despite these advances, many countries continue to use a home-based care model of service provision that is detached from mainstream care services, centred around trained health professionals, community-based volunteers, and family carers, whose circumscribed coverage does not address all the components of the WHO's enhanced public health model for palliative care development.²⁵ Moreover, international funding in response to the HIV epidemic has arguably focussed palliative care delivery opportunities away from patients with other diagnoses,²⁶ further limiting access.

Palliative care research

More than a decade after the reporting of a need among care providers for methodologically robust research,²⁷ and despite some notable research studies, the evidence base informing the delivery of effective and appropriate care on the continent remains in its infancy,²⁸ and is best described as "sparse."^{29: 6}

Some of the key obstacles to its development echo those identified in the United Kingdom³⁰ and include: lack of a research culture; lack of research skills and knowledge among health care professionals (i.e. absence of a critical research mass); outside interests that have to be negotiated or avoided; professional isolation; patient accrual and attrition; lack of agreement on outcome measures; a dearth of research funding; the dominance of the biomedical model; the

²¹ Wright M, Clark D. *Hospice and Palliative Care in Africa: A review of developments and challenges*. Oxford: Oxford University Press, 2006.

²² Knapp C, Woodworth L, Wright M, Downing J, Drake R, Fowler-Kerry S, Hain R, Marston J. Pediatric palliative care provision around the world: a systematic review. *Pediatr Blood Cancer* 2011; 57: 361-368.

²³ Lynch T, Connor S, Clark D. Mapping levels of palliative care development: a global update. *J Pain Symptom Manage* 2013; 45: 1094-106.

²⁴ World Health Organization & World Hospice Palliative Care Alliance. *Global Atlas of Palliative Care at End of Life*. Geneva: World Health Organization & World Hospice Palliative Care Alliance, 2014.

²⁵ Sternsward J, Foley K, Ferris F. The public health strategy for palliative care. *J Pain Symptom Manage* 2007; 33: 486-493.

²⁶ Lemoine M, Girard PM, Thursz M, Raguin G. In the shadow of HIV/AIDS: Forgotten diseases in sub-Saharan Africa: Global health issues and funding agency responsibilities. *J Public Health Policy* 2012; 33: 430-438.

²⁷ Harding R, Stewart K, Marconi K, O'Neill J, Higginson IJ. Current HIV/AIDS end-of-life care in Sub-Saharan Africa: A survey of models, services, challenges and priorities. *BMC Public Health* 2003; 3: 33.

²⁸ Harding R, Powell RA, Downing J, Connor S, Mwangi-Powell F, Defilippi K, Cameron S, Garanganga E, Kikule E, Alexander C. Generating an African palliative care evidence base: The context, need, challenges and strategies. *J Pain Symptom Manage* 2008; 36: 304-309.

²⁹ Jang J, Lazenby M. Current state of palliative and end-of-life care in home versus inpatient facilities and urban versus rural settings in Africa. *Palliative and Supportive Care* 2013; 11: 425-442.

³⁰ Richards M, Corner J, Clark D. Developing a research culture for palliative care. *Palliat Med* 1998; 12: 399-403.

absence of national strategies for palliative care research; and the absence of a strategic research vision.³¹

Other factors are more specific for the African setting, for example extensive linguistic diversity, from the four major languages (Arabic, English, French and Portuguese), to the immense variety of over 2,000 indigenous languages, and a significant competition for scarce resources in such resource-poor settings, with an emphasis on the provision of clinical care. Additional obstacles include the challenge posed by, and the need to address, limited palliative care research skills and the resources to undertake it, as well as researchers operating in isolation from a community of like-minded peers in unsupportive and negative work environments.³²

(ii) Southern Africa

Southern Africa has the highest HIV infection rates on the continent. In 2013 adult (aged 15-49 years) HIV infection rates were $\geq 15\%$ in five countries (Botswana, Lesotho, South Africa, Swaziland and Zimbabwe), with Swaziland the highest at 27.4%.³³ TB, which is also problematic in Africa, accounting for 26% (2.6m) of global cases,³⁴ has the highest incidence in Southern Africa, with 1,317 per 100,000 people in Swaziland.³⁵ There is also a high incidence of TB-HIV co-infection. TB is the most common cause of morbidity and the leading cause of mortality in people living with HIV/AIDS in Southern Africa. The advent of multi-drug-resistant TB (MDR-TB) is especially evident in South Africa, which – along with India, China and the Russian Federation – accounts for almost 60% of world cases.³⁶

Palliative care

Palliative care services are more advanced in Southern Africa, when that includes South Africa. In their 2011 update on global palliative care development, Lynch et al highlighted significant advances in Africa over the preceding five years.³⁷ South Africa was identified as achieving preliminary integration with existing health services, with some of the most advanced non-governmental organisation services on the continent. The categorisation of the remaining Southern African states of focus in this report was: Group 2: capacity building (DRC); Group 3a: Isolated provision (Angola [+ from category 1]; Lesotho [+ from category 2]; Mozambique [+ from category 2]; Namibia [+ from category 2]); Group 3b: Generalized provision (Swaziland); Group 4a: Preliminary integration (Malawi [+ from category 3]; Zambia [+ from category 3]; Zimbabwe [+ from category 3]).³⁸

³¹ Powell RA, Downing J, Radbruch L, Mwangi-Powell FN, Harding R. Advancing palliative care research in Africa: From Venice to Nairobi. *European Journal of Palliative Care* 2008; 15: 228-233.

³² Powell RA, Harding R, Namisango E, Katabira E, Gwyther L, Radbruch L, Murray S, El-Ansary M, Ajayi IO, Mwangi-Powell F. Palliative care research in Africa: An overview. *European Journal of Palliative Care* 2013; 20: 162-167.

³³ Joint United Nations Programme on HIV/AIDS. *The Gap Report*. Geneva: UNAIDS, 2014.

³⁴ World Health Organization. *Global Tuberculosis Report*. Geneva: World Health Organization, 2012.

³⁵ World Bank. Incidence of tuberculosis (per 100,000 people), 2011. <http://data.worldbank.org/indicator/SH.TBS.INCD>.

³⁶ World Health Organization. *Global Tuberculosis Report*. Geneva: World Health Organization, 2012.

³⁷ Lynch T, Connor S, Clark D. Mapping levels of palliative care development: a global update. *J Pain Symptom Manage* 2013; 45: 1094-106.

³⁸ Worldwide Palliative Care Alliance. *Mapping levels of Palliative Care Development: A global update*. London: Worldwide Palliative Care Alliance, 2011.

APCA has been active across the region in promoting palliative care development, assisting in country policy development, promoting access to essential palliative care medication, providing training in palliative care and supporting service quality improvements. This work has proved successful, with situation analyses conducted in a number of countries showing the adoption of stand-alone palliative care strategies, policies and guidelines in Mozambique, Swaziland and Zimbabwe, among others.³⁹ A profile of recent developments in palliative care within the a number of the target countries was outlined in oral presentations delivered at a Partners' Review Meeting held in Harare, Zimbabwe, on 25 June, 2014, the pertinent points from which are outlined below in the country-level results section for Botswana, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe.⁴⁰

Palliative care research

Palliative care research in the region is limited, with a few studies undertaken in Botswana,⁴¹ Malawi⁴² and Namibia,⁴³ among others. South Africa – which has been offering postgraduate training programmes (including a research-based Master's degree programme) at the University of Cape Town since 2000⁴⁴ – was central to the development of the primary indigenous palliative outcome measure: the APCA African Palliative Outcome Scale.^{45,46} As part of the ENCOMPASS study⁴⁷ – and working with international partners – a number of formative publications have been produced, including the prevalence and burden of symptoms among cancer⁴⁸ and HIV patients,⁴⁹ the intensity and correlates of multi-dimensional problems for HIV patients,⁵⁰ patient quality of life⁵¹ and information needs.⁵² Methodologically, it also

³⁹ Mwangi-Powell FN, Powell RA, Harding R. Models of delivering palliative and end-of-life care in Sub-Saharan Africa: A narrative review of the evidence. *Curr Opin Support Palliat Care*, 2013; 7: 223-228.

⁴⁰ Where appropriate, findings presented at this meeting are used in the results from this mapping survey to validate the accuracy of the self-report data.

⁴¹ Lazenby M, Ma T, Moffat HJ, Funk M, Knobf MT, McCorkle R. Influences on place of death in Botswana. *Palliat Support Care*, 2010; 8: 177-185.

⁴² Thumbs A, Vigna L, Bates J, Fullerton L, Kushner AL. Improving palliative treatment of patients with non-operable cancer of the oesophagus: training doctors and nurses in the use of self-expanding metal stents (SEMS) in Malawi. *Malawi Med J*, 2012; 24: 5-7.

⁴³ Powell RA, Namisango E, Gikaara N, Moyo S, Mwangi-Powell FN, Gomes B, Harding R (2013) Public priorities and preferences for end-of-life care in Namibia. *J Pain Symptom Manage* 2014; 47: 620-30.

⁴⁴ Gwyther I, Rawlinson F. Palliative medicine teaching programme at the University of Cape Town: Integrating palliative care principles into practice. *J Pain Symptom Manage*, 2007; 33: 558-562.

⁴⁵ Powell RA, Downing J, Harding R, Mwangi-Powell F, Connor S; APCA. Development of the APCA African Palliative Outcome Scale. *J Pain Symptom Manage*, 2007; 33: 229-232.

⁴⁶ Harding R, Selman L, Agupio G, Dinat N, Downing J, Gwyther L, Mashao T, Mmoledi K, Moll T, Sebuyira LM, Panjatovic B, Higginson IJ. Validation of a core outcome measure for palliative care in Africa: the APCA African Palliative Outcome Scale. *Health Qual Life Outcomes*, 2010; 8:10.

⁴⁷ Harding R, Gwyther L, Mwangi-Powell F, Powell RA, Dinat N. How can we improve palliative care patient outcomes in low- and middle-income countries? Successful outcomes research in Sub-Saharan Africa. *J Pain Symptom Manage*, 2010; 40: 23-26.

⁴⁸ Harding R, Selman L, Agupio G, Dinat N, Downing J, Gwyther L, Mashao T, Mmoledi K, Sebuyira LM, Ikin B, Higginson IJ. The prevalence and burden of symptoms amongst cancer patients attending palliative care in two African countries. *Eur J Cancer*, 2011; 47: 51-56.

⁴⁹ Harding R, Selman L, Agupio G, Dinat N, Downing J, Gwyther L, Mashao T, Mmoledi K, Moll T, Sebuyira LM, Ikin B, Higginson IJ. Prevalence, burden, and correlates of physical and psychological symptoms among HIV palliative care patients in sub-Saharan Africa: An international multicenter study. *J Pain Symptom Manage*, 2012; 44: 1-9.

⁵⁰ Harding R, Selman L, Agupio G, Dinat N, Downing J, Gao W, Gwyther L, Mashao T, Mmoledi K, Moll A, Mpanga Sebuyira L, Ikin B, Higginson IJ. Intensity and correlates of multidimensional problems in HIV patients receiving integrated palliative care in sub-Saharan Africa. *Sex Transm Infect*, 2012; 88: 607-611.

resulted in the development of the 'Spirit 8' tool to measure spiritual wellbeing,⁵³ and the examination of the factor structure of the Missoula Vitas Quality of Life Index.⁵⁴

AIM & OBJECTIVES

This review aimed to provide an up-to-date comprehensive analysis of the status of palliative care development in ten Southern African countries to address an information deficit and inform future palliative care developments and required investments in each country.

The specific objectives were to assess the status of palliative care development in regard to, among others:

1. General country-specific contextual information;
2. A working definition of palliative care;
3. Palliative care services – activities, type and number, populations served, and gender sensitivity;
4. Palliative care training – courses, by type and accreditation, medical school training and professorial leadership;
5. Professional activity – national associations, national conferences, research groups, standards, norms and guidelines, and national journal, and;
6. Policy initiatives and frameworks – national policies, varying diagnostically-based health strategies, cancer and HIV/AIDS programmes, essential medications accessibility and service provision, and palliative care funding sources.

METHODS

Study design

This was a descriptive, cross-sectional comparative review.

Setting

Ten focus African countries: Angola, Botswana, the DRC, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe.

Data collection

⁵¹ Selman LE, Higginson IJ, Agupio G, Dinat N, Downing J, Gwyther L, Mashao T, Mmoledi K, Moll T, Sebuyira LM, Ikin B, Harding R. Quality of life among patients receiving palliative care in South Africa and Uganda: a multi-centred study. *Health Qual Life Outcomes*, 2011; 9: 21.

⁵² Selman L, Higginson IJ, Agupio G, Dinat N, Downing J, Gwyther L, Mashao T, Mmoledi K, Moll AP, Sebuyira LM, Panajotovic B, Harding R. Meeting information needs of patients with incurable progressive disease and their families in South Africa and Uganda: Multicentre qualitative study. *BMJ*, 2009; 338: B1326.

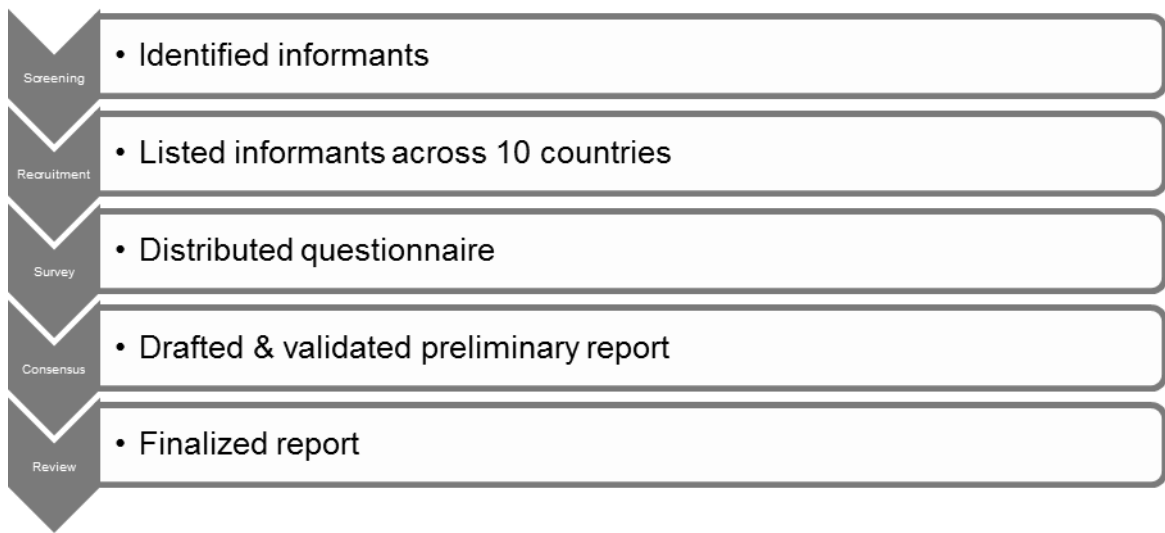
⁵³ Selman L, Siegert RJ, Higginson IJ, Agupio G, Dinat N, Downing J, Gwyther L, Mashao T, Mmoledi K, Moll T, Sebuyira LM, Ikin B, Harding R. The "Spirit 8" successfully captured spiritual well-being in African palliative care: factor and Rasch analysis. *J Clin Epidemiol*, 2012; 65: 434-443.

⁵⁴ Selman L, Siegert RJ, Higginson IJ, Agupio G, Dinat N, Downing J, Gwyther L, Mashao T, Mmoledi K, Moll T, Sebuyira LM, Ikin B, Harding R. The MVQOLI successfully captured quality of life in African palliative care: A factor analysis. *J Clin Epidemiol*, 2011; 64: 913-924.

Methods

The steps in the research process are shown in Figure 1:

Figure 1: Steps entailed in the research process



The study is based upon two data collection methods:

- (i) review of existing literature, both peer-reviewed and grey (e.g., country reports, monographs, APCA reports, websites, and data from the Pain & Policy Studies Group at the University of Wisconsin-Madison, USA, which informs section A outlined below, and;
- (ii) a semi-structured survey of key informant expert in each country.

Data tool

The survey tool (see Appendix 1) that informs sections B-E below, was developed in English and included a combination of primarily closed (including Likert-type) questions. Its key domains, and the metrics used to assess them, drew upon work undertaken to map palliative care service provision in Africa,⁵⁵ Latin America⁵⁶ and Europe.⁵⁷ The key domains used in data collection were:

A. General characteristics: country; total population; geographic area; urban / rural distribution; population density (inhabitants/km²); physicians/10,000 inhab.; World Bank Classification; Health Development Index (HDI) rating; poverty

⁵⁵ Lynch T, Connor S, Clark D. Mapping levels of palliative care development: a global update. *J Pain Symptom Manage* 2013; 45(6):1094-1106.

⁵⁶ Pastrana T, De Lima L, Wenk R, Eisenclas J, Monti C, Rocafort J, Centeno C. Atlas of Palliative Care in Latin America. First edition. Houston: International Association of Hospice and Palliative Care Press.

⁵⁷ Centeno C, Pons JJ, Lynch T, Donea O, Rocafort J, Clark D. *EAPC Atlas of Palliative Care in Europe 2013 - Cartographic Edition*. Milan: European Association of Palliative Care Press, 2013.

prevalence at \$1.25 per day; health expenditure (% of GDP); per capita total expenditure on health (2013); per capita government expenditure on health (% , 2011); opioid consumption (me mg/capita/year), compared against European and African consumption averages); and service access for marginalized populations (e.g., prisoners, lesbian, gay, bisexual, transgendered people [LGBT], men having sex with men [MSM], and commercial sex workers [CSW]);

B. Palliative care services:

level of service development, to be compared with previous estimations (i.e., 1=no known activity; 2=capacity building; 3a=isolated provision; 3b=generalised provision; 4a=preliminary integration; 4b=advanced integration); units in hospitals; home support team; community outreach centre; hospital support teams; mixed support teams; day care; and hospice volunteers; and paediatric services.

C. Palliative care training:

accreditation; year of accreditation; length of course; accreditation type; university training; number of physicians accredited; postgraduate diploma in palliative care; number of medical schools; and medical schools with palliative care courses (mandatory subject, optional subject, no palliative care subject; and full professors, assistant professors, professors in other schools).

D. Professional activity:

associations for palliative care; national conference; number of research groups; number of research sites involved in international cooperation; palliative care standards, norms or guidelines; palliative care directory / catalogue; national journal / newsletter; and number of participants at the 4th APCA / Hospice Palliative Care Association of South Africa (HPCA) conference held in South Africa in 2013.

E. Policy initiatives & frameworks.

national palliative care policy and strategy (including palliative care as a human right); national cancer / NCD strategy (including palliative care), national home-based care strategy (including palliative care); national programme / plan; auditing, monitoring, evaluation; national cancer programme (including palliative care); national HIV/AIDS programme (including palliative care); national primary care programme (includes palliative

care); dedicated line for palliative care in the government's health budget; dedicated research resources; legislation that restricts how doctors are allowed to prescribe opioids; initiatives to change regulations that may restrict physician or patient access to pain relief, that promote attitudinal change relating to 'opiophobia' and / or consider access to essential medicines as a legal or human right; and collaboration between prescribers and regulators.

Data tool piloting

The tool was pilot tested among three palliative care professionals and researchers not based in the target countries; minor modifications (primarily linguistic in nature for clarification purposes) were made to the instrument as a consequence of testing feedback.

Selection criteria

Respondents were eligible to participate in the study if they were recognised by APCA as country-based key informants, defined as those individuals who were in a position to provide informed insights into the status of palliative care in their respective countries, either because they had published studies on palliative care in their country, or were qualified from a practising healthcare or policymaker perspective to comment on palliative care in their country. The respondents could be palliative care experts, oncologists and suitably senior representatives from local government ministries. These informants were identified by assistance from national palliative care associations, where they existed, as well as other within-country APCA contacts.

Recruitment

Eligible participants were identified with assistance from country national palliative care associations, including the Palliative Care Association of Malawi, the Mozambique Palliative Care Association, the Ministry of Health in Swaziland, and the Hospice and Palliative Care Association of Zimbabwe. In countries where there were no palliative care associations (including Angola, Botswana, the DRC and Lesotho), partners included the ministries of health and key implementing partners already working closely with APCA.

APCA subsequently contacted the identified potential participant with an email inviting them to participate in the study, including an electronic Word version attachment of the survey tool.

Data validation and management

Validation

This entailed two stages: (i) use of country experts, with responses tabulated in an Excel database, with consensus derived from at least two opinions, and inconsistencies requiring specific validity examination highlighted (in light of a persisting discrepancy, priority was accorded to reports arising from APCA's in-country work); (ii) drafting of a preliminary report disaggregated regionally and by country, with identified inconsistencies (or unclear or incomplete information) highlighted for review by national palliative care associations personnel not involved in data collection.

Management

The dataset was anonymised and separated from any identifying personal information. An ID codebook was created in hard-copy form, with each participant allocated a unique study ID. Only the consultant and APCA had access to this codebook. The allocated codes were used during the entry of the data in a password-protected Excel spreadsheet.

The consultant and relevant APCA staff had access to personal information relating to data collection. The transfer of files was undertaken through the secure email systems of the participating sites using compressed (zipped) files that were password protected. Passwords were sent in a separate email.

Completed survey forms were stored securely in hard- and soft-copy forms as appropriate in both locked storage containers and password-protected folders on institution-owned computers at APCA and will be verifiably destroyed at the end of the study after seven years.

Data analysis

Closed questions were analysed using descriptive statistics.

Ethics

The study was not considered eligible for ethical approval and, given that the populations studied were not vulnerable and the nature of the research topic was not inherently sensitive, the study did not use a distress protocol.

Potential participants were provided with an information sheet as part of the study invitation. Consequently, consent to participate was assumed to be given when the survey has been completed and returned to APCA. There were no financial or other rewards entailed in the conduct of this study.

RESULTS

The survey was conducted over a 12-month period. Reports were submitted from each of the ten target countries, with respondents including governmental and non-governmental figures, with the latter including palliative care national associations, educational institutes, and cancer care agencies. The following outlines the results of the review, offering a regional and country-specific analysis.

Regional analysis

General characteristics

The general characteristics of the focus countries in the region are diverse (Table 1, in Appendix 2). Population sizes range from 1.3 million (m) in Swaziland to 71.2m in the DRC, geographic land mass from 17,364km² in Swaziland to 2.34mkm² in the DRC again, and population density of inhabitants / km² from 3 in Namibia to 174 in Malawi.

Developmentally, four countries are classified by the World Bank as 'low income' nations (DRC, Malawi, Mozambique and Zimbabwe), three as 'lower middle income' (Lesotho, Swaziland and Zambia) and three as 'upper middle income' (Angola, Botswana and Namibia). The HDI for each country generally mirrors these income group classifications, but the 'low' ranking of Angola contrasts with its upper middle income status. Botswana (13.4%), Namibia (23.5%) and Swaziland (39.3%) have the lowest percentage of their population earning \$1.25 per day, in contrast to the DRC (87.7%),⁵⁸ Zambia (74.3%) and Malawi (72.2%). There was no data available for Zimbabwe.

As for health expenditure: as a percentage of their GDP, the highest expenditures are in Lesotho (11.5%), Swaziland (8.4%) and Malawi (8.3%), all of which have a 'low' HDI ranking, while the lowest are in the DRC, Angola and Zimbabwe (3.5%, 3.8% and 5%, respectively, all with a 'low' HDI ranking). Per capita total expenditure on health is highest in Namibia (\$423), Botswana (\$397) and Angola (\$267), and lowest in the DRC (\$16), Malawi (\$26) and Mozambique (\$40). Per capita government expenditure on health is highest in Botswana (\$446), Swaziland (\$300) and Namibia (\$208), and lowest in the DRC (\$11), Mozambique (\$27) and Zambia (\$59).

Palliative care services

Where they exist, all countries report using the WHO definition of palliative care, while the reported status of palliative care activity in each country ranges from levels 2-4a: one at level 2 (capacity building activity; DRC); five at level 3a (isolated palliative care provision; the Angola, Botswana, Lesotho, Mozambique and Namibia); one at level 3b (generalized palliative care provision; Swaziland); and three at level 4a (hospice-palliative care services are at a stage of preliminary integration into mainstream service provision; Malawi, Zambia and Zimbabwe).

⁵⁸ Unlike data from the other countries, the DRC data are from 2005, which could impact upon the accuracy of the figure reported.

In terms of the types of palliative care services provided in the region: four countries (Malawi, Mozambique, Zambia and Zimbabwe) provide palliative care units in hospitals; five (Botswana, the DRC, Mozambique, Swaziland and Zimbabwe) provide palliative care home support teams; only one (Zimbabwe) provides palliative care within a community outreach centre; four (Botswana, Swaziland, Zambia and Zimbabwe) provide a palliative care hospital support team; two (Swaziland and Zambia) provide a palliative care mixed support team; none provide palliative care in a day care setting; two (Botswana and the DRC) provide volunteer hospice teams; one (Zambia) reported workforce capacity for all types of services; four (Botswana, Malawi, Zambia and Zimbabwe) provide paediatric palliative care services; and six (Botswana, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe) provide palliative care in non-specified other community settings.

Seven countries provide palliative care services for HIV patients and similarly for cancer patients, with five (Botswana, Malawi, Mozambique, Swaziland and Zimbabwe) reporting gender sensitive services. However, while four countries provided services dedicated to the elderly and five for those with disabilities, provision for other marginalized populations was less frequent: only three provided services for prisoners (Namibia, Swaziland and Zimbabwe), two for LGBT (Swaziland and Zimbabwe⁵⁹), one (Swaziland) for MSM, two for CSW (Swaziland and Zimbabwe⁶⁰), and two (Mozambique and Swaziland) for drug misusers.

Palliative care training

For the purpose of the review, palliative care training was defined as the availability of accredited palliative care training, including certification, integration into the curricula of institutions of higher learning and stand-alone palliative care courses. Based on that definition, only one country (Malawi) reported an accredited palliative care training course, which is limited to five days in length and certified at the postgraduate level of university training.

Five countries (Botswana, the DRC, Malawi, Swaziland and Zimbabwe) reported having trained palliative care physicians, with the number ranging from 1-15, while only one (the DRC) reported having a postgraduate palliative care diploma. In Malawi, teaching institutions integrated palliative care between 2011-13 and adapted a manual that guided this integration. However, while seven nations have medical schools (ranging from 1-500), only one (Zimbabwe) reported having a medical school with a palliative care 'course' (i.e., lectures delivered to 3rd and 5th year medical students), of which some lectures were mandatory and others optional. No country reported having a professor of palliative care.

Professional activity

Professional activity was defined in terms of: the availability of a palliative association, existing national palliative care research group, convening a national conference, attendance at the 4th APCA / HPCA conference and development and dissemination of palliative care information. Based on those categories, five countries (Botswana, Malawi, Mozambique, Zambia and

⁵⁹ These are reported by the country respondent as 'limited' in nature'.

⁶⁰ These are reported by the country respondent as 'limited' in nature'.

Zimbabwe) reported having a national association for palliative care, with four (the DRC, Namibia, Zambia and Zimbabwe) having held a national palliative care conference.

Two countries (the DRC and Malawi) have palliative care research groups, with ten reported in the latter, and six nations (Botswana, the DRC, Malawi, Mozambique, Zambia and Zimbabwe) reporting international research collaboration sites.

Seven countries (Botswana, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe) have palliative care frameworks ranging from strategies (Botswana, Namibia, Swaziland and Zambia) and national policies care standards, norms or guidelines (Botswana, Malawi, Mozambique, Namibia, Swaziland and Zimbabwe), while four (Botswana, Malawi, Mozambique and Zimbabwe) have a palliative care directory/catalogue, only one (Zimbabwe) has a palliative care journal / newsletter, and eight countries attended the 4th APCA conference in South Africa in 2013, with the number of participants per country ranging from 2-10.

Policy initiatives and frameworks

These were defined as a national palliative care policy and strategy (including palliative care as a human right); national cancer / NCD strategy (including palliative care); national home-based care strategy (including palliative care); national programme / plan; auditing, monitoring, evaluation; national cancer programme (including palliative care); national HIV/AIDS programme (including palliative care); national primary care programme (including palliative care); a dedicated line for palliative care in the government's health budget; dedicated research resources; legislation that restricts how doctors are allowed to prescribe opioids; initiatives to change regulations that may restrict physician or patient access to pain relief, that promote attitudinal change relating to 'opiophobia' and / or consider access to essential medicines as a legal or human right; and collaboration between prescribers and regulators.

Based on these categories, seven countries (Botswana, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe) have national palliative care policies in place which (apart from Mozambique) incorporate palliative care as a human right, while four (Botswana, Namibia, Swaziland and Zambia) have a national palliative care strategy, which only incorporates palliative care as a human right in Namibia and Swaziland. However, five countries (Botswana, Malawi, Mozambique, Zambia and Zimbabwe) have a national cancer or NCD strategy, with four of them (excluding Botswana) including palliative care. Similarly, nine countries (excluding Angola) have a national home-based care strategy, with six (excluding Botswana and Lesotho) including palliative care. However, only three countries (Mozambique, Swaziland and Zambia) have a national palliative care programme (with all three including palliative care as a human right), and four countries (Malawi, Mozambique, Namibia and Swaziland) have in place a palliative care auditing / monitoring and evaluation system.

Six countries (Botswana, Lesotho, Malawi, Mozambique, Zambia and Zimbabwe) have a national cancer programme, with only three (Malawi, Zambia and Zimbabwe) including palliative care. While all ten countries have a national HIV/AIDS programme, six included palliative care (excluding Angola, Botswana, the DRC and Lesotho), and similarly while all ten

nations had a national primary care programme, only four (the DRC, Namibia, Swaziland and Zambia) included palliative care.

Financially, two countries (Malawi and Swaziland) at the time of the review had a dedicated palliative care budget line in their national health budget, and only one (Botswana) had dedicated research resources at its disposal.

Using data from the Pain and Policy Study Group, mean consumption of morphine in the African region for 2012 was 0.315 mg/capita, compared with a global mean of 6.28 mg/capita. However, the regional mean is distorted by data from Seychelles and South Africa (4.32 and 4.02 mg/capita, respectively). For the seven target countries in the region that either reported data or reported more than zero drug consumption to the International Narcotics Control Board for 2012, consumption ranged from 0.0006 in Angola to 0.83 in Malawi.⁶¹

More positively, only one country (Mozambique) has legislation that restricts how doctors are allowed to prescribe opioids, six (Botswana, the DRC, Malawi, Namibia, Swaziland and Zambia) have initiatives to change regulations that restrict physician or patient access to pain relief, seven countries (excluding Angola, Lesotho and Namibia) have initiatives to promote attitudinal change relating to 'opiophobia', and six nations (Angola, the DRC, Malawi, Namibia, Swaziland and Zambia) have initiatives that consider access to essential medications as a legal or human right.

Country analysis

1. Angola

General characteristics

With a population of 22.4m, Angola is classified by the World Bank as 'upper middle income', with a 'low' HDI ranking (i.e., 149). In 2008, its population in poverty headcount ratio was 43% (i.e., living on \$1.25 per day), with 3.8% of its GDP allocated to health, with a \$267 per capita total expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$132.

Palliative care services

While Angola uses the WHO definition of palliative care, the discipline is relatively non-existent in the country, with the status of palliative care activity ranked at level 3a (isolated palliative care provision). This group of countries is characterised by: the development of palliative care activism that is patchy in scope and not well supported; sourcing of funding that is often heavily donor dependent; limited availability of morphine; and a small number of hospice-palliative care services that are often home-based in nature and relatively limited to the size of the population).

⁶¹ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

Palliative care training

None exists.

Professional activity

None exists.

Policy initiatives and frameworks

Similar to what was found in 2011 by APCA in their national review of policies and documents that support palliative care, there are still no national support frameworks for palliative care development in Angola. However, in the HIV/AIDS care strategy there is a focus on the rights of PLWHA, which would easily allow for the integration of palliative care as part of the essential care package for PLWHA.

With regard to opioid consumption, the Pain & Policy Studies Group state that in 2012 Angola had a reported mean consumption of morphine of 0.0006 mg/capita, the lowest of the reporting countries in the region.⁶² Collaboration between the country's opioid prescribers and regulators are rated as poor, the availability of oral morphine in the country rated as very poor, patient access to oral morphine rated as very poor, the availability of non-opioid essential palliative care medicines rated as poor, and patient access to non-opioid essential palliative care medicines rated as poor.

2. Botswana

General characteristics

With a population of 2m, Botswana is classified by the World Bank as 'upper middle income', with a 'medium' HDI ranking (i.e., 109). In 2009, its population-in-poverty headcount ratio was 13% (i.e., living on \$1.25 per day), with 5.4% of its GDP allocated to health, with a \$397 per capita total expenditure on health in 2013 and a per capita government expenditure on health in 2011 of \$446.

Palliative care services

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 3a (isolated palliative care provision), Botswana has a number of hospice and palliative care providers, including home support teams. The services are provided through a small number of hospices, the Oncology Unit of the Princess Marina National Referral Hospital and the Botswana Retired Nurses Society. A number of health care providers, including CHBC coordinators, have been oriented to palliative care through introductory courses run by the Ministry of Health and the Institute of Health Sciences in Gaborone.

Botswana has palliative care services for patients with a HIV/AIDS or cancer diagnosis, with services for only two (those with disabilities and the elderly) of seven marginalised populations,

⁶² Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

and is gender sensitive, reporting that “palliative care services in Botswana target each individual irrespective of gender or race”.

Palliative care training

The country has no accredited palliative care training course – “There are pre- and in-service training, but currently palliative care has not yet been included in the curriculum, but included in the course plans of the Institute of Health Sciences Gaborone” – one palliative care physician and one medical school. Additionally, according to APCA, Botswana has developed training materials and courses (e.g., holistic pain management using opioids) for short in-service palliative care delivered by the MoH. Additionally, they have one palliative care physician working in the Oncology Unit in Princess Marina and a few nurses with diplomas and Masters degrees trained in Uganda and South Africa.

Professional activity

Botswana has one national palliative care association established in 2014, no dedicated research group (but experience of site cooperation in international research), has palliative care standards, norms or guidelines, national pain management guidelines and a dedicated directory/catalogue. Palliative care professionals attended the 4th APCA conference held in South Africa in 2013. Lastly, some research is currently being undertaken by those following palliative care courses.

Policy initiatives and frameworks

With support from APCA and the Centers for Disease Control and Prevention, the country has recently developed a hospice and palliative care policy, a draft of which has been submitted to the Ministry of Health management for final ratification and approval. Additionally, it has a national strategy for palliative care (with a five-year national strategy developed in 2013), and a national cancer / NCDs and home-based care strategy, with the MoH recognising the value of integrating palliative care into the health system and indeed incorporating palliative care into the 2015 *House of Chiefs and Political Leaders’ Sensitization Plan*.⁶³ It was confirmed, as part of a national document review, that both Botswana’s NCD and HIV strategies have included palliative care. The country also has an Act of Parliament that allows nurses to prescribe opioids if authorised by the Director of Medical Services. There is no dedicated budget line for palliative care in their health budget (but dedicated research resources), with initiatives to change regulations that may restrict physician or patient access to pain relief and to promote attitudinal change relating to ‘opiophobia’. It has no initiatives that consider access to essential medicines as a legal or human right – but efforts to improve access to medicines have been included in the draft national palliative care policy. The government has also made essential palliative care medicines available at lower health facilities. While the hospice and palliative care policy outlines a monitoring and evaluation framework, there is a need to operationalise it.

⁶³ African Palliative Care Association. Regional HIV/AIDS Program: Project close out report. Kampala, Uganda: African Palliative Care Association, 2015.

The Pain & Policy Studies Group state that in 2012 Botswana either did not report, or reported an amount of zero consumption of morphine (mg/capita).⁶⁴ However, in 2014 national pain management guidelines were adapted and adopted.⁶⁵ Collaboration between the country's opioid prescribers and regulators are rated as mixed, the availability of oral morphine in the country rated as mixed, patient access to oral morphine rated as poor, the availability of non-opioid essential palliative care medicines rated as good, and patient access to non-opioid essential palliative care medicines rated as good.

Additional information from the 2014 partners' review meeting reveals:

- Given the clinical need, the country's Ministry of Health has refocused its national palliative care strategy (for 2013-18) to guide palliative care implementation at all levels of care;
- Adaptation of the WHO's IMAI (Integrated Management of Adolescent and Adult Illness) guidelines, including the palliative care and end-of-life module;
- Development of training materials for health professionals, allied health care workers and volunteers who are now able to assist patients in need of palliative care (600 trained, including training of trainers);
- Conduct of a pain management training in 2013 for doctors and pharmacists who are now prescribing morphine and implementing palliative care;
- Sponsoring of four officers for a study tour to Uganda;
- Briefing the House of Parliament in August 2014 on palliative care to garner their collective support;
- Conducted a high-level meeting for stakeholders and managers in 2012 to sensitize them to palliative care, especially pain management. Two hospices are now providing palliative care;
- The Botswana Hospice and Palliative Care Association, launched in July 2014, is the recognized body to advance palliative care;
- Advocated for opioids' availability at the community level for optimum pain management and the availability of oral morphine at the same level. Currently working with District Health Management Teams to identify facilities that can store opioids, especially morphine; at least four districts have started stocking morphine at the clinic level, and;
- Adaptation of the pain guidelines from APCA which were presented to the country's National Standing Committee on Drugs (NASCOD) on 27 June 2014 and have now been published to guide morphine prescribers and handlers.⁶⁶

3. Democratic Republic of Congo

General characteristics

⁶⁴ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

⁶⁵ African Palliative Care Association. Regional HIV/AIDS Program: Project close out report. Kampala, Uganda: African Palliative Care Association, 2015.

⁶⁶ Malesela K. Botswana. Partners' Review Meeting, Harare, Zimbabwe, 25 June, 2014.

With a population of 71.2m, the DRC is classified by the World Bank as 'low income', with a 'low' HDI ranking (i.e., 186). In 2005, its population-in-poverty headcount ratio was 88% (i.e., living on \$1.25 per day), with 3.5% of its GDP allocated to health, with a \$16 per capita total expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$11.

Palliative care services

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 2 (capacity building activities), the DRC has only one NGO palliative care home support team (Palliafamilli), and a volunteer hospice (Elonga Elonga), and the MoH has isolated services. Indeed, a recent basic needs assessment report found "low availability for the organisation of palliative care in the health system in the DRC" (p.44), despite the identified need.⁶⁷

The DRC has no palliative care services for patients with HIV/AIDS or a cancer diagnosis, nor for any of seven marginalised populations, and is not gender sensitive. However, APCA confirms there are some level of service provision through the NGOs and MoH which has been identified through their hospital baseline survey.

Palliative care training

The country has no accredited palliative care training course, but 15 physicians have been trained through the Hospice Africa Uganda palliative care initiators course and a few are now pursuing a postgraduate palliative care diploma. Additionally, a library specialising in palliative care medicine has been established at the University of Kinshasa.

Professional activity

The DRC aims to have a national palliative care association, has held a national palliative care conference led by Palliafamilli, held the second congress of palliative care in Kinshasa in September 2015, with support from the Ministry of Health, has one dedicated research group (with two sites experienced in international research), but no palliative care standards, norms or guidelines or dedicated directory/catalogue. An estimated three palliative care professionals attended the 4th APCA conference held in South Africa in 2013.

Policy initiatives and frameworks

Although respondents indicated the country has no palliative care policy, and no national strategies for palliative care or cancer / NCDs, the country has a strong HIV programme supported by a national primary care programme that includes palliative care. The country also has a home-based care strategy, Palliatifs à Domicile (Home-Based Palliative Care), since 2006 which aims to be a palliative care manual for HBC volunteers. Moreover, in 2013 palliative care was included in the country's *Health Action Plan* and *National Operational Plan*

⁶⁷ République Démocratique du Congo, Ministère de Santé Publique, Secrétariat Général à la Santé. Final report of basic needs assessment of palliative care for the cities of Kinshasa, Lumumbashi, Kananga and Mbandaka in DRC. Kinshasa, DRC: République Démocratique du Congo, Ministère de Santé Publique, Secrétariat Général à la Santé.

of the Primary Health Care Directorate and a National Committee on Palliative Care has been formed to guide palliative care development.⁶⁸

The DRC has no dedicated budget line for palliative care in their health budget, or research resources – the main non-governmental funding source is “the support of APCA” – with initiatives to change regulations that may restrict physician or patient access to pain relief and to promote attitudinal change relating to ‘opiophobia’. It has initiatives that consider access to essential medicines as a legal or human right, and there is no system in place for monitoring and evaluating palliative care health policies.

The Pain & Policy Studies Group state that in 2012 the DRC had a reported mean consumption of morphine of 0.0097 mg/capita, ranking it 20th among the 25 reporting countries in the region.⁶⁹ Collaboration between the country’s opioid prescribers and regulators are rated as very poor, the availability of oral morphine in the country rated as very poor, patient access to oral morphine rated as very poor, the availability of non-opioid essential palliative care medicines rated as very poor, and patient access to non-opioid essential palliative care medicines rated as very poor.

4. Lesotho

General characteristics

With a population of 1.9m, Lesotho is classified by the World Bank as ‘lower middle income’, with a ‘low’ HDI ranking (i.e., 162). In 2010, its population in poverty headcount ratio was 56% (i.e., living on \$1.25 per day), with 12% of its GDP allocated to health, with a \$123 per capita total expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$162.

Palliative care services

The status of palliative care activity is ranked at level 3a (isolated palliative care provision). This group of countries is characterised by: the development of palliative care activism that is patchy in scope and not well supported; sourcing of funding that is often heavily donor dependent; limited availability of morphine; and a small number of hospice-palliative care services that are often home-based in nature and relatively limited to the size of the population).

Palliative care training

None exists.

Professional activity

None exists.

⁶⁸ African Palliative Care Association. Regional HIV/AIDS Program: Project close out report. Kampala, Uganda: African Palliative Care Association, 2015.

⁶⁹ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

Policy initiatives and frameworks

There are no reported national framework in Lesotho that support palliative care developments. Moreover, the Pain & Policy Studies Group state that in 2012 Lesotho either did not report, or reported an amount of zero consumption of morphine (mg/capita).⁷⁰

Collaboration between the country's opioid prescribers and regulators are rated as mixed, the availability of oral morphine in the country rated as poor, patient access to oral morphine rated as poor, the availability of non-opioid essential palliative care medicines rated as poor, and patient access to non-opioid essential palliative care medicines rated as mixed.

5. Malawi

General characteristics

With a population of 16.8m, Malawi is classified by the World Bank as 'low income', with a 'low' HDI ranking (i.e., 174). In 2010, its population in poverty headcount ratio was 72% (i.e., living on \$1.25 per day), with 8.3% of its GDP allocated to health, with a \$26 per capita total expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$57.

Palliative care services

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 4a (preliminary integration into mainstream services). This group is characterised by: the development of a critical mass of palliative care activism in a number of locations; a variety of palliative care providers and types of services; awareness of palliative care on the part of health professionals and local communities; the availability of morphine and some other strong pain-relieving medicines; limited impact of palliative care upon policy; the provision of a substantial number of training and education initiatives by a range of organizations; and interest in the concept of a national palliative care association). Malawi reportedly has 50 hospital-based palliative care units, and four paediatric palliative care services.

Malawi has palliative care services for patients with both a HIV/AIDS and cancer diagnosis that are reported as gender sensitive, but no services specifically for the seven marginalised populations.

Palliative care training

The country has an accredited (in 2008 as a certified accreditation) palliative care training course that is five days in duration at the postgraduate university training level. The national palliative care association has also been accredited by the Medical and Nursing Council to offer continuing professional development courses to health professionals, while palliative care is integrated into the medical and nursing curriculum and is examinable.⁷¹ Additionally, a number of nurses are either on or completed training opportunities in Uganda and South

⁷⁰ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

⁷¹ African Palliative Care Association. Open Society Initiative for Southern Africa: Malawi proposal. Kampala, Uganda: African Palliative Care Association.

Africa, as well having 13 master palliative care trainers, 192 trained and 2,233 palliative care service providers.⁷²

Importantly, a national palliative care training manual for health professionals has been revised and a training manual for community and home-based care volunteers has been developed and disseminated.⁷³ Malawi has three palliative care physicians; it has no professor of palliative care but one of the palliative care physicians is currently pursuing a PhD in palliative care. The country also has ten health workers (nurses and clinicians) with degrees in palliative care and there is one medical college which trains doctors and two colleges of sciences that train clinical officers.

Professional activity

Malawi has one national palliative care association, has ten dedicated research groups (with four sites experienced in international research), and has palliative care standards, norms or guidelines and a dedicated directory/catalogue. An estimated ten palliative care professionals attended the 4th APCA / HPCA conference held in South Africa in 2013.

Policy initiatives and frameworks

The country has a national palliative care policy (launched in February 2015) and guidelines but has no finalized palliative care legislation and no national strategy for palliative care. However, it does have a national strategy for cancer / NCDs and home-based care, both of which include palliative care, and a dedicated MoH officer to coordinate palliative care services nationally.⁷⁴ Moreover, 50 hospitals have integrated palliative care services and 5 stand-alone organisations are providing palliative care as centres of excellence.⁷⁵

Malawi also has national cancer, HIV/AIDS, and primary care programmes, with the former two including palliative care, which is also included in the country's community- and home-based care guidelines, the country's standard treatment guidelines and its NCD and antiretroviral therapy guidelines.⁷⁶ The country has a dedicated budget line for palliative care in their national health budget (but no dedicated research resources) – the main sources of non-governmental funding are APCA, the National AIDS Commission, the Centers for Disease Control and Prevention and USAID, True Colours Trust (UK) and OSISA – with initiatives to change regulations that may restrict physician or patient access to pain relief and to promote attitudinal change relating to 'opiophobia'. It has initiatives that consider access to essential medicines as a legal or human right, and there is a system in place for monitoring and evaluating palliative care health policies.

⁷² African Palliative Care Association. Open Society Initiative for Southern Africa: Malawi proposal. Kampala, Uganda: African Palliative Care Association.

⁷³ African Palliative Care Association. Regional HIV/AIDS Program: Project close out report. Kampala, Uganda: African Palliative Care Association, 2015.

⁷⁴ African Palliative Care Association. Open Society Initiative for Southern Africa: Malawi proposal. Kampala, Uganda: African Palliative Care Association.

⁷⁵ African Palliative Care Association. Open Society Initiative for Southern Africa: Malawi proposal. Kampala, Uganda: African Palliative Care Association.

⁷⁶ African Palliative Care Association. Regional HIV/AIDS Program: Project close out report. Kampala, Uganda: African Palliative Care Association, 2015.

The Pain & Policy Studies Group state that in 2012 Malawi had a reported mean consumption of morphine of 0.8253 mg/capita, ranking it 3rd among the 25 reporting countries in the region.⁷⁷ However, there is a functional national drug advocacy taskforce in the country that has developed national palliative care guidelines and aims to ensure all medicines are available to all patients in need and are included in the Malawian essential medicines list.⁷⁸

Collaboration between the country's opioid prescribers and regulators are rated as mixed, the availability of oral morphine in the country rated as good, patient access to oral morphine rated as mixed, the availability of non-opioid essential palliative care medicines rated as excellent, and patient access to non-opioid essential palliative care medicines rated as excellent.

Additional information from the 2014 partners' review meeting reveals:

- The government is providing national leadership and coordination;
- Development and dissemination of national palliative care guidelines, with a national policy currently drafted;
- Standardized training manuals for both health professionals and community care givers;
- Palliative care integrated into the health care system via 50 public hospitals;
- By 2013, 153 master trainers were available composed of 77% nurses, 3% doctors and 20% other clinicians;
- Development and implementation of an introductory course to palliative care, with 4,025 service providers at all categories trained.
- Specialist training achievements: Masters level (3 completed); PhD level (2 currently pursuing);
- 100% of the 16 nursing and medical training institutions have integrated palliative care into pre-service curricula, including for paramedics;
- Palliative care is an examinable subject by regulatory bodies;
- Centres of excellence for clinical placement have been developed;
- The national government is procuring morphine powder, reconstituting and distributing oral liquid morphine, and;
- Essential drugs have been included in national standard treatment guidelines.⁷⁹

6. Mozambique

General characteristics

With a population of 25.1m, Mozambique is classified by the World Bank as 'low income', with a 'low' HDI ranking (i.e., 178). In 2009, its population in poverty headcount ratio was 61% (i.e., living on \$1.25 per day), with 6.8% of its GDP allocated to health, with a \$40 per capita total

⁷⁷ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

⁷⁸ African Palliative Care Association. Open Society Initiative for Southern Africa: Malawi proposal. Kampala, Uganda: African Palliative Care Association.

⁷⁹ Kambiya I. Malawi. Partners' Review Meeting, Harare, Zimbabwe, 25 June, 2014.

expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$27.

Palliative care services

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 3a (isolated palliative care provision). This group of countries is characterised by: the development of palliative care activism that is patchy in scope and not well supported; sourcing of funding that is often heavily donor dependent; limited availability of morphine; and a small number of hospice-palliative care services that are often home-based in nature and relatively limited to the size of the population). Mozambique has a small number of pain units based in hospitals that are struggling to integrate palliative care and are presently trying to pilot a district hospital for palliative care.

Mozambique has palliative care services for patients with a HIV/AIDS or cancer diagnosis and other chronic diseases, with services for two (those with disabilities and drug misusers of seven marginalised populations. The palliative care service is reportedly gender sensitive.

Palliative care training

The country has no accredited palliative care training course, no palliative care physicians and two medical schools, although a number of health professionals have been oriented to palliative care and effective pain relief through introductory courses. They also have a national palliative care curriculum for these short courses that is endorsed by the MOPCA in coordination with MoH and adapted from APCA's core curriculum.

Professional activity

Mozambique has one national palliative care association (MOPCA) (formed in 2008), has no dedicated research group (but one site is experienced in international research), has palliative care standards, norms or guidelines and a dedicated directory/catalogue. An estimated two palliative care professionals attended the 4th APCA conference held in South Africa in 2013.

Policy initiatives and frameworks

The country has a national palliative care policy (approved in 2012), but no national strategy for palliative care. However, it does have strategies for cancer / NCDs and home-based care that include palliative care – even if they are not widely integrated into all health policies⁸⁰ – and a national palliative care programme that sees the discipline as a human right. Mozambique also has national cancer, primary care and HIV/AIDS programmes, with the latter including palliative care. It has no dedicated budget line for palliative care in their health budget (or dedicated research resources), and has legislation that restricts how doctors are allowed to prescribe opioids, but has initiatives to promote attitudinal change relating to 'opiophobia'. It also has no initiatives that consider access to essential medicines as a legal or

⁸⁰ African Palliative Care Association. A review of national opioid estimation procedures and supply chain mechanisms in three African countries: Swaziland, Mozambique and Zimbabwe. Kampala, Uganda, 2015.

human right, but there is a system in place for monitoring and evaluating palliative care health policies.

The Pain & Policy Studies Group state that in 2012 Mozambique had a reported mean consumption of morphine of 0.0275 mg/capita, ranking it 17th among the 25 reporting countries in the region.⁸¹ Indeed, a recent APCA review found confusion regarding the government's responsibility in this area:

“The attitudes of respondents suggested that they understood the primary responsibility of their Government to be that of controlling the illicit use of opioids ... respondents did not know that their Government and its technical people ... were also responsible for ensuring the appropriate availability of opioids for moderate-to-strong pain control.”(p.40)⁸²

Moreover, the authority to prescribe strong opioids is limited to doctors who are “critically few in number” (p.40) and dispersed in a sparse number of hospitals, thereby limiting “access to pain relief and other palliative care benefits to patients”(p.41).⁸³

Collaboration between the country's opioid prescribers and regulators are rated as very poor, the availability of oral morphine in the country rated as very poor, patient access to oral morphine rated as very poor, the availability of non-opioid essential palliative care medicines rated as very poor, and patient access to non-opioid essential palliative care medicines rated as very poor.

Additional information from the 2014 partners' review meeting reveals:

- Adoption of a family-based approach to care provision, including prevention education;
- Dissemination of a national palliative care policy in Maputo province;
- Integration of palliative care in to the country's national HIV/AIDS programme;
- Stronger links between the Ministry of Health and MOPCA, the national palliative care association;
- Approval of a palliative care curriculum and reference manual in 2013;
- Trainings in pain and palliative care undertaken in some provinces;
- Piloting of a palliative care curriculum among 30 nurses;
- Training of 20 doctors, 100 nurses, 2 pharmacists, 1 oral health technician, 29 volunteers and 5 traditional healers.⁸⁴

⁸¹ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

⁸² African Palliative Care Association. A review of national opioid estimation procedures and supply chain mechanisms in three African countries: Swaziland, Mozambique and Zimbabwe. Kampala, Uganda, 2015.

⁸³ African Palliative Care Association. A review of national opioid estimation procedures and supply chain mechanisms in three African countries: Swaziland, Mozambique and Zimbabwe. Kampala, Uganda, 2015.

⁸⁴ Thuzine E, Mondlane L. Mozambique. Partners' Review Meeting, Harare, Zimbabwe, 25 June, 2014.

7. Namibia

General characteristics

With a population of 2.3m, and despite rapid urbanisation, Namibia remains mostly rural, with approximately 4 in 10 living in urban areas, and with very low population density.⁸⁵ Namibia is classified by the World Bank as 'upper middle income', with a 'medium' HDI ranking (i.e., 127). In 2009, its population in poverty headcount ratio was 24% (i.e., living on \$1.25 per day), with 7.7% of its GDP allocated to health, with a \$423 per capita total expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$208.

Palliative care services

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 3a (isolated provision). This group is characterised by: the development of palliative care activism that is patchy in scope and not well supported; sourcing of funding that is often heavily donor dependent; limited availability of morphine; and a small number of hospice-palliative care services that are often home-based in nature and relatively limited to the size of the population (generalised palliative care provision). Namibia only has palliative care services based in other community settings.

Namibia has limited palliative care services for patients with a HIV/AIDS or cancer diagnosis. Among the seven marginalised populations, Namibia provides for only one category (i.e., prisoners). On the whole the services are not considered gender sensitive.

Palliative care training

The country has no accredited palliative care training course, no palliative care physicians and one medical school. However, it has a curriculum for a pre-service introductory training on palliative care.

Professional activity

Namibia has no national palliative care association, with palliative care directly coordinated by the MoH. However, there are plans to revive the national palliative care taskforce and develop a plan to organize a national palliative care conference. The country has no dedicated research group (with no sites experienced in international research), and has no palliative care standards, norms or guidelines or dedicated directory/catalogue. An estimated four palliative care professionals attended the 4th APCA conference held in South Africa in 2013.

Policy initiatives and frameworks

The country has a palliative care policy and a national strategy for palliative care. It also has a national strategy for home-based care that includes palliative care. Namibia does not have a national cancer programme, but does for HIV/AIDS and primary health care, with the latter two including palliative care. The country has no dedicated budget line for palliative care in their health budget (or dedicated research resources) – non-governmental funding is derived from

⁸⁵ Namibia Demographic and Health Survey. Namibia Statistics Agency, Windhoek, Namibia, 2014.

the NGO Catholic AIDS Action – and no legislation that restricts how doctors are allowed to prescribe opioids. It has initiatives that consider access to essential medicines as a legal or human right, and there is a system in place for monitoring and evaluating palliative care health policies.

The Pain & Policy Studies Group state that in 2012 Namibia had a reported mean consumption of morphine of 0.0403 mg/capita, ranking it 15th among the 25 reporting countries in the region.⁸⁶ This fact should, however, be interpreted cautiously as much of the morphine is used in theatre for surgical procedures. Collaboration between the country's opioid prescribers and regulators are rated as excellent, the availability of oral morphine in the country rated as good, patient access to oral morphine rated as mixed, the availability of non-opioid essential palliative care medicines rated as good, and patient access to non-opioid essential palliative care medicines rated as good.

Additional information from the 2014 partners' review meeting reveals:

- A draft palliative care policy is in place, which is integrated with the Community-Based Health Care policy which is under review;
- Palliative care is integrated into the University of Namibia's Faculty of Social Work curriculum;
- Palliative care specialized training: diploma in palliative care (6 nurses) with Makerere University, Uganda;
- National training curriculum for CHBC developed;
- Codein and Brufen added as IMAI medications;
- Morphine is now accessible at clinic levels and nurses can re-prescribe;
- Supported the Ministry of Health and Social Services with the development of a national training curriculum for palliative care;
- Supported the inclusion of palliative care medicines on the Namibia Essential Medicines List (NEMLIST) to ensure drug availability for pain management;
- Supported the establishment of a national Palliative Care Taskforce;
- Training of CHBC care providers (about 2600);
- Completed advocacy and sensitization sessions for parliamentarians;
- Supported South-to-South partnerships through study tours and clinical placement – Tanzania, Uganda, and Zimbabwe;
- Doctors trainings on pain management control, and;
- Active involvement of the Ministry of Health and Social Services has facilitated the integration of palliative care into health care delivery.⁸⁷

8. Swaziland

General characteristics

⁸⁶ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

⁸⁷ Paavo R, Natanael S. Namibia. Partners' Review Meeting, Harare, Zimbabwe, 25 June, 2014.

With a population of 1.3m, Swaziland is classified by the World Bank as 'lower middle income', with a 'low' HDI ranking (i.e., 148). In 2009, its population in poverty headcount ratio was 39% (i.e., living on \$1.25 per day), with 8.4% of its GDP allocated to health, with a \$256 per capita total expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$301.

Palliative care services

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 3b (generalised palliative care provision). This group is characterised by: the development of palliative care activism in a number of locations with the growth of local support in those areas; multiple sources of funding; the availability of morphine; a number of hospice-palliative care services from a community of providers that are independent of the healthcare system; and the provision of some training and education initiatives by the hospice organisations). Swaziland has one palliative care home support team per each of its four regions (i.e., Hhohho, Lubombo, Manzini and Shiselweni), one palliative care hospital support team, and one mixed palliative care support team per facility.

Swaziland has palliative care services for patients with a HIV/AIDS or cancer diagnosis, with services reportedly provided for all of seven marginalised populations and is gender sensitive on the basis that "At the Ministry of Health we promote and provide universal access to ALL health services without discrimination."

Palliative care training

The country has no accredited palliative care training course – but does have an "in-service introduction to palliative care training" developed and implemented by the MoH – five palliative care physicians but no medical schools. The training course is based on a national curriculum for introductory training, adapted from APCA's core curriculum. The country has a highly limited number of health care workers with diploma-level training in palliative care.

Professional activity

Swaziland has no national palliative care association with the MoH coordinating palliative care developments nationally, has never held a national palliative care conference, has no dedicated research group (with no sites experienced in international research), has palliative care standards, norms or guidelines – the documents include "clinical guidelines and draft palliative care standards" – but no dedicated directory/catalogue. An estimated six palliative care professionals attended the 4th APCA / HPCA conference held in South Africa in 2013.

Policy initiatives and frameworks

The country has passed a palliative care policy and has a national palliative care policy and strategy, both of which include the discipline as a human right, has no national strategies for cancer / NCDs, but does for home-based care that includes palliative care. While Swaziland does not have a national cancer programme, it does for HIV/AIDS and primary care, with both including palliative care. The country has a dedicated budget line for palliative care in their health budget (but no dedicated research resources), but they have a palliative care desk and

dedicated officer in the MoH. It also has initiatives to change regulations that may restrict physician or patient access to pain relief and promote attitudinal change relating to 'opiophobia', and no legislation that restricts how doctors are allowed to prescribe opioids. It has initiatives that consider access to essential medicines as a legal or human right, and there is a system in place for monitoring and evaluating palliative care health policies.

The Pain & Policy Studies Group state that in 2012 Swaziland either did not report, or reported an amount of zero consumption of morphine (mg/capita).⁸⁸ Indeed, a recent APCA report stated "the various policy officials, technical people and officials from [the] drug control [units] ... had inadequate knowledge regarding opioid consumption, estimates, importation, storage, distribution and prescription" (p.39).⁸⁹

However, this appears to have changed over the last three years with the importation of morphine powder, in part attributable to a more favourable policy environment for the availability of, and access to, opioid analgesics.⁹⁰ However, collaboration between the country's opioid prescribers and regulators are rated as mixed, the availability of oral morphine in the country rated as mixed, patient access to oral morphine rated as mixed, the availability of non-opioid essential palliative care medicines rated as good, and patient access to non-opioid essential palliative care medicines rated as good.

Additional information from the 2014 partners' review meeting reveals:

- Development of documents on policy, strategic planning, clinical guidelines and a training package for healthcare workers;
- Ongoing integration of palliative care facilities; with 6/12 hospitals having multi-disciplinary teams, and opioids available, especially oral morphine, and;
- Palliative care is a stand-alone programme in the Health Sector Strategic Plan (2014-18) and in the extended National Strategic Framework (2014-18).⁹¹

9. Zambia

General characteristics

With a population of 15.1m, Zambia is classified by the World Bank as 'lower middle income', with a 'medium' HDI ranking (i.e., 141). In 2010, its population in poverty headcount ratio was 74% (i.e., living on \$1.25 per day), with 5.4% of its GDP allocated to health, with a \$93 per capita total expenditure on health in 2013 and a per capita government expenditure of health in 2011 of \$59.

Palliative care services

⁸⁸ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

⁸⁹ African Palliative Care Association. A review of national opioid estimation procedures and supply chain mechanisms in three African countries: Swaziland, Mozambique and Zimbabwe. Kampala, Uganda, 2015.

⁹⁰ African Palliative Care Association. A review of national opioid estimation procedures and supply chain mechanisms in three African countries: Swaziland, Mozambique and Zimbabwe. Kampala, Uganda, 2015.

⁹¹ Ginindza-Mdluli N. Kingdom of Swaziland. Partners' Review Meeting, Harare, Zimbabwe, 25 June, 2014.

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 4a (preliminary integration into mainstream services). This group is characterised by: the development of a critical mass of palliative care activism in a number of locations; a variety of palliative care providers and types of services; awareness of palliative care on the part of health professionals and local communities; the availability of morphine and some other strong pain-relieving medicines; limited impact of palliative care upon policy; the provision of a substantial number of training and education initiatives by a range of organisations; and interest in the concept of a national palliative care association). Zambia has three palliative care units based in hospitals, a significant number of palliative care home support teams, a tertiary-level hospital support team, three mixed support teams, a volunteer hospice team, and one paediatric palliative care service.

Zambia has palliative care services for patients with a HIV/AIDS or cancer diagnosis, with services for only two (those with disabilities and the elderly) of seven marginalised populations, and is reportedly not gender sensitive.

Palliative care training

The country has no accredited palliative care training course – but has “basic palliative care training for post-basic health workers. None for pre-service” – no palliative care physicians but three medical schools.

Professional activity

Zambia has one national palliative care association, has held a national palliative care conference, has no dedicated research group (but eleven sites are experienced in international research), and no palliative care standards, norms or guidelines or dedicated directory/catalogue. An estimated seven palliative care professionals attended the 4th APCA / HPCA conference held in South Africa in 2013.

Policy initiatives and frameworks

The country has a palliative care strategic plan and palliative care is included in its national health policy. It has national strategies for cancer / NCDs and home-based care, both of which include palliative care, and a national palliative care programme that sees the discipline as a human right. Zambia also has national cancer, HIV/AIDS, and primary care programmes that all include palliative care. The country has no dedicated budget line for palliative care in their national health budget (nor dedicated research resources) – non-governmental funding is derived from “USAID and other agencies” – but has an initiative to promote attitudinal change relating to ‘opiophobia’ in an environment where there is no legislation that restricts how doctors are allowed to prescribe opioids. It has initiatives that consider access to essential medicines as a legal or human right, but there is no system in place for monitoring and evaluating palliative care health policies.

The Pain & Policy Studies Group state that in 2012 Zambia had a reported mean consumption of morphine of 0.0033 mg/capita, ranking it 22nd among the 25 reporting countries in the

region.⁹² Collaboration between the country's opioid prescribers and regulators are rated as mixed, the availability of oral morphine in the country rated as good, patient access to oral morphine rated as poor, the availability of non-opioid essential palliative care medicines rated as mixed, and patient access to non-opioid essential palliative care medicines rated as mixed.

Additional information from the 2014 partners' review meeting reveals:

- Inclusion of palliative care in the National Health Policy and National Health Strategic Plan;
- Development of a draft National Palliative Care Strategic Framework;
- A National Palliative Care Technical Working Group in place, chaired by the Ministry of Health;
- All clinical care specialists in 10 provinces trained in palliative care;
- Palliative care pain-relieving medicines are on the Ministry of Health's essential drugs list;
- Palliative care integration expanded in health institutions;
- Increased capacity building among staff and institutions;
- Advanced palliative care pain and symptom diagnoses materials;
- Increase in oral morphine consumption from 5 litres in 3 months to 5 litres in one month;
- Increase in palliative care teams from 15 to 35, and;
- Development of one general hospital as a palliative care centre of excellence.⁹³

10. Zimbabwe

General characteristics

With a population of 14.7m, Zimbabwe is classified by the World Bank as 'low income', with a 'low' HDI ranking (i.e., 156). Data on three poverty and health expenditure metrics are unavailable. However, 5% of its GDP is allocated to health.

Palliative care services

The country uses the WHO definition of palliative care. With the status of palliative care activity ranked at level 4a (preliminary integration into mainstream services). This group is characterised by: the development of a critical mass of palliative care activism in a number of locations; a variety of palliative care providers and types of services; awareness of palliative care on the part of health professionals and local communities; the availability of morphine and some other strong pain-relieving medicines; limited impact of palliative care upon policy; the provision of a substantial number of training and education initiatives by a range of organisations; and interest in the concept of a national palliative care association. Zimbabwe has three hospices, four hospital-based palliative care units (Mutambara Hospital, RCZ/Mogenster Mission Hospital, Dananai / Murambinda Mission Hospital and Karanda Hospital), four palliative care home support teams, five palliative care community outreach

⁹² Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

⁹³ Siamianze A. Zambia. Partners' Review Meeting, Harare, Zimbabwe, 25 June, 2014.

centres, a support team in a tertiary-level hospital, and one dedicated paediatric palliative care service that is supplemented by many home-based care NGOs that integrate paediatric palliative care into their services. The largest palliative care service provider in the country is Island Hospice.

Zimbabwe has palliative care services for patients with both a HIV/AIDS and cancer diagnosis, and services for five (prisoners, LGBT [limited], CSW [limited], those with disabilities and the elderly) of seven marginalised populations, and is gender sensitive, reporting that “services are for everyone; do not discriminate at all.”

Palliative care training

The country has no accredited palliative care training course – but there is “in-service training for nurses, oncology nursing medial students and pharmacists” – three palliative care physicians and medical schools, one of which provides palliative care lectures to 3rd and 5th year medical students. Zimbabwe has a national curriculum for pre-service introductory training to PC for health professionals, adapted from APCA’s core curriculum.

Professional activity

Zimbabwe has one national palliative care association, has held a national palliative care conference, has no dedicated research group (but five sites are experienced in international research), has palliative care standards, norms or guidelines – these include “palliative care standards, palliative care policy and a palliative care training manual” – and a dedicated directory/catalogue. An estimated five palliative care professionals attended the 4th APCA / HPCA conference held in South Africa in 2013.

Policy initiatives and frameworks

The country has passed a palliative care policy that sees the discipline as a human right. While it has no national palliative care strategy, it has national strategies for cancer / NCDs and home-based care, with both including palliative care, but no national palliative care programme. Zimbabwe also has national cancer, HIV/AIDS, and primary care programmes, with the former two including palliative care. The status of a dedicated budget line nationally for palliative care in the country is unknown (it has no dedicated research resources) – with non-government funding from donors – with initiatives that promote attitudinal change relating to ‘opiophobia’. There is no restriction on morphine prescribing by doctors. Palliative care nurses at Island Hospice can start patients on morphine and then access support from a doctor, but availability remains a challenge. There is also no system in place for monitoring and evaluating palliative care health policies.

The Pain & Policy Studies Group state that in 2012 Zimbabwe had a reported mean consumption of morphine of 0.2614 mg/capita, ranking it 8th among the 25 reporting countries in the region.⁹⁴ Indeed, a recent APCA report found:

⁹⁴ Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

“limited knowledge, particularly regarding the Zimbabwe Government’s responsibilities. The attitude of respondents regarding opioid consumption estimates, importation, storage, distribution and prescription were also generally undesirable.” (p.41)⁹⁵

Moreover, the country’s method of estimating opioid analgesic need is consumption-based and inaccurate, rather than based upon actual patient need. This challenge is compounded by a “critical shortage” of health workers in the country, which has a negative impact upon the availability of, and access to, opioids despite clinical officers and nurses being permitted to prescribe them.⁹⁶

Collaboration between the country’s opioid prescribers and regulators are rated as poor, the availability of oral morphine in the country rated as mixed, patient access to oral morphine rated as poor, the availability of non-opioid essential palliative care medicines rated as poor, and patient access to non-opioid essential palliative care medicines rated as mixed.

Additional information from the 2014 partners’ review meeting reveals:

- A stand-alone palliative care policy that has been approved by the Cabinet and printed, and whose vision is “to provide comprehensive and affordable palliative care of the highest possible standard to all persons living with a life-threatening illness and their families”.⁹⁷
- A National Cancer Prevention and Control Strategy for Zimbabwe (2014-18);
- A National Palliative Care Curriculum, awaiting final approval from the Ministry of Health and Child Care;
- A strategy formulation (2014-18) for HOSPAZ, the national palliative care association, and;
- A field-tested palliative care training manual.⁹⁸

STUDY LIMITATIONS

This data is largely based on findings from the national situational analysis but there are two limitations:

- This is a historical snapshot and, in an era when the palliative care landscape is in a variable state of flux, it can only reflect upon current palliative care developments;
- The study only provides a profiling overview of palliative care developments in each country and the region generally. Further work is needed to explore issues addressed

⁹⁵ African Palliative Care Association. A review of national opioid estimation procedures and supply chain mechanisms in three African countries: Swaziland, Mozambique and Zimbabwe. Kampala, Uganda, 2015.

⁹⁶ African Palliative Care Association. A review of national opioid estimation procedures and supply chain mechanisms in three African countries: Swaziland, Mozambique and Zimbabwe. Kampala, Uganda, 2015.

⁹⁷ Ministry of Health and Child Care. *The National Palliative Care Policy*. Harare, Zimbabwe: Republic of Zimbabwe, 2013.

⁹⁸ Garanganga E. Zimbabwe. Partners’ Review Meeting, Harare, Zimbabwe, 25 June, 2014.

in this report, such as governmental plans for palliative care clinical services and education initiatives for human resource planning etc.

DISCUSSION AND RECOMMENDATIONS

As its two primary points of reference, the results from this study are contextualised in terms of its comparison with palliative care activity data from the 2011 World Hospice and Palliative Care Association report⁹⁹ and the enhanced public health model of palliative care service development that is considered essential for expanding palliative care: (i) health system policies to ensure the integration of palliative care services into the structure and financing of national health care systems at all levels of care; (ii) policies for strengthening and expanding human resources, including the education and training of health care professionals, to ensure adequate responses to palliative care needs, together with training of volunteers and education of the public; (iii) a medicines policy to ensure the availability of essential medicines for the management of symptoms, including pain and psychological distress, and, in particular, opioid analgesics for the relief of pain and respiratory distress; (iv) service delivery, and; (v) a policy for research into assessing the needs for palliative care and identifying standards and models of service that work, particularly in limited-resource settings.^{100,101} These reference points (with the public health model being prefaced by a discussion of actual palliative care implementation) will be used in the discussion of the study findings at the regional and country levels.

(a) Regional

The reported status of palliative care activity in each country ranges from levels 2-4a: one at level 2 (capacity building activity; DRC); five at level 3a (isolated palliative care provision; the Angola, Botswana, Lesotho, Mozambique and Namibia); one at level 3b (generalized palliative care provision; Swaziland); and three at level 4a (hospice-palliative care services are at a stage of preliminary integration into mainstream service provision; Malawi, Zambia and Zimbabwe).

Palliative care services - implementation

Where they exist, all countries report using the WHO definition of palliative care, even if this is often aspirational rather than reflective of actual service coverage for the majority of citizens in need in the region.

Several models of service provision were identified including:

- 1) Integration of palliative care into public hospitals with care offered by a hospital support team and others as well as a few focal people, including volunteers working together

⁹⁹ Worldwide Palliative Care Alliance. *Mapping levels of Palliative Care Development: A global update*. London: Worldwide Palliative Care Alliance, 2011.

¹⁰⁰ World Health Organization Executive Board. Strengthening of palliative care as a component of integrated treatment throughout the life course. EB134/28. 134th session 20 December 2013.

¹⁰¹ Sternsward J, Foley K, Ferris F. The public health strategy for palliative care. *J Pain Symptom Manage* 2007; 33: 486-493.

and recognised by the hospital administration as the palliative care team. This was found in at least six countries (the former in Botswana, Swaziland, Zambia and Zimbabwe, the latter in Botswana and the DRC).

- 2) Community outreach services were found in only one country (Zimbabwe).
- 3) One country (Zambia) reported workforce capacity for all types of services.
- 4) Four countries (Botswana, Malawi, Zambia and Zimbabwe) provided paediatric palliative care services.
- 5) Six countries (Botswana, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe) provided palliative care in non-specified other community settings.

In terms of disease focus, while the majority (7) provide palliative care services for HIV and cancer patients, only 5 reported their services as 'gender sensitive'. Indeed, it is interesting to explore if there are any practical innovations in these services that are directed specifically towards addressing potential gender inequalities and which merit the description, or if they are default gender sensitive as the services does not actively discriminate among the sexes. Moreover, some countries provided services dedicated specifically to the elderly (4) and those with disabilities (5), provision for other marginalized populations was less frequent, with services for prisoners, LGBT, MSM, CSWs and drug misusers being the most neglected.

Palliative care training

Palliative care training is vital for strengthening and expanding human resources and to ensure adequate responses to palliative care needs, together with the training of volunteers and education of the public. From the findings, only one country (Malawi) reported an accredited palliative care training course, which is limited to five days in length and certified at the postgraduate level of university training.

Five countries (Botswana, the DRC, Malawi, Swaziland and Zimbabwe) reported having trained palliative care physicians, with the number ranging from 1-15, while only one (the DRC) has a postgraduate palliative care diploma. In Malawi, teaching institutions integrated palliative care between 2011-13 and adapted a manual that guides this integration. On the other hand, while eight nations have medical schools (ranging from 1-500), only one (Zimbabwe) reported having a medical school with a palliative care 'course' (i.e., lectures delivered to 3rd and 5th year medical students). No country reported having a professor of palliative care.

The development of effective palliative care in the region is contingent on the development of a fit-for-purpose workforce. The development of this workforce is in no small measure premised on pre- and in-service education and training, augmenting the skill sets of existing staff and equipping the next generation of palliative care professionals. A means of ensuring

professional credibility to the discipline is to embed the more significant training and educational opportunities within the academic setting, moving gradually from modular sessions within existing health and social care courses to dedicated undergraduate and postgraduate courses; having this agenda led by a professorial chair is a potentially critical pathway.

Policy initiatives and frameworks

Seven countries (Botswana, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe) have national palliative care policies in place, which – apart from Mozambique – incorporates palliative care as a human right, while four (Botswana, Namibia, Swaziland and Zambia) have a national palliative care strategy, which only incorporates palliative care as a human right in Namibia and Swaziland. However, five countries (Botswana, Malawi, Mozambique, Zambia and Zimbabwe) have a national cancer or NCD strategy, with four of them (excluding Botswana) including palliative care. Similarly, nine countries (excluding Angola) have a national home-based care strategy, with six (excluding Botswana, the DRC and Lesotho) including palliative care. However, only three countries (Mozambique, Swaziland and Zambia) have a national palliative care programme (with all three including palliative care as a human right), and only four countries (Malawi, Mozambique, Namibia and Swaziland) have in place a palliative care auditing / monitoring and evaluation system.

Six countries (Botswana, Lesotho, Malawi, Mozambique, Zambia and Zimbabwe) have a national cancer programme, with only three (Malawi, Zambia and Zimbabwe) including palliative care. While all ten countries had a national HIV/AIDS programme, six included palliative care (excluding Angola, the DRC and Lesotho), and similarly while all ten nations had a national primary care programme, only four (the DRC, Namibia, Swaziland and Zambia) included palliative care.

Financially, two countries (Malawi and Swaziland) at the time of the review had a dedicated palliative care budget line in their national health budget, and only one (Botswana) had dedicated research resources at its disposal.

Using data from the Pain and Policy Study Group, mean consumption of morphine in the African region for 2012 was 0.315 mg/capita, compared with a global mean of 6.28 mg/capita. However, the regional mean is distorted by data from Seychelles and South Africa (4.32 and 4.02 mg/capita, respectfully). For the seven target countries in the region that either reported data or reported more than zero drug consumption to the International Narcotics Control Board for 2012, consumption ranged from 0.0006 in Angola to 0.83 in Malawi.¹⁰²

More positively, only one country (Mozambique) has legislation that restricts how doctors are allowed to prescribe opioids, six (Botswana, the DRC, Malawi, Namibia, Swaziland and Zambia) have initiatives to change regulations that restrict physician or patient access to pain relief, seven countries (excluding Angola, Lesotho and Namibia) have initiatives to promote

¹⁰² Pain & Policy Studies Group, University of Wisconsin / WHO Collaborating Centre. International Narcotics Control Board; World Health Organization population data: 2012 AFRO consumption of morphine (mg/capita), 2014.

attitudinal change relating to 'opiophobia', and six nations (Angola, the DRC, Malawi, Namibia, Swaziland and Zambia) have initiatives that consider access to essential medications as a legal or human right. This is a welcome development, but more is needed to increase access to pain medication and other essential palliative care medication. Task shifting efforts in Uganda and South Africa, where nurses have been given authority to prescribe opioids after a duration of formal training, is one example that can be scaled-up in the region to increase access.

The inclusion of palliative care into national supportive policy initiatives and frameworks, though not comprehensive and not evident in all countries, does provide opportunities to advocate for the inclusion of palliative care in those nations where it is currently excluded. It is important that national palliative care programmes are advocated for that are supplemented by accountable monitoring and evaluation systems that can report on its effectiveness and resource needs.

Palliative care research

Palliative care research is important for shaping policy and informing needs for palliative care to underpin service standards and models of service that work. However, palliative care research is not well developed in the region, with only one country reportedly with dedicated research resources at its disposal. Additionally, only two countries have palliative care research groups, while six reported international research collaboration sites.

Embedding research components within the training and educational opportunities discussed above, as well as creating fledgling research groups with other health and social care academics, is one way of ensuring that palliative care services provided (especially in resource-poor settings) meet the needs of those they serve effectively and in a cost-effective manner.

The above recommendations are in part premised upon having advocacy agencies (e.g., national palliative care associations) *in situ* that can advance them and opportunities for professional networking and information and idea exchanges. Despite this, only five countries reported having a national association for palliative care, four having held a national palliative care conference, four having a palliative care directory/catalogue and only one has a palliative care journal / newsletter, but eight reported country delegates attending the 4th APCA conference in South Africa in 2013. Development of appropriate and meaningful professional activities will open up spaces for dialogue and networking that could influence the development of palliative care in the region through peer-to-peer learning.

Based upon the above findings, the country-level recommendations are outlined below.

Countries

Angola

- Investments should focus on developing an enabling environment in which palliative care can develop. This could include the development of national policies, frameworks and general education and training on palliative care that would require working with the MoH and other policy makers.
- Work needs to be initiated to secure policies for strengthening and expanding human resources, including education and the training of health care professionals to ensure adequate responses to identified palliative care needs, together with the training of volunteers and education of the general public.
- To create local drive and ownership, another priority would be identifying stakeholders (such as HIV or cancer service providers) who could be encouraged to integrate palliative care into existing services.
- From these service providers, a group could be encouraged and facilitated to emerge that could eventually form the kernel of a national palliative care association that can be a focal point for the discipline's development in the country.

Botswana

- Develop a hospice and palliative care policy to guide the provision of palliative care at all levels of the health system that aims to integrate the discipline in public and NGO health facilities. The recently formed Botswana Hospice and Palliative Care Association should work closely with the MoH to this service development end.
- Develop a governmental mechanism for the coordination of palliative care at the national level.
- Train more health professionals on palliative care and effective pain management to ensure full service coverage in combination with considering task sharing and task shifting in opioids prescription to address the shortages of doctors and pharmacists, the current legal handlers of opioids.
- Integrate comprehensive chronic care into pre- and in-service training of health and social care providers and the defining of a career pathway for palliative care.
- Review the in-service curriculum and palliative care training manuals of 2007 to include practical aspects of provision.
- Build the palliative care workforce by forging pre-training connections and options with the country's medical school; this will augment the in-service training opportunities that have been developed – including the development of materials for health professionals, allied health care workers and volunteers and work among doctors and pharmacists,

which started in 2013, that could be explored further and scaled-up – using the adapted WHO's IMAI guidelines as a starting point.

- Ensure government allocated funding towards the implementation of a national palliative care programme.
- Advocacy must be undertaken to promote access to essential medicines as a legal or human right, as well as increase significantly the availability of, and access to, oral morphine, and improve the collaborative work between the country's opioid prescribers and regulators.
- Existing site experiences of research can be used as a leverage point to forge the development of a dedicated palliative care research group that should establish connections with other researchers within and outside Africa through APCA.
- There is a need to advance palliative care services but ensure they are responsive to all marginalised populations.

Democratic Republic of Congo

- Limited service provision through the NGOs and MoH creates an entry point for service development and further investments should be directed to scale-up and integrate such services into the health system according to WHO recommendations. This will require support across a range of areas, including: policy development and implementation; capacity building among health care providers; the availability of, and access to, essential palliative care medicines; awareness creation and monitoring; and adequate financing and evaluation mechanisms. Other recommendations arising from the hospital survey need to be reviewed and implemented, where feasible.
- Support the development of a national palliative care association.
- Supplement the development of a palliative care service with supportive strategies, programmes and legislation that can be embedded in the development of cancer / NCDs and home-based care policies and frameworks, building upon the inclusion of the discipline in the country's national primary care programme.
- Although the country has no accredited palliative care training course, the 15 trained palliative care physicians need to be supported to apply their acquired skills so they can kick-start palliative care services in the DRC.
- Integrate palliative care training into medical schools.

- Advocate for the involvement of local technical and financial partners in palliative care activities. This work will require a dedicated budget line in the government's health budget.
- A prioritised need is to address the very poor availability of, and access to, oral morphine and working relations between the country's opioid prescribers and regulators.
- Existing experiences of research in the one reported group can be a leverage point to forge connections with other researchers within and outside Africa via APCA and its research network.
- There is a significant need to establish a palliative care service that should be responsive to all marginalised populations.

Lesotho

- Further funding is needed to review existing national health plans, especially the HIV/AIDS and NCD strategies, to identify opportunities through which limited palliative care services can be initiated.
- Through such work, a critical mass of interested organisation can be united to create a national task force through which palliative care be developed.
- It will also be important to advocate at the MoH level so the government can provide leadership for palliative care service development. This can be achieved in part through exchange visits for policy makers to countries where palliative care has already developed to demonstrate the first-hand benefits of palliative care.

Malawi

- The one national palliative care association is the focal point nationally for palliative care development in the country, working with the full support of the MoH, and should be supported financially and technically.
- Whilst the country has palliative care services, there is a significant need to establish a palliative care service that should be responsive to all marginalised populations.
- While the government is reportedly procuring morphine powder, and essential drugs have been included in national standard treatment guidelines, it is important to ensure that the procured amounts of medicine reflect need – and are effectively prescribed, especially in rural health centres – and guidelines are effectively implemented.
- The existing dedicated research groups should be funded to forge connections with other researchers within and outside Africa.

Mozambique

- The one national palliative care association is the focal point nationally for palliative care development in the country. It has forged stronger linkages with the country's Ministry of Health since its formation, and should be supported financially and technically.
- Whilst the country has palliative care services, they are very limited, and there is a significant need to establish a palliative care service that should be responsive to all marginalised populations. Developing pilot programmes for the integration of inclusive palliative care services into public and non-public health facilities is a potential way forward in this respect.
- Given the existence of strategies and programmes that include palliative care, there is a need to extend the dissemination of the national palliative care policy beyond Maputo province.
- Palliative care should also be integrated into those remaining policies from which it is currently omitted.
- To ensure the effective implementation of such a policy, it is imperative to advocate for a dedicated budget line for palliative care in the health budget.
- With no accredited palliative care training course, no palliative care physicians and two medical schools, there is need to create further pre- and in-service training opportunities for palliative care and effective pain management, and on supervising community-based volunteers.
- Advocacy should be undertaken to eliminate that legislation restricting how doctors are allowed to prescribe opioids, and start initiatives that consider access to essential medicines as a legal or human right. An initial step in this direction is a review of the Controlled Medicines Act of 1997 to help provide a supportive legal environment for opioid access.
- A critical area of work is all issues regarding the availability of, and access to, opioid and non-opioid medicines and collaboration between the country's opioid prescribers and regulators. In this regard, advocacy efforts should urge at least one more category of health care worker is legally permitted to prescribe opioids.
- With no dedicated research group (but one site experienced in international research), and no dedicated research resources, funding should be provided to forge connections with other researchers within and outside Africa.

Namibia

- The country has no national palliative care association, but has a National Palliative Care Taskforce. While the Taskforce should be supported financially and technically, there is a need to establish a national association that can arise from the Taskforce so the palliative care agenda has a coherent national agenda that is not necessarily time limited.
- Whilst the country has palliative care services, there is a need to provide services that are responsive to all marginalised populations and which are gender sensitive. Moreover, to address the low population density, and the significant geographic distances between health facilities, there is a need to train more community health workers in designated catchment areas and address the neglected level of development of children's palliative care services in the country.
- While the country has a palliative care policy, among other health-related policies, to ensure the effective implementation of these policies and programmes, it is imperative to advocate for a dedicated budget line for palliative care in the national health budget.
- With no accredited palliative care training course, no palliative care physicians and one medical school, there is need to create pre- and in-service training opportunities.
- Given the positive elements surrounding the availability of, and access to, opioid and non-opioid medicines and collaboration between the country's opioid prescribers and regulators, it is critical that the amounts of morphine requested by the government reflect the quantity of actual patient need.
- With no dedicated research group (and no sites experienced in international research), and no dedicated research resources, funding should be provided to forge connections with other researchers within and outside Africa.

Swaziland

- Given the strong government ownership of palliative care in the Swaziland, it is important to strengthen the MoH structures for national palliative care coordination and implementation. In this respect, the MoH should form, via the Swaziland National AIDS Program, a palliative care technical working group or national palliative care committee to advocate for, facilitate and integrate palliative care into the health system at all levels.
- Despite being reported that the country provides services to all seven marginalised populations, it is important to determine what that means in practice.
- With a palliative care policy and a national palliative care strategy, both of which include the discipline as a human or legal right, no national strategies for cancer / NCDs, and a national strategy for home-based care that includes palliative care, there is a need for a

programme on cancer / NCDs to include palliative care. To ensure the effective implementation of these policies and programmes, it is imperative to advocate for a dedicated budget line for palliative care in the national health budget.

- With no accredited palliative care training course, and no medical schools, there is need to utilise the five palliative care physicians to create in-service training opportunities. However, there is in-service training by the MoH based on its curriculum. Consequently, there is potential in investing in more specialized palliative care training, which will require necessary resources.
- Given the positive elements surrounding the availability of, and access to, opioid and non-opioid medicines, it is critical that the amounts of morphine requested by the government reflect the quantity of need and collaboration between the country's opioid prescribers and regulators is systematically improved.
- Advocate for at least one more category of health care worker to be permitted legally to prescribe opioids given the acute shortage of primarily urban-based doctors.
- With no dedicated research group (and no sites experienced in international research), and no dedicated research resources, funding should be provided to forge connections with other researchers within and outside Africa.

Zambia

- The country has one national palliative care association and a National Palliative Care Technical Working Group that is chaired by the Ministry of Health. These create strong ownership opportunities for palliative care development and provides an opportunity for advocacy to increase MoH resources to support further palliative care service development.
- Despite a reported increase in palliative care teams providing services for patients with a HIV/AIDS or cancer diagnosis, it provides them for only two (disabilities and the elderly) of seven marginalised populations, and is not considered gender sensitive. This limitation could be addressed through an intentional expansion of the availability of services to include marginalised communities.
- While the country has a national palliative care policy and strategies for cancer / NCDs and home-based care – both of which include palliative care, and a national palliative care programme that sees the discipline as a human or legal right – and national cancer, HIV/AIDS, and primary care programmes that all include palliative care, the country has no dedicated budget line for palliative care in their health budget. To ensure the effective implementation of these policies and programmes, it is imperative to advocate for a dedicated budget line for palliative care in the national health budget.

- With no accredited palliative care training course, there is need to enhance existing in-service training opportunities and explore the strategic development of pre-service training and education among the three medical schools.
- While there is no legislation restricting how doctors are allowed to prescribe opioids, it has initiatives to promote attitudinal change relating to 'opiophobia', but no system in place for monitoring and evaluating palliative care health policies.
- While the availability of, and patient access to, non-opioid essential palliative care medicines are mixed, the availability of oral morphine is reportedly good, despite the very low reported data from the International Narcotics Control Board and patient access being poor, and collaboration between the country's opioid prescribers and regulators are rated as mixed. It is critical that the amounts of morphine requested by the government reflect the quantity of need and collaboration between the country's opioid prescribers and regulators is systematically improved.
- With no dedicated research group (but multiple sites experienced in international research), and no dedicated research resources, funding should be provided to forge connections with other researchers within and outside Africa.

Zimbabwe

- Zimbabwe has one national palliative care association, which is the focal point nationally for palliative care development in the country, working closely with the MoH and HOSPAZ. The relationship between the three bodies needs to be strengthened as they collectively provide an immense opportunity to increasing palliative care development in the country.
- The country has palliative care services for patients with a HIV/AIDS or cancer diagnosis, and services for five (prisoners, LGBT [limited], CSW [limited], disabilities and the elderly) of seven marginalised populations. Whilst the country has palliative care services, there is a need to provide services that are responsive to all marginalised populations.
- While the country has a national palliative care policy and strategies for cancer / NCDs and home-based care, with both including palliative care, and no national palliative care programme, as well as national cancer, HIV/AIDS, and primary care programmes, the status of a dedicated budget line nationally for palliative care in the country is unknown. To ensure the effective implementation of these policies and programmes, it is imperative to advocate for a dedicated budget line for palliative care in the national health budget.

- With no accredited palliative care training course, there is need to enhance existing in-service training opportunities and explore the strategic development of pre-service training and education among its medical schools.
- Despite not having legislation restricting how doctors are allowed to prescribe opioids, it has initiatives to promote attitudinal change relating to 'opiophobia', but not initiatives that consider access to essential medicines as a legal or human right, and no system in place for monitoring and evaluating palliative care health policies. A starting point in this regard would be a review of the Dangerous Drugs Act to remove terms like 'dangerous' and 'narcotics,' which can hinder health workers' willingness to prescribe opioids. Similarly, in order to address any misperceptions regarding the fear of analgesic abuse arising from subject ignorance, a systematic training programme could be developed for policy and technical personnel dealing with opioids to improve existing levels of knowledge and understanding for medical and scientific purposes.
- While the availability of, and patient access to, non-opioid essential palliative care medicines are good, the availability of oral morphine in the country is rated as mixed, and patient access to oral morphine rated as poor, which accords with the very low reported data from the International Narcotics Control Board, and collaboration between the country's opioid prescribers and regulators are rated as poor. It is critical that the amounts of morphine requested by the government reflect the quantity of actual patient need not current consumption levels (with a review of the procedures entailed in national opioid requirement estimations) and collaboration between the country's opioid prescribers and regulators is systematically improved. Given the low health-workers-to-population ratios evident in the country, there is a need for nurses trained in palliative care to receive permission to prescribe strong analgesics.
- With no dedicated research group (but multiple sites experienced in international research), and no dedicated research resources, funding should be provided to forge connections with other researchers within and outside Africa.

ACKNOWLEDGEMENTS

The consultant for, and author of, this report was Richard A. Powell. The African Palliative Care Association, and the author, expresses their gratitude to those national experts who kindly agreed to participate in this study.

Thanks are also given to the following for their advice, help, and support: Mary Callaway, Open Society Foundations, New York; Ntokozo Dlamini of Open Society Initiative of Southern Africa; Dr Tom Lynch, Senior Research Program Coordinator, Department of Anaesthesiology and Critical Care Medicine & Palliative Care Program, Kimmel Cancer Centre, The Johns Hopkins School of Medicine, USA; Dr Stephen Connor, World Hospice and Palliative Care Association; and Eve Namisango, Research Manager at the African Palliative Care Association.

APPENDICES

APPENDIX 1: STUDY DATA COLLECTION TOOL

Review of palliative care in ten Southern African countries

In 2009 the African Palliative Care Association (APCA), with funding from the Southern Africa Open Society Initiative and the Open Society Foundations' International Palliative Care Initiative, undertook a review of palliative care policies and provision across ten southern African countries. Since then, palliative care development in the region has moved forward significantly but has not been documented.

This project, led by APCA and the African Palliative Care Research Network (APCRN), aims to address this information gap by undertaking a comprehensive review of palliative care developments in the target countries to inform future financial investment and service development.

We would like you to take part in this important survey given your present position, which will enable you to provide informed opinions. As such, APCA would be very grateful if you could take a few minutes to complete the following brief questions about palliative care in your country. Information from the survey will be used to develop a briefing paper to inform national governments in the region that advocates for further palliative care development, and for donors.

Your participation in this anonymous survey is voluntary and will not impact negatively upon you. You are free to leave any questions unanswered if you choose not to answer them. Because we are not collecting any personal identifiers, there will be no way to connect you to your answers. APCA believes there is minimal risk in taking this survey. Once all data have been collated, your original questionnaire will be destroyed.

A summary of the final results will be posted on the APCA website and circulated through ehospice.

If you have any questions about this survey at any time, you may contact Eve Namisango, Research Manager at the APCA, at eve.namisango@africanpalliativecare.org, call on +256 312 264 978.

We thank you for your interest and participation in this study. Please email your completed questionnaire to Eve Namisango.

Section A: Working definition

1. The World Health Organization defines palliative care as:

“ ... an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.

“Palliative care:

- provides relief from pain and other distressing symptoms;
- affirms life and regards dying as a normal process;
- intends neither to hasten or postpone death;
- integrates the psychological and spiritual aspects of patient care;
- offers a support system to help patients live as actively as possible until death;
- offers a support system to help the family cope during the patients illness and in their own bereavement;
- uses a team approach to address the needs of patients and their families, including bereavement counselling, if indicated;
- will enhance quality of life, and may also positively influence the course of illness;
- is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications.”

Is that definition the one that is used by palliative care services in your country?

☐ Yes ☐ No

1a. If ‘no’, please outline the definition of palliative care that is used.

Section B: Palliative care services

2. How would you describe the status of palliative care activity in your country (*select one option only*)?

- ☐ **Level 1:** No known hospice-palliative care activity
- ☐ **Level 2:** Capacity building activity (e.g., training)

- ☐ **Level 3a:** Isolated palliative care provision (this group of countries is characterized by: the development of palliative care activism that is patchy in scope and not well supported; sourcing of funding that is often heavily donor dependent; limited availability of morphine; and a small number of hospice-palliative care services that are often home-based in nature and relatively limited to the size of the population).
- ☐ **Level 3b:** Generalised palliative care provision (this group of countries is characterised by: the development of palliative care activism in a number of locations with the growth of local support in those areas; multiple sources of funding; the availability of morphine; a number of hospice-palliative care services from a community of providers that are independent of the healthcare system; and the provision of some training and education initiatives by the hospice organisations).
- ☐ **Level 4a:** Countries where hospice-palliative care services are at a stage of preliminary integration into mainstream service provision (this group of countries is characterised by: the development of a critical mass of palliative care activism in a number of locations; a variety of palliative care providers and types of services; awareness of palliative care on the part of health professionals and local communities; the availability of morphine and some other strong pain-relieving medicines; limited impact of palliative care upon policy; the provision of a substantial number of training and education initiatives by a range of organisations; and interest in the concept of a national palliative care association).
- ☐ **Level 4b:** Countries where hospice-palliative care services are at a stage of advanced integration into mainstream service provision. This group of countries is characterised by: the development of a critical mass of palliative care activism in a wide range of locations; comprehensive provision of all types of palliative care by multiple service providers; broad awareness of palliative care on the part of health professionals, local communities and society in general; unrestricted availability of morphine and all other strong pain-relieving medicines; substantial impact of palliative care upon policy, in particular upon public health policy; the development of recognised education centres; academic links forged with universities; and the existence of a national palliative care association).

3. Does your country have any of the following services and, if yes, how many?

3a. Palliative care units in hospitals: ☐ Yes ☐ No

3b. If 'yes', how many facilities?

3c. Home palliative care support team: ☐ Yes ☐ No

3d. If 'yes', how many teams?

3e. Community outreach palliative care centre: ☐ Yes ☐ No

3f. If 'yes', how many centres?

3g. Hospital palliative care support team: ☐ Yes ☐ No

If 'yes', what service level is that hospital?

3h. Mixed palliative care support teams: ☐ Yes ☐ No

3i. If 'yes', how many services / teams?

3j. Day care: ☐ Yes ☐ No

3k. If 'yes', how many centers?

3l. Volunteer hospice team: ☐ Yes ☐ No

3m. Workforce capacity for all types of service: ☐ Yes ☐ No

3n. Paediatric palliative care services: ☐ Yes ☐ No

3o. If 'yes', how many services?

3p. Palliative care in other community settings: ☐ Yes ☐ No

3q. Palliative care for HIV patients: ☐ Yes ☐ No

3r. Palliative care for cancer patients: ☐ Yes ☐ No

4. Are these services available to the following marginalized populations?:

- ☐ Prisoners ☐ Yes ☐ No
- ☐ Lesbians, gay, bisexual and transgendered (LGBT) ☐ Yes ☐ No
- ☐ Men having sex with men ☐ Yes ☐ No
- ☐ Commercial sex workers ☐ Yes ☐ No
- ☐ People living with disabilities ☐ Yes ☐ No
- ☐ Elderly ☐ Yes ☐ No
- ☐ Drug users ☐ Yes ☐ No

5. Do you think these palliative care services are gender sensitive?

☐ Yes ☐ No

5a. If 'yes', please explain why you think that is the case.

Section C: Palliative care training

6. Does your country have an accredited palliative care training course?

☐ Yes ☐ No

6a. If 'no', skip to question 7.

If 'yes', what year was it given accreditation status?

6b. How long (in hours, days, weeks, months, whatever is applicable) is that course?

6c. What type of accreditation has the palliative care course been given (*please select one only*)?

- ☐ Certification
- ☐ Course
- ☐ Diploma
- ☐ Sub-specialty
- ☐ Speciality

7. Please describe what other types of palliative care training courses (both pre- and in-service, and their levels), if any, are provided in your country (e.g., nursing, medicine, social work, other professions).

If 'none', skip to question 8.

8. Is palliative care training part of either university undergraduate or postgraduate training (*please select one only*)?

- ☐ Undergraduate
- ☐ Postgraduate
- ☐ Both
- ☐ None / not applicable (please skip to question 9)

8a. If 'none' or 'not applicable', skip to question 9.

If another response, is it an examinable course?

- ☐ Yes ☐ No

8b. What is the level of the resulting qualification? (*please select all that apply*)?

- ☐ Diploma
- ☐ Undergraduate degree
- ☐ Postgraduate degree
- ☐ Other (please write here): _____

9. Are there any physicians (local or expatriate) who are accredited palliative care professionals?

- ☐ Yes ☐ No

9a. If 'no', skip to question 10.

If 'yes', approximately how many?

10. Does your country have a postgraduate diploma in palliative care?

- ☐ Yes ☐ No

11. Does your country have a medical school?

- ☐ Yes ☐ No

11a. If 'no', skip to question 12.

If 'yes', how many medical schools?

12. Does your country have a medical school with a palliative care course?

- ☐ Yes ☐ No

12a. If 'no', skip to question 13.

If 'yes', how many medical schools have a palliative care course?

12b. What is the nature of that course / those courses? (*please select one only*)

- ☐ Mandatory
- ☐ Optional
- ☐ Both mandatory and optional

12c. Does your medical school have a professor of palliative care? (*please select all that apply*)

- ☐ Full professor
- ☐ Assistant professor
- ☐ Professor in other schools
- ☐ None of the above

Section D: Professional activity

13. Does your country have a national association for palliative or hospice care?

- ☐ Yes ☐ No

13a. If 'no', skip to question 14.

If 'yes', how many national associations?

14. Has your country ever held a national palliative care conference?

- ☐ Yes ☐ No

14a. If 'no', skip to question 15.

If 'yes', how many?

15. Does your country have any palliative care research groups / research capacity?

- ☐ Yes ☐ No

15a. If 'no', skip to question 16.

If 'yes', how many?

16. Are any palliative care sites involved with international collaboration (within our outside Africa) in palliative care?

- ☐ Yes ☐ No

16a. If 'no', skip to question 17.

If 'yes', how many?

17. Does your country have any care standards, norms or guidelines for palliative care?

☐ Yes ☐ No

17a. If 'no', skip to question 18.

If 'yes', please describe what they are.

18. Does your country have a directory or catalogue of palliative care providers?

☐ Yes ☐ No

19. Does your country have a national journal or newsletter for palliative care?

☐ Yes ☐ No

20. Can you estimate how many (if any) people attended the 4th APCA palliative care conference in 2013?

☐ Yes ☐ No

20a. If 'no', skip to question 21.

If 'yes', approximately how many?

Section E: Health policy

21. Does your country have national legislation on palliative care (e.g., at the federal, state, provincial or municipal levels)?

☐ Yes ☐ No

21a. If 'no', skip to question 22.

If 'yes', does it describe palliative care as a human right? ☐ Yes ☐ No

22. Does your country have a national stand-alone palliative care strategy?

☐ Yes ☐ No

22a. If 'no', skip to question 23.

If 'yes', does it describe palliative care as a human right? ☐ Yes ☐ No

23. Does your country have a national cancer / NCD strategy?

☐ Yes ☐ No

23a. If 'no', skip to question 24.

If 'yes', does it include palliative care? ☐ Yes ☐ No

24. Does your country have a national home-based care strategy?

☐ Yes ☐ No

24a. If 'no', skip to question 25.

If 'yes', does it include palliative care? ☐ Yes ☐ No

25. Does your country have a national palliative care programme plan?

☐ Yes ☐ No

25a. If 'no', skip to question 26.

If 'yes', does it describe palliative care as a human right? ☐ Yes ☐ No

26. Does your country have an auditing, monitoring or evaluation system in place for palliative care?

☐ Yes ☐ No

27. Does your country have a national cancer programme?

☐ Yes ☐ No

27a. If 'no', skip to question 28.

If 'yes', does it include palliative care? ☐ Yes ☐ No

28. Does your country have a national HIV/AIDS programme?

☐ Yes ☐ No

28a. If 'no', skip to question 29.

If 'yes', does it include palliative care? ☐ Yes ☐ No

29. Does your country have a national primary care programme?

☐ Yes ☐ No

29a. If 'no', skip to question 30.

If 'yes', does it include palliative care? ☐ Yes ☐ No

30. Does your government's health budget have a dedicated line for palliative care?

☐ Yes ☐ No

31. Apart from the government, what are the main sources of funding for palliative care in your country?

32. Does your country have dedicated resources for palliative care research?

☐ Yes ☐ No

33. On a scale of 1-5 (*with 1 being very poor and 5 being excellent*), how would you rate collaboration between the country's opioid prescribers and regulators? (*please select one only*)

☐ 1. Very poor ☐ 2. Poor ☐ 3. Mixed ☐ 4. Good ☐ 5. Excellent

34. On a scale of 1-5 (*with 1 being very poor and 5 being excellent*), how would you rate the *availability* of oral morphine in your country? (*please select one only*)

☐ 1. Very poor ☐ 2. Poor ☐ 3. Mixed ☐ 4. Good ☐ 5. Excellent

35. On a scale of 1-5 (*with 1 being very poor and 5 being excellent*), how would you rate patient access to oral morphine in your country? (*please select one only*)

☐ 1. Very poor ☐ 2. Poor ☐ 3. Mixed ☐ 4. Good ☐ 5. Excellent

36. On a scale of 1-5 (*with 1 being very poor and 5 being excellent*), how would you rate the *availability* of other non-opioid essential palliative care medicines in your country? (*please select one only*)

☐ 1. Very poor ☐ 2. Poor ☐ 3. Mixed ☐ 4. Good ☐ 5. Excellent

37. On a scale of 1-5 (*with 1 being very poor and 5 being excellent*), how would you rate patient access to other non-opioid essential palliative care medicines in your country? (*please select one only*)

☐ 1. Very poor ☐ 2. Poor ☐ 3. Mixed ☐ 4. Good ☐ 5. Excellent

38. Does your country have any legislation that restricts how doctors are allowed to prescribe opioids?

☐ Yes ☐ No

38a. If 'no', skip to question 39.

If 'yes', please explain what those restrictions are?

39. Does your country have any initiatives to change regulations that may restrict physician or patient access to pain relief?

☐ Yes ☐ No

40. Does your country have any initiatives to promote attitudinal change relating to 'opiophobia'?

☐ Yes ☐ No

41. Does your country have any initiatives that consider access to essential medicines as a legal or human right?

☐ Yes ☐ No

Section F: Personal information

Your name: _____

Name of your organisation: _____

Type of organisation (*please select one only*):

- ☐ National palliative care association /palliative care country team
- ☐ Palliative care service provider
- ☐ Educational institution
- ☐ Government ministry
- ☐ Other (please write here): _____

Your job title: _____

Your city and country: _____

On behalf of APCA, thank you for your time in completing this form.

Please return to Eve Namisango, Research Manager at APCA, on

eve.namisango@africanpalliativecare.org

APPENDIX 2: TABULATED RESULTS

Table 1: General characteristics

| Country | Population (millions) (%) ¹ | Area km ² (%) ² | Density (inhab./km ²) 2013 ³ | Physicians / 1,000 inhab. ⁴ | World Bank Classification ⁵ | HDI (rank) 2013 ⁶ | % population poverty headcount ratio at \$1.25 a day (year) ⁷ | Health expenditure (% of GDP) ⁸ | Per capita total expenditure on health (US\$; 2013) ⁹ | % per capita govt expenditure on health (US\$; 2011) ¹⁰ |
|--------------|--|---------------------------------------|---|--|--|------------------------------|--|--|--|--|
| Angola | 22.4 (12.96) | 1.25m (17.60) | 17 | n/a | Upper middle income | Low (149) | 43.4% ('08) | 3.8 | 267 | 132.0 |
| Botswana | 2.0 (1.16) | 581.730 (8.19) | 4 | n/a | Upper middle income | Medium (109) | 13.4 ('09) | 5.4 | 397 | 446.4 |
| DRC | 71.2 (41.20) | 2.34m (32.93) | 30 | n/a | Low income | Low (186) | 87.7% ('05) | 3.5 | 16 | 10.8 |
| Lesotho | 1.9 (1.10) | 30.355 (0.43) | 68 | n/a | Lower middle income | Low (162) | 56.2 ('10) | 11.5 | 123 | 162.1 |
| Malawi | 16.8 (9.72) | 118.484 (1.67) | 174 | n/a | Low income | Low (174) | 72.2% ('10) | 8.3 | 26 | 56.5 |
| Mozambique | 25.1 (14.53) | 799.380 (11.25) | 33 | n/a | Low income | Low (178) | 60.7% ('09) | 6.8 | 40 | 27.0 |
| Namibia | 2.3 (1.33) | 824.292 (11.60) | 3 | n/a | Upper middle income | Medium (127) | 23.5% ('09) | 7.7 | 423 | 208.2 |
| Swaziland | 1.3 (0.75) | 17.364 (0.24) | 73 | n/a | Lower middle income | Low (148) | 39.3% ('09) | 8.4 | 256 | 300.9 |
| Zambia | 15.1 (8.74) | 752.618 (10.59) | 20 | n/a | Lower middle income | Medium (141) | 74.3% ('10) | 5.4 | 93 | 59.4 |
| Zimbabwe | 14.7 (8.51) | 390.757 (5.50) | 37 | n/a | Low income | Low (156) | n/a | 5.0 | n/a | n/a |
| Total | 172.8 (100) | 7.11m (100) | - | - | - | - | - | - | - | - |

Notes:

1. Population Reference Bureau. *2014 World Population Data Sheet*. Washington DC: Population Reference Bureau, 2014.
2. Central Intelligence Agency. *The World Fact Book*. Source: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2147rank.html>. Accessed: May 20, 2015.
3. World Bank. Population density (people per sq. km of land area). Source: <http://data.worldbank.org/indicator/EN.POP.DNST>. Accessed: May 20, 2015.
4. World Bank. Physicians (per 1,000 people). Source: <http://data.worldbank.org/indicator/SH.MED.PHYS.ZS>. Accessed: May 20, 2015.
5. World Bank. Countries and economies. Source: <http://data.worldbank.org/country>. Accessed: May 20, 2015.
6. Human Development Report Office. *Human Development Report, 2014: Sustaining Human Progress – Reducing Vulnerabilities and Building Resilience*. New York: United Nations Development Programme, 2014.
7. World Bank. Poverty and equity. Source: <http://povertydata.worldbank.org/poverty/region/SSA>. Accessed: May 21, 2015.
8. World Bank. Health expenditure, total (% of GDP). Source: <http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS>. Accessed: May 21, 2015.
9. World Bank. Health expenditure per capita (current US\$). Source: <http://data.worldbank.org/indicator/SH.XPD.PCAP>. Accessed: May 21, 2015.
10. UN Data. Per capita government expenditure on health (PPP int. \$). Source: http://data.un.org/Data.aspx?d=WHO&f=MEASURE_CODE%3AWHS7_108. Accessed: May 21, 2015.

Table 2: Palliative care services

| Country | WHO definition used | Status level of PC activity | Units in hospitals | Home support team | Community outreach centre | Hospital support team | Mixed support team | Day care | Volunteer hospice team | W/force capacity for all service types | Paediatric service | Other community settings |
|--------------|---------------------|-----------------------------|--------------------|-------------------|---------------------------|-----------------------|--------------------|----------|------------------------|--|--------------------|--------------------------|
| Angola | n/a | 3a | No | No | No | No | No | No | No | No | No | No |
| Botswana | Yes | 3a | No | Yes | No | Yes | - | - | Yes | No | Yes | Yes |
| DRC | Yes | 2 | No | Yes | No | No | No | No | Yes | No | No | No |
| Lesotho | n/a | 3a | No | No | No | No | No | No | No | No | No | No |
| Malawi | Yes | 4a | Yes | - | - | - | - | - | - | - | Yes | - |
| Mozambique | Yes | 3a | Yes | Yes | - | No | No | No | No | - | No | Yes |
| Namibia | Yes | 3a | No | No | No | No | No | No | No | No | No | Yes |
| Swaziland | Yes | 3b | No | Yes | No | Yes | Yes | No | No | No | - | Yes |
| Zambia | Yes | 4a | Yes | No | No | Yes | Yes | No | No | Yes | Yes | Yes |
| Zimbabwe | Yes | 4a | Yes | Yes | Yes | Yes | - | No | No | - | Yes | Yes |
| Total | 8 | - | 4 | 5 | 1 | 4 | 2 | 0 | 2 | 1 | 4 | 6 |

Table 3: Palliative care services (cont.)

| Country | For HIV pts | For cancer pts | Marginalized populations | | | | | | | Gender sensitive |
|--------------|-------------|----------------|--------------------------|-------------|------------|-------------|---------------------|----------------|----------------------|------------------|
| | | | <i>Prisoners</i> | <i>LGBT</i> | <i>MSM</i> | <i>CSWs</i> | <i>Disabilities</i> | <i>Elderly</i> | <i>Drug misusers</i> | |
| Angola | No | No | No | No | No | No | No | No | No | n/a |
| Botswana | Yes | Yes | No | No | No | No | Yes | Yes | No | Yes |
| DRC | No | No | No | No | No | No | No | No | No | No |
| Lesotho | No | No | No | No | No | No | No | No | No | n/a |
| Malawi | Yes | Yes | No | No | No | No | No | No | No | Yes |
| Mozambique | Yes | Yes | No | No | No | No | Yes | No | Yes | Yes |
| Namibia | Yes | Yes | Yes | No | No | No | No | No | No | No |
| Swaziland | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Zambia | Yes | Yes | No | No | No | No | Yes | Yes | No | No |
| Zimbabwe | Yes | Yes | Yes | Yes | - | Yes | Yes | Yes | - | Yes |
| Total | 7 | 7 | 3 | 2 | 1 | 2 | 5 | 4 | 2 | 5 |

Table 4: Palliative care training

| Country | Accredited training course | Accreditation year | Course length | Accreditation type | | | | | University training | | | |
|--------------|----------------------------|--------------------|---------------|--------------------|----------|----------|----------------|------------|---------------------|----------|----------|----------|
| | | | | Certification | Course | Diploma | Sub-speciality | Speciality | U/grad | P/grad | Both | None |
| Angola | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Botswana | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | - | - | - | Yes |
| DRC | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | - | - | - | Yes |
| Lesotho | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | - | - | - | - |
| Malawi | Yes | 2008 | 5 days | Yes | No | No | No | No | - | Yes | - | - |
| Mozambique | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Namibia | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | - | - | - | Yes |
| Swaziland | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | - | - | - | Yes |
| Zambia | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | Yes |
| Zimbabwe | No | n/a | n/a | n/a | n/a | n/a | n/a | n/a | - | - | - | Yes |
| Total | 1 | - | - | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | - |

Table 5: Palliative care training (cont.)

| Country | No of PC physicians | P/grad PC diploma | No of medical schools | No of medical schools with PC course | Nature of course | | | Professor of PC |
|--------------|---------------------|-------------------|-----------------------|--------------------------------------|------------------|-----------------|-------------|-----------------|
| | | | | | <i>Mandatory</i> | <i>Optional</i> | <i>Both</i> | |
| Angola | None | No | - | No | n/a | n/a | n/a | n/a |
| Botswana | 1 | No | 1 | No | n/a | n/a | n/a | n/a |
| DRC | 15 | Yes | 500 | No | n/a | n/a | n/a | n/a |
| Lesotho | None | No | 1 | No | n/a | n/a | n/a | None |
| Malawi | 3 | No | 3 ¹ | No | n/a | n/a | n/a | None |
| Mozambique | None | No | 2 | NO | n/a | n/a | n/a | n/a |
| Namibia | None | No | 1 | No | n/a | n/a | n/a | None |
| Swaziland | 5 | No | 0 | No | n/a | n/a | n/a | n/a |
| Zambia | None | No | 3 | No | n/a | n/a | n/a | None |
| Zimbabwe | 3 | No | 3 | 1 | - | - | Yes | DK |
| Total | - | 1 | - | 1 | 0 | 0 | 1 | 0 |

Notes:

1. This is disaggregated as one medical college (for the training of doctors) and two colleges of sciences (for the training of clinical officers).

Table 6: Professional activity

| Country | Association for pall. care | National conference | Research groups | International cooperation sites | Standards, norms or guidelines | Directory / catalogue | Journal / newsletter | Participants at 4 th APCA conference |
|--------------|-------------------------------|------------------------|--------------------|---------------------------------------|--------------------------------------|--------------------------|-------------------------|---|
| Angola | No | No | No | No | No | No | No | No |
| Botswana | Yes | No | - | Yes | Yes | Yes | No | Yes |
| DRC | No | Yes | Yes | Yes | No | No | No | Yes |
| Lesotho | No | No | No | n/a | No | No | No | No |
| Malawi | Yes | No | Yes | Yes | Yes | Yes | No | Yes |
| Mozambique | Yes | No | No | Yes | Yes | Yes | No | Yes |
| Namibia | No | Yes | No | No | Yes | No | No | Yes |
| Swaziland | No | No | No | - | Yes | No | No | Yes |
| Zambia | Yes | Yes | No | Yes | No | No | No | Yes |
| Zimbabwe | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes |
| Total | 5 | 4 | 2 | 6 | 6 | 4 | 1 | 8 |

Table 7: Health policy

| Country | National policy | PC a human right | National strategy | PC a human right | National cancer / NCD strategy | Includes PC | National home-based strategy | Includes PC | National PC programme | PC a human right | PC auditing / M&E in place |
|--------------|-----------------|------------------|-------------------|------------------|--------------------------------|-------------|------------------------------|-------------|-----------------------|------------------|----------------------------|
| Angola | No | n/a | No | n/a | No | n/a | No | n/a | No | n/a | No |
| Botswana | Yes | Yes | Yes | - | Yes | - | Yes | - | No | n/a | No |
| DRC | No | n/a | No | n/a | No | n/a | Yes | - | No | n/a | No |
| Lesotho | No | n/a | No | n/a | No | n/a | Yes | No | No | n/a | No |
| Malawi | Yes | - | No | n/a | Yes | Yes | Yes | Yes | No | n/a | Yes |
| Mozambique | Yes | No | No | n/a | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Namibia | Yes | Yes | Yes | Yes | No | n/a | Yes | Yes | No | n/a | Yes |
| Swaziland | Yes | Yes | Yes | Yes | No | n/a | Yes | Yes | Yes | Yes | Yes |
| Zambia | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Zimbabwe | Yes | Yes | No | n/a | Yes | Yes | Yes | Yes | No | n/a | No |
| Total | 7 | 5 | 4 | 2 | 5 | 4 | 9 | 6 | 3 | 3 | 4 |

Table 8: Health policy (cont.)

| Country | National cancer program | Includes PC | National HIV/AIDS program | Includes PC | National primary care program | Includes PC | Dedicated budget line | Dedicated research resources | Restrictive laws: doctors | Initiatives to change laws | Combat 'opiophobia' | Access to essential meds a human right |
|--------------|-------------------------|-------------|---------------------------|-------------|-------------------------------|-------------|-----------------------|------------------------------|---------------------------|----------------------------|---------------------|--|
| Angola | No | n/a | Yes | No | Yes | No | No | No | No | No | No | Yes |
| Botswana | Yes | - | Yes | - | Yes | No | No | Yes | No | Yes | Yes | No |
| DRC | No | n/a | Yes | No | Yes | Yes | No | No | No | Yes | Yes | Yes |
| Lesotho | Yes | No | Yes | No | Yes | No | No | No | No | No | No | No |
| Malawi | Yes | Yes | Yes | Yes | Yes | No | Yes | No | No | Yes | Yes | Yes |
| Mozambique | Yes | No | Yes | Yes | Yes | No | No | No | Yes | No | Yes | No |
| Namibia | No | n/a | Yes | Yes | Yes | Yes | No | No | No | Yes | No | Yes |
| Swaziland | No | n/a | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes |
| Zambia | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | Yes | Yes | Yes |
| Zimbabwe | Yes | Yes | Yes | Yes | Yes | - | DK | No | No | No | Yes | No |
| Total | 6 | 3 | 10 | 6 | 10 | 4 | 2 | 1 | 1 | 6 | 7 | 6 |