APCA Atlas of Palliative Care in Africa

John Y. Rhee, Emmanuel Luyirika, Eve Namisango, Richard A. Powell, Eduardo Garralda, Juan José Pons, Liliana de Lima, Carlos Centeno
APCA Atlas of Palliative Care in Africa
John Y. Rhee, Emmanuel Luyirika, Eve Namisango, Richard A. Powell, Eduardo Garralda, Juan José Pons, Liliana de Lima, Carlos Centeno
Table of contents

Introduction  ........................................................................................................... 7
Authors and Institutions ................................................................................ 9
Collaborators ........................................................................................................ 10
Institutions: About APCA, University of Navarra, IAHPC .................................................. 12
Preface .................................................................................................................... 14
Note from the Authors ......................................................................................... 15
Abstract ............................................................................................................... 16
Value of the Book ................................................................................................ 17
Aims and Objectives ............................................................................................ 18
Methods ............................................................................................................... 19

Thematic Maps ..................................................................................................... 27
Map 1. Geopolitical Map ....................................................................................... 28
Map 2. Socioeconomic Context ............................................................................ 30
Map 3. Palliative Care Hospices or Services .......................................................... 32
Map 4. Palliative Care Services per Population ....................................................... 34
Map 5. Paediatric Hospices or Palliative Care Services .......................................... 36
Map 6. Home-based Palliative Care Services in Hospices ....................................... 38
Map 7. Patients Cared for by Palliative Care Services ............................................ 40
Map 8. Hospitals with an inpatient Palliative Care Unit .......................................... 42
Map 9. Palliative Care Plans or Programmes ......................................................... 44
Map 10. Other Policy Indicators ............................................................................ 46
Map 11. Palliative Care Education ......................................................................... 48
Map 12. Medicines ................................................................................................ 50
Map 13. Palliative Care Professional Activity (Vitality) ......................................... 52
Map 14. Palliative Care Research .......................................................................... 54

Country Information ............................................................................................ 57
Algeria .................................................................................................................... 58
Angola .................................................................................................................... 60
Benin ...................................................................................................................... 62
Botswana .............................................................................................................. 64
Burkina Faso ......................................................................................................... 66
Burundi .................................................................................................................. 68
Cameroon ............................................................................................................. 70
Central African Republic ....................................................................................... 72
Comoros ............................................................................................................... 74
Côte d’Ivoire ......................................................................................................... 76
Democratic Republic of Congo .............................................................................. 78
Egypt ...................................................................................................................... 80
Equatorial Guinea ................................................................................................. 82
Eritrea .................................................................................................................... 84
Ethiopia ............................................................................................................... 86
Gabon ..................................................................................................................... 88
Gambia, The ......................................................................................................... 90
Ghana ..................................................................................................................... 92
Guinea .................................................................................................................... 94
Kenya ..................................................................................................................... 96
Lesotho ................................................................................................................ 98
Liberia .................................................................................................................. 100
Libya .................................................................................................................... 102
Madagascar ......................................................................................................... 104
Malawi ................................................................................................................ 106
Mali ....................................................................................................................... 108
Mauritania ........................................................................................................... 110
Mauritius .............................................................................................................. 112
Morocco .............................................................................................................. 114
Mozambique ....................................................................................................... 116
Namibia ............................................................................................................... 118
Niger .................................................................................................................... 120
Nigeria ................................................................................................................. 122
Republic of Congo ............................................................................................... 124
Rwanda ............................................................................................................... 126
São Tomé e Príncipe ............................................................................................ 128
Senegal ............................................................................................................... 130
Sierra Leone ....................................................................................................... 132
South Africa ...................................................................................................... 134
South Sudan ....................................................................................................... 136
Sudan ................................................................................................................. 138
Swaziland ........................................................................................................... 140
Tanzania .............................................................................................................. 142
Togo ..................................................................................................................... 144
Tunisia ............................................................................................................... 146
Uganda ................................................................................................................. 148
Zambia ............................................................................................................... 150
Zimbabwe ........................................................................................................... 152
1. Introduction
The APCA Atlas of Palliative Care in Africa 2017 has been developed by a partnership of the following institutions: the African Palliative Care Association, the Arnhold Institute for Global Health at the Icahn School of Medicine at Mount Sinai, the International Association for Hospice and Palliative Care, and the ATLANTES Research Program at the Institute for Culture and Society at the University of Navarra.

### Authors

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Yohan Rhee</td>
<td>Arnhold Institute for Global Health, Icahn School of Medicine at Mount Sinai, 1216 Fifth Avenue, New York, NY, USA 10029</td>
</tr>
<tr>
<td>Emmanuel Luyirika</td>
<td>African Palliative Care Association, Plot 95 Dr Gibbons Road, Makindye, Kampala P.O.BOX 72518, Kampala, Uganda</td>
</tr>
<tr>
<td>Eve Namisango</td>
<td>African Palliative Care Association, Plot 95 Dr Gibbons Road, Makindye, Kampala P.O.BOX 72518, Kampala, Uganda</td>
</tr>
<tr>
<td>Richard A. Powell</td>
<td>MWAPO Health Development Group, PO Box 459-00621, Village Market, Nairobi, Kenya</td>
</tr>
<tr>
<td>Eduardo Garralda</td>
<td>University of Navarra, ATLANTES Research Program, Institute for Culture and Society (ICS), Campus Universitario, 31080 Pamplona, Spain</td>
</tr>
<tr>
<td>Juan José Pons</td>
<td>University of Navarra, Department of Geography, Campus Universitario, 31080 Pamplona, Spain</td>
</tr>
<tr>
<td>Liliana de Lima</td>
<td>International Association for Hospice and Palliative Care, 5535 Memorial Dr Suite F – PMB 509, Houston TX, USA 77007</td>
</tr>
<tr>
<td>Carlos Centeno</td>
<td>University of Navarra, ATLANTES Research Program, Institute for Culture and Society (ICS), Campus Universitario, 31080 Pamplona, Spain</td>
</tr>
</tbody>
</table>

### Institutions
Collaborators

On behalf of the project team we would like to express our gratitude to the organisations, institutions, associations, and professionals that have made this project possible through their generous time and talent.

KEY INFORMANTS
The following persons have answered the survey on palliative care development in their respective countries used to build the maps and Country Information sections of this Atlas.

COUNTRY     NAME  INSTITUTIONAL AFFILIATION

Algeria     Benmoussa Dalila  Centre Pierre et Marie Curie Alger
Austria     Josef Ritz da Souza  Direcção Nacional de Saúde Pública (UNASP) - Ministry of Health
Benin       Agbodande Koussou Anthelmie  Médicine Interne CHU-Hôpital de Cotonou
Botswana     Penny Seboue Makuretsetsa  Ministry of Health
Burkina Faso  Some Olo Roland  Cancérologue chirurgien
Burundi      Muhigirwa Cita Josephine  Representant Legale de l’Association pour les Soins Palliatifs au Burundi (ASOPABU)

CONFIDENTIAL

Cameroun     Ndilkumkum George Mbinge  Hospice and Palliative Care Association Cameroon (HPCAC)
Central African Republic  CONFIDENTIAL
Comoros       Naassur Somhi  CHU El Maanrouf Hospital
Côte d’Ivoire  Jean Sampet Makassi  Pallia famille aîné
Democratic Republic of Congo  Siagbe Soungolé  Association des Soins Palliatifs de Côte d’Ivoire (ASPCI)
Egypt         Haged El-Ansary  Al Ahzar University, faculty of medicine, Dept. of Anaesthesiology, ICU and Pain Medicine, Autocnea Pain relief Unit

Samy Al Arefy  Palliative Medicine Unit, Kasr Al Ainy School of Medicine, Cairo University
Equatorial Guinea  Yolanda Axella Cabrè  IMP- Spanish Council for Scientific Research
Eritrea       Asmerom T. Sengal  Orrota School of medicine and Dental medicine
Ethiopia      Zielam Gazachew  American Cancer Society
Nicola Ayres  Federal Ministry of Health
Gabon         Filamboke Kwa Angila Christie  Institut de cancérologie de l’Evêdville
Gambia        Samba Ceesay  Ministry of Health & Social Welfare

Ghana         Edwina Beryl Addo Opare-Loko  Korle Bu Palliative Care Team, Korle Bu Teaching Hospital and Flagstaff House Medical Centre
Guinea        Bangaly TAore  Unité de chirurgie oncoloque de Donka, CHU de Conakry

ONG Soins palliatifs de Guinée (SOPAG)  ONG Soins palliatifs de Guinée (SOPAG)
Kenya         Jeppoor V. Ali  Kenya Hospice and Palliative Care Association

Saraphina N. Giruho  Nyeri Hospice
Lesotho       Sejojo Phaone C.T.(AC) - M.I.B.M.S; A.H.M.P  Disease Control (Non-Communicable disease unit) Ministry of Health - Focal Person

Elizabeth Nkabane - Nkholongo  Lesotho Boston Health Alliance
Liberia       CONFIDENTIAL
Lilya         Omar Salem M Embmed  Head of Hospitals Department, Ministry of Health
Madagascar    Tinarvio Rasoanambanjaahary  Douleurs Sans Frontieres (DSF)
Malawi        Lameck Thombo  Palliative Care Association of Malawi (PACAM)

Immaculate Kambuya  Ministry of Health
Mail          Zakari Saye  Surgical Oncology
Mauritania     David Fearon  Cairnses International Palliative Care Network
Mauritius      Sholeleh Drewan  Victoria Hospital
Morocco        Madi Neji  Unité de médecine de la douleur et de médecine palliative, Clinique Al Farabi, Casablanca
Namibia       Richard W. Bauer  Maryknoll Fathers & Brothers

Geofederus Hauihe  University of Namibia
Olatan Soyannwo  University College Hospital, Ibadan
Niger         Malaam-Abdu Badri  Hôpital National de Niamey

República de Colombia  Buncos Benito  CHU Université de Bordeaux
Rwanda        Mukashahira Diane  Rwanda Biomedical Center
São Tomé e Príncipe  Arlindo Vicente de Assunção Carvalho  Centro Nacional de Endemias
Senegal       Coubia Guaye  Institut, Joliv Cury

Boubacar Poulo Sou  MAADJI, Société de Services aux personnes Agées avec une unite mobile de soins palliatifs
Sierra Leone  Gabriel Madye  The Shepherd’s Hospice in Sierra Leone
South Africa  Elizabeth Scrimgeour  CEO Drakenstein Palliative Hospice and HPCA South Africa Vice-Chairperson
South Sudan    Joseph Lou Kenji Mogga  World Health Organization

CONFIDENTIAL

Sudan         Shama Sideeg  Radiation and Isotope Center at Khartoum (RICK)
Nahia Gafar  Comboni College of Science & Technology
Swaziland     Herve Znerika Kamble  Ntombithuthu Gininda
Ministry of Health
Tanzania      Alick Austine Kayange  Uhuru Medical Centre
Togo          Mofou Belo  Division de la surveillance des maladies non transmissibles, Ministère de la santé et de la Protection Sociale
Uganda        Amandus Jacinto  Rose Kwakwaa
Formerly Commissioner Clinical Services, Ministry of Health

Palliative Care Association of Uganda (PCAU)
Zambia        Fastone M. Guma  Palliative Care Alliance Zambia (PCAZ)
Muketelabi Mukelabai  Anaesthesia, Critical Care, HIV/AIDS & Pain Management Centre (AICHP)
Zimbabwe      Eunice Gataungwa  Hospice and Palliative Care Association of Zimbabwe (HOPACAN)
Beverley Sebastian  Island Hospice and Healthcare

INTERNATIONAL COMMITTEE OF EXPERTS ON INDICATORS
The following people have participated in the consensus process to develop and arrive at the final set of African-specific indicators used in the survey.

NAME  AFFILIATION

Emmanuel Luyirika  African Palliative Care Association (APCA)
Eve Namisango  African Palliative Care Association (APCA)
Richard Antony Powell  African Palliative Care Association (APCA)

MWAPO Health Development Group
Julia Downing  International Children’s Palliative Care Network (ICPCN);
Jeroen Hasselaar  Radboud University, Nijmegen Medical Centre
Tania Pastrana  Latin American Palliative Care Association (ALCP);
Jordão Falcão  Worldwide Hospice Palliative Care Alliance (WHPCA)
Julieta de Lima  International Association for Hospice and Palliative Care (IAHPC);
Lukas Radbruch  University of Bonn
Stephen Connor  Worldwide Hospice Palliative Care Alliance (WHPCA)
Julien Rukundo  University of Kyambogo; Uganda Palliative Care Association (UPCA)

Here, we would like to acknowledge Dr. R. Sean Morrison at the Hertzberg Palliative Care Institute, Icahn School of Medicine at Mount Sinai, for his mentorship and guidance.

APCA Atlas of Palliative Care in Africa
10

APCA Atlas of Palliative Care in Africa
11
About the African Palliative Care Association (APCA)
The African Palliative Care Association (APCA) is a pan-African organisation that was founded in 2003, with its secretariat based in Kampala, Uganda. The organisation currently has a membership of 1,300 individuals and 200 institutions from across Africa. Since its inception, APCA’s mission has been to reduce pain and suffering for people living with life-limiting illnesses (both communicable and non-communicable) across Africa. APCA’s work aims to ensure that the patient and the family have access to proven holistic care that includes physical, psychosocial and spiritual care.

This mandate is achieved through four main objectives, namely:

I. Increasing knowledge and awareness about palliative care among policymakers, multidisciplinary health worker teams, teaching institutions, the media and the general population;

II. Strengthening health systems through the integration of palliative care into existing services, utilising the WHO building blocks of leadership/governance, service delivery, health workforce, health information systems, access to essential medicines, technologies, as well as financing;

III. Strengthening the creation of research evidence for palliative care in Africa and, in particular, across the continent.

APCA works collaboratively with state and non-state actors at the local, regional and international level including: the World Health Organization, the African Union Commission, ministries of health, hospice and palliative care organisations, national palliative care associations, academic institutions, the media and the general public, among others. Since its establishment, APCA has supported palliative care interventions in more than 25 African countries, and reached more than 1 million patients in the last five years.

For more information on APCA’s work and on palliative care development in Africa, please visit www.africanpalliativecare.org.

About the ATLANTES Research Program, Institute for Culture and Society, and the University of Navarra (UNAV)
The ATLANTES programme aims to disseminate the essential and highly human value of palliative care in the society and in the professional field. ATLANTES’ wish is to improve the understanding towards patients with non-curable illnesses both in the medical field and in the society, from a dignity-based perspective, and including accompaniment and respect for the natural course of the disease, and to its emotional and spiritual dimensions.

We are a multi-disciplinary team based in Pamplona, within the Institute for Culture and Society (University of Navarra), in an attempt to combine several knowledge disciplines so as to enrich research with the diverse social sciences approaches. Besides, we count on a wide net of collaborators from different countries that contribute to a more comprehensive and international view.

We mainly work on four strategic lines: The intangible aspects of palliative care, the message of palliative care, education for the professionals and the public, and finally, the international development of palliative care discipline. The monitoring of palliative care development across Europe is the main sub-project within this last and it is where it fits these Atlantic studies for diverse regions such as Eastern Mediterranean or Africa in the present study.

Further information on the ATLANTES programme at: http://www.unav.es/web/instituto-cultura-y-sociedad/proyecto-atlantes

ATLANTES’ wish is to improve the understanding towards patients with non-curable illnesses both in the medical field and in the society, from a dignity-based perspective, and including accompaniment and respect for the natural course of the disease, and to its emotional and spiritual dimensions.
The African continent has witnessed significant development in palliative care both as a health care service and an academic discipline. This is at a time when regional and global frameworks are being emphasised and adopted. These include the World Health Assembly Resolution on Palliative Care of 2014 which focuses on “Strengthening palliative care as a component of comprehensive care throughout the life course” and “the African Common Position on pain medications and controlled substances of 2012”.

Despite the recent developments, tracking and documenting progress in Africa has remained a challenge due to lack of region-appropriate indicators that mirror the unique African health systems. The last comprehensive review focusing on palliative care service development in Africa is 12 years old and the need for more recent information in the region is pressing. We bridge this critical knowledge gap by providing the APCA Atlas of Palliative Care in Africa 2017 (APCA Atlas) to comparatively analyse African countries’ progress in palliative care, and there has been no document providing a comprehensive overview of the palliative care situation in Africa in the past decade. As in previous atlases, the current APCA Atlas covers countries that fall under the umbrella of the regional palliative care association, in this case, the African Palliative Care Association (APCA).

For the present publication, we wanted to improve on the methodology used in the EAPC and ALCP Atlases by initially studying and developing indicators specific to palliative care development in Africa. This consisted of a series of interviews with experts from seven different African countries followed by indicator extractions from those interviews and rating of those indicators by 16 African experts in palliative care. The indicators then went through a rigorous two-round Delphi consensus process with 14 international committee members who are experts in palliative care indicators. Finally, the indicators were ranked internally by the project team to arrive at the final set of 19 indicators used to build the current report.

We have also decided on a smaller set of more specific indicators than previous atlases in Europe and Latin America for greater ease in comparative analysis and obtaining only that information which is most pertinent to palliative care development in Africa. The present APCA Atlas provides information on 89% (48/54) of countries on the continent and provides a cross-country comparison of the progress of palliative care in Africa. Information was provided by country key informants in each country, which consisted of leaders of national palliative care associations, members of the Ministry of Health, or experts within each country defined as either the leader of an important hospice or palliative care service or among the few persons working to further palliative care progress within the country.

Therefore, in the current APCA Atlas, we are working with “best estimates” provided by such experts. However, as information is scarce in many countries in Africa, and since methodology must be uniform across all countries included in the study, we believe obtaining information through experts to be the best way to obtain such data within the current constraints. Where available, we have cross-compared data provided by experts with the peer-reviewed literature through a scoping review of palliative care development in Africa from 2005-2016. We have also checked the information with the African Palliative Care Association, as the regional representative body for palliative care on the continent as well as other atlases, such as the Eastern Mediterranean Atlas of Palliative Care, where some African countries were also included.

Following this APCA Atlas, we will continue to work on secondary analyses of the data we have collected for publication in a series of scientific papers and reports. We will focus on disseminating this information to key experts in African countries so that it may be used for advocacy efforts in working with governments and Ministries of Health.

We truly thank all of those who volunteered their time for the project. We thank the key informants, country experts, and international committee members for all of their assistance in making this APCA Atlas a reality as well as their tireless work in building up palliative care in their respective countries.
INTRODUCTION

Abstract

BACKGROUND

Since Wright & Clark’s book on palliative care in Africa in 2006, there has not been a comprehensive overview describing the state of palliative care development in African countries.

AIMS

To describe the current state of palliative care development in African countries according to the World Health Organisation Public Health Strategy for integrating palliative care: palliative care services availability, policies, medicine availability, educational programs, and palliative care professional activity/vitality.

METHODS

Qualitative interviews were conducted with 16 Country Experts selected through strict criteria. From those interviews, indicators were derived and content analysis performed. The same Country Experts then rated the indicators for validity and feasibility in the African setting. The indicators underwent a two-round modified UCLA-RAND Delphi consensus with an international committee of experts on palliative care development in African countries. Experts from different countries to identify experts in other countries with whom best-case practices can be exchanged and shared. The Atlas has contributed a network of contacts throughout Africa, to allow for future collaboration in continuing to build-up palliative care throughout the continent.

RESULTS

Surveys were received from 89% (48/54) of African countries. 30 countries had one respondent and 18 countries had two respondents. Uganda, South Africa, Rwanda, and Kenya have the highest number of total hospice and palliative care services in Africa; 97% (33/34) of responding countries have no hospice and palliative care services. 42% (20/48) of responding countries reported having a dedicated person to palliative care in their respective countries’ Ministries of Health. Zambia, Uganda, South Africa, Kenya, Ghana, and Egypt reported some form of accreditation for physicians for palliative care by official bodies in their countries. Opioid consumption per capita, in general, was very low across all countries with highest opioid consumption per capita seen in Mauritius, South Africa, Namibia, Morocco, Tanzania, and Tunisia. 54% (26/48) of respondents reported having a national palliative care association advocating for palliative care in their respective countries.

CONCLUSION

Palliative care remains underdeveloped in African countries. However, there has been growth on the continent, with only nine countries without any services dedicated to hospice and palliative care compared to 17 countries with no palliative care activity in Lynch et al’s updated global atlas. There has been large growth in advocacy efforts with more than half of countries reporting a national palliative care association, and almost half the countries having a dedicated person responsible for palliative care in their respective countries. Efforts should be mobilized to improve availability of formal education in palliative care and increasing service provision and opioid consumption.

The indicators underwent a two-round modified UCLA-RAND Delphi consensus with an international committee of experts on indicators, comprised of 14 members

WHAT IS IT ALREADY KNOWN ABOUT PALLIATIVE CARE DEVELOPMENT IN THE AFRICAN REGION?

The last comprehensive overview of palliative care development focusing on Africa was written in 2006 in the form of a textbook by Wright & Clark. “Hospice and palliative care in Africa: a review of developments and challenges”. Since then, our team has undertaken a scoping review, explained in greater detail in the Methodology section of the APCA Atlas, in order to provide an updated comprehensive overview of the developments in palliative care in the peer-reviewed literature in Africa over the subsequent years since the publication of the textbook.

From 2006 to 2017, what is known about palliative care development in Africa is mostly from global comparative studies on palliative care development such as the global atlas of palliative care and the Economist Intelligence Unit’s Quality of Death Index as well as global comparative studies on opioids. From the initial global atlas to its 2013 update, palliative care has grown in Africa, with 15 African countries having moved to higher levels. However, the global atlas lacks detailed information on palliative care development at the country level, providing categorizations of countries into various levels of development, and the Economist Intelligence Unit’s most recent index had information on only 13 countries in Africa.

WHAT IS THIS BOOK ADDING?

The current APCA Atlas, therefore, provides the most up-to-date information of palliative care development in nearly all countries in Africa, using indicators derived, rated, and chosen by in-country African experts followed by a thorough Delphi consensus process with a panel of international experts on palliative care indicators. Therefore, the current APCA Atlas also provides an up-to-date base of indicators specific to the African context, chosen by African experts. The Atlas offers a panoramic view utilising the World Health Organisation’s (WHO) palliative care public health strategy dimensions and palliative care professional activity (vitality) through a combination of methods including data collection from national experts in the field and peer-reviewed literature, ensuring data quality. These results provide the most comprehensive and reliable information on palliative care development, to date.

Value of the Book

WHAT IS THE APCA ATLAS? The APCA Atlas provides the most up-to-date information of palliative care development in nearly all countries in Africa, using indicators derived, rated, and chosen by in-country African experts followed by a thorough Delphi consensus process with a panel of international experts on palliative care indicators.

The APCA Atlas allows for transparency, allowing palliative care experts from different countries to identify experts in other countries with whom best-case practices can be exchanged and shared. The Atlas has contributed a network of contacts throughout Africa, to allow for future collaboration in continuing to build-up palliative care throughout the continent.

IMPLICATIONS FOR THEORY, PRACTICE AND POLICY

Information from the APCA Atlas can be used to inform policies and practice for countries in Africa. The comparative information allows for in-country advocates to work with governments and/or Ministries of Health to further advance palliative care in their respective countries. Progress can only be measured if the current state of development is known. The APCA Atlas provides this information so that progress can be gauged and measured and accountability for health systems provided to support continued development of palliative care.

Furthermore, the set of indicators provides evidence-based measures for governments and national palliative care associations in Africa to use in order to measure progress in palliative care in their respective countries.

Lastly, the APCA Atlas allows for transparency, allowing palliative care experts from different countries to identify experts in other countries with whom best-case practices can be exchanged and shared. The Atlas has contributed a network of contacts throughout Africa, to allow for future collaboration in continuing to build-up palliative care throughout the continent.

The last comprehensive overview of palliative care development focusing on Africa was written in 2006 in the form of a textbook by Wright & Clark. “Hospice and palliative care in Africa: a review of developments and challenges”. Since then, our team has undertaken a scoping review, explained in greater detail in the Methodology section of the APCA Atlas, in order to provide an updated comprehensive overview of the developments in palliative care in the peer-reviewed literature in Africa over the subsequent years since the publication of the textbook.

From 2006 to 2017, what is known about palliative care development in Africa is mostly from global comparative studies on palliative care development such as the global atlas of palliative care and the Economist Intelligence Unit’s Quality of Death Index as well as global comparative studies on opioids. From the initial global atlas to its 2013 update, palliative care has grown in Africa, with 15 African countries having moved to higher levels. However, the global atlas lacks detailed information on palliative care development at the country level, providing categorizations of countries into various levels of development, and the Economist Intelligence Unit’s most recent index had information on only 13 countries in Africa.

WHAT IS THIS BOOK ADDING?

The current APCA Atlas, therefore, provides the most up-to-date information of palliative care development in nearly all countries in Africa, using indicators derived, rated, and chosen by in-country African experts followed by a thorough Delphi consensus process with a panel of international experts on palliative care indicators. Therefore, the current APCA Atlas also provides an up-to-date base of indicators specific to the African context, chosen by African experts. The Atlas offers a panoramic view utilising the World Health Organisation’s (WHO) palliative care public health strategy dimensions and palliative care professional activity (vitality) through a combination of methods including data collection from national experts in the field and peer-reviewed literature, ensuring data quality. These results provide the most comprehensive and reliable information on palliative care development, to date.
INTRODUCTION

Aims and Objectives

The goal of this comparative study is to provide an updated and reliable descriptive analysis on the development of palliative care in African countries.

Through this research, we hope to encourage discussion on the current progress of palliative care development, its impact on the delivery of care, and improve care at the end of life and for those suffering with life-limiting illnesses. We also hope that the current APCA Atlas will provide important data and information for those working within or with Ministries of Health to continue improving palliative care provision within their respective countries.

The objectives of the project are:

1. To measure and compare the development of palliative care in countries in Africa and to explore the existing progress of hospice and palliative care development in countries in Africa.
2. Develop a database of valuable indicators that will be openly available, capable of measuring palliative care development in the APCA African Region for use in future research and discern areas of additional need (resources and research).
3. Provide comparative data for open access on palliative care development of each African country to facilitate discussion and measure progress.
4. Create a network of palliative care professionals across Africa, promote access to information, and improve communication and cooperation.
5. To promote the development of palliative care across the African continent.

Through this research, we hope to encourage discussion on the current progress of palliative care development, its impact on the delivery of care, and improve care at the end of life and for those suffering with life-limiting illnesses.

DEFINITION of “PALLIATIVE CARE DEVELOPMENT”

The current report focuses on palliative care development in Africa.

Palliative care development was organized according to the World Health Organization (WHO) public health strategy for palliative care, which includes service provision and implementation, policies, education, and medicine availability (see WHO framework below). In addition, we provide information on a fifth dimension, palliative care vitality, which reflects the level of professional activity within the country.

WHO FRAMEWORK

In order to effectively develop and integrate palliative care into a society with existing health care systems, the WHO launched a Public Health Model. This model includes advice and guidelines to governments for implementing national palliative care based on four components: 1) appropriate policies, 2) adequate drug availability, 3) education of health care workers and the public, and 4) implementation of palliative care services at all levels of society.

This process is always applied within the cultural context, disease demographics, socioeconomics and the health care system of the country.

Policy
- Palliative care part of national health plan, policies, related regulations
- Funding service delivery methods support palliative care delivery
- Essential medicines (Policy makers, regulators, WHO, NGOs)

Drug availability
- Opioids essential medicines
- Importation quota
- Cost
- Prescribing
- Distribution
- Dispensing
- Administration

Education
- Media & public advocacy
- Curricula and courses—professionals, trainees
- Expert training
- Family caregiver training & support

Implementation
- Opinion leaders
- Trained manpower
- Strategic business plans—resources, infrastructure
- Standards, guidelines measures

Figure 1. Detailed WHO Public Health Model for Palliative Care Integration (modified by Stjernswärd, 2007).
### Group of Researchers

The project team consists of seven members from different countries and backgrounds, bringing a wide range of experiences.

<table>
<thead>
<tr>
<th>RESEARCHER</th>
<th>COUNTRY</th>
<th>BACKGROUND</th>
<th>AFFILIATION(S) AND TITLE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Yohan Rhee</td>
<td>United States of America</td>
<td>Global and Public Health, Epidemiology</td>
<td>Arnhold Institute for Global Health, Icahn School of Medicine at Mount Sinai, Research Assistant, ATLANTES Research Program, Institute for Culture and Society (ICS), University of Navarra</td>
</tr>
<tr>
<td>Emmanuel Luyirika</td>
<td>Uganda</td>
<td>Family Medicine, HIV Medicine, Palliative Medicine</td>
<td>Executive Director, African Palliative Care Association</td>
</tr>
<tr>
<td>Eve Namisango</td>
<td>Uganda</td>
<td>Economics, Epidemiology, Research, Biostatistics</td>
<td>Research Manager, African Palliative Care Association</td>
</tr>
<tr>
<td>Richard A. Powell</td>
<td>Kenya</td>
<td>International Palliative Care Research</td>
<td>Former Director of Learning and Research, African Palliative Care Association, Co-Director, MNAPO Health Development Group, Nairobi, Kenya</td>
</tr>
<tr>
<td>Eduardo Garralda</td>
<td>Spain</td>
<td>Palliative Care Development Research, History</td>
<td>Research Assistant, ATLANTES Research Program, Institute for Culture and Society, University of Navarra</td>
</tr>
<tr>
<td>Juan José Pons</td>
<td>Spain</td>
<td>Geography, Cartography</td>
<td>Adjunct Professor, Department of Geography, University of Navarra</td>
</tr>
<tr>
<td>Liliana de Lima</td>
<td>United States of America</td>
<td>Clinical psychology, Healthcare Administration, Pain and Policy</td>
<td>Executive Director, International Association for Hospice and Palliative Care</td>
</tr>
<tr>
<td>Carlos Centeno</td>
<td>Spain</td>
<td>Palliative Medicine, Oncology</td>
<td>Palliative Medicine Attending Physician, Clínica Universidad de Navarra, Professor of Palliative Medicine, School of Medicine, University of Navarra, Principal Investigator, ATLANTES Research Program, Institute for Culture and Society, University of Navarra</td>
</tr>
</tbody>
</table>

### Methods

**Introduction**

Epidemiology Icahn School of Medicine at Mount Sinai

**Identification of “Country Experts”, “International Committee of Experts”, and “Key Informants”**

There were multiple levels of participation in the current project.

**“Country Experts”** refers to the 16 persons with whom initial interviews were conducted in order to derive the initial broad set of indicators. These same persons also rated the indicators on a scale from one to four for feasibility and validity. Country Experts were chosen from seven different African countries based on geographical location, languages spoken, and level of palliative care development. Country Experts were chosen by the Executive Director and Research Manager of the African Palliative Care Association as important advocates in palliative care development within their respective countries.

The experts were chosen according to their backgrounds using the following hierarchy: 1) leader or representative of the national palliative care association or similar organisation, 2) member from the noncommunicable diseases section or division of the Ministry of Health, 3) leader of a large and/or pioneering palliative care service in the country, 4) early pioneer and advocate of palliative care in the country, and 5) an oncologist or palliative medicine provider at the national cancer institute or similar institute.

**“Key Informants”** refer to the 66 persons that reported on the data for each of the indicators for their respective countries. Key Informants were identified in 51 of the 54 African countries of which 48 countries replied to the survey. Three countries had no Key Country Informants due to the fact that palliative care services and/or activity was not yet available in the country or were at such an initial stage that no experts were able to be identified. The Key Informants were chosen based on the following qualifications: 1) leader of national palliative care association, where available, 2) Ministry of Health representative or WHO representative for the region or country, 3) leader of only or major palliative care service in the country, 4) one of the first drivers of palliative care activity in the country, 5) attendant at the African Palliative Care Association Congress in Uganda in 2017, 6) healthcare worker at major cancer or pain unit in the country, or 7) researcher who published or wrote reports and/or publications on palliative care or oncology in the country. Key Informants were nominated by the Executive Director and Research Manager of the African Palliative Care Association or by the Executive Director of the International Association for Hospice and Palliative Care. Key Informants were also nominated by Sylvie Dive, a palliative care nurse in charge of education for Francophone African countries at the Institute for Hospice and Palliative Care Africa in Uganda. For countries where there were no contacts, the project team searched websites for contacts from the WHO, Ministry of Health, or those that have written reports or published in the field of palliative care.

**Country Experts were chosen from seven different African countries based on geographical location, languages spoken, and level of palliative care development**

The “International Committee” refer to the 14 persons that took part in the two-round modified UCLA/RAND Delphi consensus to narrow down the indicators that scored greater than or equal to three for feasibility and validity by the Country Experts. The International Committee members were recommended by the project team based on the following qualifications: 1) published previously or expertise in palliative care development indicators, 2) published previously or expertise in palliative care development in Africa, and/or 3) member of board, executive committee, or leader of a global or regional palliative care association or international health organisation working in palliative care.

**Key Informants were identified in 51 of the 54 African countries of which 48 countries replied to the survey.**
**Methods**

**DEVELOPMENT AND EVALUATION OF INDICATORS**

Five in-depth interviews were initially conducted with five Country Experts from four African countries. Interviews were open-ended asking for general palliative care development in the country and using the WHO palliative care public health framework as a guide. Interviews were recorded, transcribed, and analysed by two co-authors for any indicators directly mentioned from the conversations.

Country Experts ranking. From an initial 117 indicators, 75 were excluded due to the fact they were duplicates, not country-level, and unable to be obtained by experts. The remaining 103 indicators were given to 16 Country Experts for rating on a scale from one to four for feasibility and validity in the African setting. Those indicators that were rated greater than or equal to three for both feasibility and validity in Africa were sent automatically to the Delphi consensus process.

Additional 11 open-ended interviews: To ensure that saturation of indicators had been reached, an additional 11 open-ended interviews were conducted with the remaining subset of 11 Country Experts from the 16 Country Experts. Transcriptions were likewise analysed by two co-authors and an additional 27 unique indicators were sent to the two-round modified UCLA/RAND Delphi consensus, resulting in a total of 98 indicators that proceeded to the final round of the Delphi.

Two-round modified UCLA/RAND Delphi consensus

1. **1st Round** The 14-member International Committee was then asked to rate the 38 indicators on a scale from one to nine for importance in Africa, 29 indicators reached agreement and were rated as important and proceeded directly to the next stage for ranking.

2. **2nd Round** The remaining 29 indicators plus an additional four indicators suggested from comments from the International Committee were sent back for a second round of Delphi from which nine additional indicators reached agreement and were rated as important, resulting in a total of 38 indicators that proceeded to the final ranking stage.

**Project team Ranking:** The internal Project Team, the co-authors on this project, then ranked the 38 indicators for importance in Africa within each WHO public health strategy dimension and palliative care vitality. The top five ranked indicators were given points, the highest ranked indicator receiving a score of five, followed by four for the next highest, with the sixth to the last ranked indicator receiving scores of zero. Then, the indicators in each WHO public health strategy dimension that scored in the top 50% were compiled, resulting in a final 19 indicators.

Compilation and definition of indicators: The final 19 indicators were then compiled with existing indicators, where available, such as the World Health Organization’s (WHO) global observatory of indicators and the Latin American Association of Palliative Care’s development of regional indicators. Each of the indicators were carefully defined using existing indicators, where available. (See Figure 1 for the flowchart on the process of deriving the indicators)

**NETWORK OF KEY INFORMANTS**

All key informants were invited and informed via email following the APCA Conference held in Kampala. At each stage of the project mentioned above, all of the key informants were kept updated throughout the whole process through email.

**SURVEY DESIGN AND FLOWCHART OF RESPONSES**

The 19 compiled and defined indicators were then translated into French, Spanish, and Portuguese. All surveys were then sent out to Key Country Informants for each of the 51 countries where we were able to identify an expert using Survey Monkey, accompanied by a consent approved by three institutional Review Boards: the iCahn School of Medicine at Mount Sinai (IRB-16-00242), the University of Navarra (2016.054), and Mildmay Uganda Ethics Review Board (RECREF 0505-2016). 69 key informants from 48 countries responded to the survey.

Socioeconomic data for each country as well as data on opioid consumption were obtained from separate sources to ensure uniformity of responses. Socioeconomic data was obtained from the World Bank database and the United Nations Human Development Index data. Opioids consumption data were gathered from the Pain and Policy Studies Group at the University of Wisconsin.

**DATA CLEANING**

Once the data was returned, each data point was reviewed by the Principal Investigator and one additional member of the project team. The data was cleaned (clarified and reworded) based on the following:

1. Where there were discrepancies between data for two Key Informants from the same country, the data was confirmed using the following method:
   a. Comparing with the comments for any clarifications from both.
   b. Comparing with the Scoping Review data and data from other Atlases where countries matched.
   c. Cross-checking with a member of the African Palliative Care Association.
   d. Giving priority in answers to a member of the national association or Ministry of Health when the other respondent was from a single hospital or hospice.
   e. Returning back to the Key Informants for clarification on unrecognizable data points.

2. Where there was only one Key Informant from a country, the same process was used.

The internal Project Team, the co-authors on this project, then ranked the 38 indicators for importance in Africa within each WHO public health strategy dimension and palliative care vitality

**Figure 2. Indicators process flowchart.**

- Excluded based on exclusion criteria (n=75)
- Content analysis of indicators (n=27)
- Indicators from interviews with 11 Country Experts (n=189)
- Indicators to International Committee of Experts (n=58)
- Additional interviews of 11 Country Experts (n=18)
- Indicators rated for feasibility and validity by 14 Country Experts (n=31)
- Indicators with disagreement to International Committee of Experts (n=13)
- Indicators reworded based on comments (n=21)
- Agreement and ranked as “Important” (n=9)
- Agreement and ranked as “Not Important” (n=0)
- Indicators rated for feasibility and validity by 14 Country Experts (n=31)
- Disagreement (n=24)
- Agreement and ranked as “Important” (n=9)
- Agreement and ranked as “Not Important” (n=0)
- Initial list of indicators (n=103)
- Delphi Round 1
- Delphi Round 2
- Delphi Round 3
- Top 50% of indicators in each WHO Category (n=19)
- Indicators ranked by Project Team (n=38)
INTRODUCTION

A scoping review of the peer-reviewed literature was conducted from 2005-2016 on the development of palliative care in African countries. The purpose of the review was to supplement the current Atlas by providing additional information available in the literature on palliative care development in Africa plus serving as a validation reference for the data from the Key Informants. A thematic analysis of the scoping review has been published in the literature (ref). A scoping review was chosen to gain a broad overview of the state of the literature on palliative care development in Africa. In order to ensure quality of data, a rigorous, systematic search of the literature, based on Arksey and O’Malley, was chosen.

Search Strategy

Three different sources were utilized in the search: PubMed, CINAHL, and Embase. A combination of the following search terms using subject headings and/or MeSH terms was used for each database: palliative care, palliative medicine, palliative nursing, hospice, hospice care, hospice patient, cancer palliative therapy, and [country name].

An additional manual search was conducted with 76 experts in palliative care in Africa across African countries. These experts were identified by the Research Manager of the African Palliative Care Association and the Chief Executive Officer of the International Association for Hospice and Palliative Care. Experts included heads of national palliative care associations, healthcare workers working in major palliative care services in their respective countries, or advocates in the government and/or Ministries of Health.

Selection Criteria

The following criteria was used for inclusion:
1. Mention of at least one dimension of the WHO palliative care public health strategy (palliative care services, policy, education, medicine availability) and palliative care vitality
2. Inclusion of country-level data
3. Published between January 1, 2005 and December 31, 2016
4. Written in English, French, Portuguese, or Spanish

Any study that resulted from the searches, including comparative studies, conference abstracts, conference presentations, letters to editors, and others, like commentaries and/or editorials, were included.

Two independent investigators rated each article by title, abstract, and full text. Where there was disagreement, the authors came together and discussed until consensus was reached. 654 articles were identified through the database searches and eight through the manual search. After assessing for inclusion criteria, 49 articles were included in the subsequent analysis. Information was found for 26 (48%) of African countries.

Information was then extracted from each article that met inclusion criteria and organized into tables by WHO palliative care public health strategy dimensions and palliative care vitality by country.

Two investigators then chose the most important milestones for each country, where available. These information points have been added under the sub-heading of “Milestones” within each Country Information section in the present Atlas with bibliographic references to guide the reader to additional sources of information for further reading.

A special mention is needed here for Santiago Blanco, Carlos Torrado and Ibona Ayala; three students of the Faculty of Medicine of the University of Navarra that conducted the search and extraction as their final degree thesis. Information was found for 26 (48%) of African countries

THE CARTOGRAPHY

The cartography has been developed by the Geography Department of the University of Navarra, under the management of Professor Juan José Pons.

The digital covers “World Countries” and “World Cities” (DeLorme Publishing Company, Inc.) were obtained from the ArcGIS Website (under a Creative Commons license). In both cases, information was updated in March 2017 and the geographic coordinates system used was WGS 1984. The software used for map construction is the ArcGIS program (ESRI) version 10.0.

The choice of the Cartographic projection (in this case, pseudo-cylindrical Times) is based on the criteria of making the most of the available space, so as to fully represent all countries correctly. The representation scale is 1:25,000,000. The types of maps utilized for the thematic representation are: choropleth map (basically for “relative data”), symbols map (for absolute data or to highlight determined values presence/absence) and bars and sectorial cartograms.

In terms of representation style, a constant colours “range” has been adopted and used throughout this publication: blue for choropleths and “reds” for symbols and cartograms; this was done to enhance the homogeneity and coherence of the cartographic version as a whole. In terms of the socioeconomic and health information used in the country reports, the data has been collected mainly from “World Bank” databases and the United Nations reports with the clear criteria of finding the most accurate, updated and reliable data for the maximum number of countries of the WHD European region.

LIMITATIONS AND CONSTRAINTS

This is the first Atlas of palliative care in Africa. Though we worked hard to improve on the methodology of previous atlases from different regions, there were still some limitations and constraints in building the current APCA Atlas.

Information was not available for all 54 countries that fall under the umbrella of the African Palliative Care Association. The current Atlas was able to obtain information from 48 (90%) of African countries. Due to the fact that palliative care development is still in its initial stages in many countries, we were unable to identify country informants in certain countries, and we were unable to obtain responses from second informants in others.

The current Atlas gathers information from experts working in palliative care within each country. Though the numbers were cross-checked, where available, with the peer-reviewed literature as well as experts in the African Palliative Care Association, due to the fact that, for the majority of countries only one informant was available, some data points may be over- or under-estimates. The discrepancies may have been most exaggerated for number of palliative care services, as experts were asked to provide estimates for the majority of the indicators under the WHO dimension of services. In order to try to ensure quality of data, we have taken multiple steps to “sense check” the data, including careful reading of explanatory comments accompanying the data, revision with experts from APCA, cross-checking with the peer-reviewed literature from the scoping review, and, when necessary, going back to the Country Key Informants for clarification (sense checking process outlined in more detail above in the sub-section “Data Cleaning”).

Lastly, though a rigorous process was utilised in choosing the indicators used in this project, due to the diversity across the continent, some of the indicators may not reflect realities in certain countries. For example, one Key Informant highlighted the important fact that in francophone African countries, focusing on availability of immediate-release oral morphine may not best reflect their realities because of different types of opioids available in their respective countries. Such comment will be taken into account in future secondary analyses of the information.

In summary, though there are limitations to using Country Key Informants, since information is still very scarce in Africa, we felt that this was the best methodology to use for the current context. In order to try and strengthen the quality of data, we have implemented different cross-checks to provide the best information available.

ABBREVIATIONS

Below is a list of abbreviations used in the Country Information section of the current APCA Atlas.

APCA African Palliative Care Association
MOH Ministry of Health
MCD Noncommunicable Diseases
PC Palliative Care
WHO World Health Organisation

APCA Atlas of Palliative Care in Africa
24

APCA Atlas of Palliative Care in Africa
25
2. Thematic maps
The Atlas focuses on the development of palliative care in a group of countries included under the African Palliative Care Association (APCA). This includes 54 countries, representing approximately a 15% of the world’s population.

It has a total surface area of 30,272,922 km². The continent is divided into 54 countries according to the African Union, with the exception of Morocco, and another five non-officially recognised territories, and 23 dependent territories.

In the present study, a total of 48/54 of the countries (89%) have agreed to participate and have responded, each with at least one expert in palliative care. Nearly half of these countries had at least one of their official languages as English, and the other half of the countries had French, Portuguese, and/or Spanish as the official language used in the government. This was considered for research purposes, and all communications between the team and the Key Informants were done through the language which was most comfortable for each Key Informant.

All African countries except for Chad, Cape Verde, Djibouti, Guinea-Bissau, Seychelles, and Somalia have responded the questionnaire.

The Atlas includes thematic maps and a geopolitical map to visualise the participating countries in the APCA Atlas.
The thematic maps provided in the study show the socio-economic context of various countries in Africa. Socioeconomic data is provided for those countries participating in the study (48/54), and for which population density data, population, surface, gross domestic product (GDP) per capita, health expenditure both total of the GDP and that per capita, number of physicians, and the Human Development Index (HDI) score and ranking position are offered.
### Map 3. Palliative Care Hospices or Services

**Indicator**
Number of hospices or palliative care services in the country (estimate)

**Definition**
Hospices or palliative care services refers to the total number of palliative care services in the country, including, but not limited to, free standing hospices, hospices that are a part of public or NGO hospitals, any kind of other hospices or home care teams, support teams in hospitals, palliative care units, inpatient units in hospices, paediatric palliative care hospices and services, etc. Of note, there may be additional organisations providing palliative care in the country, but here, we have included those whose primary mission is to provide palliative care services. Additional organisations providing services, where relevant, have been indicated in the “Comments from Key Informants” section within each Country Information section.

In this indicator, one organisation may have more than one local branch; we consider each branch as a separate service when the community of the local branch has local ownership, local proactivity, and local focal point of the service. For example, in the case of Hospice Africa Uganda, there are branches that offer services in Kampala, Hoima, and Mbarara under the larger organization of Hospice Africa Uganda, and we would consider these to be three separate palliative care services, which are sometimes referred to as “satellites” of the “primary” or mother organization.

Information is missing from Libya.

There were no reported services in the following countries: Burkina Faso, Central African Republic, Comoros, Eritrea, Lesotho, Liberia, Mali, São Tomé e Príncipe, and South Sudan.
The following table shows the density of palliative care services per million inhabitants, according to population data from the World Bank. Information is missing from Libya.

<table>
<thead>
<tr>
<th>Country</th>
<th>Hospice or PC Services/ Million Inhab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swaziland</td>
<td>10.88</td>
</tr>
<tr>
<td>Uganda</td>
<td>5.02</td>
</tr>
<tr>
<td>Rwanda</td>
<td>4.85</td>
</tr>
<tr>
<td>South Africa</td>
<td>2.81</td>
</tr>
<tr>
<td>Botswana</td>
<td>1.77</td>
</tr>
<tr>
<td>Mauritius</td>
<td>1.58</td>
</tr>
<tr>
<td>Kenya</td>
<td>1.52</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>1.18</td>
</tr>
<tr>
<td>Gabon</td>
<td>1.16</td>
</tr>
<tr>
<td>Zambia</td>
<td>0.86</td>
</tr>
<tr>
<td>Malawi</td>
<td>0.81</td>
</tr>
<tr>
<td>Namibia</td>
<td>0.81</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0.71</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>0.62</td>
</tr>
<tr>
<td>Mauritania</td>
<td>0.49</td>
</tr>
<tr>
<td>Senegal</td>
<td>0.33</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.3</td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.3</td>
</tr>
<tr>
<td>Togo</td>
<td>0.27</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>0.22</td>
</tr>
<tr>
<td>Mozambique</td>
<td>0.21</td>
</tr>
<tr>
<td>Benin</td>
<td>0.18</td>
</tr>
<tr>
<td>Burundi</td>
<td>0.16</td>
</tr>
<tr>
<td>Tunisia</td>
<td>0.18</td>
</tr>
<tr>
<td>Guinea</td>
<td>0.16</td>
</tr>
<tr>
<td>Ghana</td>
<td>0.15</td>
</tr>
<tr>
<td>Morocco</td>
<td>0.15</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.11</td>
</tr>
<tr>
<td>Niger</td>
<td>0.1</td>
</tr>
<tr>
<td>Sudan</td>
<td>0.1</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>0.09</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.09</td>
</tr>
<tr>
<td>Angola</td>
<td>0.09</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>0.07</td>
</tr>
<tr>
<td>Algeria</td>
<td>0.07</td>
</tr>
<tr>
<td>Dem. Rep. of Congo</td>
<td>0.05</td>
</tr>
<tr>
<td>Madagascar</td>
<td>0.04</td>
</tr>
<tr>
<td>No services</td>
<td>&lt; 0.2</td>
</tr>
<tr>
<td>0.2 - 0.5</td>
<td></td>
</tr>
<tr>
<td>0.5 - 1</td>
<td></td>
</tr>
<tr>
<td>1 - 2</td>
<td></td>
</tr>
<tr>
<td>2 - 5</td>
<td></td>
</tr>
<tr>
<td>= 5</td>
<td></td>
</tr>
</tbody>
</table>

There were no reported services in the following countries: Burkina Faso, Central African Republic, Comoros, Eritrea, Lesotho, Liberia, Mali, São Tomé e Príncipe, and South Sudan.
Map 5. Paediatrics Hospices or Palliative Care Services

**Indicator**
Number of hospices or palliative care services in the country with palliative care programs specific to paediatrics (estimate)

**Definition**
Hospices or palliative care services with palliative care programs specific to paediatrics refers to the total number of palliative care services in the country with programs specific to paediatrics, including, but not limited to, free standing hospices, hospices that are a part of public or NGO hospitals, any kind of other hospices or home care teams, support teams in hospitals, PC units, inpatient units in hospices, etc.

In the case of Africa, many organizations may provide both adult and paediatric services. A service can be included here if they have a person or team dedicated to paediatrics on the team and a service whose main mission is to provide paediatric palliative care services.

In this indicator, one organisation may have more than one local branch that offer programs specific to paediatrics; we consider each branch as a separate service when the community of the local branch has local ownership, local proactivity, and local focal point of the service. For example, in the case of Hospice Africa Uganda, there are branches that offer services in Kampala, Hoima, and Mbarara under the larger organization of Hospice Africa Uganda, and we would consider these to be three separate palliative care services if each service offers a program specific to paediatrics, each service is sometimes referred to as “satellites” of the “primary” or mother organization (Clark et al., 2007)

“We’ve definitely taken palliative care from a lot earlier, from diagnosis, and then, because of the impact that HIV has had on our country, we have a much bigger focus on children and on families (...). Look, in South Africa in 2004, we were one of the first hospices to start antiretrovirals... it has been extraordinary that we’ve got very few children who are now born, HIV positive and are really managed well. But our children are now teenagers and are sick. And coping with teenagers and HIV is really a new challenge”

Extract from an interview with Country Expert (Confidential) from South Africa

Information is missing from Angola, Ethiopia, and Libya.

There were no reported services in the following countries: Algeria, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Comoros, Republic of Congo, Côte d’Ivoire, Democratic Republic of Congo, Equatorial Guinea, Eritrea, Gabon, Gambia, Guinea, Lesotho, Liberia, Madagascar, Mali, Mauritius, Mozambique, Namibia, Niger, Rwanda, São Tomé e Príncipe, Sierra Leone, South Sudan, Sudan, and Tunisia.
A home-based palliative care service is when patients stay in their own homes and are cared for by their families, and the hospice team visits patients at home to provide medical care, nursing advice and psychosocial support.

(World Health Organization, Planning and Implementing Palliative Care Services, 2016)

Here, we are asking specifically for the number of home-based services offered specifically by hospices.

In this study, one umbrella hospice organisation may provide more than one community- or home-care service. For example, in the case of Hospice Africa Uganda, there are branches that offer home care services in Kampala, Hima, and Mbarara under the larger organisation of Hospice Africa Uganda, and we would consider these to be “satellites” of the “primary” or mother organization. (Clark et al., 2007)

Information not available for Angola, Libya, and São Tomé e Príncipe. There were no reported services in the following countries: Burkina Faso, Central African Republic, Comoros, Equatorial Guinea, Eritrea, Gabon, Gambia, Lesotho, Liberia, Madagascar, Mali, Mauritius, Mozambique, Niger, South Sudan, Sudan, Zambia.

Hospice Africa Uganda provides home care throughout multiple regions in Uganda. The hospice has teams that go out daily to see patients in their homes. Teams are made up of a nurse, lay counsellor or social worker, driver, and usually accompanied by a volunteer. Depending on the complexity of the case, a medical doctor may accompany the visit or a separate home visit may be scheduled specifically for psychosocial counselling by the social worker or lay counsellor. Hospice Africa Uganda is a model in Africa for home-based care provided by a hospice.
### Map 7. Patients Cared for by Palliative Care Services

#### INDICATOR
Number of palliative care patients cared for (in the last year)

#### DEFINITION
Please give your best estimate of the total number of patients in the country who have received palliative care in the last year.

#### SUGGESTION FOR CALCULATION
Think of the number of patients cared for in the past year in the care of palliative care services or hospices that you are most familiar with. You can then estimate the total number of palliative care services or hospices there are in your country. With both of those numbers, you can make an estimation of the total number of patients served by palliative care services or hospices in the past year.

#### FOR YOUR INFORMATION
Wording for this indicator was derived from the WHO: Number of palliative care patients cared for per 100,000 inhabitants. However, please give the TOTAL number of patients in the country, NOT per 100,000 inhabitants.

We will do the calculation ourselves afterwards.

(WHO Planning and Implementing Palliative Care Services, 2016; http://apps.who.int/iris/bitstream/10665/250584/1/9789241565417-eng.pdf?ua=1)

Information not available for Algeria, Angola, Cameroon, Côte d’Ivoire, Democratic Republic of Congo, Eritrea, Lesotho, Liberia, Libya, Madagascar, Morocco, Mozambique, Niger, Nigeria, Rwanda, South Sudan, Togo, and Uganda.

There were no reported patients cared for by palliative care in the following countries: Central African Republic, Mali.

#### NUMBER OF PATIENTS

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Patients Cared for</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>40,000</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>3,000</td>
</tr>
<tr>
<td>Zambia</td>
<td>4,000</td>
</tr>
<tr>
<td>Botswana</td>
<td>3,310</td>
</tr>
<tr>
<td>Kenya</td>
<td>3,600</td>
</tr>
<tr>
<td>Egypt</td>
<td>1,600</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>1,150</td>
</tr>
<tr>
<td>Gambia, The</td>
<td>1,130</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1,000</td>
</tr>
<tr>
<td>Malawi</td>
<td>970</td>
</tr>
<tr>
<td>Swaziland</td>
<td>900</td>
</tr>
<tr>
<td>Sudan</td>
<td>850</td>
</tr>
<tr>
<td>Tanzania</td>
<td>660</td>
</tr>
<tr>
<td>Namibia</td>
<td>600</td>
</tr>
<tr>
<td>Ghana</td>
<td>400</td>
</tr>
<tr>
<td>Senegal</td>
<td>400</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>180</td>
</tr>
<tr>
<td>Tunisia</td>
<td>180</td>
</tr>
<tr>
<td>Mauritius</td>
<td>100</td>
</tr>
<tr>
<td>São Tomé e Príncipe</td>
<td>80</td>
</tr>
<tr>
<td>Benin</td>
<td>51</td>
</tr>
<tr>
<td>Burundi</td>
<td>51</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>50</td>
</tr>
<tr>
<td>Mauritania</td>
<td>50</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>40</td>
</tr>
<tr>
<td>Guinea</td>
<td>14</td>
</tr>
<tr>
<td>Comoros</td>
<td>7</td>
</tr>
<tr>
<td>Ghana</td>
<td>400</td>
</tr>
<tr>
<td>Senegal</td>
<td>400</td>
</tr>
<tr>
<td>Gabon</td>
<td>300</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>180</td>
</tr>
<tr>
<td>Tunisia</td>
<td>180</td>
</tr>
<tr>
<td>Mauritius</td>
<td>100</td>
</tr>
<tr>
<td>São Tomé e Príncipe</td>
<td>80</td>
</tr>
<tr>
<td>Benin</td>
<td>51</td>
</tr>
<tr>
<td>Burundi</td>
<td>51</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>50</td>
</tr>
<tr>
<td>Mauritania</td>
<td>50</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>40</td>
</tr>
<tr>
<td>Guinea</td>
<td>14</td>
</tr>
<tr>
<td>Comoros</td>
<td>7</td>
</tr>
<tr>
<td>Ghana</td>
<td>400</td>
</tr>
<tr>
<td>Senegal</td>
<td>400</td>
</tr>
<tr>
<td>Gabon</td>
<td>300</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>180</td>
</tr>
<tr>
<td>Tunisia</td>
<td>180</td>
</tr>
<tr>
<td>Mauritius</td>
<td>100</td>
</tr>
<tr>
<td>São Tomé e Príncipe</td>
<td>80</td>
</tr>
<tr>
<td>Benin</td>
<td>51</td>
</tr>
<tr>
<td>Burundi</td>
<td>51</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>50</td>
</tr>
<tr>
<td>Mauritania</td>
<td>50</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>40</td>
</tr>
<tr>
<td>Guinea</td>
<td>14</td>
</tr>
<tr>
<td>Comoros</td>
<td>7</td>
</tr>
</tbody>
</table>

#### THEMATIC MAPS

**Number of Palliative Care Patients Cared for in 2016 (Estimate)**

- No data
- 50,000
- 40,000
- 30,000
- 20,000
- 10,000
- 5,000
- 1,000
- 500
- 100
- 50
- 40
- 30
- 20
- 10
- 5
- 1

APCA Atlas of Palliative Care in Africa
### Map 8. Hospitals with an Inpatient Palliative Care Unit

**INDICATOR**
Number of hospitals (public and private) with inpatient palliative care units (estimate)

**Definition:**
The total number of hospitals, both publicly and privately owned, that have inpatient palliative care units.

If one larger mother organization owns two hospitals, each with its own inpatient palliative care unit, we would consider this to be two separate inpatient palliative care units in two separate hospitals.

Of note, private hospitals include both private not-for-profit and private-for-profit hospitals.

Information not available for Angola, Cameroon, and Libya.

There were no reported hospitals in the following countries: Central African Republic, Comoros, and São Tomé e Príncipe.

None of the following countries had a PC unit in hospitals: Algeria, Burkina Faso, Burundi, Republic of Congo, Democratic Republic of Congo, Eritrea, Guinea, Lesotho, Liberia, Madagascar, Mali, Mauritania, Mozambique, Niger, Sierra Leone, South Sudan, Tunisia.
**Map 9. National Palliative Care Plans or Programmes**

**INDICATOR**
Existence of a current national palliative care plan/programme: 1) Stand-alone national palliative care plan/programme, 2) National cancer plan/programme with a section for palliative care, 3) National HIV plan/programme with a section for palliative care

**DEFINITION**
Existence of a national palliative care plan or programme as a result of policy/actions defined with the objective of implementing and/or improving care of palliative care patients currently in place.

The national plan/program should:
- Have national scope
- Be designed to integrate palliative care in health care services
- Have a budget assigned
- Have a responsible person assigned

**STAND-ALONE**
A stand-alone national plan or program is defined as a specific palliative care plan or program separate from a palliative care component within a broader program, such as prevention and control of non-communicable diseases, a national cancer control, or HIV program. (Palliative Care Indicators, ALCP, 2013)

**CANCER**
A national cancer plan or programme is defined as a specific palliative care plan or program or a palliative care component within a broader program for prevention and control of cancer or a national cancer control programme. (Palliative Care Indicators, ALCP, 2013)

**HIV**
A national HIV plan or programme is defined as a specific palliative care plan or program or a palliative care component within a broader program for prevention and control of HIV or a national HIV control programme. (Palliative Care Indicators, ALCP, 2013)

**FOR YOUR INFORMATION**
Wording for this indicator was derived from the WHO: Existence of a current national palliative care plan/programme (WHO Planning and Implementing Palliative Care Services, 2016; http://apps.who.int/iris/bitstream/10665/250584/1/9789241565477-eng.pdf?ua=1)

**SUMMARY**
Twelve of responding African countries indicated having stand-alone palliative care policies. The first stand-alone palliative care policy was in Rwanda. Since then, Botswana, Ethiopia, Guinea, Libya, Malawi, Mozambique, Rwanda, South Africa, Swaziland, Tanzania, and Zimbabwe have implemented stand-alone palliative care policies, though implementation varies greatly by country. Twenty-four of responding countries indicated having palliative care in the national cancer plan/programme, and twenty-three countries indicating having it in the national HIV plan/programme.

**EXISTENCE OF A NATIONAL PALLIATIVE CARE (PC) PLAN OR PROGRAMME**
- Stand-alone PC plan or programme
- Cancer Plan or Programme with a section for PC
- HIV Plan or Programme with a section for PC
- No data
1A / INDICATOR
Existence of current national palliative care clinical guidelines

1B / DEFINITION OF PALLIATIVE CARE GUIDELINES
National palliative care clinical guidelines promote standardized clinical palliative care management and standardize palliative care training as well as provide a framework for clinical management. (HPCA, 2012: http://www.hpca.co.za/item/hpca-clinical-guidelines-2012.html)

2A / INDICATOR
Presence of a person/unit/branch in the Ministry of Health (MOH) or equivalent with responsibility for palliative care

2B / DEFINITION OF PERSON OR DESK
Existence of a current designated person, desk, unit, branch, or department within the Ministry of Health or equivalent government agency with responsibility for palliative care. A responsible person, desk, unit, branch, or department should be assigned in the government to oversee palliative care activities, development, and/or growth in the country with an accompanying budget (Palliative Care Indicators, ALCP, 2013)

2C / FOR YOUR INFORMATION
Wording for this indicator was derived from the WHO: Is there a unit/branch/department in the MOH or equivalent with responsibility for NCDs and their risk factors?

However, we have adjusted the wording to include components that we felt were important from our Country Experts and International Committee of Experts who commented on all of the indicators. (WHO NCD CCS 2015; http://apps.who.int/iris/bitstream/10665/246223/1/WHO_NMH_NVI_16.4_eng.pdf)

3A / INDICATOR
Presence of funding for palliative care activities/functions in the national health budget by the Ministry of Health or equivalent government agency

3B / DEFINITION OF FUNDING
Ministry of Health or equivalent government agency has reserved some type of funding in the national health budget for activities and/or function for palliative care in the budget for this current year. (WHO, 2015; http://apps.who.int/iris/bitstream/10665/206513/1/WHO_NMH_NVI_16.4_eng.pdf)

3C / FOR YOUR INFORMATION
Wording for this indicator was derived from the WHO: Is there funding for the following NCD and risk factor activities/functions (palliative care)? However, we have adjusted the wording to include components that were felt important from our Country Experts and International Committee of Experts who commented on all of the indicators. (WHO NCD CCS 2015; http://apps.who.int/iris/bitstream/10665/246223/1/WHO_NMH_NVI_16.4_eng.pdf#ua=1)

SUMMARY
Only thirteen of responding countries indicating having national palliative care clinical guidelines. Those that did have clinical guidelines sometimes did not have national endorsement and/or were created and maintained instead by the national palliative care association. Of importance, twenty countries reported having a person or desk in the Ministry of Health responsible for palliative care, indicating that there is growing interest in the government on palliative care. Though twelve countries indicated having funding, the vast majority indicated that funding was very minimal. Of note was Uganda and Kenya, where the country does pay for morphine for patients throughout the country, and in Kenya, someone from the Ministry of Health sits in the national palliative care association offices to help in coordination of palliative care efforts in the country.
Map 11. Palliative Care Education

1A / INDICATOR
Proportion of medical schools which include palliative care education in undergraduate curricula (obligatory/optional/total)

1B / DEFINITION OF OBLIGATORY AND OPTIONAL

Obligatory
An obligatory component means that a component of palliative medicine is included as mandatory or compulsory teaching for all medical or nursing students in order to graduate. The course may be
1. an independent subject or course with the name “palliative” included in the title OR
2. sharing of the course with other components and with a reference in the title (for example oncology and palliative medicine)
3. sharing of the course with other components where a significant number of hours of palliative medicine is included in different courses as a component or as part of the longitudinal study for that course

Optional
An optional component means that a component of palliative medicine is included as electives or optional teaching but are not required for all medical or nursing students and are not required to graduate. The course may be
1. an independent subject or course with the name “palliative” included in the title OR
2. sharing of the course with other components and with a reference in the title (for example oncology and palliative medicine)
3. sharing of the course with other components where a significant number of hours of palliative medicine is included in different courses as a component or as part of the longitudinal study for that course

For the purpose of this project, undergraduate education is defined as course or specific module within a course, which includes the basic aspects of palliative care. Basic aspects of palliative care include:

1. The identification, evaluation and treatment of the most frequent symptoms
2. The physical, psychological and social aspects of care
3. Communication issues with the patient, relatives and caregivers.

(Palliative Care Indicators, ALCP, 2013)

2A / INDICATOR FOR THE AVAILABILITY OF A PALLIATIVE CARE SPECIALISATION FOR DOCTORS
Existence of specialized palliative care educational programmes for physicians, accredited by the national responsible authority, with specialized palliative care education defined as specialty, sub-speciality, master, or diploma, as defined by the respective competent authority

2B / DEFINITION SPECIALISATION

Official recognition of palliative medicine as a specialty, sub-specialty, master, diploma, or equivalent by a professional or governmental body such as, but not limited to, the Public Service Commission, Health Service Commission, professional councils, or other equivalent associations and/or organisations within the country.

2C / FOR YOUR INFORMATION

Wording for this indicator was derived from the WHO: Number of specialized palliative care educational programmes for physicians, accredited by the national responsible authority (absolute number), with specialized palliative care education defined as specialty, sub-specialty, master, or diploma, as defined by the respective competent authority

(WHO Planning and Implementing Palliative Care Services, 2016; http://apps.who.int/iris/bitstream/10665/250584/1/9789241565417-eng.pdf?ua=1)

SCHOOLS WITH PC COURSES IN UNDERGRADUATE CURRICULA

SUMMARY

There is a great need for increased educational opportunities for palliative care in Africa. Six African countries, including Egypt, Ghana, Kenya, South Africa, Uganda, and Zambia indicated some form of official recognition of palliative medicine by an official body within the country. Egypt offers a post-graduate diploma in Supportive & Palliative Care. Ghana offers a Palliative Medicine Fellowship for physicians trained in Family Medicine. Kenya offers a higher diploma in conjunction with Oxford Brookes University. South Africa offers a Master in Palliative Care at the University of Cape Town. Uganda offers a Diploma as well as a Degree in palliative care through the Institute for Hospice and Palliative Care Africa and Makerere University. And Zambia offers a Continuous Professional Development Certificate Program in palliative care.
Opioid consumption per capita

Data on opioid consumption is obtained from the International Narcotics Control Board. These data represent the amounts of opioids distributed legally in a country for medical and scientific purposes other than through Task Shifting Policies or, as in the case of Uganda, through a policy allowing for trained nurses to prescribe, though in a few countries, there is no official law for nurse prescribing. Morphine was available in the public sector for about half of the reporting countries (24/48), and laws and regulations limited opioid prescriptions to specialist or certain types of physicians in half of the reporting countries (24/48).

SUMMARY

In general, average opioid consumption in across the continent is very low, averaging around 1 mg/capita/year. Mauritius, South Africa, Namibia, and Tanzania have the highest opioid consumption. Palliative care trained nurses prescribe opioids in about nine countries through Task Shifting Policies or, as in the case of Uganda, through a policy allowing for trained nurses to prescribe, though in a few countries, there is no official law for nurse prescribing. Morphine was available in the public sector for about half of the reporting countries (24/48), and laws and regulations limited opioid prescriptions to specialist or certain types of physicians in half of the reporting countries (24/48).
Map 13. Palliative Care Professional Activity (Vitality)

1A / INDICATOR
Existence of a national association or national association equivalent for palliative care

1B / DEFINITION ASSOCIATION
Existence of a national association for palliative care or a national association equivalent for palliative care. For example, in Rwanda, the Rwanda Biomedical Centre has a National Coordinator for Palliative Care that functions as a national association equivalent for palliative care.

2A / INDICATOR
Existence of a periodic national conference for palliative care in the country

2B / DEFINITION CONFERENCE
Existence of a periodic national conference for palliative care in the country. Periodic indicates every certain number of years, with at least one conference having taken place in the past.

SUMMARY
Twenty-six of reporting countries reported having a national association for palliative care. However, funding continues to be a challenge in terms of having an active association, and some countries indicated that though the association exists, due to lack of funding, there have not been much or any activity by the national association. Ten countries indicated having a periodic conference for palliative care, though some countries, like Algeria, does not have a separate conference for palliative care, but rather, has palliative care included as a section in conferences on pain. Here, South Africa, Uganda, Nigeria, Cameroon, and Kenya stand out for having periodic national conferences specifically for palliative care, run or organized by the national palliative care association.
**Map 14. Palliative Care Research**

**DEFINITION**
The number of articles included in the scoping review conducted with PubMed, Embase, and CINAHL on palliative care development in African countries compared with total hospice and palliative care service provision per population.

**SUMMARY**
As it can be appreciated in our study, in the published literature, there is no information on about half of the African countries, and where there is data available, it pertains mostly to Anglophone African countries as compared to non-Anglophone African countries. This fact has been reflected in work by advocacy groups such as Human Rights Watch (HRW), which states that Francophone African countries are lagging behind in palliative care development compared to development in Anglophone countries and the recent focus given to Francophone countries by the Department of International Programmes at Hospice Africa Uganda, which provides training in palliative care to healthcare professionals across Africa. Furthermore, the identified articles cover mostly medicines-related issues, and less frequently on services, policies, education or professional activity.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>12</td>
</tr>
<tr>
<td>Uganda</td>
<td>11</td>
</tr>
<tr>
<td>South Africa</td>
<td>7</td>
</tr>
<tr>
<td>Egypt</td>
<td>5</td>
</tr>
<tr>
<td>Morocco</td>
<td>5</td>
</tr>
<tr>
<td>Nigeria</td>
<td>5</td>
</tr>
<tr>
<td>Malawi</td>
<td>4</td>
</tr>
<tr>
<td>Tanzania</td>
<td>4</td>
</tr>
<tr>
<td>Zambia</td>
<td>2</td>
</tr>
<tr>
<td>Botswana</td>
<td>2</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1</td>
</tr>
<tr>
<td>Gambia, The</td>
<td>1</td>
</tr>
<tr>
<td>Lesotho</td>
<td>1</td>
</tr>
<tr>
<td>Libya</td>
<td>1</td>
</tr>
<tr>
<td>Madagascar</td>
<td>1</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1</td>
</tr>
<tr>
<td>Namibia</td>
<td>1</td>
</tr>
<tr>
<td>Rwanda</td>
<td>1</td>
</tr>
<tr>
<td>Somaliland</td>
<td>1</td>
</tr>
<tr>
<td>Sudan</td>
<td>1</td>
</tr>
<tr>
<td>Zambia</td>
<td>2</td>
</tr>
<tr>
<td>Botswana</td>
<td>1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1</td>
</tr>
<tr>
<td>Gambia, The</td>
<td>1</td>
</tr>
<tr>
<td>Lesotho</td>
<td>1</td>
</tr>
<tr>
<td>Libya</td>
<td>1</td>
</tr>
<tr>
<td>Madagascar</td>
<td>1</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1</td>
</tr>
<tr>
<td>Namibia</td>
<td>1</td>
</tr>
<tr>
<td>Rwanda</td>
<td>1</td>
</tr>
<tr>
<td>Somaliland</td>
<td>1</td>
</tr>
<tr>
<td>Sudan</td>
<td>1</td>
</tr>
<tr>
<td>Zambia</td>
<td>2</td>
</tr>
<tr>
<td>Botswana</td>
<td>1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1</td>
</tr>
<tr>
<td>Gambia, The</td>
<td>1</td>
</tr>
<tr>
<td>Lesotho</td>
<td>1</td>
</tr>
<tr>
<td>Libya</td>
<td>1</td>
</tr>
<tr>
<td>Madagascar</td>
<td>1</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1</td>
</tr>
<tr>
<td>Namibia</td>
<td>1</td>
</tr>
<tr>
<td>Rwanda</td>
<td>1</td>
</tr>
<tr>
<td>Somaliland</td>
<td>1</td>
</tr>
<tr>
<td>Sudan</td>
<td>1</td>
</tr>
</tbody>
</table>

*Figure: THEMATIC MAPS - Map 14. Palliative Care Research*
3. Country Information
Algeria

**COUNTRY INFORMATION**

**Population (2015)**: 39,666,519

**Gross Domestic Product per capita (2015)**: $4,206

**Physicians per 1000 inh. (2015)**: 1.21

**Health expenditure per capita (2015)**: $932.10

**Population density (2015)**: 1.40 inhabitants/km²

**2013**

- Algeria had six of the seven essential opioids available. (Cleary J, et al., 2013)

**KEY INFORMANTS**

- Benmoussa Daïla, Centre Pierre et Marie Curie Alger.

**COMMENTs FROM KEY INFoRMANTS**

- **Services**
  - There is no structure of PC in Algeria. PC is provided in non-PC-specific services.

- **Policies**
  - N/A.

- **Education**
  - N/A.

- **Medicines**
  - Immediate-release morphine and oxycodone are being registered.
  - There is available prolonged-release morphine and transdermal fentanyl only. Opioid prescriptions are strictly restricted to doctors.

- **Vitality**
  - There are periodic conferences carried out by the Algerian Society of Medical Oncology and the Algerian Society for the Assessment and Treatment of Pain.

**REFERENCES**


**MILESTONES**

- 2013
  - Algeria had six of the seven essential opioids available. (Cleary J, et al., 2013)

**Gross Domestic Product per capita (2015)**: $4,206

**Physicians per 1000 inh. (2015)**: 1.21

**Health expenditure per capita (2015)**: $932.10

**Population density (2015)**: 1.40 inhabitants/km²

**2013**

- Algeria had six of the seven essential opioids available. (Cleary J, et al., 2013)

**KEY INFORMANTS**

- Benmoussa Daïla, Centre Pierre et Marie Curie Alger.

**COMMENTs FROM KEY INFoRMANTS**

- **Services**
  - There is no structure of PC in Algeria. PC is provided in non-PC-specific services.

- **Policies**
  - N/A.

- **Education**
  - N/A.

- **Medicines**
  - Immediate-release morphine and oxycodone are being registered.
  - There is available prolonged-release morphine and transdermal fentanyl only. Opioid prescriptions are strictly restricted to doctors.

- **Vitality**
  - There are periodic conferences carried out by the Algerian Society of Medical Oncology and the Algerian Society for the Assessment and Treatment of Pain.

**REFERENCES**

## Angola

### Country Information

- **Population**: 25,021,974 (2015)
- **Gross Domestic Product per capita**: US$4,101.50 (2013)
- **Physicians per 1000 inh.**: 0.20 (2010)
- **Human Development Index**: 0.53 (2015)
- **Health expenditure per capita**: US$239.01 (2013)
- **Human Development Index Ranking**: 149 (2015)
- **Population density**: 1.35 million km²
- **Physicians per 1000 inh.**: 11.54 (2014)
- **GDP per capita**: US$4,101.50 (2015)
- **Population density**: 1.246,700 (2015)
- **Population**: 20,07 (2015)

### Milestones

None available.

### Key Informants

**Joseth Rita de Sousa, DNSP - Ministério da Saúde de Angola.**

### Comments from Key Informants

**Services**

- PC was initiated at the Angola Cancer Control Institute and the Américo Boavida Hospital.

**Policies**

- N/A.

**Education**

- N/A.

**Medicines**

- N/A.

**Vitality**

- N/A.

### References

None available.

### National Association or Institution

None.

### Key Informants

**Joseth Rita de Sousa, DNSP - Ministério da Saúde de Angola.**

### Services

<table>
<thead>
<tr>
<th>Number of Hospices or PC services</th>
<th>Number of Hospices or PC services with paediatric-specific programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Policies

<table>
<thead>
<tr>
<th>Stand-alone national PC plan/programme</th>
<th>National cancer plan/programme with a section for PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Education

<table>
<thead>
<tr>
<th>Number of medical schools</th>
<th>Medical schools which include PC education as mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Medicines

<table>
<thead>
<tr>
<th>Availability of immediate-release oral morphine</th>
<th>Non-specialised physicians can prescribe morphine</th>
<th>Trained nurses can prescribe morphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Vitality

<table>
<thead>
<tr>
<th>Consumption of morphine per capita (mg/capita/year), 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

### Milestones

None available.

### Certification for PC Physicians

None available.

### Consumption of morphine per capita (mg/capita/year), 2012

- 0.08 (Angola)
- 1.08 (AVG.)
- 0.00 (MIN.)
- 11.54 (MAX.)

### Health expenditure per capita, 2015

- US$239.01

### Human Development Index, 2015

- 0.53

### Health expenditure total (% of Gross), 2014

- 25%

### Physicians per 1000 inh., 2010

- 0.20

### Gross Domestic Product per capita, 2015

- US$4,101.50

### Human Development Index Ranking, 2015

- 149

### Human Development Index, 2015

- 0.53

### Population density, 2015

- 1.35 million km²

### Population, 2015

- 25,021,974

### Surface area

- 1,246,700 km²

### Health expenditure total (% of Gross), 2014

- 25%

### Physicians per 1000 inh., 2010

- 0.20

### Human Development Index, 2015

- 0.53

### Human Development Index Ranking, 2015

- 149

### Health expenditure per capita, 2013

- US$239.01

### Physicians per 1000 inh. 2010

- 0.20

### Human Development Index 2015

- 0.53

### Health expenditure per capita 2015

- US$239.01

### Human Development Index Ranking 2015

- 149

### Health expenditure total (% of Gross) 2014

- 25%

### Physicians per 1000 inh. 2010

- 0.20

### Human Development Index 2015

- 0.53

### Health expenditure per capita 2015

- US$239.01

### Human Development Index Ranking 2015

- 149

### Health expenditure total (% of Gross) 2014

- 25%
**Benin**

### COUNTRY INFORMATION

#### MILESTONES

- The Benin Association of PC is established. (Anthelme AK, 2017)

#### REFERENCES

None available.

#### NATIONAL ASSOCIATION OR INSTITUTION

Association Béninoise de Soins Palliatifs (ABSP).

### KEY INFORMANTS

Agbodane Kouessi Anthelme, Médecine Interne CNHU-HKM de Cotonou.

### SERVICES

- **Number of hospices or PC services**
- **Number of hospices or PC services with paediatric-specific programmes**

### POLICIES

- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

### EDUCATION

- Number of medical schools
- Medical schools which include PC education as mandatory
- Medical schools which include PC education as optional
- Certification for PC physicians
- Number of nursing schools
- Nursing schools which include PC education as mandatory
- Nursing schools which include PC education as optional

### MEDICINES

- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

### VITALITY

- Existence of a national association or equivalent for PC
- Existence of a periodic national conference for PC

### META

- Consumption of morphine per capita (mg/capita/year), 2014

### BENIN

#### POPULATION

- **Population**
- **Surface area**
- **Population density**

#### ECONOMY

- **GDP**
- **GDP per capita**
- **Human Development Index**
- **Physicians per 1000 inh.**
- **Health expenditure per capita**
- **Health expenditure as % of GDP**
- **Primary education enrolment rate**

#### COMMENTS FROM KEY INFORMANTS

- Services
- Policies
- Education
- Medicines
- Vitality

#### MILESTONES

- The Benin Association of PC is established. (Anthelme AK, 2017)

#### REFERENCES

None available.

#### NATIONAL ASSOCIATION OR INSTITUTION

Association Béninoise de Soins Palliatifs (ABSP).

#### KEY INFORMANTS

Agbodane Kouessi Anthelme, Médecine Interne CNHU-HKM de Cotonou.
Botswana

**Population**

- **Population**: 2,262,485
- **Population Density**: 2015

**Healthcare Statistics**

- **Gross Domestic Product per capita**: $3,660.10
- **Physicians per 1,000 inh.**: 0.34
- **Health expenditure per capita**: $870.84
- **Human Development Index**: 0.70
- **Human Development Index Ranking**: 106

**Milestones**

- **2016**: Botswana has drafted national policies that are in the process of being adopted. (Luyirika EBK, et al., 2016)

**Comments from Key Informants**

- **Services**: Generally, hospitals do not have separate PC units. Currently patients needing PC services are offered in their own respective wards, e.g. medical, surgical etc.
- **Policies**: Botswana has a PC strategy. However, there is currently no separate budget. PC activities are carried out within the Community Home Based Care Programme.
- **Education**: PC is currently offered as an extra additional topic in medical schools, plans are underway to request schools to include it in the curriculum.
- **Medicines**: Medical Doctors are the only ones allowed to prescribe medicines according to Drug Regulatory Act.
- **Vitality**: The MOH commemorates hospice and PC week annually in different districts and involve different stakeholders.

**Key Informants**

- **Penny Sebuweng Makuruetsa**: Ministry of Health.

**National Association or Institution**

Botswana Hospice Palliative Care Association (BHPCA)

https://www.facebook.com/Botswana-Hospice-Palliative-Care-Association-796499516794704/
Burkina Faso

18,105,570
Population, 2015

274,220
Surface area (km²)

66,18
Population density, 2015

US$588.80
Gross Domestic Product per capita, 2015

0.05
Physicians per 1000 inh., 2010

US$82.31
Health expenditure per capita, 2015

4.96
Health expenditure total (% of GDP), 2014

0.40
Human Development Index, 2015

183
Human Development Index Ranking, 2015

SERVICES

Number of hospices or PC services

Number of hospices or PC services with paediatric-specific programmes

N/A
N/A

POLICIES

Stand-alone national PC plan/programme

National cancer plan/programme with a section for PC

National HIV plan/programme with a section for PC

National PC clinical guidelines

Person/deck/unit in the MOH with PC responsibility

Funding for PC in the National Health budget

EDUCATION

Number of medical schools

Medical schools which include PC education as mandatory

Medical schools which include PC education as optional

Certification for PC physicians

Number of nursing schools

Medical schools which include PC education as mandatory

Consumption of morphine per capita (mg/capita/year), 2014

Health expenditure per capita, 2015

MIN.
MAX.
AVG.

1
1
2
3
4
5
6
7
8
9
10
11

0.00
11.54
0.03

589.80
82.31

18,105,570
Mill. inh.

21

1:20.000.000

183

0.05
0.40

Physicians per 1000 inh., 2010

Human Development Index, 2015

Comments from Key Informants

Services

Some organisations care for HIV-infected children without being able to offer continuous and recognised services of PC. There are individual organisations or aid associations that perform home visits and provide aspects of PC such as psychological and financial support.

Policies

N/A.

Education

N/A.

Medicines

Compressed form of opioids is available including Actiskenan (Morphine Sulfate) 5mg, 10mg, 15mg.

Vitality

N/A.

MILESTONES

None available.

REFERENCES

None available.

NATIONAL ASSOCIATION OR INSTITUTION

None.

KEY INFORMANTS

Dr. Some Ollo Roland, Cancerologue Chirurgien.
Burundi

MILESTONES

2014
> The first advocacy workshop on PC was organised and conducted by a synergy of organisations. (Ciza R, 2017)

2015
> The Association for PC in Burundi was established. (Muhigirwa Ciza J, 2017)

2016
> In Burundi, there are 2 hospices or PC services. The first is the Association for PC in Burundi and the second is a hospice for the aged run by the Congregation of Catholic Sisters BENEMUKAMA in Bujumbura. (Muhigirwa Ciza J, 2017)

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION

Association pour les Soins Palliatifs au Burundi (ASOPABU)

KEY INFORMANTS

Muhigirwa Ciza Josephine, Representante Legale de l’ASOPABU
CONFIDENTIAL.

COMMENTS FROM KEY INFORMANTS

Services
> PC in Burundi is in its very early stages. The majority of caregivers do not know PC in its true sense. In Burundi, ASOPABU is the only organisation to offer palliative home care services through training received from Hospice Africa Uganda. The remaining organisations do not have the skills to do so.

Policies
> It should be noted that with the current crisis in the country, the situation worsened with the departure of almost all the partners who supported the PC work. The government does not have the means to introduce and maintain new programmes. The partners are no longer there, and the professionals feel stuck.

Education
> PC is not integrated into the health system or into medical and nursing training. PC is not in the medical or paramedical training and there is no program to train healthcare professionals, even pain management is almost non-existent.

Medicines
> Morphine exists only in injectable form, reserved for patients in the operating room. Morphine is prescribed exclusively by doctors.

Vitality
> N/A.

COUNTRY INFORMATION

Population density (2015): 110 individuals/km²
Gross Domestic Product (per capita, 2015): USD $277.10
Physicians (per 1000 inh., 2010): 0.40
Health expenditure (per capita, 2015): USD $58.02
Health expenditure as % of total GDP (2014): 0.6%
Human Development Index (2015): 0.40
Health expenditure per capita (2015): 134
Human Development Index Ranking (2015): 184

EDUCATION

Number of medical schools: Yes
Medical schools which include PC education as mandatory: Yes (1)
Medical schools which include PC education as optional: No (0)

Number of nursing schools: Yes
Nursing schools which include PC education as mandatory: Yes (0)
Nursing schools which include PC education as optional: No (0)

SERVICES

Number of hospices or PC services: 2
Number of hospices or PC services with paediatric-specific programmes: 0/2 (0%)

Policies

Stand-alone national PC plan/programme: Yes
National cancer plan/programme with a section for PC: Yes
National HIV plan/programme with a section for PC: Yes
National PC clinical guidelines: Yes
Person/desk/unit in the MOH with PC responsibility: Yes
Funding for PC in the National Health budget: Yes

MEDICINES

Availability of immediate-release oral morphine: No
Non-specialised physicians can prescribe morphine: No
Trained nurses can prescribe morphine: Yes

VITALITY

Existence of a national association or equivalent for PC: No
Existence of a periodic national conference for PC: No

Number of home-based PC services offered by hospices: 2
Hospitals with inpatient PC units: 0/71 (0%)

CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2008

0 1 2 3 4 5 6 7 8 9 10 11
MAX. 11.54
MIN. 0.00
AVG. 1

REFERENCES

None available.
Cameroon

### COUNTRY INFORMATION

- **Population**: 23,344,179
- **Surface area**: 475,440 km²
- **Population density**: 49.38
- **GDP per capita**: US$1,217.30
- **Health expenditure (% of GDP)**: 0.10%
- **Physicians per 1000 inh.**: 0.08
- **Health expenditure per capita**: US$121.92
- **Physicians per 1000 inh.**: 0.08
- **Human Development Index**: 0.51
- **Health expenditure per capita**: US$121.92
- **Physicians per 1000 inh.**: 0.08
- **Human Development Index**: 0.51

### MILESTONES

- **2006**: First PC unit called the Integrated Hospice Program started at Banso Baptist Hospital, part of the Cameroon Baptist Convention Health Services. It is a hospital PC team that provides care at the hospital as well as home based care follow-up. (Mbeng NG, 2017)
- **2007**: The Bamenda Regional Hospital PC Unit was started and carries out interdisciplinary services like Banso Baptist Hospital. (Mbeng NG, 2017)
- **2010**: The HPCAC (the Hospice and Palliative Care Association of Cameroon) was started. (Mbeng NG, 2017)

### REFERENCES

None available.

### NATIONAL ASSOCIATION OR INSTITUTION

Hospice and Palliative Care Association of Cameroon (HPCAC).

### COMMENTS FROM KEY INFORMANTS

**Services**

- Services are not developed well enough to start building services in pediatric PC. We are hoping to get there with time and training. One community home-based care service was started at Ilana in the Western Region but developing slowly due to lack of funding and staff.

**Policies**

- There has been much discussion on developing a PC plan/policy but there are no concrete results yet. The MOH can only budget for PC like they do for cancer and HIV when it is included in the national plan. In terms of guidelines, we are still working to build a strong country team and a committee to develop one.

**Education**

- We have been trying to include PC in the medical school curriculum since 2008 but have not yet been able to do so. In 2014, the University of Buea started a workshop programme for nurses in PC.

**Medicines**

- Immediate-release oral morphine is available in the private sector. Nurses with special training in PC prescribe but there is no formal policy for nurse prescribing. However, it is generally understood that specialist nurses have acquired very good training.

**Vitality**

- We have held two national PC conferences in 2015 and 2016.

### KEY INFORMANTS

Ndikintum George Mbeng, HPCAC.

### MEDICINES

- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

### SERVICES

- Number of hospices or PC services
- Number of hospices or PC services with paediatric-specific programmes

### EDUCATION

- Number of medical schools
- Medical schools which include PC education as mandatory
- Medical schools which include PC education as optional

### VITALITY

- Existence of a national association or equivalent for PC
- Existence of a periodic national conference for PC

### MILESTONES

- **2006**: First PC unit called the Integrated Hospice Program started at Banso Baptist Hospital, part of the Cameroon Baptist Convention Health Services. It is a hospital PC team that provides care at the hospital as well as home based care follow-up. (Mbeng NG, 2017)
- **2007**: The Bamenda Regional Hospital PC Unit was started and carries out interdisciplinary services like Banso Baptist Hospital. (Mbeng NG, 2017)
- **2010**: The HPCAC (the Hospice and Palliative Care Association of Cameroon) was started. (Mbeng NG, 2017)

### REFERENCES

None available.
Central African Republic

COUNTRY INFORMATION

Population (2015)
4,900,274

Gross Domestic Product per capita, 2015
US$323.20

Physicians per 1000 inh., 2010
0.06

Health expenditure per capita, 2015
US$249.62

Population density, 2015
787

Surface area (km²)
622,980

Health expenditure total (% of GDP), 2014
4.20

Human Development Index, 2015
0.35

Human Development Index Ranking, 2015
1

Central African Republic

MILESTONES

None available.

REFERENCES

None available.

NATIONAL ASSOCIATION OR INSTITUTION

None.

KEY INFORMANTS

CONFIDENTIAL.

SERVICES

Comments from Key Informants

- Services
  - There are no PC facilities yet.
- Policies
  - Cancer is included in the NCD Program.
- Education
  - N/A.
- Medicines
  - N/A.
- Vitality
  - N/A.

MILESTONES

None available.

REFERENCES

None available.

KEY INFORMANTS

CONFIDENTIAL.

Policies

- Stand-alone national PC plan/programme
  - N/A
- National cancer plan/programme with a section for PC
  - N/A
- National HIV plan/programme with a section for PC
  - N/A
- National PC clinical guidelines
  - N/A
- Person/desk/unit in the MOH with PC responsibility
  - N/A
- Funding for PC in the National Health budget
  - N/A

MEDICINES

- Availability of immediate-release oral morphine
  - N/A
- Non-specialised physicians can prescribe morphine
  - N/A
- Trained nurses can prescribe morphine
  - N/A

EDUCATION

- Number of medical schools
  - N/A
- Medical schools which include PC education as mandatory
  - N/A
- Medical schools which include PC education as optional
  - N/A
- Certification for PC physicians
  - N/A
- Number of nursing schools
  - N/A
- Nursing schools which include PC education as mandatory
  - N/A
- Nursing schools which include PC education as optional
  - N/A

VITALITY

- Number of hospices or PC services
  - 0 (0%)
- Number of hospices or PC services with paediatric-specific programmes
  - 0 (0%)
- Number of home-based PC services (offered by hospices)
  - 0 (0%)
- Number of hospices or PC services with paediatric-specific programmes
  - 0 (0%)
- Hospitals with inpatient PC units
  - 0 (0%)
- Number of PC cared for in the last year (estimation)
  - 0 (0%)
- Districts with at least one PC service
  - 0 (0%)
- Consumption of morphine per capita (mg/capita/year), 2006
  - 0
- Existence of a national association or equivalent for PC
  - N/A
- Existence of a periodic national conference for PC
  - N/A

CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2006

Health expenditure per capita, 2015
US$249.62

Human Development Index, 2015
0.35

Human Development Index Ranking, 2015
1

Central African Republic

CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2006

Health expenditure per capita, 2015
US$249.62

Human Development Index, 2015
0.35

Human Development Index Ranking, 2015
1

Central African Republic

CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2006

Health expenditure per capita, 2015
US$249.62

Human Development Index, 2015
0.35

Human Development Index Ranking, 2015
1

Central African Republic

CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2006

Health expenditure per capita, 2015
US$249.62

Human Development Index, 2015
0.35

Human Development Index Ranking, 2015
1

Central African Republic

CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2006

Health expenditure per capita, 2015
US$249.62

Human Development Index, 2015
0.35

Human Development Index Ranking, 2015
1

Central African Republic
Comoros

COUNTRY INFORMATION

Population: 788,474
Surface area (km²): 18,611
Population density: 42.3
Gross Domestic Product per capita, 2015: US$7,174.00
Physicians per 1000 inh., 2010: N/A
Health expenditure per capita, 2015: US$100.82
Health expenditure total (% of GDP), 2014: 6.75
Human Development Index, 2015: 0.50
Human Development Index Ranking, 2015: 159

MILESTONES
None available.

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
None.

KEY INFORMANTS
Nassur Soimihi, CHN, El Maanrouf Hospital.

COMMENTS FROM KEY INFORMANTS
Services
- Home-based care services provide some non-specialised PC.

Policies
- N/A.

Education
- N/A.

Medicines
- Only injectable Morphine is available.

Vitality
- N/A.

SERVICES
Number of hospices or PC services (offered by hospices)
Number of hospices or PC services with paediatric-specific programmes

POLICIES
Stand-alone national PC plan/programme
National cancer plan/programme with a section for PC
National HIV plan/programme with a section for PC
National PC clinical guidelines
Person/desk/unit in the MOH with PC responsibility
Funding for PC in the National Health budget

EDUCATION
Number of medical schools
Medical schools which include PC education as mandatory
Medical schools which include PC education as optional
Certification for PC physicians

MEDIENCES
Availability of immediate-release oral morphine
Non-specialised physicians can prescribe morphine
Trained nurses can prescribe morphine

VITALITY
Consumption of morphine per capita (mg/capita/year), 2009

7

EXISTENCE
Existence of a national association or equivalent for PC
Existence of a periodic national conference for PC

POPULATION
Population 2015: 788,474
Surface area (km²): 18,611
Population density: 42.3

HUMAN DEVELOPMENT INDEX
Human Development Index, 2015: 0.50
Human Development Index Ranking, 2015: 159

REFERRALS
None available.

MILESTONES
None available.

COUNTRY INFORMATION

Consumption of morphine per capita (mg/capita/year), 2009

7

POLICIES
Stand-alone national PC plan/programme
National cancer plan/programme with a section for PC
National HIV plan/programme with a section for PC
National PC clinical guidelines
Person/desk/unit in the MOH with PC responsibility
Funding for PC in the National Health budget

EDUCATION
Number of medical schools
Medical schools which include PC education as mandatory
Medical schools which include PC education as optional
Certification for PC physicians

MEDIENCES
Availability of immediate-release oral morphine
Non-specialised physicians can prescribe morphine
Trained nurses can prescribe morphine

VITALITY
Consumption of morphine per capita (mg/capita/year), 2009

7

EXISTENCE
Existence of a national association or equivalent for PC
Existence of a periodic national conference for PC

POPULATION
Population 2015: 788,474
Surface area (km²): 18,611
Population density: 42.3

HUMAN DEVELOPMENT INDEX
Human Development Index, 2015: 0.50
Human Development Index Ranking, 2015: 159

REFERRALS
None available.

MILESTONES
None available.

COUNTRY INFORMATION

Consumption of morphine per capita (mg/capita/year), 2009

7

POLICIES
Stand-alone national PC plan/programme
National cancer plan/programme with a section for PC
National HIV plan/programme with a section for PC
National PC clinical guidelines
Person/desk/unit in the MOH with PC responsibility
Funding for PC in the National Health budget

EDUCATION
Number of medical schools
Medical schools which include PC education as mandatory
Medical schools which include PC education as optional
Certification for PC physicians

MEDIENCES
Availability of immediate-release oral morphine
Non-specialised physicians can prescribe morphine
Trained nurses can prescribe morphine

VITALITY
Consumption of morphine per capita (mg/capita/year), 2009

7

EXISTENCE
Existence of a national association or equivalent for PC
Existence of a periodic national conference for PC

POPULATION
Population 2015: 788,474
Surface area (km²): 18,611
Population density: 42.3

HUMAN DEVELOPMENT INDEX
Human Development Index, 2015: 0.50
Human Development Index Ranking, 2015: 159

REFERRALS
None available.

MILESTONES
None available.

COUNTRY INFORMATION

Consumption of morphine per capita (mg/capita/year), 2009

7

POLICIES
Stand-alone national PC plan/programme
National cancer plan/programme with a section for PC
National HIV plan/programme with a section for PC
National PC clinical guidelines
Person/desk/unit in the MOH with PC responsibility
Funding for PC in the National Health budget

EDUCATION
Number of medical schools
Medical schools which include PC education as mandatory
Medical schools which include PC education as optional
Certification for PC physicians

MEDIENCES
Availability of immediate-release oral morphine
Non-specialised physicians can prescribe morphine
Trained nurses can prescribe morphine

VITALITY
Consumption of morphine per capita (mg/capita/year), 2009

7

EXISTENCE
Existence of a national association or equivalent for PC
Existence of a periodic national conference for PC

POPULATION
Population 2015: 788,474
Surface area (km²): 18,611
Population density: 42.3

HUMAN DEVELOPMENT INDEX
Human Development Index, 2015: 0.50
Human Development Index Ranking, 2015: 159

REFERRALS
None available.

MILESTONES
None available.

COUNTRY INFORMATION

Consumption of morphine per capita (mg/capita/year), 2009

7

POLICIES
Stand-alone national PC plan/programme
National cancer plan/programme with a section for PC
National HIV plan/programme with a section for PC
National PC clinical guidelines
Person/desk/unit in the MOH with PC responsibility
Funding for PC in the National Health budget

EDUCATION
Number of medical schools
Medical schools which include PC education as mandatory
Medical schools which include PC education as optional
Certification for PC physicians

MEDIENCES
Availability of immediate-release oral morphine
Non-specialised physicians can prescribe morphine
Trained nurses can prescribe morphine

VITALITY
Consumption of morphine per capita (mg/capita/year), 2009

7

EXISTENCE
Existence of a national association or equivalent for PC
Existence of a periodic national conference for PC

POPULATION
Population 2015: 788,474
Surface area (km²): 18,611
Population density: 42.3

HUMAN DEVELOPMENT INDEX
Human Development Index, 2015: 0.50
Human Development Index Ranking, 2015: 159

REFERRALS
None available.

MILESTONES
None available.

COUNTRY INFORMATION

Consumption of morphine per capita (mg/capita/year), 2009

7

POLICIES
Stand-alone national PC plan/programme
National cancer plan/programme with a section for PC
National HIV plan/programme with a section for PC
National PC clinical guidelines
Person/desk/unit in the MOH with PC responsibility
Funding for PC in the National Health budget

EDUCATION
Number of medical schools
Medical schools which include PC education as mandatory
Medical schools which include PC education as optional
Certification for PC physicians

MEDIENCES
Availability of immediate-release oral morphine
Non-specialised physicians can prescribe morphine
Trained nurses can prescribe morphine

VITALITY
Consumption of morphine per capita (mg/capita/year), 2009

7

EXISTENCE
Existence of a national association or equivalent for PC
Existence of a periodic national conference for PC

POPULATION
Population 2015: 788,474
Surface area (km²): 18,611
Population density: 42.3

HUMAN DEVELOPMENT INDEX
Human Development Index, 2015: 0.50
Human Development Index Ranking, 2015: 159

REFERRALS
None available.

MILESTONES
None available.
Cote d’Ivoire

MILESTONES

2005
- A national policy was developed and validated in 2005. (Coulibaly JD, et al., 2009)

2006
- The national Policy for PC was presented by the MOH. (Coulibaly JD, et al., 2009)

2008
- Two workshops have taken place since 2008. (Coulibaly JD, et al., 2009)

REFERENCES


NATIONAL ASSOCIATION OR INSTITUTION

L’association de soins palliatifs de Côte d’Ivoire (ASPI).

KEY INFORMANTS

Siafou Siagbé, Association de soins palliatifs de Côte d’Ivoire (ASPI).

COMMENTS FROM KEY INFORMANTS

Services
- There are 280 centres dedicated to HIV that provide comprehensive services including PC but whose main purpose is not to provide PC services. Of the 255 hospices, specifically for HIV patients, about 5 are dedicated to children with cancer and other chronic diseases and 250 dedicated to children with HIV. PC is mainly provided by NGOs working in HIV and private clinics. All regions have PC units for people living with HIV, but only 3 regions have PC services for cancer patients and other chronic diseases.

Policies
- Funding is very limited. Most of the funding for cancer and HIV programmes is devoted to the prevention of these diseases and very little to PC.

Education
- N/A.

Medicines
- Only doctors prescribe morphine.

Vitality
- N/A.

COUNTRY INFORMATION

Population 2015: 22,701,556

Population density 2015: 71.39

Surface area (km²): 322,460

Gross Domestic Product per capita 2015: $339.00

Physicians per 1000 inh. 2010: 0.14

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Health expenditure total (% of GNI) 2015: 5.72

Human Development Index Ranking 2015: 172

Number of hospices or PC services: 2

Health expenditure on medical care (% of GDP) 2015: 6.46

Physicians per 1000 inh. 2010: 0.46

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Population 2015: 22,701,556

Surface area (km²): 322,460

Gross Domestic Product per capita 2015: $339.00

Physicians per 1000 inh. 2010: 0.14

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Health expenditure total (% of GNI) 2015: 5.72

Human Development Index Ranking 2015: 172

Number of hospices or PC services: 2

Health expenditure on medical care (% of GDP) 2015: 6.46

Physicians per 1000 inh. 2010: 0.46

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Population 2015: 22,701,556

Surface area (km²): 322,460

Gross Domestic Product per capita 2015: $339.00

Physicians per 1000 inh. 2010: 0.14

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Health expenditure total (% of GNI) 2015: 5.72

Human Development Index Ranking 2015: 172

Number of hospices or PC services: 2

Health expenditure on medical care (% of GDP) 2015: 6.46

Physicians per 1000 inh. 2010: 0.46

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Population 2015: 22,701,556

Surface area (km²): 322,460

Gross Domestic Product per capita 2015: $339.00

Physicians per 1000 inh. 2010: 0.14

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Health expenditure total (% of GNI) 2015: 5.72

Human Development Index Ranking 2015: 172

Number of hospices or PC services: 2

Health expenditure on medical care (% of GDP) 2015: 6.46

Physicians per 1000 inh. 2010: 0.46

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Population 2015: 22,701,556

Surface area (km²): 322,460

Gross Domestic Product per capita 2015: $339.00

Physicians per 1000 inh. 2010: 0.14

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Health expenditure total (% of GNI) 2015: 5.72

Human Development Index Ranking 2015: 172

Number of hospices or PC services: 2

Health expenditure on medical care (% of GDP) 2015: 6.46

Physicians per 1000 inh. 2010: 0.46

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Population 2015: 22,701,556

Surface area (km²): 322,460

Gross Domestic Product per capita 2015: $339.00

Physicians per 1000 inh. 2010: 0.14

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46

Health expenditure total (% of GNI) 2015: 5.72

Human Development Index Ranking 2015: 172

Number of hospices or PC services: 2

Health expenditure on medical care (% of GDP) 2015: 6.46

Physicians per 1000 inh. 2010: 0.46

Health expenditure per capita 2015: $187.02

Human Development Index 2015: 0.46
**Dem. Rep. of the Congo**

**Population**
- 77,266,814
- Population density: 340.8

**Economy**
- **Gross Domestic Product (per capita)**: USD 456.10
- **Physicians per 1000 inh., 2010**: 4.33
- **Health expenditure per capita, 2015**: USD 32.28

**Education**
- **Number of medical schools**: 4
- **Medical schools which include PC education as mandatory**: N/A
- **Certification for PC physicians**: N/A

**Policies**
- **Stand-alone national PC plan/programme**: No
- **National cancer plan/programme with a section for PC**: No
- **National HIV plan/programme with a section for PC**: Yes
- **National PC clinical guidelines**: No
- **Existence of a national association or institution**: Yes
- **Existence of a periodic national conference for PC**: No
- **Person/desk/unit in the MOH with PC responsibility**: No
- **Funding for PC in the National Health budget**: No

**Medicines**
- **Availability of immediate-release oral morphine**: N/A
- **Non-specialised physicians can prescribe morphine**: N/A
- **Trained nurses can prescribe morphine**: N/A
- **Consumption of morphine per capita (mg/capita/year), 2014**: N/A

**Vitality**
- **National PC association was created in 2015. There is a periodic national conference for PC organised by Pallia Famili and Magnificat.**

**Key Informants**
- Jean Sampert Makassi, Pallia Famili asbl.

**Comments from Key Informants**
- PC is provided by private organisations and is only available in the capital.
- There are two organisations providing PC services at home: Pallia Famili and Magnificat. The university clinics of Kinshasa want to organise a unit of PC, but it is still in the very early stages.
- There are another two home care services based in the Capital: l’ASBL Elongo Elonga and the Pain Relief Foundation.
- Policies
  - There is a national HIV program in the country, but not one with a section for PC. PC is not included in the health system; it is only through private initiatives.
  - With the support of the African PC Association, the university clinics of Kinshasa have been able to make available a few bottles of oral morphine and the Faculty of Medicine of the University of Kinshasa had just trained a few doctors and nurses.
  - In 2017, a session on pain management and PC was organised in Ngalie-ma Clinic for physicians and nurses of public hospital institutions.
  - A workshop on accessing opioids was organised by the WHO, the Ministry of Public Health and the UNODC.
- **Education**
  - Education
  - **Number of hospices or PC services (offered by hospices)**: 4
  - **Number of hospices or PC services with paediatric-specific programmes**: 0/4 (0%)
  - **Number of home-based PC services**: 4
  - **Hospitals with inpatient PC units**: 0/4 (0%)
  - **Number of PC cared for in the last year (estimation)**: 4 (1/26)
  - **Districts with at least one PC service**: 4% (1/26)

**Milestones**
- 2016: The medical school of the University of Kinshasa inserted a course on PC of 15 hours in the final year of medicine. (Makassi J, 2017)

**National Association or Institution**
- Association Nationale de Soins Palliatifs en RDC (ANSP).
Palliative care in Middle Eastern countries: accomplishments and challenges

MILESTONES

2001
- NGO PC Initiative was launched.

2003

2010
- Egypt has National Guidelines for: 1) Management of acute and chronic pain 2) Management of other physical symptoms. (Silbermann M, et al., 2012)

2012
- There is available postgraduate medical education. (Silbermann M, et al., 2012)

REFERENCES


NATIONAL ASSOCIATION OR INSTITUTION

None.

COMMENTs FROM KEY INFORmANTS

Services
- N/A.

Policies
- PC for cancer patients is one of the items reimbursed for by the Egyptian government.

Education
- A post-graduate diploma in Supportive & PC is available at Alexandria University.

Medicines
- So far, there is no form of oral morphine accessible now for more than one year, though theoretically available. A few institutions import small amounts of immediate-release oral morphine for their own use. One company recently registered immediate-release oral morphine in Egypt, but it is not yet available in the market.

- According to the Egyptian Narcotics Control Law, any physician can prescribe opioids, but many institutions develop their own internal regulations and limit the prescription of opioids to pain specialists, oncologists, senior physicians, etc.

- There are not yet any nurses with special training in PC, and nurses cannot prescribe morphine.

Vitality
- N/A.

KEY INFORMANTS

Maged El-Ansary, Al Azhar University, faculty of medicine, Dept. of Anesthesiology, IC and Pain Medicine, Avicenna Pain relief Unit.

Samy Alsirafy, Palliative Medicine Unit, Kasr Al Aini School of Medicine, Cairo University.

EDUCATION

Number of medical schools

- N/A

Number of nursing schools

- N/A

Consumption of morphine per capita (mg/capita/year), 2014

- N/A

VITALITY

Existence of a national association or equivalent for PC

- N/A

Existence of a periodic national conference for PC

- N/A

Number of hospices or PC services

- 10

Number of hospices or PC services with paediatric-specific programmes

- 1/10 (10%)

Number of home-based PC services (offered by hospices)

- N/A

Hospitals with inpatient PC units

- 2 (0.5% (6/1616))

Number of PC cared for in the last year (estimation)

- 1,600

Districts with at least one PC service

- 22% (6/27)

POLICIES

Stand-alone national PC plan/programme

- N/A

National cancer plan/programme with a section for PC

- N/A

National HIV plan/programme with a section for PC

- N/A

National PC clinical guidelines

- N/A

Person/bed/unit in the MOH with PC responsibility

- N/A

Funding for PC in the National Health budget

- N/A

M EDICINES

Availability of immediate-release oral morphine

- N/A

Non-specialised physicians can prescribe morphine

- N/A

Trained nurses can prescribe morphine

- N/A

MEDICAL SCHOOLS

Number of medical schools

- N/A

Medical schools which include PC education as mandatory

- 0% (0/19)

Medical schools which include PC education as optional

- 0% (0/19)

Medical schools which include PC education as mandatory

- 0% (0/19)

Medical schools which include PC education as optional

- 0% (0/19)

Certification for PC physicians

- N/A

Number of nursing schools

- N/A

Nursing schools which include PC education as mandatory

- N/A

Nursing schools which include PC education as optional

- N/A

Nursing schools which include PC education as mandatory

- N/A

Nursing schools which include PC education as optional

- N/A
Equatorial Guinea

MILESTONES
None available.

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
None.

KEY INFORMANTS
Alvar Jones, UNED.
Yolanda Aixelà-Cabré, IMF-Spanish Council for Scientific Research.

COUNTRY INFORMATION

Population 2015: 845,060
Population density 2015: 3013
Gross Domestic Product per capita 2015: US$14,439.60
Physicians per 1000 inh. 2010: N/A
Health expenditure per capita 2015: US$1163.42
Health expenditure total (% of GNP) 2014: 3.80
Human Development Index 2015: 0.59
Human Development Index Ranking 2015: 138

SERVICES

Number of hospices or PC services (offered by hospices): 1

Number of hospices or PC services with paediatric-specific programmes: 0/1 (0%) (1)

Number of home-based PC services: 1

Hospitals with inpatient PC units 4% (1/25)

POLICIES

Stand-alone national PC plan/programme: NO

National cancer plan/programme with a section for PC: NO

National HIV plan/programme with a section for PC: NO

National PC clinical guidelines: NO

Person/desk/unit in the MOH with PC responsibility: N/A

Funding for PC in the National Health budget: N/A

EDUCATION

Number of medical schools: N/A

Medical schools which include PC education as mandatory: 0% (0/0)

Medical schools which include PC education as optional: 0% (0/0)

Number of nursing schools: N/A

Nursing schools which include PC education as mandatory: 0% (0/0)

Nursing schools which include PC education as optional: 0% (0/0)

MEDICINES

Availability of immediate-release oral morphine: N/A

Non-specialised physicians can prescribe morphine: N/A

Trained nurses can prescribe morphine: N/A

Number of medical schools which include PC education as mandatory: 0% (0/0)

Number of medical schools which include PC education as optional: 0% (0/0)

Certification for PC physicians: N/A

Number of nursing schools: N/A

Nursing schools which include PC education as mandatory: 0% (0/0)

Nursing schools which include PC education as optional: 0% (0/0)

CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year)

Equatorial Guinea AVG. 1

MAX. 11.54

MIN. 0.00

VITALITY

Number of PC cared for in the last year (estimation): 180

Number of PC services: 1

Districts with at least one PC service 0% (1/18)

Existence of a national association or equivalent for PC: N/A

Existence of a periodic national conference for PC: N/A

Consumption of morphine per capita (mg/capita/year)
Eritrea

MILESTONES
None available.

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
None.

KEY INFORMANTS
Asmerom T. Sengal, Orotta School of Medicine and Dental Medicine.

SERVICES

- **Number of hospices or PC services**
- **Number of hospices or PC services with paediatric-specific programmes**

POLICIES

- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

EDUCATION

- Number of medical schools
- Medical schools which include PC education as mandatory
- Medical schools which include PC education as optional
- Certification for PC physicians
- Number of nursing schools
- Medical schools which include PC education as mandatory
- Medical schools which include PC education as optional

MEDICINES

- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

VITALITY

- Existence of a national association or equivalent for PC
- Existence of a periodic national conference for PC
- National PC plan/programme
- National cancer plan/programme
- National HIV plan/programme

**Policies**

PC is integrated into the national HIV plan/programme, and HIV control is well-integrated into the community and healthcare service. Plans are underway to establish funding for PC activities at the national level.

**Education**

Pain management and PC is provided within the internal medicine course.

**Medicines**

General hospitals have limited options for pain management. Opinions vary on the misconception that pain medications will result in addiction, and patients also refrain from getting adequate pain management. Morphine is not prescribed for outpatient care, although it is strictly controlled even for outpatient care, and is only prescribed by authorised physicians.

**Vitality**

N/A.

**Comments from key informants**

- There are no centres that provide PC. Cancer patients receive care in general hospitals and clinics.
- PC is integrated into national HIV plan/programme, and HIV control is well-integrated into the community and healthcare service. Plans are underway to establish funding for PC activities at the national level.
- It is not a specific course that is provided separately. Pain management and PC is provided within the internal medicine course.
- General hospitals have limited options for pain management. Opinions vary on the misconception that pain medications will result in addiction, and patients also refrain from getting adequate pain management. Morphine is not prescribed for outpatient care, although it is strictly controlled even for outpatient care, and is only prescribed by authorised physicians.

**Consumption of morphine per capita (mg/capita/year), 2012**

- Eritrea: 0.03
- AVG.: 0.03
- MAX.: 0.03
- MIN.: 0.03

**Population**

- Population (2015): 4,782,568
- Population density (2015): 51.76

**Gross Domestic Product per capita, 2011**

- US$5,445.00

**Physicians per 1000 inh., 2010**

- N/A

**Health expenditure per capita, 2015**

- US$5,105.00

**Health expenditure total (% of GDP), 2014**

- 3.34

**Human Development Index, 2015**

- 0.39

**Human Development Index Ranking, 2015**

- 186

**Health expenditure per capita, 2015**

- 0

**Certification for PC physicians**

- 1

**Number of hospices or PC services with paediatric-specific programmes**

- 0/0 (0%)

**Number of home-based PC services (offered by hospices)**

- 0 (0%)

**Hospitals with inpatient PC units**

- 0 (0%)

**Number of PC cared for in the last year (estimation)**

- 0 (0%)

**Districts with at least one PC service**

- 0 (0%)

**Existence of a national association or equivalent for PC**

- No

**Existence of a periodic national conference for PC**

- No

**N/A.**
Ethiopia

MILESTONES

2006
> PC was included in training for physicians in a basic ARV programme. (Onyeka TC, et al., 2015)

2016
> National PC guidelines were completed in June 2016 and are currently being printed. (Ayers N, 2017)

2017
> As part of this year’s Federal MOH plan, PC as part of pre-service medical and nursing training has been proposed and accepted. (Ayers N, 2017)

REFERENCES


COMMENTS FROM KEY INFORMANTS

Services
> Hospice Ethiopia and Strong Hearts are NGOs providing PC. Sandafa has a PC clinic. There are four PC hubs in Addis Ababa in four tertiary hospitals. There are no specific paediatric services, but the hubs and Hospice Ethiopia see children, if referred. At present, PC is limited to Addis Ababa. The plan for this year is to set up services in four of the eleven regions.

Policies
> PC is part of the Speciality Case Team, under the Clinical Services Directorate at the Federal MOH.

Education
> American Cancer Society and FMOH have a Pain Free Hospital Initiative involving training doctors and nurses on pain assessment and control.

Medicines
> The Pain Free Hospital Initiative helps ensure supply of morphine. All physicians can prescribe.

Vitality
> N/A.

KEY INFORMANTS

Zelalem Gizachew, American Cancer Society.
Dr. Nicola Ayers, Federal Ministry of Health.
Gabon

MILESTONES
2017
- There is a public hospital at the Cancer Institute and a private home-care service that provide PC. All home-care services in the country are private and not affiliated with a public service. The Cancer Institute has a unit for PC with dedicated beds for PC. (Christie FKA, 2017)

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
None.

KEY INFORMANTS
Filankembo Kava Angélia Christie, Institut de cancérologie de Libreville.

DATA
- Population: 1,725,292
- Surface area: 267,670 km²
- Population density: 6.70
- GDP: $3,266.40
- Physicians per 1000 inh.: 0.68
- Health expenditure per capita: $599.26
- Health expenditure total (% of GNI): 3.44
- Human Development Index: 0.68
- Human Development Index ranking: 11

EDUCATION
- Number of medical schools: YES
- Medical schools which include PC education as mandatory: NO
- Medical schools which include PC education as optional: NO
- Number of nursing schools: YES
- Nursing schools which include PC education as mandatory: NO
- Nursing schools which include PC education as optional: NO

VITALITY
- Consumption of morphine per capita (mg/capita/year), 2011: 300

SERVICES
- Number of hospices or PC services with paediatric-specific programmes: 0/2 (0%)
- Number of home-based PC services: 0/1 (0%)

POLICIES
- Stand-alone national PC plan/programme: NO
- National plan/programme with a section for PC: NO
- National HIV plan/programme with a section for PC: NO
- National PC clinical guidelines: NO
- Person/desk/unit in the MOH with PC responsibility: NO
- Funding for PC in the National Health budget: NO

AVAILABILITY OF IMMEDIATE-RELEASE ORAL MORPHINE
- Yes: YES
- No: NO

EDUCATION
- Medical schools which include PC education as mandatory: NO
- Medical schools which include PC education as optional: NO

CONSUMPTION OF MORPHINE PER CAPITA (MG/CAPITA/YEAR), 2011
- No services: NO
- < 0.2: NO
- 0.2 - 0.5: NO
- 0.5 - 1: NO
- 1 - 2: NO
- 2 - 5: NO
- > 5: NO

REFLECTIONS FROM KEY INFORMANTS
Services
- There are beds for PC in the public hospital’s cancer department. There is no dedicated structure for paediatrics. Because all home-care structures are private and not affiliated with a public service, it is costly for middle- and low-income patients. Only the province where the capital is located has structures offering PC.

Policies
- Programs exist in the fight cancer and HIV, but there is no emphasis in these programs on the need for PC. PC is still not well known at the Ministry level.

Education
- Education is not yet available at the Faculty of Medicine in Gabon, the only faculty in the country. There have been discussions with certain university authorities so that it can be available in years to come. No nursing schools provide PC training.

Medicines
- There is immediate- and slow-release morphine capsules and injectable morphine given free to patients at the Cancer Institute. A request for an agreement for the manufacturing of oral liquid morphine has been made but without approvals yet for morphine powder. There is no law on the prescription of narcotic drugs, including morphine, but lack of prescription due to opsiophobia.

Vitality
- N/A.
## The Gambia

### Key Informants

Dr. Samba Ceesay, Ministry of Health & Social Welfare.

### National Association or Institution

Gambia Palliative Care Association.

### Milestones

None available.

### References

None available.

### Comments from Key Informants

**Services**

- There are no separate services for paediatrics; they are integrated. Home-based care services are offered by hospitals and their healthcare teams rather than by hospices.

**Policies**

- PC is in the HIV care guidelines. It is part of the HIV care package funding.

**Education**

- N/A.

**Medicines**

- Only doctors can prescribe morphine.

**Vitality**

- N/A.

### Education

- Number of medical schools

### Medicine

- Medical schools which include PC education as mandatory

### Medicines

- Medical schools which include PC education as optional

### Certification for PC Physicians

- N/A

### Services

- Number of hospices or PC services

### Vitality

- Number of PC cared for in the last year (estimation)

### Policies

- Stand-alone national PC plan/programme

### Consumption of morphine per capita (mg/capita/year), 2003

### Vitality

- Existence of a national association or equivalent for PC

### Health expenditure per capita, 2015

### Districts with at least one PC service 100% (7/7)

### Number of hospices or PC services with paediatric-specific programmes 0/10 (0%)

### Education

- N/A

### Number of medical schools

- Medical schools which include PC education as mandatory

### Number of home-based PC services (offered by hospices)

### Number of PC services (offered by hospices)

### Number of hospices, or PC services

### Number of nursing schools

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 2015</td>
<td>1,990,924</td>
</tr>
<tr>
<td>Surface area (km²)</td>
<td>17,280</td>
</tr>
<tr>
<td>Population density</td>
<td>116.9</td>
</tr>
<tr>
<td>Gross Domestic Product per capita 2015</td>
<td>US$471.50</td>
</tr>
<tr>
<td>Physicians per 1000 inh. 2010</td>
<td>0.00</td>
</tr>
<tr>
<td>Health expenditure per capita 2015</td>
<td>US$118.40</td>
</tr>
<tr>
<td>Human Development Index 2015</td>
<td>0.44</td>
</tr>
<tr>
<td>Human Development Index Ranking 2015</td>
<td>175</td>
</tr>
</tbody>
</table>

### Consumption of morphine per capita (mg/capita/year), 2003

- The Gambia: 0.01

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Human Development Index, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>0.44</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>

### Physicians per 1000 inh., 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Human Development Index Ranking, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>175</td>
</tr>
</tbody>
</table>

### Health expenditure per capita, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>US$18.40</td>
</tr>
</tbody>
</table>
MILESTONES

2014
- The American Society for Clinical Oncology, and APFROS (a British NGO in Kansake) came together with the MOH of Ghana, and Ghana Health Service to do some training so as to start PC in the country. (Opare-Lokko EBA, 2017)

2015
- In September, an active PC service started in the hospital. (Opare-Lokko EBA, 2017)

2016
- During the family medicine portion of their mandatory community health rotation, final year students at the University of Ghana Medical School attend a three-hour seminar on PC, which covers an overview of PC, pain management, and communication skills (breaking bad news). (Opare-Lokko EBA, 2017)

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
Ghana Palliative Care Association (GPCA)
http://ghanapalliativecare.blogspot.com.es/

KEY INFORMANTS
Edwina Beryl Addo Opare-Lokko, Korle Bu Palliative Care Team, Korle Bu Teaching Hospital and Flagstaff House Medical Centre.

APCA Atlas of Palliative Care in Africa 93
MLENOSINES

2014
> SOPAG was the first NGO working in the field of PC in Guinea and started in 2014. SOPAG offers home visits. (SOPAG, 2017)

2016
> In February, SOPAG organized a national PC conference in collaboration with Hospice Africa Uganda at the John Paul II Hospital. (SOPAG, 2017)

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
ONG Soins palliatifs de Guinée (SOPAG)
https://www.facebook.com/Soins-Palliatifs-Guin%C3%A9e-SOPAG-
1733005193159432/

KEY INFORMANTS
Pr. Agr Bangaly Traore, Unité de chirurgie oncologique de Donka, CHU de Conakry.
ONG Soins palliatifs de Guinée (SOPAG).

COMMENTS FROM KEY INFORMANTS
Services
- PC is a new concept, that is more theoretical than practical, in pediatric and oncology services, general PC is conducted in hospitals but not specialization as in a hospice.

Policies
- Within the MOH, there is a component that includes PC within the NCD Program. There are plans and programs for PC but are not implemented. At the national level, there are clinical guidelines for PC, but they are not available. SOPAG uses guidelines from Camilla Borjesson of Sweden and Hospice Uganda. At the health department level, there is a department of care which includes PC.

Education
- In the oncology module in medical school, there are two lessons, one on PC and one on pain. PC is taught as a subject in the schools of medicine and nursing.

Medicines
- No form of morphine exists. There are laws prohibiting prescribing medicines among non-health specialists.

Vitality
- N/A.

MILESTONES

2014
> SOPAG was the first NGO working in the field of PC in Guinea and started in 2014. SOPAG offers home visits. (SOPAG, 2017)

2016
> In February, SOPAG organized a national PC conference in collaboration with Hospice Africa Uganda at the John Paul II Hospital. (SOPAG, 2017)

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
ONG Soins palliatifs de Guinée (SOPAG)
https://www.facebook.com/Soins-Palliatifs-Guin%C3%A9e-SOPAG-
1733005193159432/

KEY INFORMANTS
Pr. Agr Bangaly Traore, Unité de chirurgie oncologique de Donka, CHU de Conakry.
ONG Soins palliatifs de Guinée (SOPAG).

COMMENTS FROM KEY INFORMANTS
Services
- PC is a new concept, that is more theoretical than practical, in pediatric and oncology services, general PC is conducted in hospitals but not specialization as in a hospice.

Policies
- Within the MOH, there is a component that includes PC within the NCD Program. There are plans and programs for PC but are not implemented. At the national level, there are clinical guidelines for PC, but they are not available. SOPAG uses guidelines from Camilla Borjesson of Sweden and Hospice Uganda. At the health department level, there is a department of care which includes PC.

Education
- In the oncology module in medical school, there are two lessons, one on PC and one on pain. PC is taught as a subject in the schools of medicine and nursing.

Medicines
- No form of morphine exists. There are laws prohibiting prescribing medicines among non-health specialists.

Vitality
- N/A.

MILESTONES

2014
> SOPAG was the first NGO working in the field of PC in Guinea and started in 2014. SOPAG offers home visits. (SOPAG, 2017)

2016
> In February, SOPAG organized a national PC conference in collaboration with Hospice Africa Uganda at the John Paul II Hospital. (SOPAG, 2017)

REFERENCES
None available.
Kenya

Policies
- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

Education
- Medical schools which include PC education as mandatory 100% (5/5)
- Medical schools which include PC education as optional N/A
- Certification for PC physicians N/A
- Number of medical schools N/A
- Number of nursing schools N/A

Medicines
- Availability of immediate release oral morphine N/A
- Non-specialised physicians can prescribe morphine YES
- Trained nurses can prescribe morphine NO

Vitality
- Existence of a national association or equivalent for PC N/A
- Existence of a periodic national conference for PC N/A

Kenya Hospices and Palliative Care Association
http://kehpca.org/

MILESTONES
2005
> The Kenya Hospice and PC Association was formed. (Clark D., et al., 2007)

2014
> Through the partnership formed between KEHPCA and the MOH, other initiatives have indirectly resulted in integrating PC education and pain relief to ensure that government hospitals incorporate PC into their services. (McGowan BJ, et al., 2014)

2016
> KEHPCA worked closely with the MOH to create a Coordinator for PC and Pain Relief to ensure that government hospitals incorporate PC and pain relief in the government budget. The MOH is currently buying morphine powder for government and mission hospitals.

2016
> KEHPCA in partnership with the MOH to create a Coordinator for PC and Pain Relief to ensure that government hospitals incorporate PC into their services. (McGowan BJ, et al., 2014)

REFERENCES


NATIONAL ASSOCIATION OR INSTITUTION
Kenya Hospices and Palliative Care Association, KEHPCA
http://kehpca.org/

COMMENTS FROM KEY INFORMANTS
Services
> Palliative PC services are integrated into adult PC. Home-based PC services are usually provided by stand-alone hospices. Areas without services is inhabited by the nomadic people. The five counties without services have at least one trained healthcare provider but no PC unit.

Policies
> There is a national training curriculum, and PC is included in the National Patient’s Rights Charter. A person dedicated to PC sits in the National PC Association Offices and is a MOH employee, dedicated to work with KEHPCA to support integration of PC and pain relief in the government institutions. At hospitals with PC, the budget is integrated in the hospital budget. The MOH is currently buying morphine powder for government and mission hospitals.

Education
> PC has recently been included under “care for terminally ill patients” in the medical curricula. KEHPCA has developed content which has been reviewed and accepted. However, each university adopts it according to their own criteria and hours.

> PC was integrated into the core nursing curriculum. In the Diploma in Nursing, there are hours in the Bachelor of Nursing and in the Bachelor of Science in Nursing. At hospitals, with Oxford Brookes University, offers a Higher Diploma. However, most doctors train in the UK with Cardiff University since they offer clinical training.

Medicines
> The MOH, KEHPCA, and American Cancer Society have worked together to make morphine more available in the public health sector. Only Registered medical doctors and dentists can prescribe.

Vitality
> Facilitated by KEHPCA, every 2 years, there is the National PC Conference and is open to regional and international participants.

KEY INFORMANTS
Ziporah V All, Kenya Hospices and Palliative Care Association.
Saraphina Guichochi, Nyeri Hospice.
Lesotho

**MILESTONES**

2017
- Development of national PC clinical guidelines are in progress. (Nkabane-Nkholongo E, 2017)
- A Non-Communicable Diseases – Cancer and PC Advocate is trained and was nominated during the African PC Association Trainings. The MOH has sent the letter of nomination to WHO in Lesotho. (Phaaroe S, 2017)

**REFErences**
None available.

**NATIONAL ASSOCIATION OR INSTITUTION**
None.

**KEY INFORMANTS**

**COUNTRY INFORMATION**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2,135,022</td>
</tr>
<tr>
<td>Surface area (km²)</td>
<td>30,360</td>
</tr>
<tr>
<td>Population density, 2015</td>
<td>70.32</td>
</tr>
<tr>
<td>GDP per capita, 2015</td>
<td>US$1,067.00</td>
</tr>
<tr>
<td>Physicians per 1000 inh., 2010</td>
<td>N/A</td>
</tr>
<tr>
<td>Health expenditure per capita, 2015</td>
<td>US$276.04</td>
</tr>
<tr>
<td>Health expenditure total (% of GDP), 2014</td>
<td>10.62</td>
</tr>
<tr>
<td>Human Development Index, 2015</td>
<td>0.50</td>
</tr>
<tr>
<td>Human Development Index Ranking, 2015</td>
<td>161</td>
</tr>
</tbody>
</table>

**SERVICES**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of hospices or PC services</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of hospices or PC services with paediatric-specific programmes</td>
<td>0% (0/0)</td>
</tr>
<tr>
<td>Number of home-based PC services (offered by hospices)</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of hospices or PC services with paediatric-specific programmes</td>
<td>N/A</td>
</tr>
<tr>
<td>Hospitals with inpatient PC units</td>
<td>0% (0/0)</td>
</tr>
</tbody>
</table>

**POLICIES**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand-alone national PC plan/programme</td>
<td>N/A</td>
</tr>
<tr>
<td>National cancer plan/programme with a section for PC</td>
<td>N/A</td>
</tr>
<tr>
<td>National HIV plan/programme with a section for PC</td>
<td>N/A</td>
</tr>
<tr>
<td>National PC clinical guidelines</td>
<td>N/A</td>
</tr>
<tr>
<td>Person/desk/unit in the MOH with PC responsibility</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**EDUCATION**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of medical schools</td>
<td>N/A</td>
</tr>
<tr>
<td>Medical schools which include PC education as mandatory</td>
<td>0% (0/0)</td>
</tr>
<tr>
<td>Medical schools which include PC education as optional</td>
<td>N/A</td>
</tr>
<tr>
<td>Certification for PC physicians</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of nursing schools</td>
<td>N/A</td>
</tr>
<tr>
<td>Nursing schools which include PC education as mandatory</td>
<td>0% (0/0)</td>
</tr>
<tr>
<td>Nursing schools which include PC education as optional</td>
<td>100% (0/0)</td>
</tr>
</tbody>
</table>

**MEDICINES**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of immediate-release oral morphine</td>
<td>N/A</td>
</tr>
<tr>
<td>Non-specialised physicians can prescribe morphine</td>
<td>N/A</td>
</tr>
<tr>
<td>Trained nurses can prescribe morphine</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**VITALITY**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PC cared for in the last year (estimation)</td>
<td>N/A</td>
</tr>
<tr>
<td>Districts with at least one PC service</td>
<td>0% (0/0)</td>
</tr>
<tr>
<td>Existence of a national association or equivalent for PC</td>
<td>N/A</td>
</tr>
<tr>
<td>Existence of a periodic national conference for PC</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**CONSUMPTION OF Morphine per capita (mg/capita/year), 2006**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of morphine per capita</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**COMMENTS FROM KEY INFORMANTS**

- **Services**
  - There is no formal PC service in Lesotho.
- **Policies**
  - There is no stand-alone plan or programme, but the National Health Strategic Plan and the new NCD Strategic plans point towards future inclusion of PC. There are currently no PC guidelines, but they are being worked on with the help of the International Children’s PC Network.
- **Education**
  - There is no medical school in Lesotho, but with support from the Boston University School of Medicine the Lesotho MOH initiated a Post-graduate training in Family Medicine. Cancer and PC Advocates are being trained through APCA. There is currently funding available from OSISA for development of guidelines and training of health care workers. It is within this grant that the MOH has committed some funds.
- **Medicines**
  - Morphine availability is minimal with poor reporting.
- **Vitality**
  - In the process of registering for a national association.

**MILESTONES**

- Development of national PC clinical guidelines are in progress. (Nkabane-Nkholongo E, 2017)
- A Non-Communicable Diseases – Cancer and PC Advocate is trained and was nominated during the African PC Association Trainings. The MOH has sent the letter of nomination to WHO in Lesotho. (Phaaroe S, 2017)

**REFERENCES**
None available.

**FINANCING**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding for PC in the National Health budget</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**CONSUMPTION OF Morphine per capita (mg/capita/year), 2008**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of morphine per capita</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**VITALITY**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PC cared for in the last year (estimation)</td>
<td>N/A</td>
</tr>
<tr>
<td>Districts with at least one PC service</td>
<td>0% (0/0)</td>
</tr>
<tr>
<td>Existence of a national association or equivalent for PC</td>
<td>N/A</td>
</tr>
<tr>
<td>Existence of a periodic national conference for PC</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Liberia

**Country Information**

**Population**: 4,503,438 (2015)
**Surface area (km²)**: 111,370
**Population density**: 46.75 (2015)
**Gross Domestic Product per capita**: US$455.90 (2013)
**Physicians per 1,000 inh.**: 0.01 (2010)
**Health expenditure per capita**: US$38.29 (2015)
**Human Development Index**: 0.49 (2015)
**Human Development Index Ranking**: 177 (2015)

**Services**

- Number of hospices or PC services (offered by hospices): N/A
- Hospitals with inpatient PC units: N/A
- Number of hospices or PC services with paediatric-specific programmes: N/A
- Number of home-based PC services: N/A

**Policies**

- Stand-alone national PC plan/programme: Yes
- National cancer plan/programme with a section for PC: Yes
- National HIV plan/programme with a section for PC: Yes
- National PC clinical guidelines: Yes
- Person/desk/unit in the MOH with PC responsibility: Yes
- Funding for PC in the National Health budget: Yes
- Existence of a national association or equivalent for PC: No
- Existence of a periodic national conference for PC: No

**Education**

- Number of medical schools which include PC education as mandatory: 0%
- Number of medical schools which include PC education as optional: 0%
- Number of nursing schools which include PC education as mandatory: 0%
- Number of nursing schools which include PC education as optional: N/A
- Certification for PC physicians: 15

**Vitality**

- Consumption of morphine per capita (mg/capita/year), 1980: 0.00

**NATIONAL ASSOCIATION OR INSTITUTION**

None.

**MILESTONES**

None available.

**REFERENCES**

None available.

**KEY INFORMANTS**

CONFIDENTIAL.
**Libya**

**COUNTRY INFORMATION**


Population density (2015): 360

Gross Domestic Product per capita, 2011: $5,571.80

Physicians per 1000 inh., 2010: 1.90

Health expenditure per capita, 2015: $806.20

Health expenditure total (% of GDP), 2014: 5.00

Human Development Index, 2015: 0.72

Human Development Index Ranking, 2015: 94

**MSL**

**COUNTRY INFORMATION**

Population (2015): 1,40,000,000

Gross Domestic Product per capita, 2011: $17,595.40

Physicians per 1000 inh., 2010: 170

Health expenditure per capita, 2015: $3,600

Health expenditure total (% of GDP), 2014: 18.6

Human Development Index, 2015: 0.52

Human Development Index Ranking, 2015: 108

**MILESTONES**

None available.

**REFERENCES**

None available.

**NATIONAL ASSOCIATION OR INSTITUTION**

N/A.

**KEY INFORMANTS**

Omar Salem M, Emhmed Head of Hospitals Department, Ministry of Health.

**COMMENTS FROM KEY INFORMANTS**

Services > N/A.

Policies > N/A.

Education > N/A.

Medicines > N/A.

Vitality > N/A.

**SERVICES**

Number of hospices or PC services

Number of hospices or PC services with paediatric-specific programmes

Number of home-based PC services (offered by hospices)

Hospitals with inpatient PC units

**POLICIES**

Stand-alone national PC plan/programme

National cancer plan/programme with a section for PC

National HIV plan/programme with a section for PC

National PC clinical guidelines

Person/desk/unit in the MOH with PC responsibility

Funding for PC in the National Health budget

**EDUCATION**

Number of medical schools

Medical schools which include PC education as mandatory N/A

Medical schools which include PC education as optional N/A

Certification for PC physicians

**MEDICINES**

Availability of immediate-release oral morphine

Non-specialised physicians can prescribe morphine

Trained nurses can prescribe morphine

**VITALITY**

Existence of a national association or equivalent for PC

Existence of a periodic national conference for PC

N/A

**CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2013**

Libya: 1.18

**REFERENCES**

None available.

**MILESTONES**

None available.

**EDUCATION**

Number of medical schools

Medical schools which include PC education as mandatory N/A

Medical schools which include PC education as optional N/A

Certification for PC physicians

**MEDICINES**

Availability of immediate-release oral morphine

Non-specialised physicians can prescribe morphine

Trained nurses can prescribe morphine

**VITALITY**

Existence of a national association or equivalent for PC

Existence of a periodic national conference for PC

N/A

**CONSUMPTION OF MORPHINE PER CAPITA (mg/capita/year), 2013**

Libya: 1.18
**Madagascar**

**Services**
- Number of hospices or PC services with paediatric-specific programmes: 0/1 (0%)
- Number of home-based PC services (offered by hospices): N/A
- Hospitals with inpatient PC units: 0% (0/4)

**Policies**
- National Cancer plan/programme with a section for PC
- National HIV/ AIDS plan/programme with a section for PC
- National PC clinical guidelines
- Person/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

**Milestones**
- 2010: National Cancer Programme 2010 Refers to Need for Pain Management and PC. (Rasoanambininjanahary T, 2017)

**Comments from Key Informants**
- **Services**
  - Pain Without Borders (which has a partnership agreement with the MOH and the HJRA Hospital) has set up a new home-based PC facility for women and children. Some oncology departments (e.g., HJRA Hospital, Military Hospital, Antananarivo) indirectly include PC in their care.
- **Policies**
  - N/A
- **Education**
  - The Faculty of Medicine of Antananarivo includes PC in its course on cancer. It has also instituted a University Diploma (DU) for doctors, and one of the five modules is dedicated to PC. 6 IFIRP public schools, including that of Antananarivo, includes a course on PC.
- **Medicines**
  - In practice, there are lists of prescribing doctors in some departments and establishments that limit the number of prescribers.
- **Vitality**
  - N/A.

**Key Informants**
- Tianarivo Rasoanambininjanahary, Douleurs Sans Frontières.

**National Association or Institution**
- None.

**Country Information**
- Population: 24,235,390
- Population density: 587.295
- Health expenditure per capita, 2015: US$40,180
- Health expenditure per capita, 2015: US$43,700
- Human Development Index, 2015: 0.51
- Human Development Index Ranking, 2015: 154

**References**
- None available.

**Consumption of morphine per capita (mg/capita/year), 2014**
- Madagascar AVG. 0.03
- MIN. 0.00
- MAX. 11.54

**Health expenditure total (% of GDP), 2014**
- Madagascar: 1% (0.03)

**Gross Domestic Product per capita, 2015**
- Madagascar: 24,235,390 US$

**Human Development Index, 2015**
- Madagascar: 0.51

**Physicians per 1000 inh., 2010**
- Madagascar: 0.20

**Health expenditure total (% of GDP), 2014**
- Madagascar: 1% (0.03)

**Physicians per 1000 inh., 2010**
- Madagascar: 0.20

**Population 2015 Surface area (km²)**
- Madagascar: 1,400,000

**Population density, 2015**
- Madagascar: N/A
Malawi

**Services**
- Number of hospices/PC services
- Number of hospices/PC services with pediatric-specific programmes
- Number of home-based PC services (offered by hospices)
- Hospitals with inpatient PC units

**Policies**
- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

**Medicines**
- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**Certification for PC physicians**
- Medical schools which include PC education as mandatory
- Medical schools which include PC education as optional

**Economy**
- Number of medical schools
- Number of nursing schools

**Population and Healthcare Budget**
- Consumption of morphine per capita (mg/capita/year), 2012
- Number of home-based PC services
- Number of hospices/PC services with pediatric-specific programmes

**Vitality**
- Existence of a national association or equivalent for PC
- Existence of a periodic national conference for PC

**NATIONAL ASSOCIATION OR INSTITUTION**
Palliative Care Association of Malawi

**COMMENTS FROM KEY INFORMANTS**

- **Services**
  - There are 14 PC services, but 14 prioritize PC as their core mission. Out of the 14, are two hospices (Ndlovu Hospice and PC Centre in Blantyre and St. Gabriel Hospice in Lilongwe). There are home-based care services available run by nongovernmental and faith-based organizations such as Partners in Health, Kacz, Malawina, College of Medicine Bangwe, and PC Support Trust operating PC services. Pediatric-specific programmes are available at Level III health facilities. Tertiary and Level II facilities are mandated by the national PC policy to have PC units.

- **Policies**
  - The PC national programme originated from the national home-based care program, which was a national response to the HIV pandemic. It is housed in the community health nursing department in the Directorate of Nursing and Midwifery Services, through which funding is channelled. All districts and PC implementing sites have designated PC coordinators / focal persons that take responsibility for PC.

- **Education**
  - In nursing, PC is examinable.
  - Morphine slow-release tablets and liquid morphine are available.
  - Morphine powder is procured by the government through the Central Medical Stores. A National Task Force on Morphine Availability meet quarterly, coordinated by the PC Association of Malawi and chaired by the MOH Pharmaceuticals Directorate.

- **Vitality**
  - The MOH Pharmaceuticals Directorate is responsible for the production of oral morphine for PC services in the country. PC is included in the national drug budget. PC morphine is procured through the country's Central Medical Stores.

**NATIONAL INFORMATION**

**Population and Health Expenditure**
- Population
- Health expenditure per capita

**Gross Domestic Product**
- GMP

**Health Index**
- Health expenditure index

**Population Density**
- Per 100 inh., 2010

**Health Expenditure Index Ranking**
- 2015

**Critical Indicators**
- Morphine slow-release tablets and liquid morphine are available.
- In nursing, PC is examinable.

**REFERENCES**
**COUNTRY INFORMATION**

**Mali**

**Population** 17,599,694
**Surface area (km²)** 1,440,190
**Population density, 2015** 0.69

**Gross Domestic Product per capita, 2015** US$8,186.00
**Physicians per 1,000 inh., 2010** 0.10
**Health expenditure per capita, 2015** US$108.10

**Health expenditure total (% of GDP), 2014** 6.90
**Human Development Index, 2015** 0.42
**Human Development Index Ranking, 2015** 179

**MILESTONES**
None available.

**REFERENCES**
None available.

**NATIONAL ASSOCIATION OR INSTITUTION**
None.

**KEY INFORMANTS**
Dr. Zakari Saye, Surgical Oncologist.

**COMMENTS FROM KEY INFORMANTS**

**Services**
- There is no PC unit or hospice in Mali. There is home-based medical support for people living with HIV/AIDS.

**Policies**
- N/A.

**Education**
- N/A.

**Medicines**
- There is no morphine syrup.

**Vitality**
- The national association for PC is in the process of being created.

**SERVICES**

**Number of hospices or PC services**

**Number of hospices or PC services with paediatric-specific programmes**

**Number of hospices or PC services offered by hospices**

**Hospitals with inpatient PC units**

**MEDICINES**

**Availability of immediate-release oral morphine**

**Non-specialised physicians can prescribe morphine**

**Trained nurses can prescribe morphine**

**VITALITY**

**Existence of a national association or equivalent for PC**

**Existence of a periodic national conference for PC**

**EDUCATION**

**Number of medical schools**

**Number of nursing schools**

**Certification for PC physicians**

**MEDIAN**

**Consumption of morphine per capita (mg/capita/year), 2012**

**EDUCATION**

**Number of medical schools which include PC education as mandatory**

**Number of medical schools which include PC education as optional**

**Number of nursing schools which include PC education as mandatory**

**Number of nursing schools which include PC education as optional**

**REFERENCES**
None available.

**MILESTONES**
None available.
Mauritania

COUNTRY INFORMATION

Health expenditure total (% of GDP), 2014
Gross Domestic Product per capita, 2011
Physicians per 1000 inh., 2010
Health expenditure per capita, 2015
Human Development Index, 2015
Human Development Index Ranking, 2015

Services
» Two services: one is a home-based service and the other is a pediatric oncology nurse working at the National Cancer Centre with support from the pediatric oncologist and the home-based team. The home-based service is for adults and children, and services are only based in the capital.

Policies
» There is a national cancer plan in the works, with plans to include PC.

Education
» N/A.

Medicines
» Injectable morphine is often used as an immediate-release formulation for children. There is access to long-acting morphine and injectable, which can be well-employed to control pain, especially in conjunction with tramadol. This is the case for several francophone countries in Africa. Any doctor working at the National Cancer Centre can prescribe opioids.

Vitality
» N/A.

MILESTONES
2008
» Creation of the National Cancer Centre, which is being responsible for training healthcare professionals in PC. (Fearon D, 2017)

2015
» Some research work done in Mauritania was presented at the Francophone Congress on PC held in Tunisia. (Fearon D, 2017)

2016
» The latest version of the national cancer plan was validated, containing a section for PC. (Fearon D, 2017)

REFERENCES
None available.

KEY INFORMANTS
David Fearon, Cairdeas International Palliative Care Trust.
### Mauritius

#### KEY INFORMANTS
- **Sheilesh Dewan**, Victoria Hospital.
- **Hemoo Devi Tanoja**, Victoria Hospital.

#### MILESTONES
- 2017: A PC service was opened at Victoria Hospital available to cancer patients. (Dewan S, 2017)

#### REFERENCES
None available.

#### COUNTRY INFORMATION

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2015)</td>
<td>1,262,605</td>
</tr>
<tr>
<td>Surface area (km²)</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Population density (2015)</td>
<td>621.97</td>
</tr>
<tr>
<td>Gross Domestic Product per capita (2015)</td>
<td>US$3,252.10</td>
</tr>
<tr>
<td>Physicians per 1000 inh. (2010)</td>
<td>N/A</td>
</tr>
<tr>
<td>Health expenditure per capita (2015)</td>
<td>US$396.16</td>
</tr>
<tr>
<td>Human Development Index (2015)</td>
<td>0.63</td>
</tr>
<tr>
<td>Human Development Index Ranking (2015)</td>
<td>63</td>
</tr>
</tbody>
</table>

#### SERVICES
- **Number of hospices or PC services**
- **Number of hospices or PC services with paediatric-specific programmes**
  - 0/2 (0%) (2010)

#### POLICIES
- Stand-alone national PC plan/programme
  - No
- National cancer plan/programme with a section for PC
  - No
- National HIV plan/programme with a section for PC
  - No
- National PC clinical guidelines
  - No
- Person/unit in the MOH with PC responsibility
  - No
- Funding for PC in the National Health budget
  - Yes

#### MEDICINES
- Availability of immediate-release oral morphine
  - Yes
- Non-specialised physicians can prescribe morphine
  - Yes
- Trained nurses can prescribe morphine
  - Yes

#### EDUCATION
- **Number of medical schools**
- **Number of nursing schools**
- Medical schools which include PC education as mandatory
  - No (0/3)
- Medical schools which include PC education as optional
  - No (0/3)
- Nursing schools which include PC education as mandatory
  - No (0/2)
- Certification for PC physicians
  - No

#### VITALITY
- **Number of PC cared for in the last year (estimation)**
- **Districts with at least one PC service**
  - 22% (2/9)
- **Consumption of morphine per capita (mg/capita/year), 2014**
  - AVG. 11.54
  - MIN. 0.00
  - MAX. 22.00
- **Existence of a national association or equivalent for PC**
  - No
- **Existence of a periodic national conference for PC**
  - No

#### NATIONAL ASSOCIATION OR INSTITUTION
None.

#### COMMENTS FROM KEY INFORMANTS
- **Services**
  - PC is only accessible to cancer patients and is only hospital-based. A new service was implemented in January 2017.
- **Policies**
  - There is a programme by the MOH on Quality of Life, but it is only for cancer patients. There is a National HIV programme, but there is no specialist PC in that programme.
- **Education**
  - N/A.
- **Medicines**
  - N/A.
- **Vitality**
  - N/A.
**Morocco**

**COUNTRY INFORMATION**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>34.377.511</td>
</tr>
<tr>
<td>Surface area (km²)</td>
<td>446.550</td>
</tr>
<tr>
<td>Population density, 2015</td>
<td>7703</td>
</tr>
<tr>
<td>Gross Domestic Product per capita, 2015</td>
<td>2.878.220</td>
</tr>
<tr>
<td>Physicians per 1000 inh., 2010</td>
<td>0.62</td>
</tr>
<tr>
<td>Health expenditure per capita, 2015</td>
<td>44.664</td>
</tr>
<tr>
<td>Human Development Index, 2015</td>
<td>5.91</td>
</tr>
<tr>
<td>Human Development Index Ranking, 2015</td>
<td>0.62</td>
</tr>
</tbody>
</table>

**MILESTONES**

- **2005**
  - The first PC unit opened in Rabat, linked to the National Oncology Institute. (Lancet, 2016)

- **2012**
  - Two separate national health policies laid out a vision for the development of PC in 2010 and 2012. (Lancet, 2016)

- **2015**
  - For the first time, PC education was included as a module in the undergraduate medical curriculum. (Lancet, 2016)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Moroccan Society for Palliative Care and Management of Pain, National Institute of Oncology


**SERVICES**

- Number of hospices or PC services
- Number of hospices or PC services with paediatric-specific programmes

**POLICIES**

- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

**EDUCATION**

- Number of medical schools
- Medical schools which include PC education as mandatory

**MEDICINES**

- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**VITALITY**

- Number of home-based PC services (offered by hospices)
- Number of PC cared for in the last year (estimation)
- Districts with at least one PC service
- Existence of a national association or equivalent for PC
- Existence of a periodic national conference for PC

**Notes:**

- Number of hospices or PC services
- Number of hospices or PC services with paediatric-specific programmes
- Number of medical schools
- Medical schools which include PC education as mandatory
- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**CERTIFICATION FOR PC PHYSICIANS**

- Certification for PC physicians

**MILESTONES**

- 2005
  - The first PC unit opened in Rabat, linked to the National Oncology Institute. (Lancet, 2016)

- 2012
  - Two separate national health policies laid out a vision for the development of PC in 2010 and 2012. (Lancet, 2016)

- 2015
  - For the first time, PC education was included as a module in the undergraduate medical curriculum. (Lancet, 2016)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Moroccan Society for Palliative Care and Management of Pain, National Institute of Oncology


**SERVICES**

- Number of hospices or PC services
- Number of hospices or PC services with paediatric-specific programmes

**POLICIES**

- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

**EDUCATION**

- Number of medical schools
- Medical schools which include PC education as mandatory

**MEDICINES**

- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**VITALITY**

- Number of home-based PC services (offered by hospices)
- Number of PC cared for in the last year (estimation)
- Districts with at least one PC service
- Existence of a national association or equivalent for PC
- Existence of a periodic national conference for PC

**Notes:**

- Number of hospices or PC services
- Number of hospices or PC services with paediatric-specific programmes
- Number of medical schools
- Medical schools which include PC education as mandatory
- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**CERTIFICATION FOR PC PHYSICIANS**

- Certification for PC physicians

**MILESTONES**

- 2005
  - The first PC unit opened in Rabat, linked to the National Oncology Institute. (Lancet, 2016)

- 2012
  - Two separate national health policies laid out a vision for the development of PC in 2010 and 2012. (Lancet, 2016)

- 2015
  - For the first time, PC education was included as a module in the undergraduate medical curriculum. (Lancet, 2016)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Moroccan Society for Palliative Care and Management of Pain, National Institute of Oncology

The Mozambique PC Association (MOPCA) was created (Monjane L, interview, 2016).


A local oral morphine reconstitution plan is being developed with support from the African PC Association with support from the American Cancer Society. (Luyirika EBK, et al., 2017)

**Key Informants**

Emília Pinto Miquidade, Unidade da Dor, Hospital Central de Maputo.

**Milestones**

- 2009: The Mozambique PC Association (MOPCA) was created (Monjane L, interview, 2016)
- 2016: A local oral morphine reconstitution plan is being developed with support from the African PC Association with support from the American Cancer Society. (Luyirika EBK, et al., 2017)

**References**


**Map of Mozambique**

- Population: 27,977,863
- Population Density: 3558
- Surface Area: 799,380
- Health expenditure per capita: $529.20
- Physicians per 1000 inh.: 0.04
- Health expenditure: $793.22
- Human Development Index: 0.42
- Human Development Index Ranking: 180

**Comments from Key Informants**

- Services: There is one NGO that works in six districts with home-care teams.
- Policies: The PC Policy mentions specific training but is not implemented.
- Education: At this time, doctors are receiving specialised training in PC outside of the country.
- Medicines: There is oral morphine in Mozambique but in primary health care it is not always available. It is available in some quaternary hospitals.
- Vitality: N/A.

**Country Information**

- **Population**: 27,977,863
- **Surface Area**: 799,380
- **Population Density**: 3558
- **Gross Domestic Product per capita**: $529.20
- **Physicians per 1000 inh.**: 0.04
- **Health expenditure per capita**: $793.22
- **Human Development Index**: 0.42
- **Human Development Index Ranking**: 180

**Services**

- **Number of hospices or PC services**: N/A
- **Number of hospices or PC services with paediatric-specific programmes**: N/A

**Policies**

- Stand-alone national PC plan/programme: N/A
- National cancer plan/programme with a section for PC: N/A
- National HIV plan/programme with a section for PC: N/A
- National PC clinical guidelines: N/A
- Person/unit in the MOH with PC responsibility: N/A
- Funding for PC in the National Health budget: N/A

**Medicines**

- Immediate-release oral morphine: N/A
- Non-specialised physicians can prescribe morphine: N/A
- Trained nurses can prescribe morphine: N/A

**Vitality**

- Number of hospices or PC services (offered by hospices): N/A
- Hospitals with inpatient PC units: N/A
- Trained nurses can prescribe morphine: N/A

**Consumption of morphine per capita (mg/capita/year), 2014**

- AVG.: 1
- MAX.: 11.54
- MIN.: 0.00

**Number of home-based PC services**

- 0%

**Number of PC cared for in the last year**

- N/A

**Number of medical schools**

- N/A

**Number of nursing schools**

- N/A

**Existence of a national association or equivalent for PC**

- N/A

**Existence of a periodic national conference for PC**

- N/A
Namibia

**COUNTRY INFORMATION**

- **Population**: 2,458,830 (2015)
- **Gross Domestic Product per capita**: US$4673 (2015)
- **Physicians per 1000 inh.**: 0.37 (2010)
- **Health expenditure per capita**: US$869.30 (2015)
- **Human Development Index**: 0.37 (2015)
- **Physicians per 1000 inh.**: 0.63 (2010)
- **Health expenditure per capita**: US$869.30 (2015)
- **Human Development Index**: 0.63 (2015)

**MILESTONES**

- **2004**: APCA brought an office for PC to Namibia. (Bauer R, 2016)
- **2011**: A full semester of PC was established at the University of Namibia. (Bauer R, 2016)

**REFERENCES**

None available.

**NATIONAL ASSOCIATION OR INSTITUTION**

None.

**KEY INFORMANTS**

Richard W. Bauer, Maryknoll Fathers & Brothers. Desderius Haufiku, University of Namibia.

**COMMENTS FROM KEY INFORMANTS**

**Services**

- Central Hospital in Windhoek has some aspects of PC, and Catholic AIDS Action has satellites with active PC. However, only Catholic AIDS Action has staff trained in community/home-based PC.

**Policies**

- There is PC in the policy, but the problem is implementing the policy.

**Education**

- In the School of Social Work, there is a full semester course in PC in the University of Namibia. In Namibia, PC is seen as giving up; there is much to do for community education of PC.

**Medicines**

- Only patients in Windhoek have oral morphine both available and accessible. It is available but not accessible.

**Vitality**

- APCA functioned as the Association, and we had a Task Force on PC at the MOH.

**EDUCATION**

- Number of medical schools: 1 (1/1)
- Number of nursing schools: 3 (1/3)

**SERVICES**

- Number of hospices or PC services: 2
- Hospitals with inpatient PC units: 46% (2/4)
- Number of home-based PC services (offered by hospices): 2

**POLICIES**

- Stand-alone national PC plan/programme: YES
- National cancer plan/programme with a section for PC: NO
- National HIV plan/programme with a section for PC: NO
- National PC clinical guidelines: NO
- Person/desk/unit in the MOH with PC responsibility: NO
- Funding for PC in the National Health budget: NO

**MEDICINES**

- Availability of immediate-release oral morphine: NO
- Non-specialised physicians can prescribe morphine: NO
- Trained nurses can prescribe morphine: NO

**VITALITY**

- Number of PC cared for in the last year (estimation): 600
- Districts with at least one PC service: 66% (2/3)
- Existence of a national association or equivalent for PC: NO
- Existence of a periodic national conference for PC: NO

**MILESTONES**

- 2004: APCA brought an office for PC to Namibia. (Bauer R, 2016)
- 2011: A full semester of PC was established at the University of Namibia. (Bauer R, 2016)

**EDUCATION**

- Number of medical schools: 1 (1/1)
- Number of nursing schools: 3 (1/3)

**SERVICES**

- Number of hospices or PC services: 2
- Hospitals with inpatient PC units: 46% (2/4)
- Number of home-based PC services (offered by hospices): 2

**POLICIES**

- Stand-alone national PC plan/programme: YES
- National cancer plan/programme with a section for PC: NO
- National HIV plan/programme with a section for PC: NO
- National PC clinical guidelines: NO
- Person/desk/unit in the MOH with PC responsibility: NO
- Funding for PC in the National Health budget: NO

**MEDICINES**

- Availability of immediate-release oral morphine: NO
- Non-specialised physicians can prescribe morphine: NO
- Trained nurses can prescribe morphine: NO

**VITALITY**

- Number of PC cared for in the last year (estimation): 600
- Districts with at least one PC service: 66% (2/3)
- Existence of a national association or equivalent for PC: NO
- Existence of a periodic national conference for PC: NO

**MILESTONES**

- 2004: APCA brought an office for PC to Namibia. (Bauer R, 2016)
- 2011: A full semester of PC was established at the University of Namibia. (Bauer R, 2016)

**EDUCATION**

- Number of medical schools: 1 (1/1)
- Number of nursing schools: 3 (1/3)
### Niger

#### COUNTRY INFORMATION

**Health expenditure total (% of Gross), 2014**: 19,899,120

**Gross Domestic Product per capita, 2015**: 1,267,000

**Physicians per 1000 inh., 2010**: 0.02

**Human Development Index, 2015**: 0.35

**Human Development Index Ranking, 2015**: 188

**Population 2015 Surface area (km²)**: 1,350,000

**Population density, 2015**: 15.71

**Key Informants**

Malam-Abdou Badé, Hôpital National de Niamey.

#### SERVICES

**Number of hospices or PC services (offered by hospices)**:

**Number of hospices or PC services with paediatric-specific programmes**

#### EDUCATION

**Number of medical schools**

**Number of medical schools which include PC education as mandatory**

**Medical schools which include PC education as optional**

**Number of nursing schools**

**Number of medical schools which include PC education as mandatory**

#### MEDECINES

**Availability of immediate-release oral morphine**

**Non-specialised physicians can prescribe morphine**

**Trained nurses can prescribe morphine**

#### VITALITY

**Consumption of morphine per capita (mg/capita/year), 2009**:

#### MILESTONES

**2017**

- Six training programs for doctors and nurses have been completed. (Badé M, 2017)

#### REFERENCES

None available.

#### NATIONAL ASSOCIATION OR INSTITUTION

None.
COUNTRY INFORMATION

Nigeria

MILESTONES

2003
> In 2002, the Federal Medical Centre in Abeokuta (FMCA) evolved into the first hospital-based PC service in Nigeria. (Oliver D, et al., 2011)

2005
> The Nigerian Association for Hospice and PC was established in January. The National Association and Hospice Nigeria have helped centres in other areas across Nigeria to develop PC. (Oliver D, et al., 2011)

2013
> The University College Hospital, Ibadan has successfully introduced PC into its undergraduate curriculum, and other tertiary institutions are in the process of following suite. (Onyeka TC, et al., 2013)

REFERENCES


NATIONAL ASSOCIATION OR INSTITUTION

Hospice and Palliative Care Association of Nigeria (HPCAN).

COMMENTS FROM KEY INFORMANTS

Services
> PC is available in urban areas, mostly at tertiary hospitals and at various stages of development.
> Historically, palliative care development in Nigeria has been driven by individual ‘champions’ since 1991. These individuals from various parts of the country with support from their institutions have succeeded in establishing the current palliative care services.

Policies
> There is a National cancer plan with palliative care as goal number ten. PC is responsibility of the cancer desk officer in the Federal Ministry of Health.

Education
> National accreditation bodies are currently working on curriculum review to include PC in the undergraduate medical curriculum. The Nursing and Midwifery Council are also working on a process for inclusion. Accreditation of palliative medicine for physicians is in progress.

Medicines
> Morphine is available where there is a PC service, mostly in tertiary hospitals.

Vitality
> There is an annual conference.

KEY INFORMANTS

Olaitan Soyannwo, University College Hospital, Ibadan.
Republic of Congo

COUNTRY INFORMATION

Population 2015: 4,620,330
Population density, 2015: 13.53
Gross Domestic Product per capita, 2015: 342,000
Health expenditure total (% of Gross), 2014: 5.15
Physicians per 1000 inh., 2010: 0.10
Health expenditure per capita, 2015: 0.07

MILESTONES
None available.

REFERENCES
None available.

KEY INFORMANTS
Burucoa Benoit, CHU-Université de Bordeaux.

COMMENTS FROM KEY INFORMANTS

Services
> There is a mobile team in Brazzaville, and soon four beds of PC will be available through a medical home of the Association Congolaise Accompagner ACA which supports the ACA2, the national PC association. There was also a mobile team at Pointe Noire but stopped due to lack of funding.

Policies
> PC is included in the cancer control programme but without specific funding.

Education
> There is a course on pain for medical students, but no specific course on PC.

Medicines
> Currently, there is no access to morphine. Some 500mg ampoules are available.

Vitality
> The Congolese national association will open a multi-purpose medical home with PC activities. Past conference have been organized, and an international conference is scheduled for October 12-14th.

NATIONAL ASSOCIATION OR INSTITUTION
L’Association Congolaise Accompagner ACA.

SERVICES
Number of hospices or PC services: 1
Number of hospices or PC services with paediatric-specific programmes: 0 (0/0)

Policies
Stand-alone national PC plan/programme: NO
National cancer plan/programme with a section for PC: YES
National HIV plan/programme with a section for PC: NO
National PC clinical guidelines: NO
Person/desk/unit in the MOH with PC responsibility: NO
Funding for PC in the National Health budget: NO

MEDICINES
Availability of immediate-release oral morphine: NO
Non-specialised physicians can prescribe morphine: NO
Trained nurses can prescribe morphine: NO

EDUCATION
Number of medical schools: N/A
Number of medical schools which include PC education as mandatory: 0% (0/1)
Number of medical schools which include PC education as optional: 0% (0/1)
Medical schools which include PC education as mandatory: N/A
Medical schools which include PC education as optional: N/A
Certification for PC physicians: N/A

VITALITY
Number of PC cared for in the last year (estimation): 40
Districts with at least one PC service: 4% (1/26)

CONSULTANTS
Burucuo Benoit, CHU-Université de Bordeaux.

No services
< 0.2
0.2 - 0.5
0.5 - 1
1 - 2
2 - 5
= 5
No data

REF/MANENCES
None available.
COUNTRY INFORMATION

Rwanda

MILESTONES
2009
• Dr Christian Ntizimira, Director of Kibagabaga Hospital in Kigali, opened Rwanda’s first paediatric PC unit at Kibagabaga in 2009 and first adult unit in 2010. (Vogel L, 2011)

2014
• There is a National Coordinator of PC in the MOH. (Mukasahaha D, 2017)

2016
• To date, six African countries have stand-alone national PC policies and these are: Malawi, Mozambique, Rwanda, Swaziland, Tanzania, and Zimbabwe. (Luyirika EBK, et al., 2016)

REFERENCES

Vogel L. Rwanda moving to provide “good deaths” for terminally ill. CMAJ. 2011;183(14):E1053-4.


NATIONAL ASSOCIATION OR INSTITUTION

Palliative Care Association of Rwanda
Ministry of Health
https://www.facebook.com/pcarwanda/

KEY INFORMANTS

Mukasahaha Diane, Rwanda Biomedical Center.

COMMENTS FROM KEY INFORMANTS

SERVICES

• There are 54 organisations providing integrated PC as part of their services, with four providing it as its main mission.

• Included in the total number of hospice and PC services are PC units in government district and referral hospitals.

POLICIES

• Rwanda is the first African country to develop a stand-alone PC policy. There are clear and specific PC guidelines. PC is integrated into the NCD Budget.

• Rwanda is currently in the stage of developing a curriculum of PC for medical schools. There is, however, no accredited education programmes in PC; only short-term trainings are available.

EDUCATION

• There are 10mg and 30mg morphine tablets and oral liquid morphine. There is a task-shifting policy allowing nurses to prescribe.

VITALITY

• PC is coordinated in the MOH rather than by an association, but there is a national association of PC. There is also a Periodic PC Technical Working Group that organizes conferences.

PREFERENCES

Vogel L. Rwanda moving to provide “good deaths” for terminally ill. CMAJ. 2011;183(14):E1053-4.


EDUCATION

Number of medical schools

Number of nursing schools

MEDICINES

Availability of immediate-release oral morphine

Non-specialised physicians can prescribe morphine

Trained nurses can prescribe morphine

VITALITY

Existence of a national association or equivalent for PC

Existence of a periodic national conference for PC

REFERENCES

Vogel L. Rwanda moving to provide “good deaths” for terminally ill. CMAJ. 2011;183(14):E1053-4.

Sao Tome & Principe

**COUNTRY INFORMATION**

**Health expenditure total (% of Gross), 2014**
190.344

**Gross Domestic Product per capita, 2015**
US$1,669.10

**Population (2015)**
1,669.10

**Physicians per 1000 inh., 2010**
8.35

**Health expenditure per capita, 2015**
US$299.73

**Human Development Index, 2015**
0.56

**Human Development Index Ranking, 2015**
143

**Population density, 2015**
N/A

**Surface area (km2)**
198,28

**Population 2015**
190,344

**Stand-alone national PC plan/programme**
YES

**National cancer plan/programme with a section for PC**
NO

**National HIV plan/programme with a section for PC**
NO

**National PC clinical guidelines**
NO

**Person/desk/unit in the MOH with PC responsibility**
NO

**Funding for PC in the National Health budget**
NO

**Existence of a national association or equivalent for PC**
NO

**Existence of a periodic national conference for PC**
NO

**Key Informants**
Arlindo Vicente de Assunção Carvalho, Centro Nacional de Endemias.

**MILESTONES**
None available.

**REFERENCES**
None available.

**NATIONAL ASSOCIATION OR INSTITUTION**
None.

**SERVICES**

**Number of hospices or PC services**
N/A

**Number of hospices or PC services with paediatric-specific programmes**
0/0 (0%)

**Number of home-based PC services (offered by hospices)**
N/A

**Hospitals with inpatient PC units**
0/0 (0%)

**Number of PC cared for in the last year (estimation)**
N/A

**Districts with at least one PC service**
0/0 (0%)

**POLICIES**

**Stand-alone national PC plan/programme**
YES

**National cancer plan/programme with a section for PC**
NO

**National HIV plan/programme with a section for PC**
NO

**National PC clinical guidelines**
NO

**Person/desk/unit in the MOH with PC responsibility**
NO

**Funding for PC in the National Health budget**
NO

**Existence of a national association or equivalent for PC**
NO

**Existence of a periodic national conference for PC**
NO

**EDUCATION**

**Number of medical schools**
N/A

**Medical schools which include PC education as mandatory**
N/A

**Medical schools which include PC education as optional**
N/A

**Certification for PC physicians**
N/A

**MEDICINES**

**Availability of immediate-release oral morphine**
N/A

**Non-specialised physicians can prescribe morphine**
N/A

**Trained nurses can prescribe morphine**
N/A

**Number of hospices or PC services with paediatric-specific programmes**
0/0 (0%)

**Number of home-based PC services**
N/A

**Consumption of morphine per capita (mg/capita/year), 2011**
AVG. 1

**Minimum**
0

**Maximum**
11.54

**Median**
1

**VITALITY**

**Existence of a national association or equivalent for PC**
N/A

**Existence of a periodic national conference for PC**
N/A

**Number of nursing schools**
N/A

**Medical schools which include PC education as mandatory**
N/A

**Medical schools which include PC education as optional**
N/A

**Consumption of morphine per capita (mg/capita/year), 2011**
AVG. 1

**Minimum**
0

**Maximum**
11.54

**Median**
1
### Senegal

**MILESTONES**

- A service named MAM, created by MADJI, which is a private non-profit organisation providing home-care services; started in the second half of 2016 after receiving training in Uganda. (Sow BP, 2017)
- The Association Sénégalaise de Soins Palliatifs was created. (Sow BP, 2017)

**REFERENCES**

None available.

**NATIONAL ASSOCIATION OR INSTITUTION**

Association Sénégalaise de Soins Palliatifs (ASSOPA).

**KEY INFORMATORS**

Coumba Gueye, Institut Joliot Curie.
Boubacar Poulho Sow, MAADJI, Société de Services aux personnes Agées avec une unité mobile de soins palliatifs.

---

### COUNTRY INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Senegal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Senegal</td>
</tr>
<tr>
<td>Language</td>
<td>Wolof, French</td>
</tr>
<tr>
<td>Region</td>
<td>Senegal</td>
</tr>
</tbody>
</table>

**Health expenditure total (% of GDP), 2014**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>15,129,273</td>
</tr>
</tbody>
</table>

**Gross Domestic Product per capita, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>1,967,120</td>
</tr>
</tbody>
</table>

**Health expenditure per capita, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>7,833,580</td>
</tr>
</tbody>
</table>

**Physicians per 1000 inh., 2010**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>170</td>
</tr>
</tbody>
</table>

**Human Development Index, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>0.46</td>
</tr>
</tbody>
</table>

**Physicians per 1000 inh., 2010**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>170</td>
</tr>
</tbody>
</table>

**Human Development Index  Ranking, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>170</td>
</tr>
</tbody>
</table>

**Population 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>10,129,273</td>
</tr>
</tbody>
</table>

**Surface area (km²)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>196,710</td>
</tr>
</tbody>
</table>

**Population density, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>516</td>
</tr>
</tbody>
</table>

**M D A T E S**

- Number of hospices or PC services
- Number of hospices or PC services with paediatric-specific programmes

**SERVICES**

- **Number of hospices or PC services**
  - 1

**POLICIES**

- Stand-alone national PC plan/programme
  - Yes

**EDUCATION**

- Number of medical schools
  - 5
- Medical schools which include PC education as mandatory
  - No
- Medical schools which include PC education as optional
  - No
- Certification for PC physicians
  - No

**MEDICINES**

- Liquid morphine is generally reserved for paediatrics. By 2015, 8 pots of 25 g were used for paediatric patients and some for the cancer patients.
- Morphine tablets exist but often break and, therefore, not accessible.
- Morphine prescription is limited to doctors and can be used for up to 28 days.

**VITALITY**

- A dedicated association for PC training has just been created: ASSOPA, whose president is Professor Claude Moreira.

**Comments from Key Informants**

- Services
  - There is a paediatric service at Le Dantec Hospital in Dakar. PC services, in general, are based in the capital.
- Policies
  - A specific section for PC will be included in the project to establish a new National Cancer Centre. There is also a point person for PC in the NCD Division. There are not yet any clinical guidelines at the national level and no funding for PC activities at the MOH.
- Education
  - In oncology, there are introductory courses for fourth and seventh year students on the medicine rotation as well as for students who specialise in oncology.
- Medicines
  - In oncology, there are introductory courses for fourth and seventh year students on the medicine rotation as well as for students who specialise in oncology.
- Vitality
  - A dedicated association for PC training has just been created: ASSOPA, whose president is Professor Claude Moreira.

**REFERENCES**

None available.
### COUNTRY INFORMATION

**Sierra Leone**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6,453,184</td>
<td>72,300</td>
<td>6,453,184</td>
<td>72,300</td>
<td>11.09</td>
<td>0.41</td>
<td>0.02</td>
<td>89.40</td>
</tr>
</tbody>
</table>

**Population**

<table>
<thead>
<tr>
<th>SL</th>
<th>Freetown</th>
</tr>
</thead>
</table>

**Key Informants**

- Gabriel Madiye, The Shepherd’s Hospice in Sierra Leone.

**KEY INFORMANTS**

- Sierra Leone Palliative Care Association (SLPCA).

**MILESTONES**

- In October 2008, Shepherd’s Hospice, the only hospice in the country, received the first shipment of 500 g of low-cost morphine sulfate powder. (Bosnjak S et al., 2011)
- Morphine solution was first produced in a laboratory powder, and a hospice first began treating patients with oral morphine in February 2009. (Bosnjak S et al., 2011)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

- Sierra Leone Palliative Care Association (SLPCA).

**SERVICES**

- Number of hospices or PC services offered by hospices
- Number of home-based PC services

**POLICIES**

- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

**EDUCATION**

- Number of medical schools
- Medical schools which include PC education as mandatory
- Medical schools which include PC education as optional
- Certification for PC physicians

**MEDICINES**

- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**VITALITY**

- There is no conference but periodic meetings are held to update members of the national association.

**KEY QUESTIONS**

- Person/desk/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget
- Availability of immediate-release oral morphine
- Consumption of morphine per capita (mg/capita/year), 2007

**MEDICATIONS**

- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**TABLES**

- Table of key indicators for PC services, education, and policies.

**MILESTONES**

- In October 2008, Shepherd’s Hospice, the only hospice in the country, received the first shipment of 500 g of low-cost morphine sulfate powder. (Bosnjak S et al., 2011)
- Morphine solution was first produced in a laboratory powder, and a hospice first began treating patients with oral morphine in February 2009. (Bosnjak S et al., 2011)

**REFERENCES**

**MILESTONES**

2000
- In collaboration with the Palliative Medicine Division from the University of Wales College of Medicine (UWCM) in Cardiff, United Kingdom, the University of Cape Town (UCT) created an honorary lecturer post in PC and a distance-learning curriculum. (Gwyther L & Rawlinson F, 2007)

2001
- The University of Cape Town, with support from the University of Wales College of Medicine, now Cardiff University, developed the first postgraduate PC diploma and degree (M.Phil.) in the region. (Gwyther L & Rawlinson F, 2007)

2005
- PC was included in the undergraduate medical curriculum in South Africa. (Gwyther L & Rawlinson F, 2007)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Hospice Palliative Care Association of South Africa (HPCA) https://www.hpca.co.za/

**COMMENTS FROM KEY INFORMANTS**

**Services**
- HPCA member hospices are all non-government organisations; there is very little PC that does not fall under this umbrella. Most of the care is home-based or inpatient units are expensive. A few years ago, there was a bigger emphasis on paediatrics but funding has dried up. There are, however, very strong services that are hospital-based for paediatric PC and there is a group focusing on neonatal PC.
- The areas with sparse population, because of harsh climatic conditions, and rural areas have the least services.

**Policies**
- Clinical guidelines have been developed by HPCA who coordinates PC in the NDOH sector; they are not government guidelines. Having a dedicated person in the Ministry is new since the WHA Resolution.
- There is currently no funding for PC as PC is seen as part of generalist care though work is happening to ensure funding.
- The final draft of the national PC programme has been developed and was presented on February 24th, 2017.

**Education**
- For medical schools, the curriculum is only a few weeks with nearly no practical exposure. HPCA is working with various nursing schools to include PC into their curriculum; there is mention of PC but not a full module.

**Medicines**
- The availability of morphine is good but prescription and adequate dosage is often compromised due to lack of knowledge. Generalist physicians can prescribe morphine and currently, work is in progress for a policy for palliative nurses to prescribe morphine.

**Vitality**
- We have had annual national conferences but this is becoming regional as funding is limited.
South Sudan

Health expenditure total (% of Gross), 2014: 12,339,812
Gross Domestic Product per capita, 2015: 644,330
Gross Domestic Product per capita, 2015: 2.74
Health expenditure per capita, 2015: 730.60
Human Development Index, 2015: 0.47
Physicians per 1000 inh., 2010: N/A
Health expenditure per capita, 2015: 72.82

Population 2015: 11,000,000
Surface area (km²): 680,662
Population density, 2015: 0.16

MILESTONES
None available.

REFERENCES
None available.

NATIONAL ASSOCIATION OR INSTITUTION
None.

KEY INFORMANTS
Joseph Lou Kenyi Mogga, World Health Organization.

SERVICES
- Number of hospices or PC services: 3
- Number of hospices or PC services with paediatric-specific programmes: 0 (0%)
- Number of home-based PC services (offered by hospices): 8
- Hospitals with inpatient PC units: 0% (0/27)
- Number of hospices or PC services with paediatric-specific programmes: 0 (0%)
- Consumptions of morphine per capita (mg/capita/year), 2014: N/A

POLICIES
- Stand-alone national PC plan/programme: NO
- National cancer plan/programme with a section for PC: NO
- National HIV plan/programme with a section for PC: NO
- National PC clinical guidelines: NO
- Person/desk/unit in the MOH with PC responsibility: NO
- Funding for PC in the National Health budget: NO

EDUCATION
- Number of medical schools: 0
- Medical schools which include PC education as mandatory: 0% (0/3)
- Medical schools which include PC education as optional: 0% (0/3)
- Number of nursing schools: 0
- Nursing schools which include PC education as mandatory: 0% (0/8)
- Nursing schools which include PC education as optional: 0% (0/8)

VITALITY
- Number of PC cared for in the last year (estimation): 3
- Districts with at least one PC service: 0% (0/30)
- Existence of a national association or equivalent for PC: NO
- Existence of a periodic national conference for PC: NO

COMMENTS FROM KEY INFORMANTS
- Services: South Sudan does not have hospice services. WHO South Sudan is planning on conducting assessments of PC services as part of NCD survey. South Sudan has a few partners providing home-based care programs, for example, for follow-up of patients on HIV/AIDS treatment and mother-to-mother support groups. The home-care package includes a small component of symptom management.
- Policies: There is a separate HIV guideline on PC. This is not, however, systematically implemented. The MOH is in process of establishing an NCD unit which will include PC.
- Education: N/A.
- Medicines: The government restricts importation and prescription of narcotics, including morphine.
- Vitality: N/A.
- Non-specialised physicians can prescribe morphine.
- Trained nurses can prescribe morphine.
- Availability of immediate-release oral morphine: NO
- Certification for PC physicians: NO

REFERENCES
None available.

map: South Sudan
**Sudan**

**COUNTRY INFORMATION**

### Health expenditure total (% of Gross), 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Health expenditure total (% of Gross)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>40,234,882</td>
</tr>
</tbody>
</table>

**Gross Domestic Product per capita, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Gross Domestic Product per capita, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>2,414.70</td>
</tr>
</tbody>
</table>

**Human Development Index, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Human Development Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>0.48</td>
</tr>
</tbody>
</table>

**Physicians per 1000 inh., 2010**

<table>
<thead>
<tr>
<th>Country</th>
<th>Physicians per 1000 inh., 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>0.28</td>
</tr>
</tbody>
</table>

**Health expenditure per capita, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Health expenditure per capita, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>167</td>
</tr>
</tbody>
</table>

**Population 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Population 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>40,234,882</td>
</tr>
</tbody>
</table>

**Surface area (km²)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Surface area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>1,400,000</td>
</tr>
</tbody>
</table>

**Population density, 2015**

<table>
<thead>
<tr>
<th>Country</th>
<th>Population density, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>22.13</td>
</tr>
</tbody>
</table>

### MILESTONES

**2009**
> Two personnel from Sudan went to Hospice Africa Uganda to receive PC training. (Gafer N, 2016)

**2012**
> A Task Force for PC was formed, and their activities help spread knowledge about availabilities of services and training. (Gafer N, 2017)

**2016**
> The MOH decided to include PC in its National Health Strategy. (Gafer N, 2017)

### REFERENCES

None available.

### NATIONAL ASSOCIATION OR INSTITUTION

None.

### COMMENTS FROM KEY INFORMANTS

#### Services
Four hospitals provide PC services:
1. Radiation & Isotope Centre, Khartoum (Khartoum Oncology Hospital), which has an outpatient, home-care and inpatient bed) at the main oncology centre; 2. Sobha University Hospital, which has an inpatient PC consultation service; 3. The National Cancer Institute at Medani, which has a PC team covering the oncology wards and a referral clinic and a limited home-care service; 4. The East Oncology Centre, which is a recently opened oncology centre at Gedarif Teaching Hospital in eastern Sudan offering chemotherapy and a PC service.

All sites see adults and children, but there is no specific paediatric service. There is a nurse who will complete her training (post graduate degree in paediatric PC) soon.

#### Policies
PC has been in the Cancer Control Programme for years but no funds were allocated.

#### Education
There is a short course of PC for Health Professionals, attended by doctors, nurses, etc. This course is approved by the Ministry of Higher Education.

#### Medicines
Immediate-release morphine is available at the four sites, and a few more. It is not available at the majority of hospitals and is not available in stand-alone pharmacies at all. Only consultants and registrars can prescribe morphine.

#### Vitality
N/A.

### KEY INFORMANTS

Dr. Nahla Gafer, Comboni College of Science & Technology, Shaima Sideeg, Radiation & Isotope Center, Khartoum.

### SERVICES

#### Number of hospices or PC services

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of hospices or PC services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Number of hospices or PC services with paediatric-specific programmes

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of hospices or PC services with paediatric-specific programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>4 (100%)</td>
</tr>
</tbody>
</table>

#### Number of home-based PC services (offered by hospices)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of home-based PC services (offered by hospices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>800</td>
</tr>
</tbody>
</table>

#### Hospitals with inpatient PC units

<table>
<thead>
<tr>
<th>Country</th>
<th>Hospitals with inpatient PC units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>2% (1/50)</td>
</tr>
</tbody>
</table>

#### Consumption of morphine per capita (mg/capita/year), 2008

<table>
<thead>
<tr>
<th>Country</th>
<th>Consumption of morphine per capita (mg/capita/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>7.42 mg/capita/year (1/50)</td>
</tr>
</tbody>
</table>

#### Number of PC cared for in the last year (estimation)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of PC cared for in the last year (estimation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>17% (3/18)</td>
</tr>
</tbody>
</table>

#### Districts with at least one PC service

<table>
<thead>
<tr>
<th>Country</th>
<th>Districts with at least one PC service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>17% (3/18)</td>
</tr>
</tbody>
</table>

#### Existence of a national association or equivalent for PC

<table>
<thead>
<tr>
<th>Country</th>
<th>Existence of a national association or equivalent for PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Existence of a periodic national conference for PC

<table>
<thead>
<tr>
<th>Country</th>
<th>Existence of a periodic national conference for PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### EDUCATION

#### Number of medical schools

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of medical schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>22</td>
</tr>
</tbody>
</table>

#### Medical schools which include PC education as mandatory

<table>
<thead>
<tr>
<th>Country</th>
<th>Medical schools which include PC education as mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>0% (0/22)</td>
</tr>
</tbody>
</table>

#### Medical schools which include PC education as optional

<table>
<thead>
<tr>
<th>Country</th>
<th>Medical schools which include PC education as optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>0% (0/22)</td>
</tr>
</tbody>
</table>

#### Number of nursing schools

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of nursing schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>14</td>
</tr>
</tbody>
</table>

#### Nursing schools which include PC education as mandatory

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing schools which include PC education as mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>0% (0/14)</td>
</tr>
</tbody>
</table>

#### Nursing schools which include PC education as optional

<table>
<thead>
<tr>
<th>Country</th>
<th>Nursing schools which include PC education as optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>0% (0/14)</td>
</tr>
</tbody>
</table>

### MEDICINES

#### Availability of immediate-release oral morphine

<table>
<thead>
<tr>
<th>Country</th>
<th>Availability of immediate-release oral morphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Non-specialised physicians can prescribe morphine

<table>
<thead>
<tr>
<th>Country</th>
<th>Non-specialised physicians can prescribe morphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Trained nurses can prescribe morphine

<table>
<thead>
<tr>
<th>Country</th>
<th>Trained nurses can prescribe morphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### VITALITY

#### Existence of a national association or equivalent for PC

<table>
<thead>
<tr>
<th>Country</th>
<th>Existence of a national association or equivalent for PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Existence of a periodic national conference for PC

<table>
<thead>
<tr>
<th>Country</th>
<th>Existence of a periodic national conference for PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>N/A</td>
</tr>
</tbody>
</table>
**Swaziland**

**COUNTRY INFORMATION**

**Health expenditure total (% of Gross), 2014**

1,286,970

**Gross Domestic Product per capita, 2015**

US$3,200.10

**Physicians per 1000 inh., 2010**

9.25

**Human Development Index, 2015**

0.17

**Physicians per 1000 inh., 2010**

74.82

**Health expenditure per capita, 2015**

US$586.82

**Human Development Index Ranking, 2015**

150

**Population 2015**

1,150,000

**Surface area (km²)**

213,000

**Population density, 2015**

5.4

**Stand-alone national PC plan/programme**

NO

**National cancer plan/programme with a section for PC**

NO

**National HIV plan/programme with a section for PC**

NO

**National PC clinical guidelines**

NO

**Person/desk/unit in the MOH with PC responsibility**

NO

**Funding for PC in the National Health budget**

NO

**Existence of a national association or equivalent for PC**

NO

**Existence of a periodic national conference for PC**

NO

**Number of hospices or PC services (offered by hospices)**

14

**Number of hospices or PC services with paediatric-specific programmes**

3/14 (21%)

**Number of home-based PC services**

1

**Hospitals with inpatient PC units**

100% (11/11)

**Consumption of morphine per capita (mg/capita/year), 2014**

1.86

**Swaziland AVG.**

1

**MAX.**

11.54

**MIN.**

0.00

**MILESTONES**

2011

> Kingdom of Swaziland, MOH, approved its National PC Policy. (Luyirika EBK, et al., 2016)

2017

> National PC clinical guidelines are available for both adults and children. (Ginindza N, 2017)

**REFERENCES**


**EDUCATION**

**Number of medical schools**

0

**Medical schools which include PC education as mandatory**

0% (0/0)

**Medical schools which include PC education as optional**

0% (0/0)

**Number of nursing schools**

4

**Nursing schools which include PC education as mandatory**

100% (4/4)

**Nursing schools which include PC education as optional**

0% (0/4)

**KEY INFORMANTS**

Herve Nzereka Kambale, Swaziland National AIDS Programme, Palliative Care Unit.

Mtonebuleh Ginindza, Ministry of Health.

**NATIONAL ASSOCIATION OR INSTITUTION**

None.

**SERVICES**

**Number of hospices or PC services**

14

**Number of hospices or PC services with paediatric-specific programmes**

3/14 (21%)

**MILESTONES**

2011

> Kingdom of Swaziland, MOH, approved its National PC Policy. (Luyirika EBK, et al., 2016)

2017

> National PC clinical guidelines are available for both adults and children. (Ginindza N, 2017)

**REFERENCES**


**EDUCATION**

**Number of medical schools**

0

**Medical schools which include PC education as mandatory**

0% (0/0)

**Medical schools which include PC education as optional**

0% (0/0)

**Number of nursing schools**

4

**Nursing schools which include PC education as mandatory**

100% (4/4)

**Nursing schools which include PC education as optional**

0% (0/4)

**KEY INFORMANTS**

Herve Nzereka Kambale, Swaziland National AIDS Programme, Palliative Care Unit.

Mtonebuleh Ginindza, Ministry of Health.

**NATIONAL ASSOCIATION OR INSTITUTION**

None.
**Tanzania**

**COUNTRY INFORMATION**

**MILESTONES**

2002
- Following the second National Multisectoral Conference on HIV/AIDS held in December, Tanzania passed a resolution stating that PC was to be a core component of all home-based care services for people living with HIV/AIDS in Tanzania. (Onyeka TC, et al., 2013)

2013
- A postgraduate diploma course in PC was established at International Medical Technology University. (Onyeka TC, et al., 2013)

2014
- National PC policy approved. (Luyirika EBK, et al., 2016)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Tanzania Palliative Care Association (TPCA)
http://archive.is/20130509141423/tpca.or.tz/

**SERVICES**

- Number of home-based PC services (offered by hospices) 10% (54/500)
- Number of hospices or PC services (offered by hospices) 26
- Number of hospices or PC services with paediatric-specific programmes 2/16 (13%)

**POLICIES**

- Stand-alone national PC plan/programme
- National cancer plan/programme with a section for PC
- National HIV plan/programme with a section for PC
- National PC clinical guidelines
- Person/unit in the MOH with PC responsibility
- Funding for PC in the National Health budget

**EDUCATION**

- Number of medical schools
- Number of nursing schools
- Medical schools which include PC education as mandatory 23% (2/9)
- Medical schools which include PC education as optional 0% (0/9)
- Certification for PC physicians

**MEDICINES**

- Availability of immediate-release oral morphine
- Non-specialised physicians can prescribe morphine
- Trained nurses can prescribe morphine

**VITALITY**

- Existence of a national association or equivalent for PC
- Existence of a periodic national conference for PC

**NATIONAL PC plan/programme**

- National PC plan/programme

**COMMENTS FROM KEY INFORMANTS**

**Services**

- Some PC services in regional hospitals were previously active but not current due to lack of support. There is a shortage of paediatric PC/hospice services, therefore, existing services provide for both children and adults.

**Policies**

- None of the plans have budgets to finance PC. There is a National PC Strategy underway. PC is considered part of NCDs, which has a focal person. Cancer treatment is offered for free in the country, but in most cases, there is a shortage of drugs leading to many patients buying drugs out of pocket. Currently, there is an ongoing plan to ensure health insurance covers PC services.

**Education**

- For a long time, nurses and physicians had been getting training from Uganda and South Africa. Only training that involved field attachment to a PC unit is available in the country. The International Medical and Technological University (IMTU), University of Dodoma, and Ocean Road Cancer Institute have integrated PC into their training. There used to be a post-graduate diploma in Palliative Medicine at the IMTU but the program collapsed due to a lack of funding.

**Medicines**

- The Tanzania Food and Drug Authority (TFDA) is in charge of controlled medicines.
- For a long time, nurses and physicians had been getting training from Uganda and South Africa. Only training that involved field attachment to a PC unit is available in the country. The International Medical and Technological University (IMTU), University of Dodoma, and Ocean Road Cancer Institute have integrated PC into their training. There used to be a post-graduate diploma in Palliative Medicine at the IMTU but the program collapsed due to a lack of funding.

**Vitality**

- The main challenge with the national association is lack of funding.
### COUNTRY INFORMATION

**Togo**

**MILESTONES**

None available.

**REFERENCES**

None available.

**NATIONAL ASSOCIATION OR INSTITUTION**

Association Togolaise des Soins Palliatifs  
https://www.facebook.com/AssociationTogolaiseDesSoinsPalliatifs-ViePlus/

**KEY INFORMANTS**

Mofou Belo, Division de la surveillance des maladies non transmissibles, Ministère de la santé et de la Protection Sociale.

---

**COMMENTS FROM KEY INFORMANTS**

**SERVICES**

The Paediatric Hematology/Oncology Service at CHU Lome provides PC services as well as one private organization.

**POLICIES**

Stand-alone national PC plan/programme

National cancer plan/programme with a section for PC

National HIV plan/programme with a section for PC

National PC clinical guidelines

Person/desk/unit in the MOH with PC responsibility

Funding for PC in the National Health budget

**EDUCATION**

Number of medical schools

Medical schools which include PC education as mandatory

Medical schools which include PC education as optional

Certification for PC physicians

**MEDIENCES**

Availability of immediate-release oral morphine

Non-specialised physicians can prescribe morphine

Trained nurses can prescribe morphine

**MEDICINES**

Number of home-based PC services (offered by hospices)

Hospitals with inpatient PC units

Number of PC caregivers in the last year (estimation)

Districts with at least one PC service

Consumption of morphine per capita (mg/capita/year), 2014

**VITALITY**

Existence of a national association or equivalent for PC

Existence of a periodic national conference for PC

**REFERENCES**

None available.

---

**COUNTRY INFORMATION**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Togo</td>
<td>7,304,578</td>
<td>559.60</td>
<td>0.56</td>
<td>0.05</td>
<td>0.48</td>
<td>76.25</td>
</tr>
</tbody>
</table>

**SERVICES**

- **Number of hospices or PC services**
  - US$568,60
  - Physicians per 1000 inh., 2010
  - US$76.25

- **Number of hospices or PC services with paediatric-specific programmes**
  - 0/2 (0%)
**Tunisia**

**MILESTONES**
1992 - The first PC association was started by Prof. Ben Ayed Farhat and Prof. Chedly Azzouz.
2006 - The Tunisian MOH included PC in the National Cancer Plan along with prevention, treatment, and research.
2018 - Oral opioids prescribing laws were changed, making pain medications much more accessible to patients.

**REFERENCES**

**COMMENTS FROM KEY INFORMANTS**

**SERVICES**
- **Number of hospices**
- **Number of hospices or PC services with paediatric-specific programmes**

**EDUCATION**
- **Number of medical schools**
- **Medical schools which include PC education as mandatory**

**POLICIES**
- **Stand-alone national PC plan/programme**
- **National cancer plan/programme with a section for PC**
- **National HIV plan/programme with a section for PC**
- **National PC guidelines**

**MEDICINES**
- **Availability of immediate-release oral morphine**
- **Non-specialised physicians can prescribe morphine**

**VITALITY**
- **Existence of a periodic national conference for PC**

**NATIONAL ASSOCIATION OR INSTITUTION**
Associaation Tunisienne pour la Promotion des Soins Palliatifs

**KEY INFORMANTS**
Henda Rais, Professor in Medical Oncology and Palliative Care
Chedly Azzouz, Association Tunisienne pour la Promotion des Soins Palliatifs

**COUNTRY INFORMATION**

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (Million)</th>
<th>GDP (billion US$)</th>
<th>Health Expenditure % of GDP</th>
<th>Physicians per 1000 inh.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunisia</td>
<td>11,107,800</td>
<td>163,610,000</td>
<td>7.2%</td>
<td>122</td>
</tr>
</tbody>
</table>

**Health Expenditure Total (US$ per capita), 2015**
- Tunisia: $785.32

**Human Development Index (2015)**
- Tunisia: 0.72

**Human Development Index Ranking (2015)**
- Tunisia: 71

**Population, 2015**
- Tunisia: 11,107,800

**Area, (km²) 2015**
- Tunisia: 163,610

**Population density, 2015**
- Tunisia: 72.44

**Gross Domestic Product per capita, 2015**
- Tunisia: $3,872.50

**Physicians per 1000 inh., 2010**
- Tunisia: 1.0

**Health expenditure per capita, 2015**
- Tunisia: $785.32

**REFERENCES**

**AMOUNTS OF MEDICINES (mg/capita/year), 2014**

**MEDICINES**
- **Immediate-release oral morphine**

**Funding for PC in the National Health budget**
- Tunisia: $nil

**Stand-alone national PC plan/programme**
- Tunisia: No

**National cancer plan/programme with a section for PC**
- Tunisia: No

**National HIV plan/programme with a section for PC**
- Tunisia: No

**National PC guidelines**
- Tunisia: No

**Availability of immediate-release oral morphine**
- Tunisia: Yes

**National PC responsibility in the MOH with PC responsibility**
- Tunisia: Yes

**Certification for PC physicians**
- Tunisia: No

**Number of medical schools**
- Tunisia: 11

**Medical schools which include PC education as mandatory**
- Tunisia: No

**Number of medical schools**
- Tunisia: 11

**Number of home-based PC services (offered by hospices)**
- Tunisia: 180

**Number of hospital PC services**
- Tunisia: 2

**Number of hospices**
- Tunisia: 2

**Number of hospices or PC services with paediatric-specific programmes**
- Tunisia: 0

**Number of PC cases for in the last year (estimation)**
- Tunisia: 0

**Awareness or equivalent for PC**
- Tunisia: No

**Existence of a periodic national conference for PC**
- Tunisia: No
COUNTRY INFORMATION

Uganda

MILESTONES

2004
> Uganda, a statute in 2004 allow specially trained nurses and clinical officers to prescribe oral morphine to patients who need it. (Kwanuka R, 2017)

2005
> A major step forward was the co-operation with Makerere University, which validated the Distance Learning Diploma in Palliative Medicine, the first African PC qualification. (Merriman A, 2010)

2016
> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

REFERENCES


NATIONAL ASSOCIATION OR INSTITUTION

Palliative Care Association of Uganda (PCAU)
http://pcauuganda.org/

COMMENTS FROM KEY INFORMANTS

Services
> There are 78 hospitals providing hospital-based PC services and 15 stand-alone hospices. Hospital PC teams are available in regional referral hospitals. There are home-based care services that provide PC (eg. Kitou Mobile Home Care, Kawempe Home Care). PC is integrated in the health care system, but some have strong PC while others are weak.

Policies
> National guidelines are finalized but are awaiting national endorsement. The MOH reserves 15 million Ugx for PC. The MOH also pays for morphine for all PC patients.

Education
> Training is included in the nursing curriculum across all schools. The challenge is lack of teachers. This year, one government nursing school will start a Diploma in PC. There is a Diploma accredited by National Education of Higher Learning offered by the Institute of Hospice and Palliative Care Africa and a Diploma and Degree affiliated with Makerere University.

Medicines
> Oral morphine is available in over 95 districts of Uganda. Uganda has a National guidelines for PC education. (Merriman A, 2010)

Vitality
> There are quarterly meetings at the national association as well as in its district branches. There is also a biennial PC conference. The next one will be in August 24-25, 2017.

KEY INFORMANTS

Dr. Amanda Jacinto, Formerly Commissioner Clinical Services, Ministry of Health.
Rose Kwanuka, Palliative Care Association of Uganda.

SOURCES

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> In Uganda, a statute in 2004 allow specially trained nurses and clinical officers to prescribe oral morphine to patients who need it. (Kwanuka R, 2017)

> A major step forward was the co-operation with Makerere University, which validated the Distance Learning Diploma in Palliative Medicine, the first African PC qualification. (Merriman A, 2010)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> A major step forward was the co-operation with Makerere University, which validated the Distance Learning Diploma in Palliative Medicine, the first African PC qualification. (Merriman A, 2010)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> A major step forward was the co-operation with Makerere University, which validated the Distance Learning Diploma in Palliative Medicine, the first African PC qualification. (Merriman A, 2010)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> A major step forward was the co-operation with Makerere University, which validated the Distance Learning Diploma in Palliative Medicine, the first African PC qualification. (Merriman A, 2010)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> A major step forward was the co-operation with Makerere University, which validated the Distance Learning Diploma in Palliative Medicine, the first African PC qualification. (Merriman A, 2010)

> Uganda has developed a diploma in paediatric PC through Mildmay Uganda. (Downing J, et al., 2016)

> A major step forward was the co-operation with Makerere University, which validated the Distance Learning Diploma in Palliative Medicine, the first African PC qualification. (Merriman A, 2010)
**Milestones**

- 2005: PC Association of Zambia (PCAZ) was founded. (Logie DE & Harding R, 2012)
- 2006: The Diana, Princess of Wales Memorial Fund (DPWMF), recognising a need for palliative care, established a 2 year small grants programme and planned to link it with the Pilot of Oral Morphine in Zambia's Hospice, a partnership between the MOH and the PCAZ, funded by The True Colours Trust. (Logie DE & Harding R, 2012)

**Comments from Key Informants**

**Services**

- The peak of the HIV/AIDS funding for PC was in 2008-2012. Since then, many PC services have closed due to lack of funding. There is only one paediatric-specific service at the University Teaching Hospital. There were four inpatient units for PC, but currently, only one is still running at a mission hospital.

**Policies**

- The management problem has been implementation of the plans. National guidelines were facilitated by the PC Alliance Zambia. PC was placed under Home Based Care focal point in the Directorate of Public Health. However, the national focal person is overworked, and greater collaboration with non-state actors is needed. Funding continues to be a challenge.

**Education**

- Pain management is not yet included in the curriculum. There is an accredited Continuous Professional Development Program at certificate level in PC accredited by the Health Professions Council of Zambia.

**Medicines**

- Oral Morphine suspension is available at secondary and tertiary institutions and a few primary care facilities though availability is erratic. Trained nurse prescribing for is allowed under a task-shifting process.

**Vitality**

- The PC Alliance Zambia is largely dormant due to lack of funding to run an active Secretariat.

**National Association or Institution**

- Palliative Care Alliance Zambia (PCAZ)

**Key Informants**

- Dr. Fastone M. Goma, Palliative Care Alliance Zambia
- Mukelabai Mukelabai, ACCHAP Management Centre.

**Country Information**

**Zambia**

**Population**

- 16,211,767

**Gross Domestic Product per capita**

- US$130,490

**Physicians per 1000 inh.**

- 0.69

**Health expenditure per capita**

- US$194,68

**Human Development Index**

- 0.59

**Human Development Index Ranking**

- 139

**Number of hospices or PC services**

- 14

**Number of hospices or PC services with paediatric specific programmes**

- 1/14 (7%)
**Zimbabwe**

**MILESTONES**

1979  
> First hospice service in Africa appeared in Zimbabwe: Island Hospice. (Clark D, et al., 2007)

2004  
> The African PC Association held its first annual general meeting in Tanzania and elected a board with representatives, including one from Zimbabwe. (Clark D, et al., 2007)

2005  
> The WHO was involved in a joint PC project for cancer and HIV/AIDS patients in Zimbabwe, and the Diana, Princess of Wales Memorial Fund has supported PC initiatives in Zimbabwe. (Clark D, et al., 2007)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Hospice and Palliative Care Association of Zimbabwe (HOSPAZ)  
www.hospaz.co.zw/

**COUNTRY INFORMATION**

<table>
<thead>
<tr>
<th>Population 2015</th>
<th>Surface area (km²)</th>
<th>Population density 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>15,602,751</td>
<td>390,760</td>
<td>40,33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Domestic Product per capita, 2015</th>
<th>Physicians per 1000 inh., 2010</th>
<th>Health expenditure per capita, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$32,410</td>
<td>0.07</td>
<td>US$114.61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health expenditure total (% of GDP), 2014</th>
<th>Human Development Index, 2015</th>
<th>Human Development Index Ranking, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.08</td>
<td>0.51</td>
<td>155</td>
</tr>
</tbody>
</table>

**MILESTONES**

1979  
> First hospice service in Africa appeared in Zimbabwe: Island Hospice. (Clark D, et al., 2007)

2004  
> The African PC Association held its first annual general meeting in Tanzania and elected a board with representatives, including one from Zimbabwe. (Clark D, et al., 2007)

2005  
> The WHO was involved in a joint PC project for cancer and HIV/AIDS patients in Zimbabwe, and the Diana, Princess of Wales Memorial Fund has supported PC initiatives in Zimbabwe. (Clark D, et al., 2007)

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Hospice and Palliative Care Association of Zimbabwe (HOSPAZ)  
www.hospaz.co.zw/

**COMMENTS FROM KEY INFORMANTS**

**SERVICES**

**Policies**

> A PC Strategy is underway. There are PC Standards. PC falls under NCDs and policies.

**Medicines**

> There are stock-outs and erratic supply. Tablet morphine is available in the urban areas. There is reluctance to prepare liquid morphine as it is not profitable. Trained PC nurses in Island Hospice can start the patient on morphine then seek a prescription from the doctor. We are in the process of advocating for trained PC nurses to prescribe. Only doctors can prescribe prescription of opioids. PC trained nurses can apply for authority to prescribe.

**Vitality**

> N/A.

**REFERENCES**


**NATIONAL ASSOCIATION OR INSTITUTION**

Hospice and Palliative Care Association of Zimbabwe (HOSPAZ)  
www.hospaz.co.zw/

**KEY INFORMANTS**

Eunice Garanganga, Hospice and Palliative Care Association of Zimbabwe (HOSPAZ)  
Beverly Sebastian, Island Hospice and Healthcare.