Original Article

Factors Affecting Palliative Care Development in Africa: In-Country Experts' Perceptions in Seven Countries

John Y. Rhee, MPH, Eduardo Garralda, MA, Eve Namisango, MSc, Emmanuel Luyirika, MD, Liliana de Lima, MHA, Richard A. Powell, MSc, Carole A. Robinson, PhD, and Carlos Centeno, MD, PhD

Icahn School of Medicine at Mount Sinai (J.Y.R.), New York, New York, USA; ATLANTES Research Program, Institute for Culture and Society (E.G., C.C.), University of Navarra, Pamplona, Navarra; IdiSNA (Instituto de Investigación Sanitaria de Navarra/Institute of Health Research of Navarra) (E.G., C.C.), Pamplona, Navarra, Spain; African Palliative Care Association (E.N., E.L.), Kampala, Uganda; International Association for Hospice and Palliative Care (L.d.L.), Houston, Texas, USA; MWAPO Health Development Group (R.A.P.), Nairobi, Kenya; University of British Columbia (C.A.R.), Kelowna, British Columbia, Canada; and Clínica Universidad de Navarra (C.C.), University of Navarra, Pamplona, Spain

Abstract

Context. Factors contributing to and impeding palliative care (PC) development in Africa can provide insights into current strategies for advancing PC.

Objectives. To identify key factors affecting PC development in African countries from in-country PC experts' perspectives.

Methods. About 16 PC experts from seven African countries undertook semistructured interviews on PC development in their respective countries. An interpretive description approach was adopted, with data analyzed using constant comparison.

Results. Emerged themes included drivers, strengths, challenges, and aspirations for PC development in Africa. Drivers included advocates and pioneering organizations, HIV/AIDS, culture of caregiving, and the World Health Assembly PC resolution. Strengths included community health workers, the special role of nurses, diversity of services, and short training courses. Challenges included lack of PC education; lack of standardization in implementation; limited availability of and/or accessibility to morphine; poverty and disease burden; and lack of funding for PC. Aspirations included integration of PC, specialization in PC, nurse prescribing, and strong partnerships with Ministries of Health. Factors already highlighted in the literature were only briefly discussed.

Conclusion. The key factors underpinning PC development in the seven countries contributed to the beginnings of PC in Africa, fueled by advocates who built on existing strengths to maximize opportunities. However, the current approach is at high risk in terms of its sustainability, and strategies for maximizing existing resources and growing infrastructure support are needed moving forward. J Pain Symptom Manage 2018;55:1313–1320.

Key Words

Palliative care development, Africa, HIV, Sudan, Mozambique, South Africa, Cote d'Ivoire, Ghana, Namibia, Kenya

Introduction

Palliative care (PC) has steadily grown in Africa over the past decade;[1–3] 15 countries moved to higher levels of PC development between 2006 and 2011.[1,4] However, about half of African countries in 2011 had no identified PC service.[1] Although there is much hope for PC development on the continent,[5] there are many challenges impeding its progress, including disease burden,[6] high morbidity and mortality,[6] lack of funding and resources,[7] and poverty.[6]

Global report indicators[1,4,8] clarify the current state of PC development. However, indicators are unable to present the rich background of diversity, challenges, and historical achievements of countries. For example,

Address correspondence to: John Y. Rhee, MPH, Institute for Culture and Society, University of Navarra, 31080 Pamplona, Spain. E-mail: john.yohan.rhee@gmail.com

Accepted for publication: January 16, 2018.

0885-3924/$ - see front matter
https://doi.org/10.1016/j.jpainsymman.2018.01.009

South Africa is considered one of the most highly developed countries in terms of PC, ranked number one among African countries,[8] but did not have a stand-alone PC policy, whereas Mozambique did,[9] despite not being listed in the Economist Intelligence Unit's 2015 Quality of Death Index.[8]

Factors affecting PC development within and across countries are complex. Understanding historical developments, strengths, challenges, opportunities, and future goals and aspirations provides a framework for assessing current PC provision and supports the development of targeted strategies for continued development.

As PC remains relatively new on the continent, many current PC leaders are among the first providers and/or advocates for PC.[9,10] In-depth interviews[11] offer a lens through which to better understand development indicators and narrate a story of why, for example, a country has PC services available for only a sector of its population, or how a small group of advocates could build the first PC services in a country. Therefore, this qualitative study aimed to offer an in-depth view into the key factors affecting PC development among seven African countries.

Methods

An interpretive description approach was taken,[12] with semistructured face-to-face interviews conducted, and where needed by videoconference from March to August 2016 with in-country experts (here on called participants) of PC development.

Participants and Recruitment

Participants from seven countries (Cote d'Ivoire, Ghana, Kenya, Mozambique, Namibia, South Africa, and Sudan) were invited to participate by the research manager (E. N.) and executive director (E. L.) of the African Palliative Care Association (APCA). Countries chosen represented a balanced mix of geography, language, levels of PC development, and past work with the APCA (Table 1). Participants were identified based on one or more of the following nonhierarchical criteria: 1) officer of the Ministry of Health, 2) leader of the national PC association or similar organization, 3) leader and/or health care provider of a large and/or pioneering PC service in the country, or 4) early pioneer and advocate of PC in the country. Sixteen participants were interviewed (Table 2).

Data Collection

Data were collected through individual semistructured interviews (duration 30–45 minutes), asking an open-ended question (Could you tell us about

Table 1
Characteristics of Countries and Background

Country	Geographical Region (UN)	Major Language Spoken	Population Density (per km^2) (2016)[a]	Total Health Expenditure (% of GDP) (2016)[a]	Physicians per 1000 People (2010)[b]	No. of PLWH/Adults 15–49 yrs old Prevalence[c]	Level of Development[d]
Cote d'Ivoire	Western Africa	French	71.39	5.72	0.14	460,000/3.2%	3b
Ghana	Western Africa	English	120.46	3.56	0.10	270,000/1.6%	3a
Kenya	Eastern Africa	English and Swahili	80.91	5.72	0.18	1,500,000/5.9%	4a
Mozambique	Eastern Africa	Portuguese	35.58	6.98	0.04	1,500,000/10.5%	3a
Namibia	Southern Africa	English, German, and Afrikáans	2.99	8.93	0.37	210,000/13.3%	3a
South Africa	Southern Africa	English and Afrikáans	45.35	8.80	0.78	7,000,000/19.2%	4a
Sudan	Northern Africa	Arabic and English	22.13	8.43	0.28	56,000/0.3%	3a

UN = United Nations; GDP = gross domestic product; PLWH = people living with HIV.
[a]World Health Organization's Global Health Expenditure database.
[b]World Health Organization's Global Health Workforce Statistics.
[c]UNAIDS = United Nations Programme on HIV/AIDS.
[d]Lynch et al.[1]

Table 2
Characteristics of Country Experts From Qualitative Study

Country	No. in Article	Gender	Background of Experts
Cote d'Ivoire	P15, P16	1 M, 1 F	Internal medicine physician, psychologist
Ghana	P1, P2	1 M, 1 F	Palliative medicine physician, family medicine physician
Kenya	P3, P4, P5	3 F	2 palliative medicine physicians, palliative medicine nurse
Mozambique	P11, P12	2 F	Pain physician, palliative medicine nurse
Namibia	P6, P7	2 M	Professor, social worker, chaplain
South Africa	P8, P9, P10	3 F	Palliative medicine physician, oncology nurse, pediatric nurse
Sudan	P13, P14	2 F	2 oncology and palliative medicine physicians

M = male; F = female.

PC development in your country?) with follow-up questions addressing the dimensions of the World Health Organization's PC public health strategy dimensions,[13] as appropriate (Appendix, Part A). Two participants from Cote d'Ivoire were interviewed together because of scheduling difficulties.

Interviews were led by a coauthor (E. G.) with expertise conducting interviews on national PC development, accompanied by another coauthor based on the availability (J. Y. R., C. C., or E. N.). All interviews were recorded in English or French and transcribed verbatim. Transcripts were reviewed by the interviewed participants for accuracy and elaboration within a month after the interview to ensure their rigor.

Data Analysis

Data were analyzed using constant comparison.[13] Analysis began with open coding where two investigators (J. Y. R. and E. G.) and an external qualitative analysis expert (Dr. Maria Arantzamendi) independently read transcripts, fragmented the data into meaningful units, and accorded each unit a tentative label or code. The team met and determined the codes by consensus, with like codes organized into categories, which were organized within a coding framework. All transcripts were then coded using NVivo 11 (QSR International Pty Ltd., Doncaster, Victoria, Australia) based on the framework. After all the interviews were coded, the categories were refined and clarified with a third team member (C. A. R.) specialized in qualitative data analysis. Data in each category were reviewed and compared with other categories, with some categories renamed, and the relationship between categories revised. Overarching themes were identified by consensus (J. Y. R., E. G., and C. A. R.), with the key themes and their relationships diagrammed (Fig. 1).

Results

Key factors influencing PC development in Africa were identified in relation to the following themes: drivers, strengths, challenges, and aspirations (Fig. 1). Factors that have been previously identified in

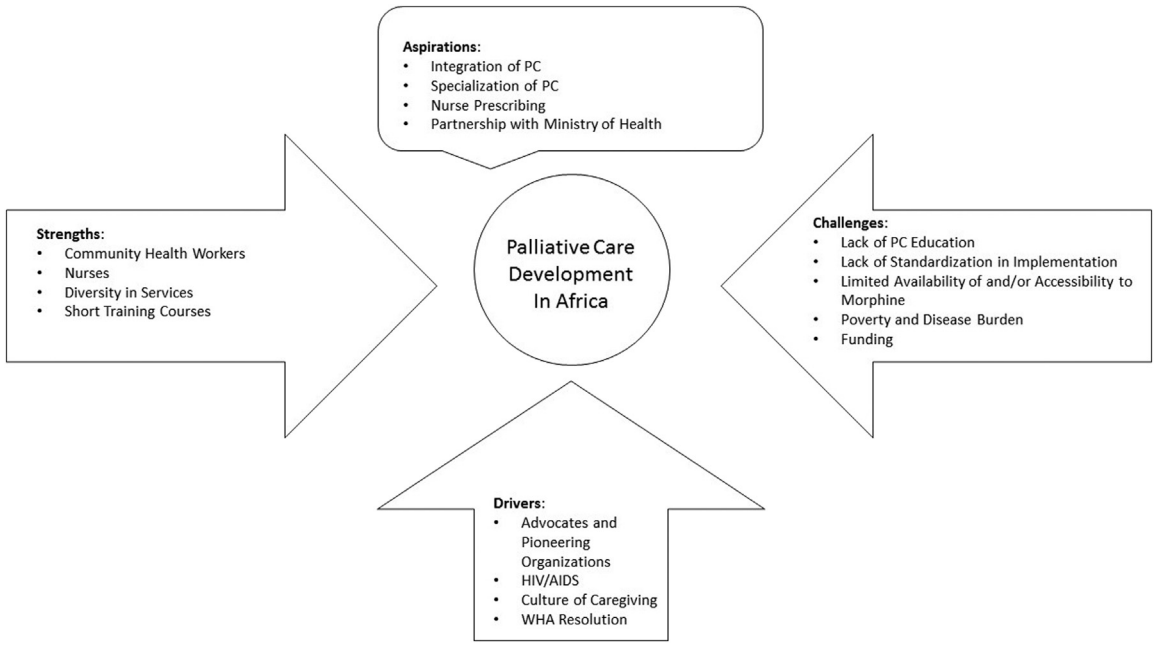

Fig. 1. Factors affecting palliative care development in Africa that emerged from analysis. PC = palliative care; WHA = World Health Assembly.

the literature are described succinctly, with supporting quotes reported in Appendix (Part B).

Drivers

Advocates and Pioneering Organizations. A health care worker who had completed a PC specialization course, outside or within Africa, was seen as key to the growth of PC. Often, advocates came together to form a national PC association to work with governments in advocating for PC. The APCA was also mentioned repeatedly as crucial to building capacity in various countries and for PC development across the continent.[14,15] Some pioneering organizations were focal points of training for the whole continent: Hospice Africa Uganda,[16] the University of Cape Town in South Africa,[17] and Nairobi Hospice in Kenya[18] (Appendix, Part B).

HIV/AIDS. Depending on the country, participants stressed the importance of the HIV epidemic in PC development. A significant amount of funding, including external funding such as from the President's Emergency Plan for AIDS Relief, were allocated to HIV/AIDS, allowing for funding of PC for HIV patients. The epidemic drove PC development in countries such as Cote d'Ivoire, Kenya, Namibia, and South Africa[19] (Appendix, Part B).

It is important to note that for Sudan, where HIV prevalence rate is considerably lower than many sub-Saharan African countries, cancer have been crucial to PC development, and formal PC services started in the country's cancer institute, with services limited to oncology patients.

Culture of Caregiving. Participants underscored how much patients want to spend less time in hospital and more time at home. This has resulted in hospices focusing on developing home-based care; there are very few inpatient hospices in Africa (Appendix, Part B).

World Health Assembly Resolution. The 2014 World Health Assembly PC resolution was a driver for development of policies and task forces. The resolution gave a framework for Ministries of Health and served as an advocacy document for government officials and advocates advancing improved PC within their respective countries. It has, for example, influenced the creation of a Steering Committee and Task Force in South Africa.

> P10: The Steering Committee has been developed, aligned with the World Health Assembly Resolution [… due to the] Resolution in 2014 […] this Ministerial Steering Committee, feels like we've, kind of made a huge leap forward, and we've been pushing [the] rock upwards, and now we're at the top, and we've got just the, just the nuts and bolts together to make it happen.

Strengths

Community Health Workers. Community health workers (CHWs) were sometimes referred to differently between countries, as activists, community volunteers, or trained traditional healers. The CHWs were seen as affordable extensions of the PC system providing essential services such as visiting patients.[2]

The roles and the levels of training the CHWs received varied between countries. Mozambique partnered with traditional healers and trained them as CHWs, linking patients with PC services. However, a South African participant warned that this was an abused group of health care workers in that they are paid minimally for their services despite adopting some of the most difficult PC tasks.

Nurses. Because of the relative scarcity of doctors on the continent, nurses often lead PC teams, and home care visits may be undertaken solely by the PC-trained nurses. They perform different roles and provide all aspects of PC, including psychosocial and spiritual counseling. Although some PC services may lack a doctor, psychologist, or social worker, all included a PC-trained nurse, and therefore, nurses were considered to be at the center of PC delivery in Africa.

> P10: It's a professional nurse who's been trained in PC who leads the team […] hospice and PC is very much a nurse-driven profession and a nurse-driven activity ….

Diversity in Services. The interviews reflected a rich diversity of PC service delivery in Africa. Hospitals provided a vast array of services in PC, including outpatient clinics, PC inpatient units, PC consultation services, and home care services often run by the same PC team, such as in Sudan. Services could be run by the cancer center or Ministry of Health. Nongovernmental organizations are important in providing community-based care systems or hospices and are often faith-based organizations and internationally funded, as in Namibia (Appendix, Part B).

Because of the often limited number of services, the model (or only) service site, such as in Ghana and Sudan, was often the base for advocates working to develop PC at the national level.

PC may also be delivered in nonspecialized services, for example, integrated within the broader service offered in HIV clinics in Cote d'Ivoire. In Mozambique, PC is being introduced first through

pain units with the hope of evolving those units into PC services.

> P11: But now, the advocacy work we are doing in the provinces, we have three institutions of pain units. […] it's one of the strategies because the control of pain is part of PC … So, […] we are starting to introduce PC in the hospitals.

Short Training Courses. Short training courses were also considered very important, both to train health care workers in PC and to sensitize people to its existence. Short courses were very varied in their number of hours and topics covered. Where there was a lack of health care workers, short courses were seen as an important bridge to address this deficit. Health care workers were most often nurses, physicians, and counselors but could also include pharmacists, physical therapists, and volunteers.

> P5: So, they get the short training […] The five days training. Plus, three days' orientation, attachment. […] But it allows them to become PC providers. They are actually the ones mostly taking care of patients.

Sudan and Mozambique highlighted the use of short courses in training new advocates, and all countries indicated that short courses were important for sensitizing and raising awareness among health care workers on the importance of PC.

Challenges

Lack of PC Education. Participants highlighted the lack of knowledge of PC among both health care professionals and the public, emphasizing what has been shown in the literature.[9,20] Among health care professionals, there was a reported misunderstanding of what PC is and, sometimes, a complete lack of knowledge about it, resulting in few PC referrals and low levels of morphine prescription, one of the most fundamental aspects of the approach (Appendix, Part B).

Lack of Standardization in Implementation. In terms of education, there was a lack of standardization in PC training materials, including number of hours and content covered. This was not only the case in formal medical or nursing curricula but also in trainings for short courses or CHWs.

> P8: When they come, they get a training that is very varied. And again, this is where we have a problem […] you can have an accredited training that is only a week long, which is, of course, nowhere near long enough.

The lack of standardization was challenging. For example, officially recognizing nurse prescribing of opioids is difficult because of the variability in training a person may have received. This was sometimes addressed by people receiving training from institutions within or outside Africa with established track records, such as Hospice Africa Uganda or fellowships and/or master programs abroad.

In Mozambique, there was a difference between having an educational curriculum and implementation of the curriculum.

> P11: We have the curriculum approved. But we need to introduce this curriculum into the schools' curricula.

Within implementation, there were differences in terms of how strongly it was implemented at certain institutions as opposed to others. Similarly, policies might be in place but not implemented. For example, in Mozambique, although there was a national PC policy in place, the policy was not implemented in practice.

Limited Availability of and/or Accessibility to Morphine. Participants from Cote d'Ivoire, Kenya, and Namibia expressed a difference between morphine availability and accessibility for a number of reasons (e.g., lack of knowledge, lack of legal protections, expiring opioids, lack of use, and opiophobia). This emphasizes the difficulties with access to morphine in Africa highlighted in the literature through international comparative studies.[21,22] Participants relayed the importance of nurse-prescribing laws, shown to be an important means of improving opioid access in Uganda.[23] Because of a shortage of doctors, however, none of the countries in this study had nurse-prescribing laws for PC-trained nurses. Participants also reported that PC-trained nurses were placed in a difficult position when patients they cared for needed opioids, but there were no legal protections for them to prescribe (Appendix, Part B).

Poverty and Disease Burden. Poverty and insecurity often impeded PC service growth in particular areas. Poverty prevented patients from receiving medical services and may prevent patients from seeking early treatment (Appendix, Part B).

HIV/AIDS and the lack of health care workers to address its disease burden continued to be significant problems in many countries. Limited numbers of physicians resulted in the need for task sharing with other health care professionals, and specialist PC was more difficult to develop because of a limited number of health care workers.

Funding. Participants reported that funding for PC in Africa was still largely external, through foreign governments or nongovernmental organizations and, therefore, was dependent on continued funding from, and demands of, those sources. This was best

exemplified in the case of HIV/AIDS in South Africa, where PC rapidly grew because of significant growth in funding for HIV patients with PC needs. However, PC later became a barrier, given services were restricted to HIV patients. The withdrawal of funding for HIV has resulted in the closure of many hospices and was a substantial challenge in South Africa. Here too, our findings highlight the literature reflecting the difficulties with both internal and external fundings in growing PC in Africa[7,18,24] (Appendix, Part B).

Aspirations

A number of future aspirational goals were expressed as important indicators and milestones for PC development.

Integration of PC. Integration of PC was mentioned as an important indicator. Integration was defined as availability of PC services through all levels of the health care system, including in different types of services provided, such as public hospitals vs. faith-based and private hospitals. The importance of PC availability in the primary care level, that is general PC provision, was also stressed. This also included the ability for a patient to receive services when returning home from the hospital and integration of PC into community-based organizations (Appendix, Part B).

Specialization in PC. Participants considered some kind of specialization as very important for PC in Africa. Oftentimes, participants spoke about it as very aspirational and as a distant goal.

> P7: There is no course for someone to specialize yet […] Yeah, we are not there yet.

Specialization was one strategy, similar to PC policies, where participants used a top-down approach to ensure visibility and voice for PC within their health care system. Specialization for physicians and nurses allowed for increased advocacy as well as formalization and accreditation. This could attract additional health care workers to the field who might have avoided it for the career-related risks associated with practicing in a field without formal recognition.

Ghana stood out in terms of its achievements for specialization. PC has been approved as a subspecialty of Family Medicine by the Ghana College of Physicians and Surgeons, and the Ghana College of Nursing and Midwives offers a three-year specialist postlicensure program in PC for nurses.

Nurse Prescribing. Trained nurse prescribing was seen as an important goal in all the countries, modeled after the success of a law passed in Uganda. Because of the lack of physicians and opiophobia, participants mentioned the difficulties of delivering PC services to patients. Because nurses are at the core of PC and are more available, participants used what was available to try to meet the needs of patients by advocating nurse-prescribing legislation. Participants referred to the Uganda law as model legislation, allowing nurses to prescribe not only opioids but also medicines related to symptom management.

> P10: Which is why we are saying that these nurses should have prescribing powers because they actually are educating the doctors and saying this is what you could write on a prescription.

Partnership With Ministry of Health. A strong partnership with the Ministry of Health was important for development of a stand-alone PC policy and a dedicated person in the ministry working on PC. Without the help of the Ministry of Health, continued PC development was seen as difficult.

> P6: We had a Task Force on PC at the Ministry of Health, and one of the challenges was we never had a champion at the Ministry […] Is there a dedicated person, desk, at the Ministry of Health, whose entire job is PC? Not part of their portfolio, not the HIV Coordinator, not cancer, not community health […], if that person is not there, […] it's not going to be integrated.

The partnership with the ministry was expressed as important for developing policies, national strategies, and programs. One of the main roles of advocates was to educate members in the ministry of the importance of PC.

In South Africa, because of a strong partnership with the ministry, there have been large policy-level gains within the past few years, including drafting of a stand-alone PC policy and the creation of a Steering Committee tasked with implementing the World Health Assembly resolution on PC. Kenya also had a very strong relationship with the Ministry of Health, including a specific person from the ministry assigned to PC.

One of the key categories that emerged from partnership with the ministry was the importance of national stand-alone policies for PC. Participants saw developing a stand-alone national policy as a milestone for PC development, separate from any particular disease category, to ensure PC would not be tied or restricted to a particular disease or disease group, such as HIV or cancer.

A subtheme that repeatedly emerged was the importance of a formal champion or desk at the ministry, who would advocate for PC; Kenya stood out in this respect. Although the definition of the champion or desk varied, a few participants clarified that a formalized position was more important because if a champion

moved on to another position, they would need to start advocating from Stage 1 (Appendix, Part B).

Discussion

This study identified key factors underpinning, and aspirations for, PC development in seven African countries. This is the first qualitative study since Wright and Clark's textbook in 2005[25] comparing PC development across multiple African countries with in-country participants.

Some factors reflected themes previously mentioned in the literature, such as importance of CHWs,[2] challenges in funding,[7,18,24] and knowledge deficits.[9,20] HIV has played a crucial role in PC development in Africa through international funding, contributing to genuine need on the continent,[19] and South Africa, particularly, benefited greatly from this aid with tremendous growth in PC service delivery. However, as HIV/AIDS transitioned to a chronic condition, it became evident that PC was overly dependent on HIV-specific funding with insufficient replacement funds to accommodate a chronic disease model of service provision for HIV and other noncommunicable diseases.[19] Barriers to opioid access have also been reflected in the literature,[21,22] and although there continue to be major limitations in opioid prescription and access because of stigmatization,[26] our study indicates a growing awareness of the efficacy and importance of opioids, especially among those interacting with PC/hospice services in Africa. These factors, having resurfaced in our interviews, show that they continue as major factors affecting PC development in Africa.

It is important to note that these factors are reported in the literature in a nonsystematic way, and our interviews synthesize and organize these factors in a conceptual model. Another strength of our study is that our results also report unique factors, such as partnership with the Ministry of Health, specialization in PC, lack of standardization in implementation, and the unique role of nurses, which indicate new areas of drivers, strengths, and aspirations, as well as challenges, as PC continues to develop in Africa.

The interviews highlighted a two-pronged approach to PC development. The first recognizes the realities in Africa and capitalizes on them to build PC. Key examples include Mozambique, which is using pain as an entry point for PC; the use of CHWs for delivering services in the context of limited resources; and capitalizing on funding from HIV to grow PC service capacity. The second strategy simultaneously used a top-down approach, working with governments to develop PC policies and generate dedicated internal funding. This appears to be important both for structural recognition and culturally, where reverence and respect is paid to those in positions of political power.[27]

As was the case in other regions of the world, the role of African advocates has been crucial to progress. PC developed early in the U.K. and the U.S. with links to tuberculosis, and then, later, with cancer,[28] whereas HIV/AIDS had a much larger influence on historical PC development in Africa.

The present study had some limitations. First, all seven African countries, according to the global atlas,[1] are at medium-to-higher levels of PC development, and information from countries with no services or capacity building is not reflected in this article. Therefore, the themes obtained may not reflect the realities in most other African countries that have lower levels of PC development. However, we purposefully chose seven countries that had a certain amount of recorded progress in PC to understand historical developments and provide narratives of PC development for countries undergoing similar processes in development. Second, although one interviewer was constant in all interviews (E. G.), the second interviewer changed, depending on their availability. Although this may have affected the interviews, as the current topic was not innately sensitive, but rather, an overview of developments within participants' respective countries, we feel this did not play a significant biasing role in the type of information generated.

The ability of advocates to build on existing strengths and maximize opportunities is reflected in the remarkable beginnings and growth of PC in Africa. However, the current situation is one of high risk. Advocates are core to PC, and with the loss of an advocate, growth could be significantly slowed or even stopped in a country. Risk is elevated when there is lack of demand for PC stemming from inadequate public and professional knowledge. Furthermore, lack of knowledge and misconceptions about opioids results in continued fear and restrictions around one of the most fundamental aspects of PC, that is, pain management. Therefore, it is critical to grow infrastructure, including stabilizing resources, standardization of PC education and services, removing barriers to medicines, and increasing knowledge of PC among the public and professionals, to moderate the risk.

In conclusion, the key factors affecting PC development in the seven African countries contributed to the beginnings of PC in Africa by building on existing strengths to maximize opportunities. However, the current system is at high risk in terms of its sustainability, and strategies for maximizing existing resources and growing infrastructure for support are needed to achieve PC development aspirations. The interviews conducted in this article have been used to build indicators used in the 2017 APCA Atlas of Palliative Care in Africa,[29] the first African-specific quantitative review of PC development in Africa, with the hope that the atlas will inform policy decisions on PC development in African countries. Future studies could further

explore PC development themes identified in this article with a larger sample of African countries via surveys or conducting additional interviews.

Acknowledgments

Funding: This work was coordinated and funded by the Atlantes Research Program, at the Institute of Culture and Society (University of Navarra, Pamplona, Spain), and cofunded by the Arnhold Institute of Global Health at the Icahn School of Medicine at Mount Sinai (New York, NY, USA), the African Palliative Care Association (Kampala, Uganda), and the International Association for Hospice and Palliative Care (Houston, TX, USA). The funding sources had no direct role in the study design, in collection, analysis, or interpretation of data, in writing the report, or in the decision to submit the paper for publication.

Ethical approval: The study was approved by the Icahn School of Medicine at Mount Sinai, New York (Institutional Review Board-16-00242), the University of Navarra, Spain (2016.054), and Mildmay Uganda Ethics Review Board, Uganda (RECREF 0505-2016). Introductory information was sent to participants before the interview, and informed verbal consent obtained from all participants.

References

1. Lynch T, Connor S, Clark D. Mapping levels of palliative care development: a global update. J Pain Symptom Manage 2013;45:1094–1106.

2. Grant L, Downing J, Namukwaya E, Leng M, Murray SA. Palliative care in Africa since 2005: good progress, but much further to go. BMJ Support Palliat Care 2011;1:118–122.

3. Rhee JY, Garralda E, Torrado C, et al. Palliative care in Africa: a scoping review from 2005-16. Lancet Oncol 2017; 18:e522–e531.

4. Wright M, Wood J, Lynch T, Clark D. Mapping levels of palliative care development: a global view. J Pain Symptom Manage 2008;35:469–485.

5. Downing J, Namisango E, Kiyange F, et al. The net effect: spanning diseases, crossing borders—highlights from the fourth triennial APCA conference and annual HPCA conference for palliative care. Ecancermedicalscience 2013;7:371.

6. African Health Observatory. WHO, 2014. Available from http://www.aho.afro.who.int/profiles_information/index.php/AFRO:Analytical_summary_-_Health_Status_and_Trends. Accessed March 22, 2017.

7. Callaway M, Foley KM, De Lima L, et al. Funding for palliative care programs in developing countries. J Pain Symptom Manage 2007;33:509–513.

8. Unit TEI. The 2015 Quality of Death Index: Ranking palliative care across the world 2015.

9. Ntizimira CR, Nkurikiyimfura JL, Mukeshimana O, et al. Palliative care in Africa: a global challenge. Ecancermedicalscience 2014;8:493.

10. Clark D, Wright M, Hunt J, Lynch T. Hospice and palliative care development in Africa: a multi-method review of services and experiences. J Pain Symptom Manage 2007;33:698–710.

11. Carr LT. The strengths and weaknesses of quantitative and qualitative research: what method for nursing? J Adv Nurs 1994;20:716–721.

12. Thorne S, Kirkham SR, MacDonald-Emes J. Interpretive description: a noncategorical qualitative alternative for developing nursing knowledge. Res Nurs Health 1997;20: 169–177.

13. Stjernsward J, Foley KM, Ferris FD. The public health strategy for palliative care. J Pain Symptom Manage 2007; 33:486–493.

14. Mwangi-Powell F. APCA's role in the development of palliative care in Africa. Prog Palliat Care 2012;20:230–233.

15. Luyirika EB, Namisango E, Garanganga E, et al. Best practices in developing a national palliative care policy in resource limited settings: lessons from five African countries. Ecancermedicalscience 2016;10:652.

16. Downing J. Palliative care and education in Uganda. Int J Palliat Nurs 2006;12:358–361.

17. Gwyther L, Rawlinson F. Palliative medicine teaching program at the University of Cape Town: integrating palliative care principles into practice. J Pain Symptom Manage 2007;33:558–562.

18. Rawlinson F, Gwyther L, Kiyange F, et al. The current situation in education and training of health-care professionals across Africa to optimise the delivery of palliative care for cancer patients. Ecancermedicalscience 2014;8:492.

19. Powell RA, Ali Z, Luyirika E, et al. Out of the shadows: non-communicable diseases and palliative care in Africa. BMJ Support Palliat Care 2015;7:128–132.

20. Busolo DS, Woodgate RL. Using a supportive care framework to understand and improve palliative care among cancer patients in Africa. Palliat Support Care 2016;14:284–301.

21. Bosnjak S, Maurer MA, Ryan KM, Leon MX, Madiye G. Improving the availability and accessibility of opioids for the treatment of pain: the International Pain Policy Fellowship. Support Care Cancer 2011;19:1239–1247.

22. Cleary J, Powell RA, Munene G, et al. Formulary availability and regulatory barriers to accessibility of opioids for cancer pain in Africa: a report from the Global Opioid Policy Initiative (GOPI). Ann Oncol 2013;24(Suppl 11):xi14–xi23.

23. Jagwe J, Merriman A. Uganda: delivering analgesia in rural Africa: opioid availability and nurse prescribing. J Pain Symptom Manage 2007;33:547–551.

24. Harding R, Higginson IJ. Palliative care in sub-Saharan Africa. Lancet 2005;365:1971–1977.

25. Wright M, Clark D, Hunt J, Lynch T. Hospice and palliative care in Africa: A review of developments and challenges. Oxford: Oxford University Press, 2006.

26. McNeil DG Jr. 'Opiophobia' has left Africa in agony. New York Times 2017. December 4, 2017.

27. Igboin BO. Colonialism and African cultural values. Afr J Hist Cult 2011;3:96–103.

28. Clark D. To comfort always. Oxford: Oxford University Press, 2016.

29. Rhee JY, Luyirika E, Namisango E, et al. APCA atlas of palliative care in Africa. Houston, TX: IAHPC Press, 2017.

Appendix

A. Interview Script and Questions

We would like to spend the next 30 minutes discussing the development, growth, and challenges of palliative care (PC) in your country.

We have some formal questions first:

1. *Would you please introduce yourself, saying your name and affiliation (or workplace) and state that you allow the recording so as to be latterly analyzed for research purposes?*
2. *Could you please tell us about your role in PC?*

Questions:

3. *Could you tell us about PC development in your country?*

If the interviewee does not address the World Health Organization's dimensions, continue with the following questions:

4. *Could you tell us about PC **services** in your country?*
5. *Could you tell us about PC **policies and programs** in your country?*
6. *Could you tell us about PC **education** in your country?*
7. *Can you tell us about the availability of **opioids and medicines** in your country?*
8. *Could you tell us about **advocacy and vitality** of PC in your country?*

B. Additional Quotations From Interview Transcripts for Different Factors

Drivers

Advocates and Pioneering Organizations

P10: I think part of the success in Africa has been that we've now got a critical mass of […] senior leaders […] who are in a position of authority in countries who are saying, "what about PC?"

P13: Now, Dr. [confidential] [is building a] research center and she helps many others in their PhD in PC. […] when it comes to PC […] they seek advice [from her] …

P7: I think there is a move for a national association for PC to do that work as well, […] so it can promote and develop an understanding of PC. [… An] association is very, very important.

P12: So, we start working with APCA, APCA helped us to building capacity for the association. And now, during this time, […] we were able to elaborate a policy of PC, the curriculum of PC, and the manual of reference in PC.

P2: […] post-graduate level for doctors, the post-graduate level for nurses […] will be able to teach in the other 20 institutions, to scale up PC. So, we'll have a lot more service providers, practicing, and caring for patients who need PC.

HIV/AIDS

P8: But certainly, HIV and AIDS was what drove development of PC in South Africa […] So, I think that South Africa has one of the strongest PC movements, in the world […] But the trigger was HIV.

Culture of Caregiving

P9: But within Africa, people really care […] And, so, they take the time […] they are really able to spend quality time with the family and with the patients. Which I think in Western medicine, it's hard because it's very expensive, and […] all the other medical legal hazards and risks and insurances that go with it. We don't have those encumbrances. So, we can really care for a patient and for the family in the true sense of PC.

Strengths

Community Health Workers

P8: […] not just South Africa, but the whole of Africa, is the use of community care workers. And that's the only way we can reach the patients, is through the community care workers …

Diversity in Services

P4: (…) PC services in the government hospitals and also in the faith-based hospitals, and in the private hospitals as well. (…) we have these stand-alone hospices and the hospices and PC services in the rural communities. These are faith-based organizations. And then we have hospices and PC services within mission hospitals or the ones that are called faith-based hospitals. All these, and now teaching and referral hospitals, […] And the county referral hospitals …

Challenges

Lack of PC Education

P6: … [PC is] very much in the development of awareness phase, from the point of the practitioners.

Limited Availability of and/or Accessibility to Morphine

P14: There were rumors that there was addiction within the health personnel. So, that was the reason why that hospital was having these very strict regulations.

P1: Most practitioners in Ghana would not use morphine for pain. […] Those even within the teaching [hospital …] still do not like to prescribe more than 60 mg of morphine in a day.

P16: But our doctors don't like to prescribe morphine because they feel that [the hospital policies] can be against them.

Poverty and Disease Burden

P3: […] the other thing was financial considerations, they don't have money. They lack money for treatment and for transport […] the number one challenge was that they get very hungry and very thirsty [… now,] we have water, all over the hospital, [… and] started a feeding program.

Funding

P9: I think that at most, we had over 200 hospices within the country, but funding has become very limited; our expertise is actually dwindling. It's quite difficult to keep hospices going.

P8: But HIV was a two-edged sword […] it stimulated the development of hospice and PC, but it actually meant that a lot of people who needed PC didn't get it because all the money was going for AIDS […] and it's only in the last few years where it's started trying to even out a bit […] And on balance, most of the hospice care is given to patients with HIV, and TB. […] And for hospices to survive, they need money, and so their focus is on HIV and TB.

Aspirations

Integration of PC

P1: [… integration] into our health service from the primary care level to up to the tertiary level, so that PC will be accessible to all.

P6: A patient with HIV, if they were treated at the hospital, could then go back to the village, go back to the community and still have access to palliative services …

Partnership With Ministry of Health

P10: I don't trust having desks in the Ministry because it doesn't "man" the desk. The desk in the Ministry means there should be somebody responsible, but in our draft National Policy, it says that from March 2017, there must be a National Director responsible for palliative care.