

# Challenges of Access to Oral Morphine Medicine: Palliative Care at a Crossroads for Cancer Patients in Ethiopia

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**Abstract:** Ethiopia registers 77,352 new cases of cancer and 51,865 deaths every year, and the number is showing an increasing trend year to year. Despite the importance of providing palliative care, the country has a long way to go to match the needs of and provide relief for patients with cancer. The promotion and expansion of palliative care services is challenged by a number of problems, among which lack of access to pain-relieving medicine is one of, if not the main, problems raised by health professionals and by various parties involved in health care. Oral morphine is effective and the preferred pain-relieving medicine with tolerable side effects, especially when given by titrating the dose. However, Ethiopia is facing a shortage of oral morphine in health-care facilities and other places where the product is needed. Unless an immediate solution is sought to address the inaccessibility of this medicine, the problem of palliative care will be pronounced and the suffering of patients will continue.

**Keywords:** palliative care, morphine, cancer, Ethiopia

## Introduction

Cancer is a public health problem that results in catastrophic challenges if not controlled by devising appropriate disease control strategies and multidisciplinary care. Palliative care is one of the key components of cancer care and has been proposed as a basic human right. The World Health Organization (WHO) defines palliative care as “an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness through prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other physical, psychosocial, and spiritual problems.”<sup>1</sup> As a result, morphine, the most widely utilized opioid analgesic for severe pain managements is one of the medications included in the WHO and International Association for Hospice and Palliative Care essential medicine list for palliative care.<sup>2,3</sup>

In low- and middle-income countries (LMICs), patients needing palliative care are often denied effective pain medications such as morphine and only 17% of the world’s morphine is consumed in these countries, which are home to nearly 83% of the global population.<sup>4,5</sup> The problems concerning the promotion and expansion of palliative care services cannot be solved by the mere presence of the pain-relieving medicine. There should be a means to deliver the product to the places where it is needed, including rural areas where health facilities are too far away to access easily. The Ugandan model is a good one in this respect to promote access to morphine and palliative care. The country’s approach with respect to both advocacy and support from the government in achieving continuous opioid availability and rollout across health facilities was found to be successful.<sup>6</sup> In this article, the situation of palliative care for cancer patients in Ethiopia and the challenge of access to oral morphine are discussed.

## Cancer Care in Ethiopia

In Ethiopia, four main diseases — cardiovascular disorders, cancer, diabetes mellitus, and chronic obstructive pulmonary disease — cause >80% of deaths from noncommunicable diseases. According to the GLOBACAN report, about 77,352 new cancer cases and 130,858 overall cancer cases are seen per year in Ethiopia, with 51,865 deaths (>39.6% mortality).<sup>7</sup> Overall, breast cancer accounts for 20.9% of all cancer types, followed by cancer of the cervix (9.6%) and colorectal cancer (7.8%).<sup>8,9</sup> However, a significant proportion of cancer cases are diagnosed at advanced stages. For example, >60.4% of cancer of cervix cases in Ethiopia are diagnosed at advanced stages.<sup>10</sup> Even though there are limited published studies available, among pediatric patients hematologic malignancies, acute lymphoblastic leukemia, and non-Hodgkin's lymphoma are the most prevalent cases, followed by solid malignancies, such as Wilms's tumor, neuroblastoma, and rhabdomyosarcoma. One study from Gondar University Hospital on a small sample reported that 60.3% of pediatric malignancies were hematologic, followed by Wilms's tumor (18.3%) and neuroblastoma (7%).<sup>7,11</sup>

Even if the prevalence of cancer in Ethiopia is increasing, the 5-year survival and overall treatment outcome continues to be poor due to late presentation/diagnosis, poor access to care and anticancer medications, and weak diagnostic infrastructure. Five-year survival for breast cancer is 25.8% and 30% among pediatric patients treated for acute lymphoblastic leukemia in Ethiopia, as opposed to 90% in the US for both cancer types.<sup>12</sup>

Considering the high morbidity and mortality of cancer in Ethiopia, priority was given to improving cancer care by the Federal Ministry of Health (FMOH).<sup>8,9</sup> Initially, amongst high-level activities, much attention was given to expand access to care from one oncology center, Tikur Anbessa Specialized Hospital, to 24 oncology centers (pediatric cancer is treated in five hospitals, 16 hospitals provide cancer care for adults, and eight hospitals only for breast cancer treatment). A total of 10 private hospitals also provide cancer care in Ethiopia. A total 54 physicians specialized in cancer care (six hematologists, 40 oncologists, and eight pediatric oncology hematologists) are currently practicing in Ethiopia, as opposed to one oncologist two decades ago. As a result, access to care has improved nationally, but still a lot has to be done to standardize care and improve clinical and humanistic outcomes.

## Situation of Palliative Care in Ethiopia

Cancer is a significant worldwide public health, social, and economic problem that is linked with massive morbidity and mortality, particularly in resource-limited countries with fragile health-care systems like Ethiopia. Palliative care is a crucial part of integrated, people-centered health services at all levels of care, and aims to relieve suffering that is associated with the disease and treatment.<sup>13,14</sup> Globally, an estimated 40 million population are in need of palliative care, 78% of whom live in LMICs and almost half of them living in Africa.<sup>14,15</sup> Moreover, 98% of children needing palliative care live in LMICs and almost half of them living in Africa.<sup>15</sup> Sadly, only 14% patients are getting comprehensive palliative care globally. Cancer-related pain is the most common symptom needing palliative care.<sup>16–19</sup>

Despite the recognition of the huge demand for palliative care at a high level and the development of palliative care guidelines in Ethiopia, there are no clear data on the demand of palliative care; however, a few studies have demonstrated that there is huge unmet need for the service.<sup>20</sup> Structured patient-centered palliative care is almost nonexistent due to a number of barriers, including but not limited to restricted access to and poor supply of palliative care medications, lack of contextually appropriate interventions, shortage of qualified professionals for the service, and lack of system structure for care. These life-threatening illnesses cumulatively pose a significant burden to patients and their families, and financial hardships, especially in the face of a COVID-19 global pandemic, for the health-care systems.<sup>21–23</sup> Therefore, it is an imperative and ethical responsibility of health-care systems to provide palliative care for patients with cancer needing it.<sup>8</sup>

## Challenges of Access to Oral Morphine in Ethiopia

Since the aim of palliative care is to prevent and relieve suffering of patients by the early identification and accurate assessment of pain and other symptoms, morphine should not be reserved only for terminal cases.<sup>24,25</sup> The medicine can be administered to patients by titrating the dose to control symptoms. This shows the need to avail pain-relieving

medicine in health facilities to alleviate pain for patients at any stage of cancer. In Ethiopia, morphine is included in the essential drug list for the country.<sup>26,27</sup>

Oral morphine has been used in the country's hospitals and some cancer-care centers for alleviating the pain from this chronic disease. However, a shortage of this medicine has been repeatedly reported by almost all cancer care-providing health-care facilities. At different times, intermittent supply of this medicine from government and private suppliers has been observed, but the supply is too erratic with a prolonged periods of absence/shortage of stock.

By taking into consideration the imbalance between the need for this medicine and the huge number of patients and the problem of availability and access of the product in the country, a technical working group (TWG) was established in 2009. The main objective of this TWG was to explore ways to increase access to this medicine. The TWG was composed of experts from various stakeholders, including the Federal Ministry of Health, Ethiopian Pharmaceutical Supply Service, regulatory authorities, hospitals, and the pharmaceutical industry. The TWG undertook various activities by benchmarking the success stories of some African countries, eg, Uganda, to alleviate the problem of shortage and implementing effective supply management of this controlled medicine. The TWG finally came up with a solution of launching morphine production locally. The main impediment to the domestic production of morphine was the shortage of this medicine in the local market.

Hence, morphine syrup production was started by a local pharmaceutical company in 2009, as per the information obtained from members of the TWG, and supplied to the local market after complying with the registration requirements of the regulatory body of the country. After uninterrupted supply of the medicine to health facilities for about 3 years, the manufacturing company ceased production of this medicine in 2012. Though the product was available till 2014 in hospitals and other health facilities, in subsequent years an interruption of production caused a dramatic shortage in the supply needed to provide palliative care services in health settings. According to hospital pharmacists' information, though efforts had been made to improve availability of the morphine product by importing it from other countries, such as in 30 mg tablets, it was found insufficient to respond to the surge in demand for the medicine in the country. Moreover, the imported medicine did not satisfy the dose requirements or convenience for pediatric patients.

Nowadays, cancer-care centers are feeling the pinch in supplies of this medicine. Though there is continuing support from regional institutions like Hospice Africa Uganda with technical support and sharing best practices, the challenge of availability of oral morphine in the country is continuing. The country has been taking various policy and structural measures, but there is a need to go a long way to match the burden of cancer. Offering good care to patients with the disease is among the various activities that should be considered for reducing the suffering of the patients.

## Conclusion

Health facilities in Ethiopia are facing problems of availability and accessibility of oral morphine products for cancer pain relief. Generally, more effort is required to improve palliative care services in the country.

## Recommendations

Apart from expanding the centers for the treatment of cancer, advocacy for availability of pain-relieving medicines, such as oral morphine, shall be given more emphasis in Ethiopia, and this can be led by such organizations as the Federal Ministry of Health, Ethiopian Pharmaceuticals Supply Service, and Hospice Ethiopia, among others. To respond to the need of this medicine for pediatric and adult cancer patients, local pharmaceutical manufacturers and hospitals can produce the drug in different dosage forms and strengths by adhering to regulatory standards. In addition, more resilient supply-chain and diversified sourcing options should be taken into account to minimize the suffering of cancer patients in the country.

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