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# The Global Status of Universal Health Coverage and Oncology Care

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**Abstract**

The reduction of preventable deaths from non-communicable diseases, including cancers, is one of the main targets of universal health coverage. Not only there is a shortage of financial resources for universal health coverage for cancer patients in many countries, but also there are many challenges in the continuity and the quality of care. There are disparities rooted in both providers' and patients' behavior at the time of care. Unmet needs for information on treatment and prognosis, inadequate cost coverage of care, and inadequate support for other living costs are contributing factors to poor prognosis in cancer patients, especially in cases with advanced stages and those living in low-income countries. There is a need for a comprehensive, holistic approach to the care of cancer patients considering the patients' socioeconomic and cultural status and the institutional status of the providers.

*Keywords:* Oncology, Universal Health Coverage, Global

## 1. Background

United Nations Sustainable Development Goal Number Three targeted reduction of premature death from non-communicable diseases, including cancers, and achievement of universal health coverage (UHC), focusing on financial protection and access to high-quality health services, including medications. Both of these targets are very relevant in the care of cancer patients (1).

Despite these targets and the global agenda, malignancies are a growing cause of catastrophic health expenditure worldwide. The global burden of cancers has increased even during the recent pandemic of COVID-19. These realities indicate that the current approaches to the care of cancer patients are not adequate and not appropriate. This study aimed to summarize the current global approaches under the UHC agenda for cancer care and its challenges.

## 2. Prevention

Many cancers have a close association with environmental hazards, which are more prevalent among lower socioeconomic classes.

Tobacco has been associated with many cancers. Although many countries have ratified the WHO Framework Convention on Tobacco Control, in reality, the implementation is far behind the ideal. Many strategies for the prevention and control of tobacco smoking are intersectoral and behind the scope of this paper. However, the treatment of current users, which should be part of health care and needs both behavioral and medicinal approaches, is not covered in many countries.

There are few effective vaccines to prevent cancers. Hepatitis B vaccination for hepatocellular carcinoma is now widely integrated into neonatal immunization programs globally, but there are still populations with low neonatal vaccine coverage, which need enhancement strategies (2). The relatively high-cost human papillomavirus vaccine for the prevention of cervical cancer has prevented its wide availability, especially in needy countries. Without cost reduction in the range of 50% cost-effectiveness of this vaccine has been questioned, at least in low- and middle-income countries (3).

## 3. Screening

Cancer screening programs need to be in concordance with the social context and available resources and prioritized based on the current and forecasted burden of cancers. Screening at the community level will be failed if these issues are not considered (4). Community awareness of screening programs and increasing the understanding of the target population of the screening procedures and their benefits and hazards are a cornerstone for acceptance and utility of screening at the community level (5). Telemedicine and digital health could potentially expand the screening programs (6).

Coverage by insurance has a positive impact on the utility of cancer screening procedures, which could ultimately lead to a better outcome in these patients (7, 8). The utility of these services was affected by socioeconomic status and probably cultural context even after full coverage of the costs (8-11).

## 4. Treatment

Cancer treatments, especially surgery and chemotherapy, are among the most important causes of catastrophic health expenditure (CHE) (12). Using oncology treatment modalities is dependent on socioeconomic status and financial protection provided by the states (12). Cancer treatment costs have been one of the major determinants of CHE in many countries, with an upward trend in recent years (13). Although there has been progress toward universal health coverage for non-communicable diseases, including cancer, since the announcement of the sustainable development goals in 2015, there is still a need for financial protection, especially for high-cost anti-cancer drugs (14).

Access to efficient treatment modalities, including radiotherapy, is very limited in some parts of the world. This makes the holistic approach to treatment impossible globally and increases avoidable mortality and morbidity from cancers (15). Even some drugs with proven effects in the treatment of certain cancers are not included in the essential drug list of some countries, while others have included medicines without proven effects (16, 17).

The relatively high cost of cancer management is a global challenge with resultant financial toxicity for patients and their families (18). Financial toxicity is now a universal problem for cancer patients. It is more serious in countries without universal health coverage, but even in countries with relatively good UHC, there are patients who experience financial toxicity due to no coverage of the costs by the basic package of UHC or overutilization of treatments, among other reasons (19). In addition, there are groups without UHC in these countries, including immigrants and minorities.

Implementation of universal health coverage has shown to decrease mortality in some cancers (20-22). Universal health coverage implementation also has resulted in shorter treatment intervals from diagnosis and lower rates of treatment abandonment, especially in lower socioeconomic groups (21, 23-25). Despite these benefits, there are examples of the failure of this approach in reducing mortality. Insurance coverage of treatments increased access very rapidly, but this did not end in a better prognosis for all patients (26). Having UHC but not supporting the basic costs for life has not improved the prognosis in cancer patients with low income, even in countries with good UHC (27).

The outcome of cancers between and within countries varies according to socioeconomic status (27-29). Even potentially treatable pediatric cancers have a poor outcome in low- and middle-income countries (29). Health systems, especially in these countries, need to implement operational plans for cancer registry, effective use of available resources, equitable distribution of cancer centers, capacity building, and ultimately universal health coverage for treatable and common malignancies with emphasis not only on treatment but also screening and prevention (30).

Patients' awareness has a crucial role in commitment to treatment and screening programs, which ultimately result in better outcomes in those with higher education regardless of their socioeconomic status (31).

The use of digital health for continuity of care and even as a supportive measure for palliative care is now an accessible modality even in low-income countries, and it should be part of real practice (32).

It should be emphasized that recent experiences in reform focusing on infrastructures by improving the environment, increasing the medicines and equipment, and even increasing the number of staff without programs for the promotion of quality of care have not improved the outcomes and coverage of services (33).

There are suggestions for value-based pricing for oncology drugs (18). These suggestions are criticized for their possible effect on innovations in the field. However, it is clear that the current approach to pricing cancer medicines is not parallel with clinical outcomes. The maximum proven value of many expensive drugs is to extend a poor quality life expectancy by a few months. Oncology societies worldwide should be committed to value-based care, and the providers should avoid low-value care and consider the patients' ability to pay in their clinical decisions. At the same time, the Ministries of Health should supervise the implementation of value-based care, especially for expensive care of cancer patients through insurance companies and accreditation procedures (34).

There is an increasing trend in the use of complementary medicine, especially in end-stage states of cancer patients. This has resulted in increased costs and even CHE for some families (35). Many of these drugs and procedures do not have good scientific support and are not covered by UHC programs. There is an urgent need for a scientific approach in this regard to responding to this demand. This needs consideration of evidence-based complementary medicine in the package of services in UHC. There is urgent need to increase patients' awareness of those expensive complementary medicines, which have no benefit or are even harmful in the care of cancer patients (35).

## 5. Cancer Survivors

The psychosocial pain of cancer, discrimination, experiencing financial toxicity, and stringent behavior of supportive and insurance companies have made the survivors of cancers and their families a vulnerable group (36). Fear of recurrence and distress of the possibility of cancer occurrence in their beloved relatives adds to this vulnerability. The problem is more pronounced for childhood cancer survivors (36). This neglected aspect of long-term care of these patients needs to be managed at the individual level by a multiorganization and holistic approach.

## 6. End-of-Life Care

Death is a reality, and malignancies are a growing cause of death worldwide. The process of end-of-life care is an ignored part of care, especially for cancer patients. Access to such care is not available in many countries, and in those who provide this care, the quality of such care and the costs are concerns, which may result in cost dissaving (37, 38).

## 7. Effect of the COVID-19 Pandemic on Cancer Care

This pandemic has had tremendous effects on the care of cancer patients and screening procedures for cancers. Overloaded health system with COVID-10 patients, along with cancer patients' hesitancy to attend the health care facilities due to fear of COVID-19, have hindered the care of these patients (39). National cancer programs in all aspects, from prevention to treatment, have been affected globally, and it is predicted that the recovery of these programs will take at least a decade or longer, especially in low- and middle-income countries (39).

Despite these challenges, COVID-19 could become a momentum for reform of health systems. The importance of health as the major driver of the economy is now well recognized. Meanwhile, many countries, even the low- and middle-income states, have experienced the use of their primary health care, information technologies, and digital health in control of this pandemic. This could become an opportunity to expand the cancer screening programs and even the treatment of malignancies (40).

## 8. The Way Forward

The current evidence shows that although there is an inadequate financial resource for universal health coverage of oncology care in many countries, even with adequate resources, the prognosis and quality of life have not improved for all cancer patients. Despite UHC, there are disparities rooted in both provider and patients' behavior at the time of care (41). Unmet needs for information on treatment and prognosis, inadequate cost coverage of care, and inadequate support for other living costs are contributing factors to poor prognosis in cancer patients, especially in those with advanced stages (42).

There is a need for a comprehensive, holistic approach to the care of cancer patients considering the patients' socioeconomic and cultural status and providers' institutional status.

## Footnotes

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