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Review Article

The strategic role of good governance in quality care and control of cancer

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ABSTRACT

Cancer is a leading cause of death globally and its economic impact is increasing on yearly basis, especially in transiting countries. The health outcomes (i.e., morbidity and mortality rates, quality-adjusted life years, disability-adjusted life years, life expectancy from birth, and infant mortality rate) of people living with cancers (PLWCs) depend largely on health financing which revolves around health economics and governance. This study highlighted the global burden of cancer disease and the role of good governance in improving the quality care and health indices of PLWC. To actualize this, the study focused on the application of a strategic operational framework of good governance and health financing for quality care and cancer control, especially in low-income countries, where there are leadership malfeasances. This short communication was an integrated review of works of literature on global cancer statistics updates, health economics, health governance, and palliative care of cancer patients using PubMed, Medline, CINAHL, cancer control guidelines, Google Scholar, and African Journal Online as databases. The paper presented a synthesis of the reviewed articles and the expected outcome of the possible interventions on cancer control. The article was analyzed and grouped according to the following categories namely health indices and social determinants of health (SDH) in a nation, health economics and health governance in cancer control, operational frameworks for cancer control, and palliative care in cancer control. To achieve sustainable cancer control in any nation, good political will, good governance, and equitable health financing are vital priority areas of action. Good governance can improve the quality of life of PLWC when the government in collaboration with other key stakeholders passionate about cancer control provides sustainable favorable SDH, in addition to operational frameworks for cancer control, protection, prevention, treatment, and awareness promotion.

Keywords: Cancer, Quality care, Palliative care, Good governance, Health economics

INTRODUCTION

One of the public health challenges of this age is that due to cancer. According to the World Health Organization (WHO) report on cancer, a total of 19.3 million newly diagnosed cancer cases and 10 million cancer-related deaths were reported in 2020.[1] These were far greater than the 50% estimated global cancer burden and cancer-related death rise postulations in a population of 29 million people living with cancer (PLWC) in 2008.[2,3] The top five cancers of greatest burden globally include breast (2.26 million cases), lung (2.21 million cases), colorectal (1.93 million cases), prostrate (1.41 million cases), and skin (non-melanoma) (1.2 million cases), while the lung, colorectal, liver, stomach, and breast were the top five cancer-related deaths based on 2020 report.[1] One out of every three deaths from cancer is attributable to unhealthy lifestyle variables such as tobacco use, obesity (or increasing body mass index), physical inactivity, alcoholism, and low consumption of fruits and vegetables.[4] Carcinogenic infective agents

(i.e., HPV, HIV, HBV, HCV, H. Pylori, and EBV) account for 13% of the global cancer burden and 30% of cancer cases in low-income countries (LICs)/low-middle-income countries (LMICs) of the world.[5] The developing countries bear the highest global burden of cancer with 57% of new cases and 65% of cancer-related deaths.[6] The African union contributes 5.7% and 7.2% of the global cancer incidence and deaths, respectively.[4] The 2030 projection of cancer rise has been achieved with an estimated 1.1 million cancer incidence based on the 2020 global cancer observatory report.[7] In Nigeria, an estimated 102,000 newly diagnosed cancer cases and 72,000 cancer-related deaths occurred annually based on a 2012 report.[8] However, it is presumed with the current cancer statistics, the estimated cancer incidence and deaths in Nigeria are 165,000 and 105,000, respectively, annually.[4] The top five cancers of greatest burden in Nigeria are breast, cervical, liver, prostate, and colorectal cancers; with the breast and cervical cancers accounting for 50.3% of all cancers in the country.[8] Late presentation and detection, coupled with lack of access to comprehensive (quality) care, are the major contributors to the poor health outcomes of PLWC, especially in LICs where < 15% comprehensive treatment is available as against 90% in high-income countries (HICs).[9] Cancer is, therefore, a modifiable non-communicable disease based on the above attributable risk factors. The global economic impact of cancer management is of unprecedented magnitude. In 2010, an estimated United States Dollar (USD) 1.16 trillion was the annual economic cost of cancer management.[10] To control cancer burden, there is a need to address the four key interrelated factors that could predispose to the disease burden, namely, lifestyle variables, unhealthy social environment, poor health policy, and poor health financing. The majority of the risk factors of cancer and health outcomes of PLWC depend on health financing which is a function of governance.

HEALTH INDICES AND SOCIAL DETERMINANTS OF HEALTH (SDH) OF A NATION

The two major health indices that determine the health status of any nation are the average life expectancy from birth (LE) and infant mortality rate (IMR) of her population.[11] The healthier a nation becomes the higher the average LE and the lower the IMR of its populace. A case scenario is that of Canada and Nigeria. Nigeria is a LMIC sub-Saharan African country with an average GNI per capita of USD2000. It ranks 214st out of 224 member countries of the United Nations with an average LE of 53.8 years and IMR of 69.8/1000 live birth per year. On the other hand, Canada is a high-income North American country with an average GNI per capita greater than $12,325. It ranks 21st in LE with 81.90 years as the average number of years from birth and an IMR of 4.50 deaths/1000 live births per year. The implication of this is that the ordinary Canadian life is 28.1 years older than a Nigerian in sub-Saharan Africa, while the rate of infant deaths in Nigeria is about 15.5 times (1550%) greater than that in Canada.[11] The social environment which is the place where a person is born, lives, grows and dies plays a crucial role in the prediction of the health outcome of any population.[12] The availability of favorable SDH makes a social environment conducive for living. The survival outcomes of PLWC in transiting countries (LICs and LMICs) such as Asia and Africa are low when compared to HICs such as the United States and Canada. For instance, while the mortality-incidence ratio of breast cancer in the United States is 19%, it is 51% in Nigeria. Furthermore, the mortality-incidence ratio of cervical cancer in Nigeria is 85% while liver cancer is 95%. The indicators of low survival outcome of PLWC in developing countries include lack of healthcare facilities for cancer management, late diagnosis, late therapeutic intervention, high mortality-incidence ratio, and lack of healthcare insurance for PLWC.[13] There are four major determinants of health that make an environment health-friendly. They are education, health policy, access to quality healthcare, and economic empowerment.[14] These SDH are the panacea for improved quality of life (QoL) of any target population. This is where health economics and good governance come into play. The SDH and health indices of a nation are the end products of governance.

HEALTH ECONOMICS AND HEALTH GOVERNANCE IN CANCER CONTROL

Health economics is a science that teaches leadership approaches of prudent allocation of scarce resources to improve healthcare, while good health governance applies health economics to improve clinical practice and public health indices.[15]

Broadly speaking, governance is a process that uses strategic leadership approaches to coordinate activities for the well-being of society. The term "governance" goes beyond "government." Government in the real sense of it comes under governance because the latter is a network of key actors, public and private sectors interacting in a coordinated manner as a team to actualize a common goal for the betterment of the society. Both the political and health organizational governance is critical in improving the health indices of any given society.[16] While the political governance improves the health indices of a nation by sustaining the major SDH of the entire populace, the health organizational governance is saddled with the responsibility of application of health economics to improve the quality of healthcare services which ultimately improve the health outcome of the target population.

The application of good health governance becomes very important when dealing with cancer. Cancer could be defined

as malignant cells which grow beyond their usual boundaries. They are invasive and metastatic in nature, ultimately causing cell death. Any cell in the body can undergo mutation and become cancerous. The current global statistics of cancer is a huge socio-economic burden and calls for action and adequate health interventions to curb the menace. It is good governance that has the capacity to coordinate these interventions to produce the desired outcome.[17]

OPERATIONAL FRAMEWORKS FOR CANCER CONTROL

The growing burden of cancer has led to the establishment of different organizational frameworks (i.e., Non-governmental Organizations [NGOs] and Civil Society Organizations [CSOs]) whose targets are to improve the QoL of PLWC using health promotion, health prevention, and health protection interventions. Examples of such bodies include International Union for Cancer Control (UICC), Global Cancer Observatory, and International Agency for Research on Cancer. Others include the National Comprehensive Cancer Network, European Society of Breast Specialists, American Society of Clinical Oncology, American Cancer Society, Nigerian National Cancer Control Plan, Nigeria Cancer Society, Hospice Palliative Care Association, African Palliative Care Association (APCA), and others.

These NGOs work in collaborations with multilateral organizations such as WHO and World Bank to drive global health issues relating to cancer with the aim of re-shaping the global population and global economies.[17,18]

In good health organizational governance, several concepts and principles including monitoring, evaluation, auditing, setting standards, use of data, research studies, regulations, risk assessments, quality control, quality assurance, leadership theories, styles, and models are incorporated in decision-making in public health practice. The hallmark of these applications is to impact a behavioral change that will produce the desired outcome for the target population.[17] These concepts are currently incorporated into the palliative care (PC) of PLWC in modern comprehensive health care practice.[19] These concepts and principles could be strategically translated into the framework of good governance by crafting their objectives and performance indicators for cancer control. The primary objectives of such framework include: (i) Co-ordination and provision of effective leadership for management and implementation of the seven priority areas of action of the national cancer control program namely prevention, treatment, hospice, and palliative care, advocacy/social mobilization, data management/research and supply chain/logistics; and (ii) establishment of a standard quality service delivery system in all institutions across the continuum of cancer care annually. Other objectives may include: (iii) Delivering a sustainable financing solution for cancer care and (iv) capacity building of healthcare providers in cancer care. Periodic monitoring and evaluation could be the strategy to provide effective leaders while an annual publication list of stakeholders could be a performance indicator. [Table 1] shows how the strategic framework of good governance can improve QoL of PLWC.[12]

PALLIATIVE CARE IN CANCER CONTROL

Every disease tends toward inflammation, degeneration, deterioration, disability, dysfunctional performance, decreased QoL, and ultimately death. PC is the quality care that repairs the inflammation, regenerates the degenerated cells, and restores functional performance and dignity to life. Its hallmark is to improve quality-adjusted life years (QALY) and increase the average LE (i.e., delay the death) of the debilitated.

PC is an intervention that holistically improves the QoL of a patient suffering from life-threatening illness such as cancer through the prevention and relief of his sufferings by risk identification, assessment, and management of his conditions which could range from physical, psychological, spiritual, and socio-economic problems.[20] About 1% of a country's population requires PC. Early commencement of PC concurrently with other anticancer therapies have demonstrated patient-caregiver's satisfaction, lower cost of management and improved QALY.[21] A typical example is in the survival outcome of palliative care of multiple myeloma (a cancer of the bone marrow) in a HIC and a LMIC. The 5-year relative survival of multiple myeloma is between 7 and 15% in Nigeria as against 51% in the United States of America. The reason for the disparity is that the USA has a better Medicare and palliative care system compared to Nigeria, a LMIC with an inadequate palliative care system.[19,22] PC approach is a public health intervention universally accepted and used by many oncology organizations to reduce the disability-adjusted life years (DALYs) and improve the QALYs of cancer patients. It can use the modification of lifestyle variables to improve the QoL of the sufferers. A classic example of palliative intervention is the impact of physical activity (exercise) on QALY and the cost of management of PLWC.[23]

The APCA is a pan-African NGO passionate about the care of PLWC in Africa. This organization uses strategic leadership approaches of good governance to improve QoL and the average LE of PLWC in Africa. To achieve an effective level of care in cancer patients, the operational models and styles must be applied conscientiously to produce the desired outcome. APCA believes that cancer awareness promotion, modification of lifestyle variables (e.g., diet and body mass index, physical inactivity, smoking, and substance abuse) are strategic approaches of cancer prevention and QoL of sufferer's improvement. Hence, the organization embarks

Table 1: Strategic Framework of good governance showing the objectives, strategies, and performance indicators.

Objectives	Strategies	Performance indicators
1. Co-ordination and effective leadership provision for cancer management	Periodic monitoring and evaluation team	Annual publication list of cancer stakeholders' activities
2. Establishment of quality service delivery system across the continuum of cancer care annually	Strengthen and improve healthcare accessibility and health insurance for cancer patients	Proportion of patients receiving care in treatment centers
3. Funding cancer care	Effective budgeting for cancer care including infrastructure, capacity building, and information. An alternative source of funding- Grants	Number of cancer patients treated per annum by government and NGOs
4. Capacity Building of healthcare providers in cancer annually	Establish a framework for capacity building including partnership	Number of healthcare providers successfully trained annually

on public health interventions using a health-behavioral theoretical framework to educate their target population to adopt good behaviors that will ultimately bring about the desired outcome at a cost-effective price. The APCA is a member of the UICC. In collaboration with the latter, this organization has established a strategic framework for good governance and health financing in African union member countries. The APCA has played an exceptional role in the capacity building of healthcare providers in the cancer in African union.[24]

The value of good governance in the prevention and alleviation of suffering of PLWC cannot be overestimated. Effective PC becomes functional when good governance is embraced. The effective operation, in this case, requires collaboration with research groups, NGOs, CSOs, and donor agencies passionate about cancer prevention and care. The leadership must be patient-centered, visionary, growth-focused, inclusive, and result-oriented. In addition, it must be driven by regulations, accountability, transparency, and effective healthcare services.[16] These are the qualities of APCA. In addition to this, it has multi-disciplinary professional leaders who work as a team.

The WHO recommended model of palliative care is supported by four pillars namely policy-making, funding, education, and strategic planning and implementation.[25] To sustain quality care, funding for capacity building, research, and purchase of essential drugs is necessary. There is a need for collaboration with multilateral organizations, NGOs, CSOs, and research organizations on cancer to come up with frameworks and grants that will help to improve the quality of care of cancer patients.[26]

CONCLUSION

The role of good governance in improving the QALY and reducing the DALY of PLWC cannot be over-emphasized. Good governance can improve the QoL of PLWC when the government in collaboration with other key stakeholders passionate about cancer control provides sustainable favorable SDH, in addition to operational frameworks for cancer control, protection, prevention, and awareness promotion. These operational frameworks will become more impactful when incorporated into PC in health institutions. We recommend good governance as a strategic leadership approach to scale up comprehensive care of PLWC in developing countries such as those found in Africa. In order to achieve good governance in cancer control in less developed regions, four cardinal things must be addressed, namely, leadership failure, poor funding of health institutions, weak healthcare systems, and capacity building of healthcare providers in cancer care.

Authors' contributions

The authors contributed to the development of the study, data analysis, writing and revisions of the article, and gave approval of the final version submitted for publication.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

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Conflicts of interest

There are no conflicts of interest.

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