

Implementation of the National Integrated Cancer Control Act in Central Luzon, Philippines

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Abstract — **Aim:** This study determined the level of implementation of the National Integrated Cancer Control Act in Central Luzon. It also identified the current problems encountered by the respondents, to which measures were proposed

Methodology: The study used quantitative descriptive correlational research to gather and analyze the data needed in the survey. In addition, the researcher identified the five (5) cancer center facilities in Central Luzon that participated and evaluated the level of implementation of NICCA.

Results: The findings of the study shows that there is no significant correlation between the Profile of the Cancer Center with regards to Type of Personnel and Number of Patients. While as to the level of implementation, the five (5) centers are all compliant with the DOH Implementing Rules and Regulation of NICCA. Also, the cancer patients in different cancer centers in Central Luzon perceived that they received and experienced the benefits of this law as Cancer patients and survivors. They are recognized as Persons with Disabilities (PWD) and receive benefits for PWDs. The Cancer Assistance Fund provides financial assistance for cancer patients and their families.

Conclusions: The study revealed that NICCA provides financial assistance for cancer patients and their families through the Cancer Assistance Fund. The respondents identified that the among problems encountered in the implementation of NICCA, the limited number of government subsidies or programs for individuals accessing palliative care and high rate of abandonment or discontinuance of treatment are least considered challenges.

Keywords — *Cancer Control Act, NICCA*

I. Introduction

Transformation is crucial, and the United Nations' 2030 Agenda for Sustainable Development offers a comprehensive framework for action. Goal 3 of the Sustainable Development Goals (SDGs) focuses on enhancing global health and ensuring the well-being of people of all ages. Within this goal, two key targets aim to tackle cancer: (1) reducing premature deaths caused by non-communicable diseases, including cancer, by one-third by 2030; and (2) achieving universal health coverage, which includes financial protection, access to necessary healthcare services, and the provision of safe, effective, and affordable medicines and vaccines for everyone (Braga, 2018).

In February 2019, President Duterte signed the National Integrated Cancer Control Act (NICCA) into law, aiming to enhance cancer control measures, improve survival outcomes, and ease the challenges faced by cancer patients and their families. This law emerged from sustained advocacy and collaboration among various stakeholders, including the government, civil society, the private sector, and international organizations. Public consultations and technical working groups were integral to shaping the bill, with input from diverse sectors (Official Gazette of the Republic of the Philippines, 2019).

The Cancer Coalition Philippines, along with cancer patients, survivors, their families, and advocacy groups, united to create a shared cancer control agenda. Their "connect, collect" strategy facilitated information gathering and collaboration, ensuring robust support for the NICCA's implementation.

Cancer is a major health concern in the Philippines, currently, the third leading cause of death, taking with it one in ten recorded deaths (Philippine Health Statistics 2018). According to the International Agency for Research on Cancer, there are an estimated 110,000 new cancer cases every year and over 66,000 deaths from cancer, with unusually high figures for childhood cancer. It was in the 1980s that palliative care achieved momentum in the Philippines; but a great advance was made in 1990 when the Pain Society of the Philippines lent support to the Cancer Control Program and thus initiated the first home care program of the Philippine Cancer Society, designed for the Filipino family dynamic.

The Department of Health (DOH)-Designated Cancer Centers network in the Philippines is a well-organized collaboration of medical facilities focused on providing comprehensive and advanced cancer care. This network is divided into two categories: Advanced Comprehensive and Basic Comprehensive, consisting of a total of 24 reputable healthcare centers.

The Basic Comprehensive Centers comprise 13 medical institutions, each vital to expanding cancer care services in various regions of the Philippines. In Luzon, these include Mariano Marcos Memorial Hospital and Medical Center, Region I Medical Center, Cagayan Valley Medical Center, Dr. Paulino J. Garcia Memorial Research and Medical Center, Jose B. Lingad Memorial Regional Hospital, and Batangas Medical Center.

Central Luzon, which includes both urban and rural areas across provinces such as Aurora, Pampanga, Bulacan, Tarlac, Bataan, Nueva Ecija, and Zambales, faces distinct challenges in healthcare accessibility, particularly in rural communities. These challenges can affect the implementation of health policies like the National Integrated Cancer Control Act (NICCA).

The study's respondents include key figures such as the Chief of Hospital, CEO, Medical Director, Cancer Center Manager, Medical and Radiation Oncologists, as well as representatives from the DOH Region 3 Center for Health and Development. Cancer patients, survivors, and those living with cancer from various healthcare facilities are also involved. The evaluation of NICCA's implementation with challenges faced in the assessment by the respondents will include examining

government strategies implemented for the national cancer control program to ensure that program benefits can be transferred to new leadership and altered resource settings.

One of the key pillars of NICCA is the creation of a Cancer Assistance Fund which caters for the costs of cancer screening, the cost of diagnosis, treatment, and rehabilitation. It also includes provisions for preventive cancer screening and underscores the importance of charitable initiatives for support to cancer care. In the course of improving access to treatment, funds for cancer care will be made available in 31 hospitals in the country for the purpose of resource allocation to basic and advanced comprehensive cancer centers.

It goes on to say that NICCA would be a great part of improvement for cancer patients in the Philippines. It provides even some hope for any improved health in a country with very few resources. To ensure success, however, this law should, like all others, be implemented properly with equal disparity of resources along with an undying commitment from government establishments. "There was a very strong advocacy for the law from civil society, patient and medical organizations who have been formed into a coalition that closely worked with the legislators for the enactment of NICCA". Their efforts have brought about this law that also includes adult as well as pediatric cancer patients.

The cancer control program of the Department of Health aims at reducing cancer deaths and morbidity through primary and secondary preventive measures with its tertiary care and rehabilitation functions. NICCA is implemented within an entire national network of hospitals and other institutions funded by PhilHealth health insurance Schemes, including cancer screening, treatment, and rehabilitation services. NICCA also avails financial assistance to cancer patients and survivors as they are considered Persons with Disabilities (PWD), thus making them eligible for more benefits.

The event "Hope Matters: Lighting a Path for Better Cancer Care" emphasized the careful implementation of NICCA. While advances were made, one still needed to go beyond this and pay particular attention to inequalities in access to healthcare and other social determinants of health, incentivizing Filipino-led research into them all with the conjugated effort of various institutions and different regions.

Statement of the Problem

This study evaluated the implementation of National Integrated Cancer Control Act in Central Luzon.

Specifically, this study sought to answer the following question:

1. How is the profile of the cancer centers in Central Luzon, Philippines be described along with:

1.1. Personnel

- 1.2. Location of the Cancer Center
- 1.3. Type of Cancer Center Ownership
- 1.4. Total Number of Cancer Patients Registered in Cancer Center
2. What is the extent of implementation of the National Integrated Cancer Control Act in the areas of:
 - 2.1. Establish a National Integrated Cancer Control Program
 - 2.2. Health Care System
 - 2.3. Cancer Awareness
 - 2.4. Affordable Cancer Care and Treatment
 - 2.5. Essential Medicines
 - 2.6. Supportive Environment for Persons with Cancer and Cancer Survivors
 - 2.7. Cancer Registry and Monitoring System
3. Is there a significant relationship between the profile of the Cancer Center and the level of implementation of the National Integrated Cancer Control Act
4. What are the problems encountered in implementing the National Integrated Cancer Control Act?
5. What measures can be proposed to enhance the implementation of the National Integrated Cancer Control Act?
6. What are the implications of the study for Public Administration?

II. Methodology

Research Design

This study utilized a quantitative descriptive correlational research method. The questionnaires were distributed to all accredited Cancer Centers by the Department of Health in Central Luzon, Philippines. Descriptive correlational research aims to investigate two or more variables without correlation establishment of cause and effect. This involves the collection and analysis of data from various variables to identify their possible association.

It collected information on several issues about government strategies for dealing with the challenges related to the implementation of the National Integrated Cancer Control Act (NICCA).

It further investigated how well the characteristics of the cancer centers aligned with the implementation of the NICCA. Respondents were given a questionnaire that was specially designed to gather all the information necessary for the study. In descriptive correlational research, the emphasis is on data collection without undergoing intervention over those variables.

Hence, the major goal of doing this study is to give an overview of all the features and associations without any manipulation or causation assumptions. Through tables, frequencies, percentages, and other methods of statistics, analyses, and interpretation, such data were given

Locale of the Study

This research was conducted in several Department of Health (DOH)-accredited Cancer Centers in Central Luzon, also known as Region 3 in the Philippines. This region consists of seven provinces: Aurora, Bataan, Bulacan, Nueva Ecija, Pampanga, Tarlac, and Zambales, and contains two highly urbanized cities. The researcher visited various accredited cancer treatment centers across the region, such as Dr. Jose B. Lingad Memorial Medical Center (San Fernando, Pampanga), Bataan General Hospital and Medical Center (Balanga, Bataan), Dr. Paulino J. Garcia Memorial Research and Medical Center (Cabanatuan, Nueva Ecija), Central Luzon Doctors' Hospital (Tarlac City, Tarlac), Medical Center (Tarlac City, Tarlac), Mother Theresa of Calcutta Hospital (San Fernando, Pampanga), Premier Medical Hospital (Cabanatuan, Nueva Ecija), and Sacred Heart Hospital (Angeles, Pampanga).

Sampling Design

Sampling is a process of selecting a number of members of the population of a study through subsets. Participants in this descriptive evaluative research were purposely selected. Researchers take into account the study's objectives and the target audience's comprehension. The researcher focused on selecting individuals such as the Chief of the Hospital, CEO, President, Chief Operating Officer, Medical Director, Cancer Center Manager, Medical and Radiation Oncologists, Provincial DOH officials, Cancer Patients, Cancer Survivors, and individuals living with cancer as the key respondents for the study.

Respondents of the Study

The researcher identified the five (5) cancer center facilities in Central Luzon were participated and evaluated the level of implementation of NICCA in Central Luzon with a total of two hundred eight- seven (287) respondents. The cancer center facilities are Central Luzon Doctors' Hospital (Tarlac City, Tarlac), Medical Center (Tarlac City, Tarlac), Mother Theresa of Calcutta Hospital (San Fernando, Pampanga), Sacred Heart Hospital (Angeles, Pampanga) and Premier Medical Hospital (Cabanatuan, Nueva Ecija).

The respondents of the study were the Chief of Hospital / CEO / President / Chief Operating Officer, Medical Director, Cancer Center Manager, Medical and Radiation Oncologist, DOH

Region 3 Center Luzon Center for Health and Development, Cancer Patient/ Cancer Survivors, and people living with cancer from different cancer facilities. The respondents also assess the extent of NICCA's implementation, the challenges faced, and the government's strategies and actions to maintain the national cancer control program in the Philippines, despite changes in leadership and the need for sustained human and financial resources for its execution.

Research Instrument

The study made use of a researcher-made questionnaire based on the Implementing Rules and Regulations of the Republic Act No. 11215, otherwise known as the National Cancer Control Act.

The data-gathering instrument used in this study was subdivided into two divisions, the different part deals with 1. Level of Implementation of National Integrated Cancer Control Act in Central Luzon; 2. Current challenges encountered; and 3. Strategies and Actions of the government to improve the level of Implementation of the National Integrated Cancer Control Act in Central Luzon.

The instructions and purpose of the survey questions were thoroughly explained to the respondents prior to administration. Informal interviews were also conducted to get clarity and validation of the replies to validate the data that had been gathered.

The researcher gathered data and facts on the level of implementation of the National Integrated Cancer Control Act in different Cancer Centers in Central Luzon. The different challenges encountered by our respondents in their respective Cancer Centers were gathered After which, the different strategies and actions of the government were given on how to improve the level of implementation of the National Integrated Cancer Control Act in different Cancer Centers in Central Luzon through the questionnaire

Data were gathered through the combined efforts of the researcher to look on matters relating to the topic.

The questionnaire underwent a validation and verification process. With assistance from a statistician, a reliability test was performed. Cronbach's alpha was used to assess the reliability of the measurement tool by analyzing the shared variance or covariance among its items in comparison to the total variance. The principle behind this method is that a reliable tool will exhibit a strong correlation between its items relative to the total variance.

The data obtained through this survey questionnaire method were consolidated, organized, and tabulated in a distribution table format. They were analyzed and interpreted by utilizing appropriate statistical tools.

Ethical Consideration

The research ensures that participants are fully informed and aware of the study's objectives. Participants have the option to remain anonymous, and their responses will be kept confidential and used exclusively for academic purposes. The study complies with the Data Privacy Act of 2012, ensure respondents protection and confidentiality of information.

III. Results and Discussion

Profile of the Cancer Center

The researcher conducted survey respondents from different Accredited DOH Cancer Center Facilities in Central Luzon where the respondents were the Chief of Hospital / CEO / President / Chief Operating Officer, Medical Director, Cancer Center Manager, Medical and Radiation Oncologist, DOH Region 3 Center Luzon Center for Health and Development, Cancer Patient/ Cancer Survivors, and people living with cancer. The profile is presented in next section.

Personnel of Cancer Center Facilities

Successful leaders in healthcare foster a motivating workplace, drive changes in practices, and encourage interdisciplinary collaboration to enhance patient-centered care. Health professionals involved in cancer education require leadership development to address the growing number of cancer cases and stay abreast of the swift advancements in biomedical and technological fields within global cancer care.

Table 1 presents the Number of Personnel at the Cancer Center Facilities in Central Luzon.

Table 1
Number of Personnel of the Cancer Center Facilities

Hospital	<i>f</i> (Chief Hospital /CEO President/ COO)	<i>f</i> (Medical Director)	<i>f</i> (Cancer Center Manager)	<i>f</i> (Medical/ Radiation Oncologist)	Total	%	R
Central Luzon Doctor Hospital	1	1	1	11	14	15.22	4
Medical Center	1	1	1	6	9	9.78	5
Mother Theresa of Calcutta	1	1	1	25	28	30.43	1
Sacred Heart Hospital	1	1	1	17	20	21.74	3
Premier Medical Hospital	1	1	1	18	21	22.83	2
Total	5	4	5	77	92	100.00	

The data analysis underscores significant variations in the contributions of healthcare institutions to cancer treatment services, highlighting disparities in their capacity and performance. The reasons may go beyond just resource availability, specialized personnel, leadership, and even institutional infrastructure. These institutions are considered as the best hospitals for taking care of large number of cancer patients with specialized institutions that have resources but still have a lot of room to grow.

First is the Mother Theresa of Calcutta Hospital stands out as the leading institution, contributing 30.77% of the total personnel involved in cancer care (28 out of 91). The hospital treats an average of 1,440 cancer patients annually, reflecting its dominant position in oncology services within the region. Research has shown that hospitals with advanced infrastructure, specialized medical staff, and efficient systems attract more patients and achieve better outcomes (Ribeiro et al., 2020). This is likely the case with Mother Theresa of Calcutta Hospital, whose high patient load can be attributed to its well-established reputation, specialized personnel, and advanced medical equipment. However, handling such a high volume of patients raises concerns regarding resource strain. A study by Tawk et al. (2016) emphasized that hospitals with high patient volumes often face challenges in maintaining quality care unless they invest in continuous training, process optimization, and adequate staffing. Without these measures, patient outcomes may suffer due to burnout or overstretched resources.

Second is the Premier Medical Hospital, which ranks second, manages 23.08% of the personnel (21 out of 91) and treats an average of 1,200 cancer patients annually. Its competitive position can be attributed to strong institutional capabilities, such as adequate medical resources and specialized personnel. Tsai et al. (2015) found that hospitals with well-defined leadership structures and operational efficiency are more likely to perform well despite managing substantial patient volumes. This supports the case for Premier Medical Hospital, where operational efficiency, leadership quality, and the allocation of resources likely play significant roles in its performance. Such hospitals are often characterized by effective management strategies that ensure both patient volume and care quality are balanced. However, the study also suggests that even high-performing hospitals must constantly innovate and adapt to maintain their competitive edge in cancer care.

Third, Sacred Heart Hospital, accounting for 21.98% of the total personnel (20 out of 91) involved in cancer care, treats an average of 960 cancer patients annually. Although it slightly trails Premier Medical Hospital in rankings, Sacred Heart Hospital demonstrates strong service delivery in cancer care. Aiken et al. (2014) found that an optimal personnel-to-patient ratio is crucial in improving patient satisfaction and overall outcomes. In this case, Sacred Heart's balanced staffing approach may allow it to provide individualized care, fostering a more supportive environment for patients, which could contribute to its ability to maintain solid service quality despite a lower patient load. Maintaining such balance is essential for mid-tier hospitals that aim to compete with larger institutions but may not have the same resources or patient volume.

Fourth, Central Luzon Doctors Hospital, which ranks fourth, contributes 15.38% of the personnel (14 out of 91) and manages 1,320 cancer patients annually. This hospital's lower rank despite its high patient volume suggests that while it manages a substantial number of patients, there may be inefficiencies in specialized care or infrastructure. A study by Linton et al. (2017) pointed out that hospitals with lower ranks often face challenges in resource allocation, resulting in inefficiencies in service delivery. This discrepancy between patient volume and rank could be due to limited specialized personnel or outdated technology. To address these gaps, targeted investments in technology, staff development, and infrastructure are necessary to improve the hospital's overall performance. Additionally, establishing partnerships with higher-ranked institutions could provide access to specialized expertise and resources, improving service quality and patient outcomes.

Lastly, Medical Center contributes the smallest share of personnel, treating only 8.79% of the total cancer cases (8 out of 91), and handles an annual average of 720 cancer patients. Its lower contribution can be attributed to several factors, including fewer resources, a smaller catchment area, and potentially limited staffing. However, Jecson Medical Center's inclusion in the data suggests significant potential for growth. Previous studies, such as those by Mays et al. (2017), have shown that hospitals with lower patient loads and fewer resources can expand their service delivery through strategic interventions such as capacity-building programs, collaborations with other healthcare institutions, and community outreach initiatives. By focusing on building capacity and forming partnerships with more established institutions, Jecson Medical Center could enhance its oncology services and improve its overall ranking in the future.

Location of the Cancer Center Facilities

To fend off cancer with better evidence-based patient-centered care, DOH has primarily developed an initiative for this Network of DOH-designated cancer centers. This center-network consists of 31 hospitals under the categorization of Advanced Comprehensive and Basic Comprehensive, funded by the government for cancer treatments. The division of Basic Comprehensive and Advanced Comprehensive cancer centers puts cancer patients according to their complexity of condition vis-a-vis the required management level. They are to be able to handle uncomplicated cases along the lines with essential cancer treatment by Basic Comprehensive centers, along with Advanced Comprehensive centers that deal with more complex cases, including surgery and high-technology medical equipment (Montemayor, 2022).

Table 2 presents the Location of the Cancer Center Facilities in Central Luzon.

Table 2
Location of the Cancer Center Facilities in Central Luzon

Province	Number of Cancer Center	%	R
Pampanga	2	40.00	1.5
Tarlac	2	40.00	1.5
Nueva Ecija	1	20.00	3
Total	5	100.00	

In Central Luzon, a region that boasts a well-established healthcare infrastructure, there are seven accredited cancer hospitals. These include: Dr. Jose B. Lingad Memorial Medical Center (San Fernando, Pampanga), Bataan General Hospital and Medical Center (Balanga, Bataan), Central Luzon Doctors' Hospital (Tarlac City, Tarlac), Medical Center (Tarlac City, Tarlac), Mother Theresa of Calcutta Hospital (San Fernando, Pampanga), Premier Medical Hospital (Cabanatuan, Nueva Ecija), and Sacred Heart Hospital (Angeles, Pampanga). The placing of these hospitals was indeed very strategic for maximum accessibility of cancer patients living in the region to the specialized care they need, significantly ramping up the availability of cancer treatment and management within Central Luzon.

Number of Cancer Patients Registered at the Cancer Center

From the Philippine Health Insurance Corporation, reports state that in 2020, the country produced more than 150,000 new cancer cases and 90,000 cancer deaths. This led to over 110,000 cancer deaths in 2022, making cancer the third most common cause of death in the country. Despite progress in cancer treatment, many patients still face difficulties in obtaining care that aligns with international standards. This issue has gained more attention, particularly as economic constraints force healthcare systems to provide quality care despite rising costs for diagnostics and treatments. As a result, inadequate delivery of cancer care leads to unequal access to effective therapies, exacerbating financial burdens on patients. (Fernandez, et al, 2023).

Table 3 presents the number of cancer patients registered at the Cancer Centers in Central Luzon.

Table 3
Number of Cancer Patients Registered at the Cancer Center

Cancer Center Facilities	No. of Cancer Patients	%	R
Central Luzon Doctors' Hospital	71	27.10	1
Mother Theresa of Calcutta Hospital	69	26.34	2
Premier Medical Hospital	54	20.61	3
Sacred Heart Hospital	44	16.79	4
Medical Center	24	9.16	5
Total	262	100	

The table 3 shows that Central Luzon Doctors Hospital has 71 cancer patients or with a percentage of 27.10. This is the highest figure from 262 respondents followed by Mother Theresa of Calcutta Hospital with 69 cancer patients or 26.34%. Premiere Medical Hospital with 54 cancer patients or 20.61%, Sacred Heart Hospital with 44 cancer patients or with 16.79% or lastly Medical Center with 24 cancer patients or 9.16%.

Based on the gathered data, the average number of cancer patients per year in Central Luzon Doctors' Hospital was 1320, followed by Medical Center with 720 cancer patients, Mother Theresa of Calcutta Hospital with 1,440 cancer patients, Sacred Heart Hospital with 960 and last the Premier Medical Center with 1,200 cancer patients. The distribution of cancer patients' respondents is based on the total registered cancer patients per center.

Overall Evaluation of the Implementation of the National Cancer Control Act in Central Luzon

Table 4 presents the overall implementation of the National Integrated Cancer Control Act (NICCA) provisions in Central Luzon.

Establishing a Supportive Environment for Cancer Patients and Survivors earned a mean of 5.00, which indicates that it is very well reputedly implemented. This aligns with a strong commitment toward the creation of a supportive environment for people with cancer and survivors. Other provisions such as the National Integrated Cancer Control Program and Affordable Cancer Care and Treatment were evaluated as having been put into operation, with average scores of 3.52 and 3.82, respectively. Meanwhile, areas like the Healthcare System, Cancer Awareness, and Essential Medicines were rated on average as moderately implemented with mean values of 3.22, 2.75, and 3.32, respectively. While, the Cancer Registry and Monitoring System received the lowest rating, with a mean score of 2.43, described as slightly implemented.

Table 4
Overall Evaluation of NICCA

Indicators	Grand Mean	Adjectival Description
Establish National Integrated Cancer Control Program	3.52	Implemented
Health Care System	3.22	Moderately Implemented
Cancer Awareness	2.75	Moderately Implemented
Affordable Cancer Care and Treatment	3.82	Implemented
Essential Medicines	3.32	Moderately Implemented
Supportive Environment for Persons with Cancer and Cancer Survivors	5.00	Well Implemented
Cancer Registry and Monitoring System	2.43	Slightly Implemented
Overall Grand Mean	3.44	Implemented

Summary of Correlation between the Profile of the Cancer Center and the Level of Implementation of NICCA in Central Luzon

Based on the previous findings in the level of implementation, the five (5) centers are all compliant with the DOH Implementing Rules and Regulation of NICCA and with the cancer patients in different cancer centers in Central Luzon, the patients perceived that they received and experience the benefits of this law such as Cancer patients and survivors are recognized as Persons with Disabilities (PWD) and receive benefits for PWDs. This includes a 20% discount on medicines and maintenance drugs, the Cancer Assistance Fund provides financial assistance for cancer patients and their families.

Table 5 shows that there is no significant correlation between the Profile of the Cancer Center, Type of Personnel, and Number of Patients.

Table 5
Summary of Correlation between the Profile of the Cancer Center and the Level of Implementation of NICCA in Central Luzon

Correlation of Cancer Center Profile	Decision	Result
Type of Personnel	Accept H_0	Not Significant
Location of the Cancer Center	Reject H_0	Significant
Number of Cancer Patients	Accept H_0	Not Significant

In addition, PhilHealth expands its benefits to include cancer care, such as diagnosis, surgery, chemotherapy, hormone therapy, and targeted therapy, NICCA provides financial assistance for cancer patients and their families through the Cancer Assistance Fund. This fund can help with screening, diagnosis, treatment, rehabilitation, and others. There is a notable correlation between the location of cancer center facilities in Central Luzon and the implementation of the National Integrated Cancer Control Act. The results indicate a significant positive relationship, as the degrees of freedom are lower than the expected value.

Implications of the study to Public Administration

The researches on cancer care in the Philippine setting has a potential for improving public administration, especially under the aspect of managing healthcare services for cancer patients. Results from such studies can lead to formulating strategies that will prove effective and efficient in the public healthcare system focusing on addressing the resource needs of cancer patients so that this life's ailment will become widely obtainable to everyone, especially the small communities.

Public administration would basically be affected by this enormous legislation because it covers the most diverse area of governance and health policy and administration. Awareness of those would propel the effective implementation of NICCA towards the delivery of services to cancer patients in such a way as to ensure long-run viability of cancer control programs in the country. The number of barriers to care ranging from access to limited availability of services to inadequate management practices and a decentralized health system will have to be tackled.

Barriers can be linked to one another; hence, it may require a comprehensive and integrated approach towards the solution.

Establish strong coordination among critical government agencies such as Department of Health (DOH), local government units (LGUs), and PhilHealth for effective implementation of NICCA. Public administrators must ensure alignment of policies across these organizations for consistency and prevent service delivery gaps. Public administration plays another very important role: long-range strategic planning for possible future needs relating to resource allocation, medical infrastructure development, or workforce training in cancer care. Admittedly, the administrators will manage budgets and procurement processes while also facilitating the establishment of cancer centers to meet the emerging demand for cancer services.

The NICCA could include the rationale for and significance of Regional Cancer Centers to a particular healthcare setting towards the place of cancer care within a patient healthcare continuum. The Public Administration's role would be in ensuring that the development and enhancement of these centers meet quality parameters within the shared environment of health services. Cancer care within communities is basically provided by local government unit (LGUs), and administrators must strategize to address decentralization and effectiveness in reaching underserved or remote areas. With this would be the establishment of an effective monitoring system to evaluate the quality and access of cancer services by region according to the national standard and availability to all.

The sustainability of finance as well as the effective resource allocation must support the goal of NICCA, particularly in its initiatives such as the Cancer Assistance Fund (CAF), improved PhilHealth cancer packages, and subsidized cancer medicines that truly make cancer treatment less of a financial burden. These are the mandate of public administrators on this public fund-to manage it efficiently and allocate it to those in great need. It is about working with the DBM and Congress for the long-term allocation for cancer care, especially with the increasing incidence of and rising costs for cancer treatment. Investments in cancer programs, according to public administrators, should continue while collecting the best possible resources for areas of greatest needs while delivering services to all patients regardless of income status.

Furthermore, public administrators need to be keen in developing legal frameworks that will guarantee that cancer treatments, especially medicines, will meet national standards; this also, will include overseeing the Philippine National Formulary (PNF); and making sure that the Cancer Medicine Access Program benefits patients with affordable essential medicines. Add to that, accountability systems to track the proper disbursement of money from the Cancer Assistance Fund (CAF) are also necessary and services are regularly evaluated and audited, thus preventing the misuse of resources while addressing service delivery gaps.

IV. Conclusion and Recommendations

Regarding the implementation of the National Integrated Cancer Control Act (NICCA) in Central Luzon, the respondents rated the law's provisions with a weighted average mean of 3.44, indicating they believe it has been implemented to some extent. There is no significant relationship between the type of personnel and the level of NICCA implementation. Whether standardized or non-standardized, training received by personnel, including patients, seems to contribute to consistent implementation. Additionally, established protocols, which apply to all personnel, may have guided the program's execution

The respondents noted that the Cancer Registry and Monitoring System had the least or weakest implementation under NICCA. Currently, cancer patients are not included in the Department of Health's disease surveillance for notifiable diseases. Cancer registries are essential for collecting and analyzing data on cancer incidence, treatment, and survivorship to provide health officials with accurate, timely information

Among the challenges in implementing NICCA, respondents found that the limited number of government subsidies or programs for those accessing palliative care and the high rate of treatment abandonment were among the least significant challenges. The respondents identified the following challenges as key issues in NICCA implementation: shortages of essential medicines and devices, inadequate support structures for cancer treatment and patient care, lack of understanding about NICCA implementation, absence of an electronic medical record system for timely documentation at local, regional, and national levels, a shortage of physicians with S2 licenses required for prescribing opiates, and insufficient awareness about evidence-based information on cancer prevention and treatment. The study stated that the respondents identified the least prioritized government strategies for improving NICCA implementation as providing transportation for palliative care providers to reach remote areas and conducting medication literacy campaigns focused on rational drug use.

Based on the conclusions and purpose of the study, the following recommendations were identified such as the Department of Health (DOH) should allocate specific funds for improving cancer-related healthcare infrastructure, ensure that hospitals, clinics, and laboratories are mandated to report all cancer cases, as per NICCA guidelines, and establish a centralized online platform for cancer data collection from all regions and facilities, cancer centers should establish strong communication with the DOH to stay updated on NICCA developments. Providing informative materials about the law at cancer centers can help improve understanding of its provisions. Incorporating NICCA into center orientations would emphasize the importance of cancer support and partnerships, Use of existing data to assess benefits from the cancer care offered through PhilHealth packages and the Cancer Assistance Fund (CAF). Very important are procurement, service delivery, and health outcome data to update funding for Z-Benefits. While the Health Technology Assessment Council evaluates all these packages, PhilHealth should also adjust them in consideration of inflation in medicines. Moreover, ramping up access to oncology drugs shall be done during this review period by the DOH with adherence to the Data Privacy Act

of 2012, and make use of the NICCA program to engage both the public and private sectors for generating inclusive funding for cancer. The need for timely development of the necessary infrastructure of NICCA for better cancer care financing across the country can be accomplished through partnership among diverse stakeholders, experts, and advocates.

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