STRENGTHENING OF THE CANCER REGISTRY BASED ON THE POPULATION OF THE MUNICIPALITY OF AINARO OF THE REGIONAL HOSPITAL OF MAUBISSETIMOR - LESTE

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Citation: Carlos Boavida Tilman. STRENGTHENING OF THE CANCER REGISTRY BASED ON THE POPULATION OF THE MUNICIPALITY OF AINARO OF THE REGIONAL HOSPITAL OF MAUBISSETIMOR - LESTE . AJMCRR 2024; 3(3): 1-7.

ABSTRACT

Introduction: *Cancer is the leading cause of death worldwide, accounting for nearly 10 million deaths in 2020, or nearly one in six deaths, cancer predominantly afflicts older people. Routine data collection efforts are a necessary, often undervalued, component of almost all cancer research and prevention efforts.*

Objective: *To go through the most frequent type of cancers, age, sex and address based on the use of canreg5 software in cancer reports according to the population based on the cancer registration program in Maubisse Regional Hospital of the Municipality of Ainaro Timor-Leste from January 1 to December 31, 2023.*

Methods: *a descriptive cross-sectional study design with purposive sampling, all cancer cases were recorded using a CANREG5 software. The total cancer registry was 35 patients. Data analysis uses simple descriptive statistics in the implementation.*

Results & Discussion: *Over 65 years of age is cancer that occurs mostly and has enrollment with 40%. Mostly women with 74.3% and men with 25.7%. Oral or oral cancer is the most common cancer identified with 34.2% and traditional care was predominant with 21 patients, 60% as an optional choice for end-stage patients with cancer identified by the dentist at Maubisse Hospital.*

Conclusion: *This study concludes an important suggestion that exists: strengthening the cancer registry program to all health facilities and preventing public health interventions to reduce cancer risk cited by (Tilman CB & Belo G., 2024).*

INTRODUCTION

Cancer is the leading cause of death worldwide, accounting for nearly 10 million deaths in 2022, and also nearly one in six deaths[1]. Cancer is the rapid design of abnormal cells that grow beyond their usual confines and can then conquer adjacent parts of the body and spread to other organs; The latter process is referred to as metastasis[2]. Generalized metastases are the leading cause of cancer death[3]. About one-third of cancer deaths are due to tobacco use, high body mass index, alcohol consumption, low swallowing of fruit and vegetables, and lack of physical activity. Cancer-causing infections, such as human papillomavirus (HPV) and hepatitis, account for about 30% of cancer cases in low- and low-middle-income countries cited by (Tilman CB & Belo G., 2024)[4]. Many cancers can be cured if they are detected early and treated effectively from a dental point of view. Cancer predominantly distresses the elderly. Two out of three cases occur after the age of 65. Breast cancer is the most common form of cancer among women, accounting for about 30% of all female cancer[5]. In the last 10 years, the incidence of breast cancer has increased by 1.5% worldwide and annually[6].

Communities have the public health problems that work to achieve the mission of combating infectious and chronic diseases through research and surveillance, public health programs, health communication activities, and changes in the political system[11]. Routine data collection efforts are a necessary, often undervalued, component of almost all cancer research and prevention efforts. Public health cancer surveillance data are crucial for identifying needs, planning interventions, directing public resources towards health, and assessing the overall effectiveness of initiatives to prevent or treat cancer and its negative health consequences[12]. As the national health protection agency, the Centers for Disease Control and Prevention (CDC, 2022) makes resources available for disease surveillance systems to help protect our country against costly and dangerous health threats, including cancer. Therefore, community health and public health surveillance is a core function of the CDC. Effective public health strategies, which include communion and home care, are essential to provide pain relief and palliative care to patients and their families. However, a significant variation in the availability of treatment between countries of different income levels; Comprehensive treatment is reportedly available in more than 90% of high-income countries, but less than 15% of low-income countries. Although cancer affects individual patients and their families in different ways, studying its impact on large populations can provide important information that influences practices, policies, and programs that directly affect the health of populations and millions of people[13]. cited by (Tilman CB & Belo G., 2024).

Timor-Leste is the new country born in a new millennium, it is located close to the Southeast Asia Region and the Pacific Region between Indonesia and Australia. East Timor is with the smallest share of nations in a larger region in Asia. The nation state is an island located in the Malay Archipelago. The land has a total area of 14,870 km² (5,741 mi²) and a total coastline of 706 km (438.7 mk2). This land area is approximately 104% of the island's area. Timor-Leste is thus one of the

smallest nations in Asia by area and is ranked 160th worldwide. Most of the population (68%) lives in rural areas. The majority of Timorese lived under poverty, their socio-economic life expectancy was low. The culture was similar to Pacific and Asian culture, chewing betel nuts or areca nuts, tobacco smoking, and drinking fermented alcohol was part of their culture since before the Portuguese colonialism and annexation of Indonesian cited by (Tilman CB & Belo G.., 2024). Ainaro is a Municipality in Timor-Leste, located in the southwestern corner. In addition, Ainaro is part of the border with the Municipality of Manufahi on the south coast, the Municipality of Bobonaro on the west side, the north with Ermera, and the east with Aileu to the east14. It has a population of 57,435 (2015 Census) and an area of 1,128 km2. The Administrative Post of Maubisse. Administrative Post of Hatubuilico, Administrative Post of Hatudo and Administrative Post of Ainaro Vila. The Capital of Ainaro Municipality is the same Ainaro, the main center of population and public government facilities, which is 118 km from Dili, the Capital of the Nation [15]. According to the data reported via a softwere application in the cancer registry above, we think it is important to write about "strengthening population-based cancer enrollment at Maubisse Ainaro Regional Hospital based on the cancer reports of Canreg5 January 1 through December 31, 2023," according to the research cited by (Tilman CB & Belo G., 2024).

Objective: To go through the most frequent type of cancers, age, sex and address based on the canreg5 software application for oncology reports according to the population based on the cancer registration program in Hospital Regional Maubessi of the Municipality of Ainaro Timor-Leste from 1 January to December 2023.

METHODS

We opted for this study is a descriptive cross-sectional study design with sample suggestion for all cases of cancers were recorded using a software CANREG5 after they have been confirmed from a pathology report by dentists or general practitioners. The total number of oncology cases based on the population's cancer enrollment program was 35 confirmed cases under the International Classification of Diseases for Oncology (ICD-O) guidelines, 2023. Admission data of confirmed patients were made by a cancer registry voice point and by the dentist and general practitioner for surveillance at the Maubessi Regional Hospital. The variables of this study are secondary data and photographic documentation to confirm the validity of the data cited by (Tilman CB & Belo G., 2024). For analysis of all data, we will investigate or use simple descriptive[statistics16] and the results are presented in table and graph, according to the research results.

DISCUSSION RESULT

Table 1. Distribution of cancer enrollment based on age and sex.

Age	Frequencies or Number of cases (%)	Sex	
		Male	Female
0-15	3 (8.6)	0 (0)	3 (8.6)
16-30	1 (2.9)	0 (0)	1 (2.9)
31-45	7 (20)	1 (2.9)	6 (17.1)
46-55	6 (17.1)	0 (0)	6 (17.1)
56-65	4 (11.4)	2 (5.7)	2 (5.7)
< 65	14 (40)	6 (17.1)	8 (22.9)
Total = 35 (100%).		9 (25.7)	26 (74.3)

In table 1 indicated above, of varying age over 65 years, there is cancer majority, and it has been recorded with 40% among all ages of variety that

had been recorded as carcinogenic. Among 40% there were women predominant, with 22.9%, compared to men, with 17.1%, at Maubessi Hospital. The second most affected age was between 31 and 45 years old, with half of the total over 65 years old, with 20%, based on gender, women were predominant with 17.1% compared to men with 2.9%. Aged between 16 and 30 years, the lowest percentage of cancer registration was 2.9%. According to LOTTI BARLOW, 2016 at the *Centre for Epidemiologic National Board of Health and Welfare.* This as, Sweden's cancer predominantly afflicts the elderly. Two of the three cases occur after the age of 65 cited by (Tilman CB & Belo G., 2024)[17].

Table 2. Distribution of cancer registry based on primary or morphological site or cancer nomenclature.
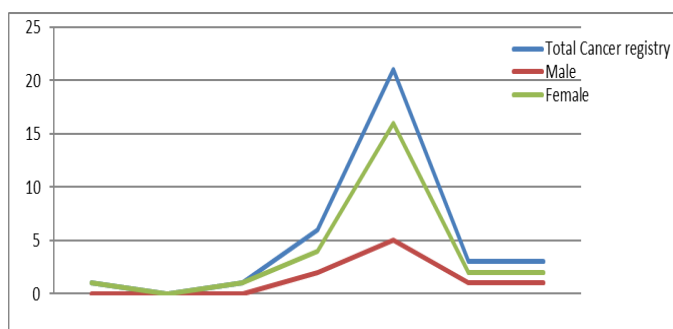
Types of Cancer	Number or number of cases (%)	Sex	
		Man	Female
Cervical	3 (8.6)	0 (0)	3 (8.6)
Chest	6 (17.1)	0 (0)	6 (17.1)
Liver	2 (5.7)	1 (2.9)	1 (2.9)
Straight	1 (2.9)	0 (0)	1 (2.9)
Thyroid	1 (2.9)	1 (2.9)	0 (0)
Prostate	1 (2.9)	1 (2.9)	0 (0)
Pancreas	1 (2.9)	1 (2.9)	0 (0)
Gastrointestinal	4 (11.4)	1 (2.9)	3 (8.6)
Oral or mouth	12 (34.2)	4 (11.4)	8 (22.9)
Colon	1 (2.9)	0 (0)	1 (2.9)
Intestinal tract	1 (2.9)	0 (0)	1 (2.9)
Vagina	1 (2.9)	0 (0)	1 (2.9)
Ovary	1 (2.9)	0 (0)	1 (2.9)
Total n = 35 (100%)		9 (25.7)	26 (74.3)

In table 2 above, the types of cancer that are mostly in the cancer registry program were oral or oral cancers with 34.2% among all types of cancers in Maubessi Regional Hospital of the Municipality of Ainaro. Based on the sex of oral or oral cancer, it occurs predominantly for females with 22.9% and for males 11.4%. As we know, in Timor-Leste consuming areca nuts or chewing betel nuts were a part of Timorese socio-cultural life. Timorese people living in rural areas consume traditional fermented alcohol, smoke tobacco, and chew betel nuts. In another study, smoking tobacco, using betel nuts or areca nut, is the main cause of oral premalignancy diseases. In addition, most women wear areca nut all their lives. Otherwise, another study indicated that the risk of cancer can be reduced by: not using tobacco; eat a healthy diet, including fruits and vegetables; avoid or reduce alcohol consumption. About 25% of all cancer is caused by smoking, the only known factor that causes most cancer cases[18].

The second most recorded cancer at the Maubessi Regional Hospital was breast cancer, with a total of 17.1% among all types of cancer, and occurs only in women. Breast cancer is the most common form of cancer among women, accounting for about 30% of all female cancer. In the last 10 years, the incidence of breast cancer has increased by 1.5% cited by (Tilman CB & Belo G., 2024)[6]. Early and improved diagnostics have led to detection at earlier and earlier stages, sometimes even at the primary stage; And many women can therefore be treated successfully. It directs the causative mechanisms for breast cancer, but it is established that the female sex hormone (estrogen) is of great importance. The risk of breast cancer is higher for women who have their first period at the onset of puberty and for women whose menstruation

persists into old age. Women who have children when they are relatively young, and who have borne many, are at a lower risk. Breastfeeding also has a protective effect. Between 5% and 10% of all breast cancer is hereditary. More than 30 to 50% of cancers can currently be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies. The remarkable burden can also be reduced through early detection of cancer and proper treatment and care of patients who develop cancer. Many cancers have a high chance of cure if diagnosed early and treated properly by a dentist. Early diagnosis of symptomatic cancers is relevant in all contexts and most cancers[19].
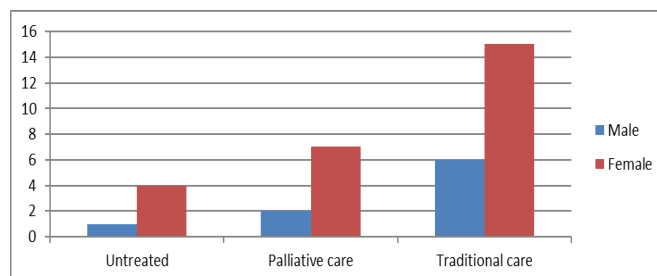
Graph 1. Cancer curve registered based on Administrative Posts in the Municipality of Ainaro, Timor-Leste (2023).

In a graph one points one above, in the Maubessi, Hatubuilico, Hatudo and Ainaro Serum Administrative Post of the Municipality of Ainaro, in the Capital of this same Municipality was Ainaro Vila the majority cancer record with a total of 21 patients or 60% of the total of those Administrative Post with a female majority of 16 patients compared to men with 5 patients. The second most cancerous record was Hatubuilico Posto Administrativo with 6 patients or 17.1% among all patients, the majority female with 4 patients compared to the male with 2 patients. The Administrative Post with no cancer case by cancer registry program was Ainaro Serum with zero (0) reported research case cited by (Tilman CB & Belo G., 2024).

Graph 2. Treatment-based cancer registry chart (Untreated Care, Palliative Care and Traditional Care)

In Graph 2. Point two of the cancer, most patients after the diagnosis confirmed by a dentist or general practitioner choose to do traditional care or go home for alternative treatment by traditional drugs by their families with 21 patients with predominantly female patients, 15 patients and 6 male patients. Other patients choose to have palliative care in the hospital with a total of 9 patients with predominantly female patients, 7 and 2 male patients. The untreated patient only asks to go home with their own decision and their families ask to take the patients home after they have been diagnosed with 5 patiences with predominantly female patients 4 and male patients 1. Determining treatment goals is an important first step. The main goal is usually to cure cancer or prolong life considerably. Improving patients' quality of life is also an important goal. This can be achieved by supporting the physical, psychosocial and spritual well-being of the end-stage cancer patient. Palliative care is treatment to relive, rather than cure, the symptoms and suffering caused by cancer and to improve the quality of life for patients and their families. Palliative care can help patients live more comfortably. It is particularly needed in places with a high proportion of patients in

advanced stages of cancer where there is little chance of cure. Better access to oral morphine is strongly recommended for the treatment of moderate to severe cancer pain, suffered by more than 80% of people with end-stage cancer, according to the needs report cited annually by (Tilman CB & Belo G., 2024).

CONCLUSION

In this study, among the total number of patients in the cancer registry where the majority was identified were 74.3% female, compared to 25.7% male.   patients undergoing treatment at the Maubessi Regional Hospital in the Municipality of Ainaro. Otherwise, the high incidence of cancer occurs at ages over 65 with 40%, plus age groups 31-45 were the second highest incidence of cancers at 20%. Based on types of cancer that had been identified and the most cancer cases in the registry were oral or oral cancer with 34.2% and breast cancers were the second largest cancer where it was recorded with 17.1%. Maubessi Administrative Post with the most cancer cases was Maubessi -Vila with 21 patients and the majority 16 female patients compared to the male was 5 patients. Terminally ill patients prefer to do traditional care or go home for alternative treatment by traditional drugs by their families with 21 patients with 15 female patients predominant and 6 male patients. In addition, this study concludes an important suggestion: strengthening the cancer registration program to all health facilities and identifying   public health problems and community health interventions to reduce the risk of cancer, this is a key point for the Government of Timor-Leste, responsible for the Ministry   of   Health,   to   consider   the recommendation for future cancer cited by (Tilman CB & Belo G.,2024).

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