EDITORIAL / *EDITORIAL*

Integration of research, teaching, and health services: contributions to cancer surveillance in Mato Grosso

Integração pesquisa, ensino e serviços de saúde: contribuições para a vigilância do câncer em Mato Grosso

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The project "Cancer surveillance and its associated factors: update of the population-based and hospital registry (VIGICAN)" is a milestone for health surveillance in Mato Grosso. This supplement presents articles that disclose the results of outreach and research projects of the Collective Health Institute (*Instituto de Saúde Coletiva*) of Universidade Federal de Mato Grosso (ISC/UFMT), connected to VIGICAN, on the cancer epidemiology in Mato Grosso (MT).

Result of a partnership between public institutions and with the collaboration of students from different education levels, the project investigated the analytical potential of data from the Population-based Cancer Registry (*Registro de Câncer de Base Populacional —* RCBP), the Mortality Information System (*Sistema de Informação sobre Mortalidade —* SIM), and a survey conducted in two reference cancer hospitals.

The set of articles reveals the cancer incidence, mortality, and survival, as well as its associated factors, in the state of Mato Grosso, providing support to actions aimed at tackling cancer, such as the decision-making process in public policies and the reorganization of the health care system in the state.

Cooperation between undergraduate and graduate programs, outreach projects, research, and service was necessary to achieve this objective. The present supplement results from this exchange and the work of collaborators from many educational institutions, the Mato Grosso Health Department (*Secretaria de Estado de Saúde de Mato Grosso —* SES/MT), and the Ministry of Public Labor Prosecution (*Ministério Público do Trabalho —* MPT).

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Mato Grosso is the third Brazilian state in territorial extension and shows differences related to economy, culture, access to health services, and population in its 141 municipalities. Most of them (75.9%) have fewer than 20 thousand inhabitants, and only 2.8% have a population above 100 thousand people. The main economic activities in the state are agriculture and extractivism. Inequalities affect the health of the population of Mato Grosso, reducing their quality of life and life expectancy due to preventable and treatable infectious diseases, external causes, and chronic conditions, such as cardiovascular diseases, metabolic disorders, and cancer[1-3].

In this context, knowing the population profile and risk factors, as well as monitoring health indicators over time, is paramount to planning actions and programs to reduce the magnitude, severity and socioeconomic relevance, and vulnerability of the population in the face of these non-communicable diseases (NCDs), especially cancer[4].

In 2020, 2,918 cancer deaths were reported in Mato Grosso, corresponding to the third cause of death (12.5%) in the state[5]. The Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA) has predicted 8,120 new cases of cancer in Mato Grosso from 2020 to 2022, of which 54.7% will affect men. The most incident types of cancer, excluding non-melanoma skin tumors, are prostate, breast (in women), lung, cervix, colorectal, thyroid, stomach, and oral cancer[6].

To understand the magnitude and impact of cancer in Mato Grosso, secondary databases were analyzed, including RCBP, the Hospital Information System of the public health system (*Sistema de Informações Hospitalares do Sistema Único de Saúde* — SIH / SUS), and SIM. Using descriptive epidemiology principles and statistical methods, geographical variations over time were associated with demographic, environmental, and socioeconomic risk factors. The results found allow the analysis of the cancer scenario in the state and should contribute to the management of health surveillance, primary care, and patient care, as well as the application of the structural, operational, and human resources necessary for promotion, prevention, and control of new cancer cases.

In this context, outreach and research projects from public educational institutions aim to collaborate with public health management by performing essential activities of active surveillance for cancer cases and researching the factors associated with the disease onset. Some aspects that stand out are the low cost of these activities, the introduction of students into the practice, the new forms of work organization in SUS services, and the valuable exchange of knowledge among students, professors, health professionals, and users.

This supplement has 19 articles produced from the partnership between educational institutions, the SUS state management from Mato Grosso, and the 23rd Region MPT. It starts by describing the project operationalization, trend analyses of cancer mortality in Mato Grosso and its main types, the incidence trend according to the coverage of population-based records from Cuiabá and the inland, and prevalence estimates of the main cancer-related exposures.

The VIGICAN project is an important contribution, especially when considering the context of economic, health, and political crises that put at risk the continuity of public policies

and investment in scientific research in the country and in Mato Grosso. Thus, the analyses presented herein should contribute to scientific development. We hope that the results of this set of studies can lay the foundation for managers, health professionals, and society in general, serving as a guide for more effective public health policies.

Lastly, we expect that this supplement inspires new inter-institutional partnerships that promote integration initiatives involving research, teaching, and health services, such as the successful experience of the VIGICAN Project.

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