



MINISTRY OF INTERNALLY DISPLACED
PERSONS FROM THE OCCUPIED
TERRITORIES, LABOUR, HEALTH AND
SOCIAL AFFAIRS OF GEORGIA



დაავადებათა კონტროლისა და
საზოგადოებრივი ჯანსაღის ცენტრი
ეროვნული ცენტრი

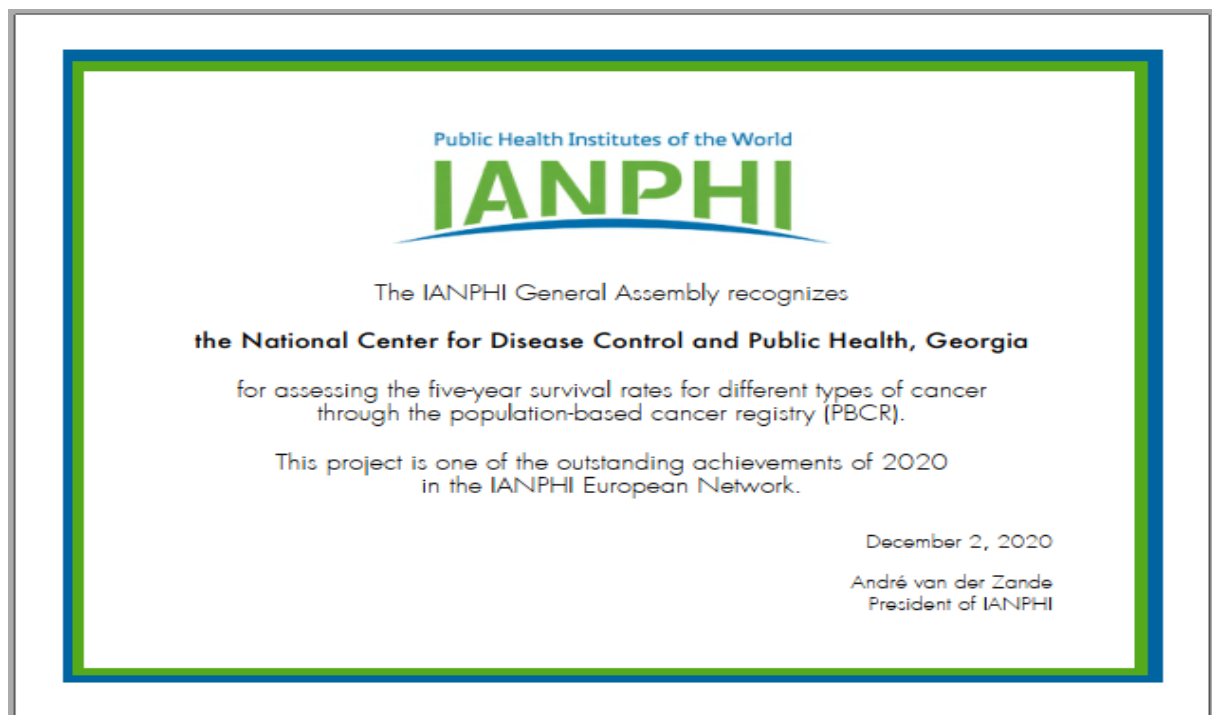
GEORGIAN NATIONAL CENTER FOR DISEASE
CONTROL AND PUBLIC HEALTH

Five-year (2015-2019 Survival Rates Assessment for Different Types of Cancer in Georgia

Success story

Project “**the Five-year (2015-2019) survival rates assessment for different types of cancer in Georgia**” was submitted by the National Center for Disease Control and Public Health to the "Recognitions of success" contest, announced by the International Association of National Public Health Institutes (IANPHI) in 2020. The project was recognized as one of the outstanding achievements of 2020 in the IANPHI European Network. The recognition was declared during online session of the IANPHI General Assembly that was held on December 2nd 2020.

IANPHI is the organization that strengthens the National Public Health Institutes (NPHIs) using an evidence-based international framework for development. IANPHI has 100 members in 95 countries. The National Center for Disease Control and Public Health of Georgia is a member of IANPHI since 2014.

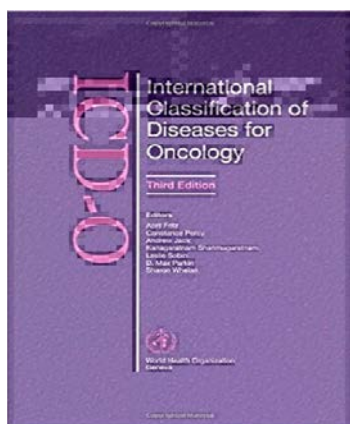


In 2020, five years after the implementation of the population-based cancer registry (PBCR), we were able to assess the five-year survival rates for different types of cancer that gives possibility to identify weak link in the chain of cancer care and to make suitable changes in cancer control approaches in the country.

Implementation of Population Based Cancer Registry in Georgia, 2015

Cancer registries are important tools in identifying trends and developing public health approaches against cancer. Epidemiological surveillance of oncological diseases require continuous, timely, systematic collection of cases and cancer-specific mortality with the purpose to evaluate incidence, prevalence, age-specific trends and survival rates. Registries also enable evaluation of introduction and monitoring of cancer screening and other preventive and management measures. Population-based cancer registries are thus a unique source of information for research and public programme monitoring. From the viewpoint of assessing progress in cancer control, reliable data about disease stages of cancer over time is important.

In 2015 population-based cancer registry model, complying with International (WHO/IARC) requirements and hospital sector development national plan, has been developed at the National Center for Disease Control and Public Health in Georgia.



The importance of the cancer registry is based on data quality; it is particularly valuable to register each cancer case correctly and comprehensively as to evaluate tendencies accurately and compare the data at international level. The above mentioned can be reached, if classification of oncological diseases meets with modern requirements. Publishing International Classification of Diseases for Oncology (ICD-O, Third Edition) in Georgian language and its introduction throughout the country directly serves the purpose.

Before implementation of cancer registry, NCDC of Georgia was responsible for the collection of cancer data through routine surveillance from medical facilities that provided different services for oncological patients. However, this approach provided incomplete data. In 2014, only 4,200 new cases were registered while in 2015 and in following years, after implementation of PBCR, more than 10 000 cancer new cases have been detected annually.

Since cancer care is provided in multiple settings in Georgia, the complexity of data collection, management, and linkages was challenging. The Unified Electronic System for Cancer Data Collection, which has been launched in 2019, combines information on cancer screening, diagnosis, and treatment. The system is connected to the birth-death module and the patient's life status is updated in real-time.

Trends in mortality rates are not ideal, in order to assess the success of cancer control strategies in different populations, as they are influenced by both - incidence and disease duration, while survival rates are actual markers of control measures. Although cancer survival in addition to the access to effective medical care, depends on the number of tumor (clinical, morphological and molecular) and patient (age, gender, comorbidity) characteristics, it is estimated that survival rates are main indicators for cancer management and care in the country.

As it is mentioned above, in 2020 we had possibility to estimate the overall 5-year survival rates of different types of cancer. The assessment of the survival rates revealed that they are much lower in comparison to developed countries; the identification of predictive factors for low survival of cancer will allow us to develop evidence-based approaches in cancer control strategy in the country.

Challenges and ways to overcome them

Due to our limited experience, the cancer survival rate in the first stage was assessed by using a direct method (direct proportion of cancer patients who are alive at the end of 5 years); as it is known, the direct method for calculating a survival rate does not use all the information available. However, we are currently working closely with the CONCORD team and the International Agency for Research on Cancer (IARC) to be able to compute estimated rates (by using Kaplan-mayor and other specific methods) that more accurately reflect real survival.

Table. Five-year survival rates (%) for selected localization of cancers, 2015-2019, Georgia

Cancer localizations	5-year survival (%)	Cancer localizations	5-year survival (%)
All localizations	50.1	Prostate	46.6
Thyroid	92.8	Leukemia	43.9
Hodgkin lymphoma	74.5	Colorectum	41.4
Kidney	69.3	Ovarian	39.1
Cancer uteri	66.7	Melanoma	37.7
Breast (women)	66.0	Brain	33.5
Bladder	56.9	Stomach	22.7
Cervix	56.9	Lung, tracheal, bronchial	12.3
Thorax	50.8	Pancreatic	12.0
Non-hodgkin lymphoma	47.9	Liver, cholangiocarcinoma	11.7

Figure 1. Number of Cancer New Cases, 2008 -2019, Georgia

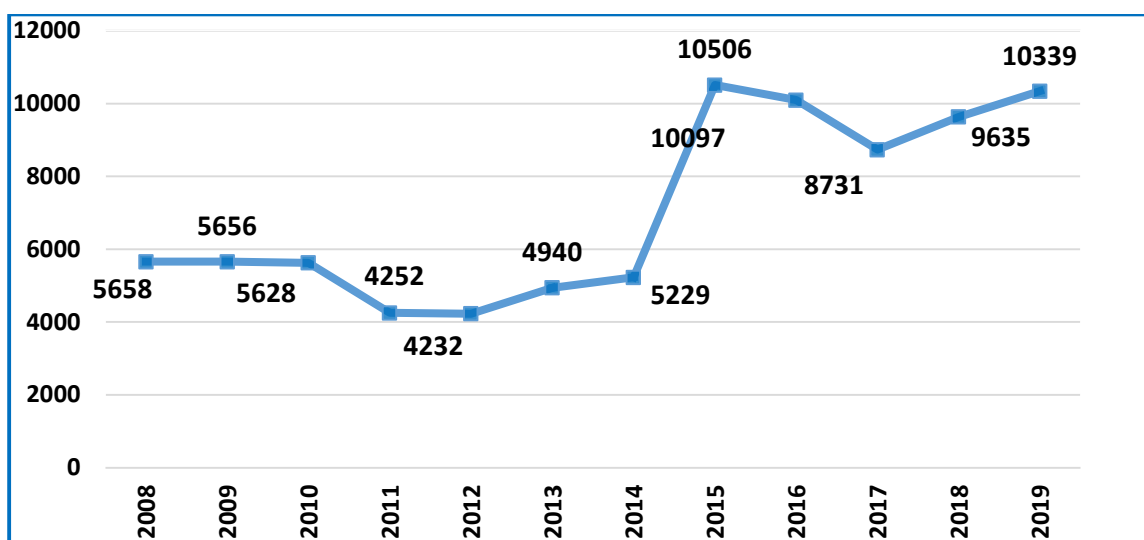


Figure 2. Gender and Age Distribution of Cancer New Cases, Georgia, 2019

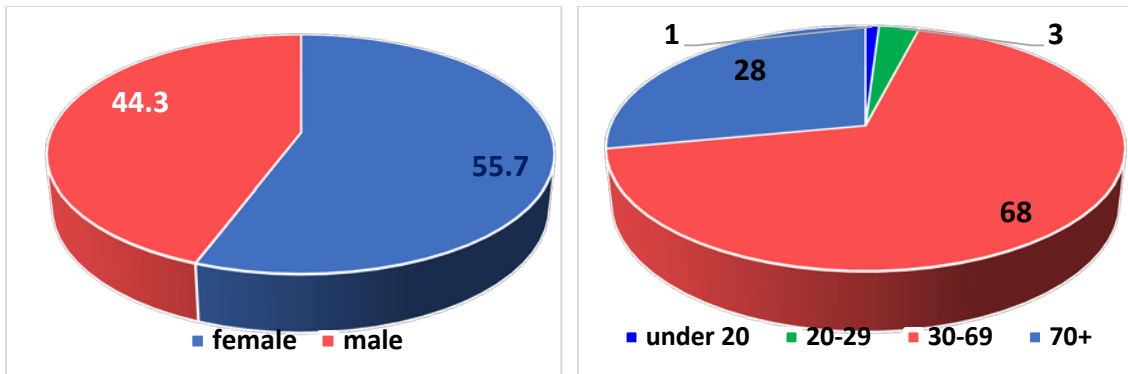


Figure 3. Incidence rate per 100000 population of 10 top Localization of Cancer According to Gender, Georgia, 2019

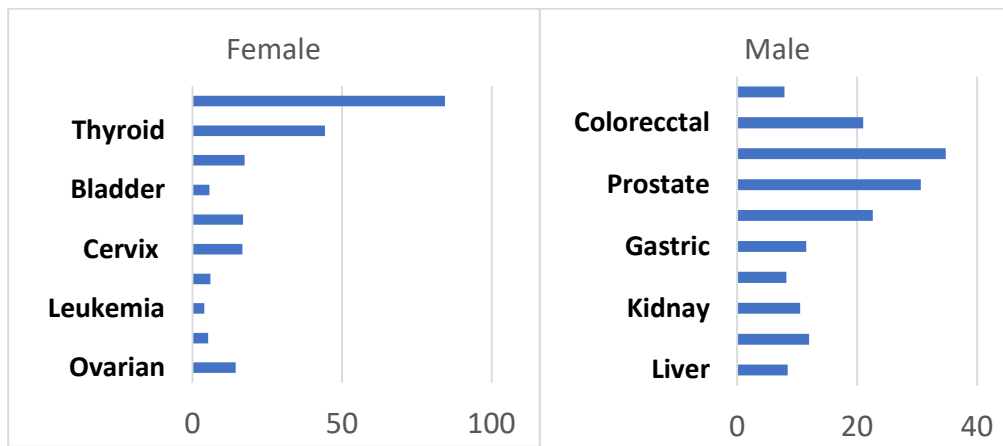


Figure 4. Age-standardized Incidence Rates per 100000 Population in Different Municipalities of Georgia, 2019

