Type of Health Insurance Coverage (Government Health Plan vs. Non-Government Health Plan) Effect in the Survival of Colorectal Cancer Patients: The Experience in Puerto Rico, 2004

Karen J. Ortiz-Ortiz, MA, MPH; Marelly Nieves-Plaza, MS; Heriberto Marin-Centeno, PhD; Mariela Torres-Clintron, MS; Javier Perez-Iriarte, MPH; Nayda Figueroa-Vales, MD, MPH; Ana P Ortiz, PhD

Puerto Rico Central Cancer Registry; Research Design, Biostatistics and Clinical Research Ethics, PRCTRC; Department of Health Services Administration, Graduate School of Public Health, Medical Sciences Campus, University of Puerto Rico; University of Puerto Rico Comprehensive Cancer Center & Department of Biostatistics and Epidemiology, Graduate School of Public Health, RCM, UPR.

INTRODUCTION

Colorectal cancer (CRC) represents a major public health problem in Puerto Rico (PR). Studies have demonstrated that diagnosis and the receipt of appropriate treatment may greatly enhance the chances of survival for cancer patients. Thus, access to health insurance and the type of insurance status may influence their survival.

In order to ensure access to health services and to eliminate inequality in medical care, the government of PR has implemented during the 1990’s a Health Care Reform (HCR).

The HCR goal was to ensure access to health services and eliminate disparities for medically indigent citizens and provide special coverage for high-risk conditions such as cancer.

The total number of insured individuals under the Government Health Plan (GHP) was approximately 1,540,000 representing 39.3% of the total estimated Island population.

OBJECTIVE

To compare the survival among CRC patients by type of health coverage (GHP vs. Non-GHP) to estimate the survival of patients diagnosed in 2004.

To estimate the relative excess risk of death in CRC patients by type of health coverage (public vs. others).

METHODS

Patients with a diagnosis of CRC reported in the PR Central Cancer Registry database in 2004 were linked with health insurance claims data from GHP to identify GHP patients (GHP, 37.9%) and those with health insurance other than GHP (Non-GHP, 62.1%).

CRC cases were examined and reviewed manually to ensure accuracy in the variable of interest (e.g. staging, treatment and vital status).

RESULTS

The bivariate analysis demonstrated that GHP and NGHP had differences in age, SEP and stage at diagnosis.

The total number of insured individuals under the Government Health Plan (GHP) was approximately 1,540,000 representing 39.3% of the total estimated Island population.

To compare the survival among CRC patients by type of health coverage (GHP vs. Non-GHP) we:

1. Estimate 4-year relative survival for CRC by type of health insurance for patients diagnosed in 2004

2. Estimate the relative excess risk of death in CRC patients by type of health coverage (public vs. others).

Analysis of survival, death, and causes of death by type of health insurance coverage was estimated using different models with Poisson regression.

The collection of cancer incidence data was supported, in part, by the National Program of Cancer Registries (NPCR) of the Centers of Disease Control and Prevention (CDC) for the Puerto Rico Central Cancer Registry, Grant#1U58DP000782-04.

The collection of cancer incidence data was supported, in part, by the National Program of Cancer Registries (NPCR) of the Centers of Disease Control and Prevention (CDC) for the Puerto Rico Central Cancer Registry, Grant#1U58DP000782-04. The collection of cancer incidence data was supported, in part, by the National Program of Cancer Registries (NPCR) of the Centers of Disease Control and Prevention (CDC) for the Puerto Rico Central Cancer Registry, Grant#1U58DP000782-04. The collection of cancer incidence data was supported, in part, by the National Program of Cancer Registries (NPCR) of the Centers of Disease Control and Prevention (CDC) for the Puerto Rico Central Cancer Registry, Grant#1U58DP000782-04. The collection of cancer incidence data was supported, in part, by the National Program of Cancer Registries (NPCR) of the Centers of Disease Control and Prevention (CDC) for the Puerto Rico Central Cancer Registry, Grant#1U58DP000782-04. The collection of cancer incidence data was supported, in part, by the National Program of Cancer Registries (NPCR) of the Centers of Disease Control and Prevention (CDC) for the Puerto Rico Central Cancer Registry, Grant#1U58DP000782-04.

REFERENCES


LIMITATIONS

The percentage of the NGHP group without insurance is unknown. Consequently, this could lead to an understimation of the survival for this group.

The use of maximum survival may result in an overestimate of the true survival rate.

We could not access other variables of interest like comorbidities that may affect CRC survival.

SUMMARY

To compare the survival among CRC patients by type of health coverage (GHP vs. Non-GHP) we:

1. Estimate 4-year relative survival for CRC by type of health insurance for patients diagnosed in 2004

2. Estimate the relative excess risk of death in CRC patients by type of health coverage (public vs. others).

REFERENCES


The collection of cancer incidence data was supported, in part, by the National Program of Cancer Registries (NPCR) of the Centers of Disease Control and Prevention (CDC) for the Puerto Rico Central Cancer Registry, Grant#1U58DP000782-04.