

Effectiveness of a cardiovascular risk management program in the reduction of premature mortality associated to cardiovascular events in the Caribbean region of Colombia

Miranda P. A., Salcedo Mejía F. E., Parra Padilla D., Vargas R., Paz-Wilches J., Fernandez Mercado J. C., Alvis Zakzuk J., Alvis Zakzuk N., Alvis-Guzmán N., De La Hoz F.

Abstract

Objectives: To establish the effectiveness of a cardiovascular risk management program ["De Todo Corazon (DTC)" program in Mutual SER-EPS] in the reduction of premature mortality associated to cardiovascular events (CVE) (male , 55 years, female , 60 years). **Methods:** The population eligible for the study were patients over 18 years of age affiliated to Mutual SER insurance company between June 2015 and June 2018 and residents of the Caribbean region of Colombia, enrolled or not to DTC program in which a cardiovascular event (CVE) occurred. The main outcomes considered were age of occurrence of cardiovascular events (AOCVE), age at death due to CVE (ADCVE) and years life lost (YLL). For the evaluation of the effectiveness, differences in AOCVO, ADCVO and the YPLL between the patients enrolled and nonenrolled in the DTC program were estimated using a Simple Linear Regression model. **Results:** A total of 3.902 CVE occurred in the study period among both groups. The enrolled patients had an average of AOCVE of 4.96 years (95% CI 3.85-6.06) higher than in non-enrolled patients. The ADCVE average was 4.64 years (95% CI 1.47 - 7.81) higher in the enrolled patients compared with the non-enrolled patients. Patients enrolled in the DTC program had on average -3.54 (95% CI -5.62 - -1.46) YLL compared to the non-enrolled patients. **Conclusions:** The DTC program in Mutual SER-EPS was effective to delay the AOCVE, ADCVE and YPLL. DTC program is an effective strategy to reduce the incidence and premature mortality due to CVE in the Caribbean region of Colombia.