

Temporal trend of premature mortality for external causes in Chile between 1997-2014

Evolución temporal de la mortalidad prematura por causas externas en Chile entre 1997-2014

San Martín Campos, Catalina

Ponce Castro, Javiera

Proboste Naranjo, Amanda

Yohannessen-Vásquez, Karla

OBJECTIVE: Currently, there is a change in the causes of mortality towards noncommunicable diseases and external causes. However, there are no updated studies on the trend of premature mortality due to external causes (PMEC) in Chile and the underlying sociodemographic variables. The objective of this study was to evaluate the trend of PMEC in Chile between 1997-2014 and analyze its distribution according to sociodemographic variables. **METHODS:** Ecological mixed study. The cause of death and demographic data of mortality databases and official population estimates of the government of Chile were used. The PMEC and main subcauses (traffic accidents, self-inflicted injuries and aggressions) were considered in the population between 15-64 years. Annual crudes and adjusted rates (direct method) were estimated between 1997-2014. The trend of adjusted rates was evaluated using Prais-Winsten regression. **RESULTS:** There were 102.559 deaths from external causes during the period studied (22.1% of total mortality). The cases were concentrated in men (85.3%), in the group of 25-44 years (44.8%) and at the basic instruction level-without instruction (48,4%). The PMEC trend decreased significantly in general population ($\beta = -1.18 \times 100,000$ inhab., 95%CI: -1.58,-0.78) and men ($\beta = -2.25 \times 100,000$ inhab. 95%CI: -2.79;-1.7). In women, there were no significant changes in PMEC, however an increase in PM due to aggressions was observed ($\beta = 0.03 \times 100,000$ inhab. 95%CI: 0.002,0.05). **CONCLUSIONS:** During the study period, a decrease in MPCE could be observed, especially that caused by traffic accidents. However, it has not been possible to reduce in women, alerting the increase in MP due to aggressions. **OBJETIVO:** Actualmente existe un desplazamiento de las causas de mortalidad hacia

las enfermedades no transmisibles y causas externas. Sin embargo, no hay estudios actualizados sobre la tendencia de la mortalidad prematura por causas externas (MPCE) en Chile y sus variables sociodemográficas. El objetivo del estudio fue evaluar la tendencia de la MPCE en Chile entre 1997-2014 y analizar su distribución según variables sociodemográficas. METODOS: Estudio ecológico mixto. Se utilizó la causa de muerte y los datos demográficos de las bases de mortalidad y estimaciones de población oficiales del gobierno de Chile. Se consideró la MPCE y las causas específicas principales (accidentes de tránsito, lesiones autoinflingidas y agresiones) en la población entre 15-64 años. Se estimaron tasas anuales crudas y ajustadas (método directo) entre 1997-2014. Se evaluó la tendencia de las tasas ajustadas utilizando regresión de Prais-Winsten. RESULTADOS: Hubo 102.559 muertes por causas externas durante el período estudiado (22,1% de la mortalidad total). Los casos se concentraron en hombres (85,3%), en el grupo de 25-44 años (44,8%) y en el nivel de instrucción básico-sin instrucción (48,4%). La tendencia de la MPCE disminuyó significativamente en la población general ($\beta = -1,18 \times 100.000$ hab. IC95%: -1,