

Trend of Mortality By Asthma in Colombia, 1998 - 2021

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OBJECTIVE

We aimed to analyze trends of mortality by asthma in Colombia, 1998 - 2021

METHODS

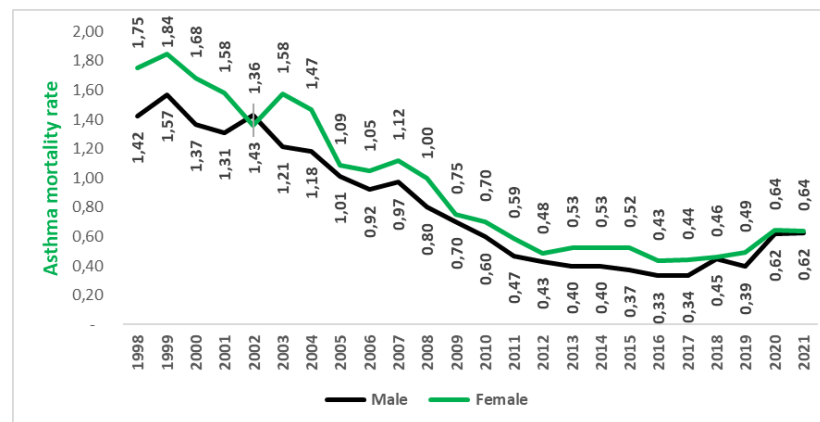
Data on asthma-related mortality (ICD-10: J45-J46) from 1998 to 2021 and population projections were obtained from National Administrative Department of Statistics (DANE) in Colombia. Crude mortality rates (CMR) for asthma were estimated. Asthma mortality rates (AMR) per 100,000 people were estimated by sex and year. Trends of AMR were analyzed by Joinpoint regression (JPR) to determine inflection points for temporal analysis. Annual Percent Change (APC) and Average Annual Percent Change(AAPC) were also estimated..

RESULTS

8,920 asthma-related deaths were registered (55.0% in women). The annual mean of deaths during period was 372 (SD±162; 95%CI 307-436). For women and men, 204 (SD± 89; 95%CI 169-240) and 167 (SD±74; 95%CI 64-270), respectively. The annual mean of AMR was 0.88 (SD±0.45; 95%CI 0.70-1.06) per100,000 people. For women and men, 0.95 (SD±0.48; 95%CI 0.75-1.14) and 0.80 per 100,000 people(SD±0.41; 95%CI 0.64-0.97) respectively.

APC	Men 2 Joinpoints	(1998-2004)	-3.9(95%UI -7.7;7.2)
		(2004-2016)	-10.7*(95%UI -17.3;-9.3)
		(2016-2021)	15.6*(95%UI 8.7;26.9)
	Women 3 Joinpoints	(1998-2007)	-5.9(95%UI -15;2.9)
		(2007-2012)	-13.8(95%UI -21.4;4)
		(2012-2018)	-2.3(95%UI -15.3;4.2)
		(2018-2021)	14.2*(95%UI 1.4;29.5)
	Both sexes 3 Joinpoints	(1998-2007)	-5.7*(95%UI -7.4;-3.4)
		(2007-2012)	-14.3*(95%UI -20;-8)
		(2012-2017)	-3.7(95%UI -10.7;3.1)
		(2017-2021)	13.4*(95%UI 7.6;24.4)
AAPC	Men 2 Joinpoints	(1998-2021)	-3.7*(95%UI -4.7;-2.6)
	Women 3 Joinpoints	(1998-2021)	-4.4*(95%UI -5.6;-3.4)
	Both sexes 3 Joinpoints	(1998-2021)	-4.2*(95%UI -4.8;-3.6)

Asthma mortality rate 1998 - 2021



CONCLUSIONS

The trend of mortality due to asthma has decreased significantly during the study period. However, the AMR increased in the last 5 years of the observation window, especially in men.