

Educational inequalities in mortality due to alcoholic liver disease in Poland

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The number of deaths due to alcoholic liver disease increased steadily between 2002 and 2021. In 2002, 1079 people died due to this cause, while in 2021 the number of deaths increased more than 6-fold and amounted to 6532. The aim of the study was to analyse educational inequalities on mortality due to alcoholic liver disease.

The study used a database of all deaths of Polish residents aged 20+ years due to alcoholic liver disease (K70) in the years 2002–2021. Crude death rates (CDRs) and standardised death rates (SDRs) were calculated. To determine the rate of change, Joinpoint Regression software was used and the AAPC (average annual percentage change) coefficients were calculated.

In the group of men, the crude death rate was 5.0 in 2002, and in 2021 its value increased to 26.4 (AAPC = 8.3%). In the female group, the CDR value increased from 0.8 per 100,000 in 2002 to 8.5 in 2021 (AAPC = 12.0%). In the group of men, as well as among women, high increase in coefficient values was observed in all educational groups between 2002 and 2021. In the group of men, the lowest values of standardised death rates, and at the same time the smallest increase, concerned people with higher education. Between 2002 and 2021, the SDR increased its value 3.4-fold, i.e. from 1.6 to 5.4. The highest coefficient values and an increase slightly over 5-fold concerned men with primary education. The SDR value increased from 11.3 to 57.5. In the group of men with secondary education, a more than 5-fold increase in SDRs

values was also observed, from 5.4 to 29.7. In the group of women the SDR value increased from 2.0 to 23.9 in the group with primary education, and from 1.0 to 9.1 in the group with secondary education. The greatest disproportions between the coefficients in the group of people with primary and higher education occur in the youngest age groups. In 2021, the CDR in the group of men aged 20–44 years was over 24-fold higher in the group with primary education compared to men with higher education (66.3 vs. 2.7), and in the group of women it was over 15-fold higher (27.8 vs. 1.8). In the oldest age group (65+ years) among men, the CDR in the group with primary education was 38.3, which was 1.8-fold higher than in the group with higher education (21.4). In the group of women aged 65+ years, the CDR was 8.3 in the group with primary education, which was twice as high as in the group with higher education (4.1).

Death rates due to alcoholic liver disease are significantly higher among men than among women. However, the growth rate is faster among women, which is causing a gradual decrease in the difference. There are large differences in mortality due to alcoholic liver disease arising from the level of education. There is an urgent need to implement national programs to reduce alcohol consumption.

DISCLOSURE

The author reports no conflict of interest.