Use case for reorganisation of population-based cancer registration in Saxony-Anhalt (Germany): Mesothelioma incidence



<u>Wittenberg I</u>, Lacruz ME, Hartwig S, Schmidt-Pokrzywniak A, Kluttig A Clinical Cancer Registry Saxony-Anhalt, Halle (Saale), Germany

BACKGROUND

With the dissolution of the Joint Cancer Registry in East Germany after 70 years of existence, Clinical Cancer Registry Saxony-Anhalt is preparing to take over the population-based cancer registration and related scientific activities. The biggest challenges are the data integration of the individual data and the search for historical metadata in a suitable form.

Southern Saxony-Anhalt was one of the industrial centers of the former GDR, and environmental pollution was significant, including the use of asbestos. This use case aims to combine historical and current data for Saxony-Anhalt to show trends in incidence of mesothelioma for the period between 1961 and 2022 in an international comparison.

METHODS

Sources of aggregated data that allow the reporting of incidence trends of mesothelioma should be identified. Furthermore, the aggregated data should be converted to allow for both: county-level report after several administrative reforms and international comparisons. The individual data will be evaluated if a legal basis comes into force.



Development and integration of epidemiological and clinical cancer registration for the State of Saxony-Anhalt

RESULTS

Data allowing for comparison of mesothelioma incidence trends were obtained from literature [1-4] only for males and without age standardization because of unavailability of age-stratified data. There is still no legal basis for the use of historic individual data in Saxony-Anhalt. The crude incidence rate of mesothelioma for Saxony-Anhalt was 2.4 per 100,000 person-years 1980 to 1989 and 1.7 per 100,000 person-years 2005 to 2014. The counties with highest crude incidence rates 1980 to 1989 were Zeitz and Merseburg with 6.0 and 5.5 per 100,000 person-years, respectively.



Smoke of unknown composition comes out of a chimney in Bitterfeld, then German Democratic Republic, in 1988. Rainer Hällfritzsch, CC BY-SA 3.0 https://creativecommons.org/licenses/by-sa/3.0, via Wikimedia Commons



Crude incidence rates per 100,000 person-years 1980 to 1989, 2005 to 2014 and 2019 to 2021 for men in the German state of Saxony-Anhalt, Denmark and counties of Zeitz and Merseburg in 1990 borders.

DISCUSSION

While the crude incidence for mesothelioma for men in Saxony-Anhalt sank by relative 29% between periods 1980-1989 and 2005-2014, it rose in Denmark by 75%. These preliminary results are promising for further research, but individual data are indispensable to interpret the figures in international comparison and to adjust for effects of demographic changes.

REFERENCES

- [1] Mohner, M. Atlas der Krebsinzidenz in der DDR, 1961-1989. Berlin: Ullstein Mosby. 1994
- [2] European Cancer Information System. Available at: <u>https://ecis.jrc.ec.europa.eu/index.php</u> (Accessed: 2nd November 2023)
- [3] GEKID-Atlas. Available at: https://www.gekid.de/gekid-atlas/index.html#/ (Accessed: 2nd November 2023)
- [4] Nordcan 2.0. Available at: https://nordcan.iarc.fr/en (Accessed: 2nd November 2023)

