THE USE OF HOSPITAL MORBIDITY DATABASE FOR EPIDEMIOLOGICAL STUDIES ON COALWORKER'S PNEUMOCONIOSIS.

Krzysztof Kanecki[1]; Aneta Nitsch-Osuch[1]; Paweł Gorynski[2]; Bogdan Magdalena[1]; Kosinska Irena[1]; Piotr Tyszko[3].

Author responsible for correspondence: Krzysztof Kanecki. Medical University of Warsaw, Oczki 3 str., 02-007 Warsaw. E-mail: kanecki@mp.pl

1) Department of Social Medicine and Public Health, Medical University of Warsaw, Warsaw, 02-097, ul. Oczki 3, Poland

2) National Institute of Public Health - National Institute of Hygiene, Warsaw, 00-971, ul. Chocimska 24, Poland

3) Institute of Rural Health in Lublin, Lublin, ul. Jaczewskiego 2, 20-090, Poland.

Introduction: Coalworker's pneumoconiosis (CP) is a chronic lung disorder caused by accumulation of inhaled carbon or coal dust in the lung parenchyma leading to the formation of black nodules and emphysema. The use of hospital morbidity database is an important element of epidemiological analysis of this occupational disease. The study is the first such analysis in Poland and may provide the recent data on epidemiology of CP. **Objectives:** This study was undertaken to assess the incidence of CP in Poland and to analyze factors related to its epidemiology. **Patients and methods:** We conducted a retrospective, population-based study using hospital discharge records with a CP diagnosis. CP incidence was estimated based on data from a Polish hospital morbidity study carried out by the National Institute of Public Health. Data were collected between 2009 – 2017 and covered 4623 records. The final sample was consisted of 2818 patients (41 females, 2777 males) with first-time hospitalizations for CP. **Results:**. The average annual incidence of CP in Poland was estimated to be from 1 to 4 per 100,000 in southwestern regions with the large number of coal miners in Poland. The median and mean age were 66 and 66 years, respectively. Higher CP incidence were observed in people with place of residence in more urban than rural regions of Poland (88 % vs 12 %). Annual rates of CP incidence were decreasing but not significantly in this study. **Conclusions:** Hospital discharge records may be an interesting and important element of epidemiological studies on CP.