

LITERATURA

- Adler G.S., 1978, *Measuring the quality of medical care*, „New England Journal of Medicine” 298: 574.
- Albert X., Bayo A., Alfonso J.L., Cortina P., Corella D., 1996, *The effectiveness of health systems in influencing avoidable mortality: a study in Valencia, Spain, 1975-90*. „Journal of Epidemiology and Community Health” 50: 320–325.
- Andreev E., Nolte E., Shkolnikov V., Varavikova E., McKee M., 2003, *The evolving pattern of avoidable mortality in Russia*. „International Journal of Epidemiology” 32: 437–446.
- Arriaga E., 1984, *Measuring and explaining the change in life expectancies*, „Demography” 21: 83–96.
- Bandosz P., O’Flaherty M., Drygas W., Rutkowski M., Koziarek J., Wyrzykowski B., Bennett K., Zdrojewski T., Capewell S., 2012, *Decline in mortality from coronary heart disease in Poland after socioeconomic transformation: modelling study*, „British Medical Journal” 344 (doi: 10.1136/bmj.d8136).
- Becker N, Boyle P, 1997, *Decline in mortality from testicular cancer in West Germany after reunification*, „Lancet” 350: 744.
- Bojan F., Hajdu P., Belicza E., 1991, *Avoidable mortality. Is it an indicator of quality of medical care in eastern European countries?*, „Quality Assurance in Health Care” 3(3): 191–203.
- Boys R.J., Forster D.P., Jozan P., 1991, *Mortality from causes amenable and non-amenable to medical care: The experience of Eastern Europe*, „British Medical Journal” 303: 879–883.
- Bunker J.P., 2001, *The role of medical care in contributing to health improvements within societies*, „International Journal of Epidemiology” 30: 1260–1263.
- Burcin B., 2009, *Avoidable Mortality in the Czech Republic in 1990–2006*, „Czech Demography” 3: 64–79. http://www.czso.cz/eng/redakce.nsf/i/czech_demography_2009_vol_3 (dostęp 12.09. 2011).
- Charlton J.R. Hartley R.M., Silver R., Holland W.W., 1983, *Geographical variation in mortality from conditions amenable to medical intervention in England and Wales*, „Lancet” 1: 691–696.
- Charlton J.R., Velez R., 1986, *Some international comparisons of mortality amenable to medical intervention*, „British Medical Journal” 292: 295–301.
- Chiang C.L., 1972, *On constructing current life tables*, „Journal of the American Statistical Association”, 67 (339): 538–541.
- Cieślak M. (red.), 1992, *Demografia. Metody analizy i prognozowania*. PWN, Warszawa.
- Cochrane A.L., St Leger A.S., Moore F., 1978, *Health service “input” and mortality “output” in developed countries*, „Journal of Epidemiology and Community Health” 32: 200–205.
- Colgrove J., 2002, *The McKeown thesis: a historical controversy and its enduring influence*, „American Journal of Public Health” 92: 725–729.
- Gaizauskiene A., Gurevicius R., 1995, *Avoidable mortality in Lithuania*, „Journal of Epidemiology and Community Health” 49: 281–284.
- Gaizauskiene A., Westerling R., 1995, *A comparison of avoidable mortality in Lithuania and Sweden, 1971–1990*, „International Journal of Epidemiology” 24: 1124–1131.
- Gay J.G., Paris V., Devaux M., de Looper M., 2011, *Mortality Amenable to Health Care in 31 OECD Countries: Estimates and Methodological Issues*, OECD Health Working Papers, no. 55, OECD Publishing.
- Holland W.W., 1986, *The ‘avoidable death’ guide to Europe*. „Health Policy” 6: 115–117.
- Holland W.W., 1988, *European Community Atlas of Avoidable Death*, Commission of the European Communities Health Services Research Series No. 1, Oxford University Press, Oxford.
- Holland W.W., 1991, *European Community Atlas of Avoidable Death*, Commission of the European Communities Health Services Research Series No. 3, Oxford University Press, Oxford.
- Holland W.W., 1993, *European Community Atlas of Avoidable Death*, Commission of the European Communities Health Services Research Series No. 6, Oxford University Press, Oxford.

- Holland W.W., 1997, European Community Atlas of Avoidable Death 1985-89, Commission of the European Communities Health Services Research Series No. 9, Oxford University Press, Oxford.
- Humblett P.C., Lagasse R., Levàque A., 2000, *Trends in Belgian premature avoidable deaths over a 20 year period.* „Journal of Epidemiology and Community Health” 54: 687–691.
- Koupilová I., McKee M., Holčik, J., 1998, *Neonatal mortality in the Czech Republic during the transition.* „Health Policy” 46: 43–52.
- Mackenbach J.P., Looman C, Kunst A.E, Habbema D., van der Maas P.J, 1988a, *Post-1950 Mortality Trends and Medical Care: Gains in Life Expectancy Due to Declines in Mortality from Conditions Amenable to Medical interventions in the Netherlands,* „Social Science and Medicine” 27(9): 889–894.
- Mackenbach J.P., Looman C, Kunst A.E, Habbema .D., van der Maas P.J, 1988b, *Regional differences in decline of mortality from selected conditions: The Netherlands, 1969–1984,* „International Journal of Epidemiology” 17: 821–829.
- Mackenbach J.P., Bouvier-Colle MH, Jouglu E., 1990, *“Avoidable” mortality and health services: a review of aggregate data studies.* „Journal of Epidemiology and Community Health” 44(2): 106–111.
- Mackenbach J.P., 1996, *The contribution of medical care to mortality decline: McKeown Revisited,* „Journal of Clinical Epidemiology” 49: 1207–1213.
- Marshall S.W., Kawachi I., Pearce N., Borman B., 1993, *Social class differences in mortality from diseases amenable to medical intervention in New Zealand.* „International Journal of Epidemiology” 22: 255–261.
- Newey C., Nolte E., McKee M., Mossialos E., 2004, *Avoidable Mortality in the Enlarged European Union,* Institut des Sciences de la Santé, Paris.
- Nolte E., Brand A., Koupilova I., McKee M., 2000, *Neonatal and postneonatal mortality in Germany since unification.* „Journal of Epidemiology and Community Health” 54: 84–90.
- Nolte E., Scholz R., Shkolnikov V., McKee M., 2002, *The Contribution of Medical Care to Changing Life Expectancy in Germany and Poland,* „Social Science and Medicine” 55: 1905–1921.
- Nolte E., McKee M., 2004, *Does Health Care Save Lives? Avoidable Mortality Revisited,* Nuffield Trust, London.
- Nolte E., McKee M., 2008, *Measuring the Health of Nations: Updating an Earlier Analysis,* „Health Affairs” 27(1): 58–71.
- Nolte E., McKee M., 2011, *Variations in amenable mortality--trends in 16 high-income nations,* „Health Policy” 103(1): 47–52.
- OECD, 2002, *Measuring up Improving health system performance in OECD countries,* Organisation for Economic Co-Operation and Development (OECD), Paris.
- OECD, 2010, *Health care systems' efficiency and policy settings,* Organisation for Economic Co-Operation and Development (OECD), Paris.
- Page A., Tobias M., Glover J., Wright C., Hetzel D., Fisher E., 2006, *Australian and New Zealand Atlas of Avoidable Mortality,* University of Adelaide, Adelaide.
- Poikolainen K., Eskola J., 1986, *The effect of health services on mortality: Decline in death rates from amenable and non-amenable causes in Finland, 1969–1981.* „Lancet” 327: 199–202.
- Poikolainen K., Eskola J., 1988, *Health services resources and their relation to mortality from causes amenable to health care intervention: a cross-national study.* „International Journal of Epidemiology” 17: 86–89.
- Rutstein D.D., Berenberg W., Chalmers T.C., Child C.G., Fishman A.P., Perrin E.B., 1976, *Measuring the Quality of Medical Care. A Clinical Method,* „New England Journal of Medicine” 294(11): 582–588.
- Rustein D.D., Berenberg W., Chalmers T.C., Fishman A.P., Perrin E.B., Zuidema G.D., 1980, *Measuring the quality of medical care: second revision of tables of indexes.* „New England Journal of Medicine” 302: 1146.
- Shkolnikov V, McKee M, Leon D.A., 2001, *Changes in life expectancy in Russia in the mid-1990s.* „Lancet” 357: 917–921.

- Simonato L., Ballard T., Bellini P., Winkelmann R., 1998, *Avoidable mortality in Europe 1955–1994: a plea for prevention*, „Journal of Epidemiology and Community Health” 52: 624–630.
- Tobias M., Jackson G., 2001. *Avoidable Mortality in New Zealand, 1981–199*, „Australian and New Zealand Journal of Public Health” 25 (1): 12–20.
- Tobias M., 2009, *Amenable Mortality: Concept and Application*, [http://www.health.gov.au/internet/safety/publishing.nsf/Content/com-pres_2009-MeaMortWscn/\\$](http://www.health.gov.au/internet/safety/publishing.nsf/Content/com-pres_2009-MeaMortWscn/$) (dostęp 4.01.2011).
- Tobias M., Yeh L., 2009, *How much does health care contribute to health gain and to health inequality? Trends in amenable mortality in New Zealand 1981–2004*, „Australian and New Zealand of Public Health” 33(1): 70–78.
- Velkova A., Wolleswinkel-van den Bosch J.H., Mackenbach J.P., 1997, *The East-West life expectancy gap: differences in mortality from conditions amenable to medical intervention*, „International Journal of Epidemiology” 26 (1): 75–84.
- Westerling R., 1992, *Avoidable causes of death in Sweden 1974–85*, „International Journal for Quality in Health Care” 4(4): 319–328.
- Westerling R., Gullberg A., Rosen M., 1996, *Socioeconomic differences in ‘avoidable’ mortality in Sweden, 1986–1990*, „International Journal of Epidemiology” 25: 560–567.
- WHO, 2000, *The World Health Report 2000. Health Systems: Improving performance*, World Health Organisation, Geneva.
- WHO, 2011, *Health for all database (HFA-DB)*, WHO Regional Office for Europe, Copenhagen. <http://www.euro.who.int/hfadb> (data dostępu 2.09.2011).
- Wróblewska W., 2006, *Analiza umieralności w Polsce w latach 1970–2003. Dekompozycja zmian w oczekiwany trwaniu życia noworodka*, „Studia Demograficzne” 1(149): 28–48.
- Zatoński W.A., McMichael A.J., Powles J.P., 1998, *Ecological study of reasons for sharp decline in mortality from ischaemic heart disease in Poland since 1991*. „British Medical Journal” 316: 1047–1051.
- Zatoński W.A., Willett W., 2005, *Changes in dietary fat and declining coronary heart disease in Poland: Population based study*, British Medical Journal” 331: 187–188.

AVOIDABLE MORTALITY – THE CONCEPT AND EMPIRICAL STUDY FOR POLAND

ABSTRACT

The study is divided into theoretical and empirical part. First part presents the concept of avoidable mortality (Rutstein et al. 1976) including its further development and modifications. The objective of the second part is to examine the potential impact in medical care on changing population health in Poland from 1999 to 2008. We used the concept of avoidable mortality divided into three groups: treatable disease, preventable diseases and ischemic heart disease (Newey et al. 2004). We calculated the contribution of changes in mortality from these conditions to changes in life expectancy. The analyses were based on temporary life expectancy between birth and age 75 (e_{0-75}). Chiang’s method was used for constructing abridged life tables, and Arriaga’s method was used for decomposition. Mortality data were obtained from the WHO mortality files using ICD-10th revision (WHO 2011).

The findings indicate that changes in the health care system were associated with improvements in life expectancy, between birth and age 75, in Poland. The avoidable mortality decreased considerably from 1999 to 2008, especially due to causes avoidable through improved treatment and medical care (amenable). Although the improvement there is still potential for further progress in avoidable deaths in Poland.

Key words: avoidable mortality, temporary life expectancy, Poland