

Project Title:

**Socioeconomic status and health behaviors as determinants of wellbeing of chronic patients:
an analysis of their trends in Italy**

Name, address, affiliation, phone and email of principal investigator:

Giovanni Crea

Dipartimento di Scienze Economiche e Aziendali,

Università degli Studi di Pavia,

via San Felice, 5/7,

27100 Pavia

Email: giovanni.crea@unipv.it

Tel. 0039 345 1825447

Name and affiliation of other researchers in the team:

Valentina Beretta

Dipartimento di Scienze Economiche e Aziendali,

Università degli Studi di Pavia,

via San Felice, 5/7,

27100 Pavia

Email: valentina.beretta02@universitadipavia.it

Tel. 0039 349 6992624

Executive summary

The rise of chronic conditions forces healthcare systems to continuously operate in a context of increasing costs [1]–[3]. In Italy, more than 2 million people live in conditions of disability, which testify a radical change in the epidemiological conditions of Italians in the last years [4]. Due to the relevance of the topic, understanding the patterns of determinants of chronic conditions is fundamental for the development of health policies able to support the sustainability of the health systems.

Socioeconomic status and health behaviors are among the determinants of the wellbeing of chronic patients, and, therefore, the analysis of their correlations helps the understanding of the critical issues of patients' wellbeing [5], [6]. At this aim, this study first analyzes the wellbeing concentration of chronic patients among socioeconomics classes and health behaviors and, subsequently, it analyzes the determinants of the concentration in the Italian context. In order to perform the analysis, the survey “Indagine Multiscopo sulle Famiglie, Condizioni di salute e ricorso ai servizi sanitari” from the Istat Multiscopo survey, will be analyzed for the years 1994, 1999-2000, 2004-2005, and 2012-2013.

The Wagstaff and van Doorslaer concentration index [7], with the correction proposed by Erreygers [8], will be computed for each available year, to overcome the limitations of the conventional inequality measures in handling qualitative data. In particular, consistently with previous studies [9], the principal component analysis (PCA) will be implemented in order to derive an index for wealth, by generating scoring weights for each variable [10]. Then, the Erreygers index will be decomposed into the contributions of socioeconomic status and health behaviors which helps identify the drivers of inequality among wellbeing of chronic patients [11].

This study will explore the differences among chronic patients' wellbeing in terms of socioeconomics conditions and health behaviors, in order to detect gender, age, income and lifestyle effects.

Keywords: chronic conditions, health determinants, socioeconomic status, wellbeing

References

- [1] R. B. Rothenberg and J. P. Kaplan, “CHRONIC DISEASE IN THE 1990s1,” *Mortality*, no. Figure 1, 1990.
- [2] R. Horton, “The neglected epidemic of chronic disease,” *Lancet*, vol. 366, no. 9496. p. 1514, 2005.
- [3] K. Andersen and V. Gudnason, “[Chronic non-communicable diseases: a global epidemic of the 21st century],” *Laeknabladid*, vol. 98, no. 11, pp. 591–595, 2012.
- [4] M. Massucci *et al.*, “LA RIABILITAZIONE DELLE PERSONE IN CONDIZIONI DI CRONICITA’E DISABILITA’,” 2010.
- [5] R. G. Wilkinson, “Socioeconomic determinants of health. Health inequalities: relative or absolute material standards?,” *BMJ*, vol. 314, no. 7080, pp. 591–595, 1997.
- [6] A. Steptoe and J. Wardle, “Health behaviour, risk awareness and emotional well-being in students from Eastern Europe and Western Europe,” *Soc. Sci. Med.*, vol. 53, no. 12, pp. 1621–1630, 2001.
- [7] A. Wagstaff and E. Van Doorslaer, “Equity in health care finance and delivery,” *Handb. Heal. Econ.*, vol. 1, pp. 1803–1862, 2000.
- [8] G. Erreygers, “Correcting the concentration index,” *J. Health Econ.*, vol. 28, no. 2, pp. 504–515, 2009.
- [9] C. Di Novi, R. Jacobs, and M. Migheli, “Smoking Inequality across Genders and Socio-economic Classes. Evidence from Longitudinal Italian Data,” University of Turin, 2018.
- [10] S. Vyas and L. Kumaranayake, “Constructing socio-economic status indices: how to use principal components analysis,” *Health Policy Plan.*, vol. 21, no. 6, pp. 459–468, 2006.
- [11] E. van Doorslaer, X. Koolman, and A. M. Jones, “Explaining income- related inequalities in doctor utilisation in Europe,” *Health Econ.*, vol. 13, no. 7, pp. 629–647, 2004.