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Healthcare utilisation among the Belgian elderly in relation to their socio-economic status

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ABSTRACT

Objectives: To analyse the association between healthcare utilisation of elderly persons (65 and over) in Belgium in terms of contacts with GP or specialist and the socio-economic indicators household income, highest educational level within the household, and housing tenure.

Methods: A cross-sectional study based on 4494 non-institutionalised elderly participants in the Belgian Health Interview Surveys of 2001 and 2004. Socio-economic gradients in contacts (yes or no) with a GP or specialist were explored, based on the socio-behavioural model of Andersen, a conceptual framework that includes the most important determinants of healthcare utilisation. Three multivariate models were constructed using multiple logistic regression.

Results: After adjustment for age, sex, health status (self-assessed health, functional restrictions, and comorbidity), region, and living situation, initial differences in contacts with a GP and specialist between the different socio-economic groups disappeared among the elderly. On the other hand, contacts with a specialist remain dependent on SES in the younger population.

Conclusions: Adjustment for the determinants of healthcare utilisation among the Belgian elderly nullified the socio-economic gradients in contacts with a GP and specialist that initially existed. The results point to a potential link with the Belgian social and health policy.

1. Introduction

Socio-economic equity and an equitable healthcare system represent high priorities in 'mature' welfare states. Within this philosophy, establishing and maintaining socio-economic differences in healthcare utilisation should be prevented. In an equitable society, healthcare utilisation should reflect individual differences in health status and needs, and should not depend on socio-economic status (SES).

Socio-economic differences in contacts with a general practitioner (GP) and a specialist have been observed in many countries. Lower socio-economic groups more often contact a GP and less often a specialist than expected based on their health status [1,2]. Within the general Belgian population, there is no socio-economic gradient in the contacts with GPs, and lower socio-economic groups are less likely to see a specialist than higher socio-economic groups (SES groups), after adjustment for health status [3].

Socio-economic differences in healthcare utilisation have generally much less been explored within the elderly part of the populations. Some European studies suggest

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that elderly persons with a lower SES are more likely to contact a GP, even after controlling for health status, and less likely to contact a specialist than the elderly in higher socio-economic groups [4–7]. Broese van Groenou [8] took the position that higher healthcare utilisation (including contacts with GP and specialist) among the elderly is mainly determined by their health status and not by their SES. There is, therefore, inconsistent evidence of socio-economic differences in healthcare utilisation after adjustment for health status.

An affordable healthcare system has always been an important element in the Belgian health policy and has led to the successive development of instruments to protect the weakest SES groups, including the elderly. Two important, potentially powerful, socially inspired measures to decrease financial barriers for specified vulnerable groups, including pensioners and low-income groups, were developed and introduced by the Federal Government: a 'preferential treatment' (laid down in 1963 as the WIGW statute, extended in 1997 and 2007, and then called the OMNIO statute), and a 'maximum bill' (MAB, introduced in 2002), which puts an upper limit (dependent on the net taxable household income) to the total amount of yearly co-payments for healthcare [9].

The question whether inequalities in healthcare utilisation according to SES within the elderly part of the Belgian population do exist or not has not convincingly been answered yet. The objective of this study was therefore to explore socio-economic inequities in healthcare utilisation by the elderly in Belgium, and to check whether the Belgian health policy succeeds in guaranteeing an equal distribution of healthcare among elderly persons with equal needs. The potential associations between healthcare utilisation in terms of contacts with GPs and specialists, and SES (household income, highest level of education within the household, and housing tenure) were analysed for that purpose.

2. Material and methods

This cross-sectional study is based on pooled 2001 and 2004 data of the Belgian Health Interview Survey (HIS) [10] in which a representative sample of the Belgian population of 15 years and over was interviewed about their lifestyle, health status, and healthcare utilisation. Statistical analysis was restricted to the non-institutionalised elderly (65 and over; $n = 4494$). Proxy interviews were excluded, because the variable 'self-assessed health', a crucial dimension of health status, was not available in these cases.

Healthcare utilisation measures used were having at least one contact with a GP and having at least one contact with a specialist within the last 2 months prior to the interview. To see a specialist, the Belgian healthcare system does not require a referral from a GP.

Our models of healthcare utilisation were based on the socio-behavioural model of Andersen [11], a conceptual framework that includes the most important determinants of healthcare utilisation. These comprise predisposing factors indicating the propensity for utilising healthcare (age, sex, educational level), enabling factors that influence the ability to use care and/or facilitate access to healthcare and the quantity of care received (partner status, income, housing tenure, environmental determinants), and need factors determined by the health status of an individual.

We included age, sex, and highest educational level within the household as predisposing factors. Healthcare utilisation increases with age and is more widespread among females [12]. Enabling factors considered in this study were living situation, equivalent household income, housing tenure, and region. Living situation is considered an important enabling factor of healthcare utilisation [13,14]. Huber et al. [15] indicated that living alone is significantly associated with having contacts with a GP, after controlling for education, income, health insurance, and health status. Healthcare utilisation is also associated with environmental determinants such as the availability and accessibility of services, which can vary geographically. In Belgium, the density of practicing GPs and specialists varies between the regions [16].

Prevention, vaccination, and social care belong to the responsibilities of the regional governments, while other aspects of the Belgian health policy are covered by the federal authorities. This situation potentially leads to differences in healthcare utilisation. This study, however, did not allow to explore this aspect further. Nevertheless, 'region' is included as an environmental factor, and adjustment is made for demographic and socio-economic differences between the regions.

Since health status is a multidimensional concept, we included several health indicators as need factors, covering different health domains: self-assessed health, functional restrictions, and comorbidity. 'Self-assessed health' was evaluated from the answers to the question 'How is your health in general?', which were recoded into two categories: 'good to very good health' and 'moderate, bad to very bad health'. The indicator 'functional restrictions' was based on ten items measuring functional limitations and limitations with activities of daily living (ADL): walking distance, transfer in and out of bed, transfer in and out of a seat or chair, dressing and undressing, washing hands and face, cutting and eating food, going to the toilet on ones own, suffering from urinary incontinence, hearing the TV at an acceptable volume, and recognising a person at a distance of 4 m. The indicator consists of three categories: not functionally restricted, moderately restricted (one activity), and severely restricted (two or more activities). The indicator 'comorbidity' is based on the occurrence of 13 chronic diseases in the past year, grouped into six clusters: asthma or chronic bronchitis/other chronic lung disease (cluster 1), serious heart disease or heart attack (cluster 2), diabetes (cluster 3), Parkinson's disease, epilepsy, dizziness with falling, or stroke and its consequences (cluster 4), cancer (cluster 5), and serious back problems, arthrosis, arthritis, or other forms of chronic rheumatism (cluster 6). The indicator consists of three categories: no chronic diseases, chronic disease(s) belonging to one cluster, and chronic diseases belonging to more than one cluster.

Equivalent household income, highest level of education within the household, and housing tenure were included as SES indicators. A higher household income increases financial accessibility of public and private healthcare services and is therefore a crucial enabling fac-