Original Research

Predictors of medication use in the Roma population in Spain: a population-based national study

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ABSTRACT

Objectives: To describe the prevalence of prescribed and self-medicated use of medication in the Spanish Roma population, and identify the associated factors.

Study design: Descriptive cross-sectional study.

Methods: Data from the first National Health Survey conducted on the Roma population in Spain were used. The sample comprised 1000 Spanish Roma adults of both sexes aged ≥16 years. Answers (yes/no) to the question, 'In the last two weeks have you taken the following medicines [in reference to a list of medicines that might be used by the population] and were they prescribed for you by a doctor?' were used to ascertain 'medication use'. 'Self-medication' referred to use of these medicines without medical prescription. Using multivariate logistic regression models, odds ratios (ORs) with 95% confidence intervals (CIs) were calculated to identify associated factors.

Results: The overall prevalence of medication use in the Roma population for both sexes was 69.1%, and 38.7% was self-medicated. Females reported higher use of medication than males (75.1% vs 62.3%); however, self-medication was higher among males. Analgesics and antipyretics were used most often (35.8%). Among males, the variables that were independently and significantly associated with a higher probability of medication use were: age; negative perception of health; presence of chronic disease (OR 2.81; 95% CI 1.67—4.73); and medical visits (OR 4.51; 95% CI 2.54—8.01). The variables were the same among females, except for age.

Conclusion: A high percentage of the Spanish Roma population use medication, and a significant proportion of them self-medicate. The presence of chronic diseases, a negative perception of health and medical consultations were associated with increased use of medication in the study population.

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Introduction

The Roma population represents one of the largest ethnic groups in Europe. In Spain, it is the main ethnic group, numbering approximately 970,000 people (i.e. 2% of the total population). Their centuries-long presence in this region, as in the rest of Europe, has been marked by social exclusion, discrimination and poverty, which has had a negative effect on their health status.[1,2] Previous studies have reported that health indicators are poorer for the Roma community compared with the mainstream population [i.e. lower life expectancy, higher child mortality and overall morbidity, higher rates of chronic diseases, less healthy lifestyles (e.g. poorer nutrition habits, higher rates of accidents and deficient use of healthcare services, particularly when prevention is concerned)],[3,4] and, in some cases, are worse in comparison with groups who are in a more vulnerable social and economic situation.[5] These specific health inequalities, deemed unnecessary, avoidable and unfair,[6] are not only a product of socioeconomic variables, but also represent a specific impact of particular cultural characteristics, as well as the barriers the Roma community experience when accessing healthcare services and resources, and the resulting ineffective use.[7,8]

The importance of medication as a determinant of the health of the population is an aspect that calls for special attention by public health, primarily to establish whether usage patterns reflect rational use by the population.[9]

Studies have been undertaken to examine the use of medication by certain minorities, especially immigrants,[10,11] in Spain; however, very little evidence is available regarding the use of medication by the Roma community. It is known that the Spanish Roma community makes greater use of medication than the general population.[12] However, to the authors' knowledge, no studies have been undertaken, to date, with the primary objective of describing the pattern of medication use in this group.

As such, this study aimed to describe the prevalence of medication use in the Spanish Roma population, and identify the associated factors, according to data from the first National Health Survey conducted on the Roma population in Spain.

Methods

The Ministry of Health and Consumer Affairs and the organization Fundación Secretariado Gitano undertook the first National Health Survey on the Roma population in Spain,[12] which was designed as per the methodology of the Spanish National Health Surveys.[13,14]

The target population was composed entirely of Spanish Roma individuals. The study sample consisted of 1500 non-institutionalized individuals of both sexes and any age, and was selected using a multistage strategy, stratified by clusters, with proportional random selection of the primary sampling units (towns) and secondary units (household); the final units (individuals) were selected by random route methods and sex- and age-based quotas. Face-to-face interviews were conducted in the respondents' homes between September and November 2006. Nearly all of the interviewers were working directly or indirectly with the Roma population. The survey was designed to collect information on the household as a whole, Roma minors (aged 0—15 years) and Roma adults (aged ≥16 years). The questionnaire included questions regarding health status, lifestyle and access to health services, as well as questions designed to collect demographic information about the household and its members.

The estimated sample size of 1500 individuals would allow an error of 2.56, for a confidence interval (CI) of 95.5% and p = q = 50, when drawing inferences for the results across the entire population.[12]

Using data from the National Health Survey on the Roma population in Spain, an epidemiological study with a descriptive cross-sectional design was undertaken, using individualized secondary data from 1000 adults (aged ≥16 years) of both sexes.

The dichotomous dependent variables chosen for the study were the answers 'yes' or 'no' to the question: 'In the last two weeks have you taken the following medicines and were they prescribed for you by a doctor?', referring to a list of drugs that might typically be used by the population (listed in Table 1). The dependent variable 'self-medication' was defined as the use of these medicines without medical prescription. The independent variables collected in the study were the primary sociodemographic characteristics of the population, namely age, education level (categorized as 'no formal education', 'junior/high school' and 'higher education') and occupational status (categorized as 'employed', 'unemployed' and 'inactive' including housewives and pensioners). The study also analysed comorbidity variables (any type of chronic disease) and variables related to lifestyle, which were: consumption of any alcoholic beverages in the two weeks preceding the survey, smoking (both defined as dichotomous variables), number of hours of sleep per day, leisure-time physical activity ('moderate', 'light' or 'no physical activity') and body mass index (BMI, calculated using self-reported weight and height). Self-rated health was analysed as a dichotomous variable ('very good and good', 'fair/poor and very poor'). In order to assess the use of healthcare resources, subjects were asked whether they had seen a doctor during the past four weeks, and asked about hospitalizations (defined as a minimum of one night in the preceding 12 months) and use of emergency services in the preceding 12 months; all were defined as dichotomous variables.

Statistical analysis

For the purpose of data analysis, patterns of medication use among the Spanish Roma population were identified using descriptive statistics of the principal variables, calculating the prevalence of total use of medication (defined as both prescribed by a doctor and self-medicated).

For bivariate comparison of proportions, Pearson's Chi-squared test or Fisher's exact test was applied, with values of $P < 0.05$ taken to indicate significance.

To estimate the independent effect of each covariate on total medication use, the corresponding adjusted odds ratios (ORs) and 95% CIs were calculated using multivariate logistic regression analysis. This analysis was conducted using