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TRENDS IN SELF-RATED HEALTH IN SPAIN

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ABSTRACT

Improving health-related quality of life among persons with diabetes is a public health goal. This study sought to assess trends in self-rated “fair and poor health” among Spanish adults with diabetes, and to identify factors associated with “fair and poor health” using data from all five National Health Surveys conducted from 1993 to 2003. The most relevant finding of this study is that, among Spanish adults with diabetes, prevalence of “fair or poor health” is more than double that of persons without diabetes and that overall prevalence of “fair or poor health” in Spain did not vary during the decade 1993-2003 (71.2% to 70.5%). The variables associated with an increased risk of self-rated “fair or poor health”, were: age 54-64 years (OR 1.5), ≥ 65 (OR 2.1); presence of comorbidity, (OR 4.3); female gender (OR 1.2); lower educational level (OR 1.7); obesity (OR 1.3); and no physical activity (OR 1.6).
RESEARCH DESIGN AND METHODS

Improving health-related quality of life among persons with diabetes is a public health goal (1). The US Healthy People 2010 includes self-rated health as one of three surveillance tools that can be used to measure health-related quality of life (2).

Self-rated health status is a useful indicator of a population’s overall well-being because lower ratings of health status have been associated with increased mortality and morbidity (3).

This study sought to assess trends in self-rated “fair”, “poor” or “very poor” health among Spanish adults with diabetes, and to identify factors associated with “fair” “poor” or “very poor” health.

This study was undertaken using individualized data drawn from all five National Health Surveys (NHSs) conducted from 1993 to 2003 on a representative sample of Spain’s population, i.e., 1993 (N=20,880), 1995 (N=6,400), 1997 (N=6,400), 2001 (N=21,034) and 2003 (N=21,650). The NHS used multi-stage and stratified cluster sampling. Details of NHS methodology are described elsewhere (4,5).

Subjects were classified as diabetes sufferers if they answered affirmatively to either or both of the following questions: “Has your doctor told you that you are currently suffering from diabetes?”, and/or, “Have you taken any medication to treat diabetes in the last two weeks?”.

Information regarding self-rated health was obtained from the question “Over the last twelve months, would you say that in general your health has been very good, good, fair, poor or very poor?” Persons who answered “fair”, “poor” or “very poor” were defined as having “fair or poor health status”. Non responders (<0.3% in all the NSHs used) and those who reported “don't know” were excluded from the analysis.

We estimated age- and sex-adjusted “fair or poor health status” prevalences, directly standardized to the sex and age distribution of the general Spanish adult population in 2003 (6), for each survey and for adults with and without diabetes.

Poisson regression analysis was used: to assess the trend in “fair or poor health status” during the period 1993-2003; and to compare prevalences between diabetes vs. non-diabetes sufferers and within each group, by year of survey, age group and gender (7).

Multivariate logistic regression models were generated so that, using “fair or poor health status” as the dependent variable, we could ascertain which sociodemographic and health-related variables were independently associated in the 2003 NHS.

Estimates were made using the “svy” functions of the STATA program. Statistical significance was set at $p < 0.05$ ($p$ values are two-tailed).

RESULTS

Among Spanish adults, age- and sex-adjusted prevalence of diabetes increased from 4.6% to 6% in the period from 1993 to 2003.

Overall, the adjusted prevalence of adult diabetes sufferers who reported having “fair or poor health” registered no significant change over the study period, going from 71.2% in 1993 to 70.5% in 2003 (Table 1). Moreover, these prevalences were significantly higher among diabetic versus non-diabetic subjects across both sexes and all age groups for all the years analyzed. The greatest difference in year 2003 was found among the youngest age group (16-44 years), in
which 56.1% of those with diabetes reported “fair or poor health” compared with only 17.2% of those without the disease.
Analysis by gender revealed that in almost all the years studied and for all age groups, a significantly higher proportion of females reported having “fair or poor health” than did males. Prevalence of “fair or poor health” was shown by all surveys to increase significantly with age, for men and women alike.

Among diabetes sufferers aged 65 years and over, the trend from 1993 to 2003 showed a significant reduction in prevalence among men (down from 71.9% to 63.1%), and the opposite among women (up from 76.7% to 83.4%).
The multivariate analysis showed that, in 2003, the variables that were independently and significantly associated with an increased risk of self-rated “fair or poor health”, after adjustment for all the other factors, were: age 54-64 years (OR 1.5), ≥ 65 (OR 2.1); presence of comorbidity (High blood pressure and/or heart and/or respiratory chronic disease), (OR 4.3); female gender (OR 1.2); lower educational level (OR 1.7); obesity, defined as a BMI≥30, (OR 1.3); and no physical activity (OR 1.6).

CONCLUSIONS

The most relevant finding of this study is that, among Spanish adults with diabetes, prevalence of “fair or poor health” is more than double that of persons without diabetes, a result that is in line with those previously reported by other authors (8-11). These differences in self-rated health are greatest among subjects aged 16-44 years (56.1% vs. 17.2%). In our opinion, factors found by other authors to be linked to a worse quality of life among diabetes sufferers, i.e., diabetes type I, use of insulin, and disease duration, may serve to explain the larger difference observed among the younger age group (8,11).

As described in the USA for the period 1996-2005, overall prevalence of “fair or poor health” in Spain did not vary during the decade 1993-2003, though other authors have found improvements (8,9). We feel that changes in the prevalences of comorbid conditions in general, and mental disorders in particular (anxiety/depression), may account for the age- and gender-related variations observed by us in the prevalence trends (10-13).

Arguably, the main limitations of this study are that: all the information obtained within the interviews may be subject to recall error or the tendency of interviewees to give socially desirable responses; and data on relevant variables, such as duration, type of diabetes or insulin use, are not collected by the Spanish National Health Survey and may act as confounding factors in certain associations.

Accordingly, the lack of improvement in self-rated health among Spanish adults with diabetes calls for urgent implementation of health-promotion, prevention and diabetes-management strategies aimed at enhancing the quality of life of such persons.
REFERENCES


Table 1. Age and sex adjusted prevalences of self-rate “fair”, “poor” or “very poor” health among adults (age >15 years) with and without diabetes included in the Spanish National Health surveys conducted from 1993 to 2003

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Age and sex adjusted prevalences were estimated according to the 2003 Spanish population (6).

Poisson regression analysis was used to assess the trend 1993-2003 and to compare prevalences.