ABSTRACT. Background and aims: Some studies have reported a decline in disability prevalence in older people, but few data were available for Europe, especially for France. Our aim was to study the 10-year evolution of disability prevalence in elderly community dwellers and related factors. Methods: Two generations of subjects aged 75 to 84, participants in the PAQUID (Personnes Âgées QUInd) cohort were compared. The first generation included 1496 subjects (born between 1903 and 1912) and the second 910 subjects (born between 1913 and 1922). Three domains of disability were assessed: mobility, Activities of Daily Living (ADL) and Instrumental ADL (IADL). Logistic regressions were used to explain the effect of generation on disability, controlling for sociodemographic characteristics, impairment, lifestyle, medical care, and social support. Results: The percentage of subjects fully independent increased from 13.5 to 23.3% (p<0.001). A large decline in disability prevalence independent of the controlled factors was observed for mobility in both genders [Odds Ratio for the second generation (OR_G2)=0.48, 95% CI 0.38-0.60]. When adjusting for age and education, the risk of IADL disability was significantly lower in women in the second generation (OR_G2 0.61, 95% CI 0.49-0.77), and the generation effect was strengthened when adjusting for the other covariates, but unchanged in men (OR_G2 1.09, 95% CI 0.81-1.48). There was no significant change for ADL. Conclusions: A significant decline in disability prevalence was observed over 10 years, which was not explained by the selected covariates. These aggregate changes differed by gender, education, and the domain of disability considered. (Aging Clin Exp Res 2005; 17: 229-235)

INTRODUCTION
In recent decades, life expectancy has made considerable progress, but the increasing survival of older persons may lead to an increase in the number of people in bad health and/or living with a poor quality of life. Improvement in life expectancy cannot therefore be considered without taking into account the evolution of disability prevalence, which constitutes a “leading” indicator of health changes in the elderly population (1). In the 1970s and early 1980s, the proportion of disabled Americans increased, as did the proportion of subjects suffering from potentially disabling chronic conditions such as diabetes or circulatory diseases (2). Subsequently, the prevalence of chronic disability in aged people in the National Long Term Surveys has not ceased to decline since 1982 (3), and an acceleration in the rate of improvement was even observed until 1999 despite a low level of disability in 1994 (4). In the 1982-1996 National Health Interview Surveys, a decline in disability prevalence by 17% was observed, especially concentrated within the 5-year period 1982-1986 (5).

Unlike the situation in the United States, few data on disability trends are available in Europe and especially in France. Moreover, as highlighted by Freedman et al. (6), only “few studies explicitly have focused on trends in disparities for major demographic and socioeconomic groups” such as gender and education. Thus, the overall improvement ob-
served in US studies may mask great inequalities. Targeting groups of older persons who did not fully benefit from this improvement should be a public health priority. Furthermore, previous studies on disability trends have used different indicators and thresholds for defining disability, and comparisons are thus limited. It is also important to determine which degree of improvement is achieved at each level of disability, since corresponding needs differ. Lastly, little is known about the impact of medical, societal and behavioral changes, which may explain some of the observed trends in disability prevalence.

This paper describes the 10-year evolution of the prevalence of disability for mobility, basic Activities of Daily Living (ADL), and Instrumental ADL (IADL), by gender and educational level, in two generations of French elderly community dwellers. We also examine whether the generation effect may be explained by changes in sociodemographic factors, life-style, or the prevalence of impairments, the relationship of which with disability is well established (7), and/or by changes in the implementation or use of medical care and social support.

METHODS

The population studied is a sub-sample of the PAQUID (Personnes Agées QUID) cohort, started in 1988. This prospective epidemiological study included at baseline 3777 community dwellers aged 65 years and over. Participants were randomly recruited from the electoral rolls, and selection was stratified by sex, age and size of urban unit, throughout Gironde and Dordogne, two administrative areas of south-west France. The initial participation rate was 68% and the sample was representative of the age-sex distribution of the elderly community dwellers of the area (8). The general methodology has been described previously (7). The data collected at home by a psychologist at each follow-up included sociodemographic variables, assessment of disability and health status. When the participant was unable to answer, a proxy respondent was used: 95.1% of the answers were given by the participant without help, 2.8% by the participant with help of a proxy, and 2.1% by a proxy.

This research was approved by the Ethics Committee of the CHU (Centre Hospitalo-Universitaire) of Bordeaux, according to the principles embodied in the Declaration of Helsinki.

In this paper, two generations of participants, aged 75 to 84 years, were compared. The procedure of selection is shown in Figure 1. The first generation (G1) included 1496 participants born between 1903 and 1912, aged 75 to 84 years at baseline. The second (G2) included 910 community dwellers aged 75 to 84 years, visited at the 10-year follow-up (T10) and thus born between 1913 and 1922. G2 participants had the same sex distribution as the community-dwelling population aged 75-84 at the 1999 census in Gironde and Dordogne, but the proportion of older subjects (80-84 years old) was higher in our sample (39.3% of G2 subjects vs 29.8% in the general population).

Three domains of disability were evaluated. The Katz scale (ADL) evaluated ability for bathing, dressing, toileting, transferring and eating (9). Incontinence, which is an impairment rather than a disability, was not analyzed here (10).

The Lawton and Brody scale (IADL) included telephoning, shopping, using transport, managing medication,