

RE:THE HEALTH STATUS OF NONPARTICIPANTS IN A POPULATION-BASED HEALTH STUDY: THE HORDALAND HEALTH STUDY

In their interesting article in which they compared the health of participants with that of nonparticipants in a population-based survey in Norway, Knudsen et al. (1) were able to link their eligible population sample with the Norwegian national registry of disability pensions, which includes information about diagnoses. They found that the likelihood of receiving a disability pension was higher among nonparticipants, and this was especially true for persons receiving disability pensions as a result of mental disorders. One of the most important features of their study was that the use of a registry-based outcome provided information on health status several years after inception, and the authors claim that “this was the first study to obtain information about nonparticipation bias using a longitudinal design” (1, p. 1310).

This is not exactly correct. In a study published in the *American Journal of Epidemiology* in 2001 (2), we used data collected for the target population to examine personal, socioeconomic, and health factors, both at the beginning of the study and thereafter, in association with participation in the French Electricité de France–Gaz de France (GAZEL) cohort, which began in 1989 (3). Data on both participants and nonparticipants were available to us from study inception in 1989 (and before the recruitment of the cohort for absenteeism and incident cancers, as data from the company for the years preceding the inception of GAZEL were made available to us) to 1994 or to 1996, depending to the data source.

Among other findings, we showed that participation was strongly associated with socioeconomic position, and that during follow-up, participation was negatively associated with several groups of diseases, especially psychiatric disorders and diseases associated with alcohol consumption. The risk of upper respiratory, digestive tract, and lung cancers during follow-up was higher among nonparticipants. During follow-up, the mortality rate in men was higher among nonparticipants, especially for deaths resulting from alcohol-related diseases. Among men, but not women, diseases caused by alcohol, smoking, or dangerous behaviors were the primary causes of the health differences

observed between participants and nonparticipants. Overall, the most important determinants of participation were cultural and lifestyle factors.

It seems to us that these results support the conclusions of Knudsen et al. (1) and provide more specific insights into the potential biases that can occur from differences in socioeconomic position and the health status of participants and nonparticipants in epidemiologic surveys.

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