

On the Use of the SF-36 Questionnaire to Measure Health-Related Quality of Life in Smokers

To the Editor: We read with interest the recently published original article by Cayuela et al¹ and would like to remark upon several aspects concerning the context for applying the SF-36 questionnaire on health-related quality of life (HRQL). We would also like to mention some considerations about its advantages as a preventative measure for quitting smoking early.

The study shows that male smokers older than 30 years, with no more than elementary studies, married, in active employment, and otherwise healthy, show deterioration in HRQL when compared with nonsmokers in their community and with the male population of Spain. The homogeneity of the sample is a strong point of the study by Cayuela et al¹ and the results are consistent with those obtained by other authors when the sample is divided into levels of smoking.² However, in a survey we performed of a representative sample of the general population of Valladolid, including female smokers with a different profile to male smokers, our group confirmed that, after adjusting for confounding sociodemographic variables, the short-term differences found in HRQL for smokers compared to nonsmokers and the general population were unremarkable.³ The differences between the 2 studies might be explained by the fact that the target population and the degree of exposure to smoking were different.

However, irrespective of the method used by Cayuela et al,¹ the interpretation of HRQL deterioration has certain limitations. Firstly, the pernicious short-term effect of smoking on mental and physical health is not easy to demonstrate. Occupational, sociocultural, and neuropsychological factors closely linked to smoking influence smoking behavior and should be considered as factors that confound perceptions of health. Moreover, dose-dependent biological effects arising from physical or psychological dependence on nicotine, or from toxicity, with general inhibitory and stimulating effects that are both simultaneous and conflicting,

cannot provide a simple and balanced explanation for short-term HRQL changes in all smokers, owing to the vast number of substances contained in tobacco smoke. Added to these 2 considerations is the fact that the SF-36 is a generic questionnaire.⁴ Although it has been useful for generally assessing the long-term effects of smoking on cardiorespiratory disease in Spanish patients,^{5,6} it is not specific enough for studying the direct and overall pernicious effect of smoking. A complementary, specific questionnaire would be necessary to better identify HRQL deterioration.

In the light of the study by Cayuela et al,¹ however, the SF-36 could be used to follow HRQL over time, in order to persuade the smoker to quit smoking, or to check early health recovery after quitting. Nevertheless, this hypothesis presents other methodological limitations.

In summary, although we believe the contribution of Cayuela et al¹ to be of interest, it should be set in the context described above. The short-term biological effects of smoking are conflicting and consequently difficult to detect. Using the SF-36 questionnaire on a homogeneous, defined population can be useful, but its psychometric properties should be taken into consideration for clinical or epidemiological application. When applying the SF-36 questionnaire to assess the pernicious effects of smoking on HRQL, only the long-term effects that come once the disease has appeared, or the effects in heavy smokers, are easily detected.

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