

LETTERS

QUESTION CONTEXT, ETHNIC DIFFERENCE, AND SELF-RATED HEALTH

Lee and Schwarz conducted a study on the effect of the allocation of questionnaire on self-rated health (SRH) by considering language and race/ethnicity.¹ They used two questionnaires including items on SRH: the Health and Retirement Study (HRS) and the National Health Interview Survey (NHIS). The HRS places SRH before any health-related questions and NHIS places SRH after health limitation questions in combination with health-related questions. To clarify the effect of allocation of questionnaire, they checked the difference in the percentage of good SRH between HRS and NHIS by the stratification on language and race/ethnicity. In addition to this univariate analysis, which showed significant difference between the groups, multivariate logistics regression analysis was adopted to check the predictive power of SRH with special reference to language and race/ethnicity.

I have some concerns regarding their study. First, HRS and NHIS were composed of different questionnaire items, and controlling or adjusting variables for the calculation of odds ratios (ORs) of SRH for subsequent mortality

were different. Although they listed ORs (95% confidence interval) of good SRH in HRS and NHIS, direct comparison of ORs is difficult in this situation. I speculate that the authors intended that the difference of statistical test would indirectly explain the effect of the allocation of questionnaire on SRH. I recommend to included language and race/ethnicity simultaneously to logistic models with other independent (controlling) variables. As they stratified language and race/ethnicity for logistic regression analysis, ORs of language and race/ethnicity cannot be calculated in their study.

Second, they selected mortality to check the effect of SRH on the biological events. Morbidity is a more sensitive indicator than mortality on health, and there is a recent report that SRH is a significant predictor of onset of total and specific chronic diseases.² In this longitudinal study, race/ethnicity was also included as an independent variable, and hazard ratio of Hispanic against White was 0.76, which was significantly decreased. The protective effect of Hispanic race for morbidity should be handled with caution, because Lee and Schwarz reported in their Table 1 that the percentage of good SRH in Hispanics was 26.0% lower than that in Whites.

Although I deeply understand the importance of their study, the study design should be reconsidered to elucidate the effect of the allocation of questionnaire on SRH. ■

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References

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LEE AND SCHWARZ RESPOND

We agree with Kawada that the ideal data set for our study would include a confounder-free experiment that asks the self-rated health (SRH) question in different contexts (or order) and follows study participants over time to assess subsequent morbidity and mortality. This data set does not exist. As an approximation with minimal methodological noncomparability, we used the National Health Interview Survey linked with the National Death Index and the Health and Retirement Study (HRS) to examine SRH context effects on health outcome predictions.

The main focus of stratified logit models is the interaction between SRH contexts and interview language on mortality prediction examined indirectly because of data limitations. The purpose of these models is not to compare odds ratios between surveys but to examine whether SRH is a significant predictor. If this proven utility of SRH holds universally, SRH should be significant for all groups in both surveys. This was not the case for Spanish-interviewed Hispanics in HRS which asked SRH without a health context. Figure 1 may clarify this point because it includes subsequent mortality rates calculated separately for baseline-year respondents in each response category of SRH. If SRH is a good predictor, one would expect the rates to increase from the "excellent" to "poor" SRH category. Echoing the logit models, all groups in both surveys show this increasing pattern *except* for Spanish-interviewed Hispanics in HRS, for whom mortality rates did not differ by SRH report. We analyzed models suggested by Kawada and found that Hispanic ethnicity was associated with lower mortality rates in both surveys consistent with the literature.¹

In a related experimental study, we examined how variations of SRH context affect the relationship between SRH and current

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