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"Breast cancer screening behaviors : an experimental approach."

Abstract:

This paper aims to understand breast cancer screening behaviors with respect to psychological characteristics that can influence individual decision-making process such as risk and time preferences. We generate data from the laboratory to assess the role of time preference, risk aversion, expected longevity, overconfidence and other preventive health behaviors on the decision to undergo breast cancer screening. Our starting point is Picone et al. (2004)'s model of demand for medical test for early detection of cancer. Their estimation of the model using the Health and Retirement survey found its limits in the questions available, which neither provided beliefs nor fully appropriate measures of preferences. Our contribution is threefold. First, we elicited actual beliefs on health behaviors and especially on breast cancer screening in the laboratory. Second, we estimate this model with relevant measures of risk and time preferences toward health issues as opposed to the usual monetary (and therefore incentivized) measures. Our data also allows to test for the relationship between health and monetary measures of risk and time preferences. To test for the predictive validity of these measures, we analyze how they correlate to primary (as smoking cessation) and secondary (as cancer screening) preventive behaviors. To our knowledge, the effects of these preferences have never been disentangled between the two categories of preventive health behaviors. We predict that time and risk preferences differently influence primary and secondary preventive behaviors. This third contribution mainly lies in improving the methodology concerning time and risk preferences elicitation procedures, dealing with the trade-off of domain specificity and an easily implementable procedure in general population surveys. The French national cancer screening program uptake rate has reached a ceiling of around 52% of the target population since 2010. Rethinking public health policies in order to increase the participation requires the use of new knowledge and survey technics that our results would intend to provide.