Dutch researchers have peered into the minds and wallets of a group of men aged 55 to 75 years to determine what they are willing to trade for a reduced risk of prostate cancer–related death or to avoid unnecessary procedures and treatment.

Men with more education had a lower probability of opting for prostate cancer screening. Furthermore, in aggregate, the men were willing to lose 2% of risk reduction in mortality related to prostate cancer or to pay on average €188 (in 2010 Euros; equivalent to $245 in 2010 US dollars) annually for a 10% reduced risk of unnecessary biopsy or treatment.

“Physicians should be aware that men, particularly those with less education, may overestimate the benefit of prostate cancer screening, due to numeracy problems...and that therefore tailored prostate cancer screening programs may result in a better-informed shared decision-making for screening,” wrote Esther W. de Bekker-Grob, PhD, a researcher and health economist at Erasmus Medical Center, Rotterdam, the Netherlands, and her colleagues (de Bekker-Grob EW, et al. Br J Cancer. 2013 Jan 29 [Epub ahead of print]).

The team formulated 2 versions of a questionnaire containing 16 choice sets on prostate cancer screening. These were based on the prostate cancer screening literature and interviews with 8 prostate cancer experts. A total of 459 men (average age, 63.3 years) from southwest Holland responded to the questionnaires.

The researchers divided the men into 3 groups:

- Most men in the first group had a lower educational level, did not have anxiety or depression, and were willing to pay for prostate cancer screening
- Most men in the second group also had a lower educational level and did not have anxiety or depression, but they were not willing to pay for screening
- The third group largely comprised men who had a higher educational level, had anxiety or depression, and were not willing to pay for prostate cancer screening.

The men in all 3 groups indicated that a reduction in the risk of developing prostate cancer, a reduction in the risk of unnecessary treatment and biopsy, and costs are all important.

Those in the first group had a preference for annual or biennial screening, while the second group did not have a preference for shorter or for longer screening intervals, and members of the third group preferred screening every 2 years versus screening every 4 years.

Willingness to Pay

When all 3 groups were combined, the men were willing to pay an average cost of:

- €188 (or $245 US) for a 10% reduction in prostate cancer–related death
- €33 ($43 US) annually for a 10% reduction in the risk of an unnecessary prostate biopsy
- €38 ($50 US) annually for a 10% decrease in the risk of undergoing unnecessary treatment
- €87 ($115 US) annually to access a prostate cancer screening program with a 2-year interval rather than a 4-year interval.

In addition, the men were willing to exchange 2% of the reduced risk of prostate cancer mortality for a 10% reduction in unnecessary treatment.

The men were also willing to trade 1.8% of their reduced mortality risk for a 10% reduction in the probability of an unnecessary biopsy, and a 4.6% reduced risk of prostate cancer–related death for a 2-year screening interval rather than a 4-year screening interval.

“Increasing knowledge on overdiagnosis and overtreatment, especially for men with lower educational levels, is warranted to prevent unrealistic expectations from prostate cancer screening,” she continued.

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