

Difficulties in Communicating Information about Screening for Lung Cancer

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Mass screening by low-dose computed tomography (LDCT) reduces lung cancer mortality rates in high-risk populations. The screening test is recommended by North American and European medical experts. While I welcome the decision to offer LDCT screening in Israel, I am concerned by the difficulties to communicate its risks and benefits to participants to obtain their informed consent.

Ethical considerations of screening began in the 1980s when it was realized that different types of doctor-patient encounters require different strengths of evidence for the efficacy of interventions. When encounters are initiated by symptomatic patients, doctors are committed to do their best. They may even act on the basis of incomplete evidence for their intervention, and certainly they do not guarantee better health. In encounters that are initiated by doctors who solicit asymptomatic persons for screening, doctors are implicitly committed to guarantee better health and no harm.

Such a guarantee is appropriate in screening for some, but not all, cancers. Accordingly, guidelines for screening appear to discern between two types of recommendations. The first is for screening for breast, cervical, colorectal, and endo-

metrial cancer. The recommendation is made directly to consumers through the news media, and uses the term should (e.g., "women aged ... should undergo regular mammography") [1]. The second type of recommendations, for prostate and lung cancer, is for doctors and calls for shared decision making with patients (e.g., "whether to be screened ... after receiving information about the benefits and risks") [1].

In the case of PSA screening for prostate cancer, the call for shared decision making is due to the controversy about its efficacy. In the case of LDCT screening for lung cancer, the call for shared decision making is due to the false-positive rates that may cause distress and unnecessary further radiation and invasive surgical procedures. In 2016, as many as 11–26% of the LDCT screened persons were false-positives. Approximately 5 to 10 individuals per 1000 screened with benign conditions had minor and major invasive follow-up procedures, respectively; and in every 1000 patients undergoing invasive follow-up procedures, 11 died and 52 had major complications [2]. Harm-to-benefit considerations have precluded LDCT screening for lung cancer of low-risk individuals. In high-risk patients, recommendations for LDCT screening require that the uncertainties related to the potential benefits and risks be shared with subjects who are offered screening.

But, how can doctors share these uncertainties? Different formats of presentation of data on screening are interpreted differently depending on patient knowledge, beliefs, and preference to undergo screening [3]. A lung cancer screening

decision aid has been shown to improve knowledge on screening-related benefits and risks for primary care patients. Their overall preferences remained similar: 54% preferred screening before viewing the decision aid and 50% after. However, as many as 28% of participants changed their preference to or away from screening after viewing [4].

The responsibility to inform patients about the benefits and risks of screening for lung cancer by LDCT should be shouldered by doctors. It would appear to me that as long as the confirmation of a screen-detected lung cancer may require surgical interventions or repeated exposure to computed tomography, eliciting patient preferences will remain the main challenge in the implementation of LDCT screening.

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There are years that ask questions and years that answer.

Zora Neale Hurston (1891–1960), American author, anthropologist, and filmmaker

We don't see things as they are, we see them as we are.

Angela Anaís Juana Antolina Rosa Edelmirá Nin y Culmell (1903–1977), known professionally as Anaís Nin, French-Cuban American diarist, essayist, novelist, and writer of short stories and erotica