

Would Digital Rectal Examination in Over-45s Make Sense?

In the context of gynecological cancer screening, digital examination of the rectum is a standard procedure in the over=45s. This has been the law since 1977. Women have a far higher awareness of screening than men. 34% of annual participants since 1990 are women; men only account for 14% of participants. Does this result in a sex-specific difference in the prognosis and survival after treatment for rectal cancer owing to early detection? Rectal cancers account for 20–25% of colorectal cancers, which can be diagnosed by means of preventive colonoscopy—and this includes precursor lesions.

This would have to translate into a benefit in women, whose uptake of statutory cancer screening is double than it men.

However, the early findings of colonoscopy screening for bowel cancer do not support this assumption. As many cancers were detected in women aged 55–59 as in men (13% vs 12.2%). The same is true for adenomas (21% vs 19.3%). The age group of 55–59 year olds was chosen because these women are most likely to attend gynecological cancer screening.

Colonoscopy screenings after the 55th year of life (90% of incident cases are diagnosed after this age) are attended by only 2.6% of persons (aged 55–84) who are legally entitled to participate.

The estimated number of cancers for this cohort, for early-stage cancers and advanced adenomas, was slightly higher in men than in women. Half of these findings apply to persons aged 60–70 years. Very few women attend gynecological screenings in this decade of life.

This raises the question of whether rectal-digital examinations in the context of gynecological cancer screening should be re-evaluated 33 years after introduction.

By contrast, it is certainly of note that preventive colonoscopy is being evaluated as early as 8 years after its introduction.

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Complete and Comprehensible Data Are Required

In order to evaluate the data regarding projections in the context of colonoscopy screening, critical appraisal and comparison with other preventive measures is needed. Such data can be calculated from the authors’

models with very little extra effort, as a similar publication by the same authors shows (1). It would therefore be helpful if the authors could provide the following information:

- In addition to the number of estimated prevented cancers, or those detected early, what is needed as a reference value is the total number of cases of bowel cancer for the individual age groups and time periods.
- Mention should be made of the estimated data that would apply to a situation without colonoscopy screening in Germany.
- The data should be presented with constant reference values and time periods. Thus, it should be reported how many persons the prevented cancer cases correspond to for each time period.
- The data should be presented with comprehensible reference values. For example: “As a result of colonoscopy screening, every year (over a period of 10 years) XX persons per 1000 population who are entitled to be screened receive a diagnosis of bowel cancer and XX die from their cancer. Without colonoscopy screening, XX per 1000 population would die each year (every 10 years).
- In order to enable easier classification, the total number of cancer cases in each category should be listed.
- It should be discussed why no projections can be made regarding possible complications.

In general I would suggest that *Deutsches Ärzteblatt* makes it a rule to present study results within a context that rules out misunderstandings and misinterpretations and that enables readers to appraise data easily. Standards are available for communicating the results of cancer screening programs, and these can be adapted for scientific studies (2, 3).

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