Review: personalised risk communication may improve uptake of screening tests more than general risk communication


Q Do personalised risk communication (PRC) strategies about participation in health screening programmes increase screening uptake compared with general risk communication (GRC) strategies?

METHODS


Study selection and assessment: randomised controlled trials (RCTs) that included participants facing real life decisions about whether to be screened (an investigation done by a health professional); compared PRC with GRC; and assessed cognitive, affective, behavioural, health status, or economic outcomes. Exclusion criteria: studies of mass communication or military, school, or prison interventions. Quality of individual studies was assessed using the Jadad scale and a second method score.

Outcome: uptake of screening test.

MAIN RESULTS

13 trials met the selection criteria. Studies addressed screening for breast cancer (10 trials), cervical cancer (1 trial), prostate cancer (1 trial), colorectal cancer (1 trial), and high cholesterol (2 trials). Overall quality of individual studies was good (mean score 15 out of 22). Types of PRC were a numerical risk or risk score; risk categorised as, for example, low, medium, or high; or a listing of personal risk factors without an estimate of risk level.

Meta-analysis was done using a random effects model. Overall, PRC (written, spoken, or visually presented) increased uptake of screening tests compared with GRC (table). However, meta-analysis of 3 trials of PRC using numerical risk scores (n = 4381) and 2 trials of PRC using risk categorisation (n = 1031) found no difference between PRC and GRC for test uptake; PRC using personal risk factor lists improved test uptake more than GRC (table). Separate analyses by type of screening for mammography, Pap smears, prostate cancer screening, and colorectal screening showed no difference between PRC and GRC. Analyses for cholesterol screening showed increased uptake with PRC, but this result should be viewed with caution because of heterogeneity among studies.

CONCLUSIONS

Personalised risk communication may increase uptake of health related screening more than general risk communication.

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<tr>
<th>Personalised risk communication (PRC) vs general risk communication (GRC) for improving uptake of screening tests*</th>
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<tbody>
<tr>
<td><strong>Type of PRC</strong></td>
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<td>All (10 trials, n = 7465)</td>
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<td>Personal risk factor list (5 trials, n = 2053)</td>
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*Abbreviations defined in glossary; PRC event rate, RBI, NNT, and CI calculated from data in article.

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