Clinician advice, an interactive computer program, and motivational counselling increased smoking cessation in teens


Clinical impact ratings GP/FP/Primary care ****** Paediatrics ******

Q Does an intervention of brief clinician advice during routine medical visits, an interactive computer program, and brief motivational counselling reduce smoking in adolescent smokers and non-smokers over the long term?

METHODS

Does an intervention of brief clinician advice during routine medical visits, an interactive computer program, and brief motivational counselling reduce smoking in adolescent smokers and non-smokers over the long term?

MAIN RESULTS

The table shows the results.

CONCLUSIONS

A smoking cessation intervention comprising brief clinician advice during routine medical visits, an interactive computer program, and brief motivational counselling increased quitting in adolescent smokers at 2 years. The intervention reduced smoking onset in non-smokers at 1 year but not at 2 years.

A modified version of this abstract appears in Evidence-Based Nursing.

**Teen reach smoking cessation intervention v diet intervention (control) for smoking abstinence in adolescents**

<table>
<thead>
<tr>
<th>Baseline smoking status</th>
<th>Follow up</th>
<th>Event rates</th>
<th>RBI (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All participants</td>
<td>1 year</td>
<td>77% vs 73%</td>
<td>6.1% (2 to 10)</td>
<td>23 (14 to 67)</td>
</tr>
<tr>
<td></td>
<td>2 years</td>
<td>73% vs 69%</td>
<td>6.2% (1 to 11)</td>
<td>24 (14 to 58)</td>
</tr>
<tr>
<td>Smokers (smoked in previous 30 d)</td>
<td>1 year</td>
<td>33% vs 22%</td>
<td>38% (4 to 77)</td>
<td>12 (6 to 114)</td>
</tr>
<tr>
<td></td>
<td>2 years</td>
<td>30% vs 21%</td>
<td>39% (2 to 84)</td>
<td>13 (6 to 304)</td>
</tr>
<tr>
<td>Non-smokers</td>
<td>1 year</td>
<td>91% vs 88%</td>
<td>3.4% (0.1 to 6)</td>
<td>34 (20 to 949)</td>
</tr>
<tr>
<td></td>
<td>2 years</td>
<td>86% vs 83%</td>
<td>3.5% (0.5 to 7)</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

*Abbreviations defined in glossary; RBI, NNT, and CI calculated from control event rate and odds ratio (CI) in article. Based on total n = 2524 with multiple imputation for missing values.

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Source of funding: National Cancer Institute.

Commentary

We know from systematic reviews that brief advice from a clinician and tailored self help interventions increase, by a modest amount, the number of adults who stop smoking compared with those who receive no intervention. The study of teenage smokers by Hollis et al provides encouraging evidence that brief interventions have similar effects in this age group. The study is distinctive in that it included interventions that encouraged abstinence in current smokers as well as prevention in current non-smokers.

Applying the results of the study by Hollis et al directly to clinical practice is not straightforward. Research staff delivered all aspects of the intervention other than the clinician’s brief advice. As the authors acknowledge, most healthcare organisations are not set up to easily incorporate this package into routine clinical care. A cost effectiveness analysis would have provided helpful additional information for organisations considering whether to invest in such an intervention.

It is not possible to disaggregate the effects of clinician advice, motivational interviewing by a counsellor, and computerised self help in this study. Although the study does not directly support an effect of brief advice alone (and indeed only 41% of the intervention group recalled receiving clinician advice), we can be confident from other published evidence and systematic reviews that advice is worthwhile in encouraging smokers to stop. The study by Hollis et al provides less evidence that brief clinical interventions discourage non-smokers from starting. Based on current evidence, busy clinicians might justifiably prioritise their preventive efforts to focus on helping current smokers to quit.

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