Does sending a home safety questionnaire increase recruitment to an injury prevention trial? A randomised controlled trial

D Kendrick, M Watson, M Dewey, A J Woods

Few publications have examined maximising recruitment to randomised controlled trials in primary care. Mass mailings have been used as a recruitment strategy, but have had low response rates. Short messages in mass mailings have achieved better recruitment rates than longer messages. Within a primary care injury prevention trial we assessed response and recruitment rates to the trial using mass mailing, comparing an invitation to participate with and without a home safety questionnaire. We considered that sending a questionnaire may reduce the recruitment rate because of the time and effort needed for completion or because questions on safety behaviours and previous injury may be perceived as intrusive; alternatively we considered that the questionnaire may raise awareness of risk of injury and through this might increase the recruitment rate.

Methods
The study population comprised the first 2397 families randomised for a randomised controlled trial of the effectiveness of health visitor advice and low cost safety equipment. Families with children under 5 years on the caseloads of participating health visitors working in general practices in deprived areas (Townsend score >0) were eligible to take part. Families living in areas where safety equipment was already provided as part of a local programme, those with children on the child protection register and those whom the health visitor felt may be distressed by an invitation to take part in the study (for example, recent child death) were excluded. Families were randomised to receive an invitation to participate, the questionnaire including the consent form, the study information leaflet and a freepost envelope or to receive an invitation to participate, the questionnaire raised awareness of the risk of injury and increased recruitment through this might increase the recruitment rate.

A total of 2397 families were randomised, 1203 to receive the questionnaire with the invitation to take part and 1194 to receive the invitation without the questionnaire. Four invitations were returned as not known at that address and were excluded from the analysis. In total 425 (17.8%) invitations were returned after the first mailing and 374 (15.6%) families agreed to participate in the study. The response and recruitment rates for the two methods are shown in table 1.

Discussion
Including a safety questionnaire increased the response and recruitment rates for an injury prevention trial. Previous work suggests that people choose to participate in trials for a variety of reasons including the extent to which they feel physically threatened by their illness. It is possible that completion of the safety questionnaire raised awareness of the risk of injury and increased recruitment through doing this. Even if the data collected on the questionnaire are not required for each participant, for example for assessing baseline characteristics, researchers may wish to include a questionnaire to increase recruitment rates. This has to be weighed against the increased costs of questionnaire production and postage. A further advantage of including a questionnaire is that some families will complete it but

Table 1 Response and recruitment rates for the invitations with and without the safety questionnaire

<table>
<thead>
<tr>
<th>Method</th>
<th>Responded to invitation (%)</th>
<th>RR (95% CI)</th>
<th>Recruited to trial (%)</th>
<th>RR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invite with questionnaire (n=1203)</td>
<td>259 (21.5)</td>
<td>1.54 (1.29, 1.84)</td>
<td>217 (18.0)</td>
<td>1.37 (1.13, 1.65)</td>
</tr>
<tr>
<td>Invite without questionnaire (n=1190)</td>
<td>166 (13.9)</td>
<td>χ²=23.53, 1 df, p&lt;0.001</td>
<td>157 (13.2)</td>
<td>χ²=10.65, 1 df, p=0.001</td>
</tr>
</tbody>
</table>
choose not to participate, so differences between participants and non-participants can be examined, which is useful when considering the generalisability of the results of the study.

Funding: NHS Executive Trent
Conflicts of interest: none.


