Does requesting sensitive information on postal questionnaires have an impact on response rates? A randomised controlled trial in the south west of England

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The context of the trial reported here was a two phase community based observational study to ascertain the prevalence of various chronic conditions.¹ The first phase entailed a postal screening questionnaire; the second involved clinical examinations of screen positives and a sample of screen negatives. To maximise compliance with the second phase, it was considered valuable to obtain subjects' telephone numbers from the initial questionnaire. However, there was concern that requesting this information might reduce the questionnaire response rate. Potential sensitivity to divulging this information is clear in a community setting where in the experience of ourselves and others the proportion of people who are ex-directory is around 25% (David Mouncey, personal communication).

Previous randomised controlled trials on optimising questionnaire response rates have focused on either financial incentives or the apparent mailing source.² Although a number have investigated the impact of asking sensitive questions (for example, about ethnic group^{2 3} or explicit questions regarding cancer⁴), the impact of requesting telephone numbers has not previously been investigated.

Methods and results

The trial took place during the pilot for the main study,¹ in a single general practice located in a commuter town near Bristol. Two, age-sex stratified, computer generated random samples each of 351 people aged 35 and over registered with the practice were sent a postal questionnaire enquiring about various chronic conditions, as well as basic sociodemographic information such as employment status and ethnic group. One (pre-determined) sample was sent a version of the questionnaire that ended with a request for daytime and evening telephone numbers; for the other, the questionnaire was identical apart from the omission of this request.

Overall, 608 (87%) people responded to the questionnaire. Comparing the two arms of the trial, identical proportions responded (table 1). The difference between them is clearly not statistically significant ($\chi^2=0$). The 95% confidence intervals (CI) for the difference is from

–5% to +5%. Of the 304 who were asked for their telephone numbers and responded, 58 (19%) gave both daytime and evening numbers, 185 (61%) daytime only, 21 (7%) evening only, and 40 (13%) neither. From the original 351 sent the version of the questionnaire requesting telephone numbers, at least one number was ascertained from 264 (75%, 95% CI 71% to 80%).

Comment

To optimise response rates (reduce non-response bias) a number of strategies have been evaluated using randomised experiments. Generally, requesting sensitive information such as ethnic group or knowledge about AIDS has not influenced response rate,^{2 3 5} and even when statistical significance was reached (such as for housing tenure) the differences were very small (2%).³ In one study, explicit mention of cancer in an accompanying letter actually increased the response rate by 11%.⁴ Source of mailing, though, has been shown to be highly influential—for instance, an 18% higher response rate for an NHS organisation than an independent research unit.²

In this trial, requesting telephone numbers was both successful (the proportion overall for whom telephone numbers were not obtained equated to the proportion expected to be ex-directory) and had no influence on the response rate. This may have been helped by placing the request at the end of this (postal) questionnaire, although further experimentation would be required to show this. It remains that for the approach investigated, differences in response rate larger than 5% can be reasonably ruled out.

Neither the evidence in the literature nor the findings from this trial support the notion that the general public is excessively sensitive to potentially intrusive questions. This does not imply that researchers should be insensitive in designing questionnaires, but it is reassuring that important questions need not be withheld for fear of discouraging responses.

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Table 1 Numbers and proportions returning a questionnaire according to whether telephone numbers were requested

	Returned questionnaire (%)	Did not return questionnaire (%)	Total (%)
Telephone numbers requested	304 (87)	47 (13)	351 (100)
Telephone numbers not requested	304 (87)	47 (13)	351 (100)
Total	608	94	702

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