**Medical students’ experiences optimising follow-up in ethnically diverse, sexually active 16-24 year olds participating in the ‘Test n Treat’ feasibility trial of rapid chlamydia tests**

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**Context**

‘Test n Treat’ [1] is a NIHR funded cluster-randomised feasibility trial assessing the feasibility of conducting a future trial in FE colleges to investigate if frequent, rapid, on-site testing and same day treatment reduces chlamydia rates in sexually active male and female students aged 16-24 years.

At the outcome assessment at seven months, participants were asked to provide self-taken genitourinary samples in college and complete a questionnaire in return for £10. However, over half of participants (57%, 143/252) from three colleges did not attend for follow-up. Such attrition is problematic as it can give biased estimates of the outcome measure when data are missing not at random [2].

Under supervision from the research team, two medical students developed a method to increase the response rate. (Describing a clear process for following up non-attenders and knowing the follow-up yield is also helpful for assessing what might work in future.) Prior to conducting the research both students completed their Good Clinical Practice training.

# Project aims

1. To investigate the final response rate in obtaining samples and questionnaires from 143 trial participants who did not attend follow-up at seven months in three colleges.
2. To measure the work involved in obtaining these additional samples and questionnaires.

# Description

Of the 143 non-attenders, the mobile number for 33 was either known to be the wrong number or not functional. The remaining 110 were sent a text message with a link to the follow-up questionnaire online. This questionnaire also allowed participants to choose whether to meet a member of the research team in college to provide a sample, or to be sent a postal testing kit. Those who did not respond to the questionnaire were telephoned a maximum of twice, or texted if they preferred. (The trial steering committee agreed that this was the upper limit of appropriate contact, given participants had already received multiple text messages and a phone call to invite them to follow-up.)

If a participant answered the telephone, they were asked if they were happy to complete the questionnaire and provide a sample in college or by post. We emailed them the questionnaire if this was preferred. Those who did not want to provide a sample were given the option of answering a shortened version of the questionnaire over the phone. If a participant did not answer the phone or respond by text message after calling twice, we considered them to be lost to follow-up.

Participants who agreed to provide samples, were met in college to collect samples, or posted testing kits. On the days we visited the colleges, we also texted the other non-attenders, informing them that we would be there. Participants who did not attend their prearranged college meeting were considered lost to follow-up.

Ten days after sending out the postal testing kits, we called those with outstanding samples or questionnaires up to twice more, and completed the questionnaire over the telephone if possible. Participants who provided samples were texted their results and were given £10. Those with infections were followed up by the health advisor.

Numbers of participants followed up were recorded before and after the project. All communication with participants and the time taken was documented to assess the work involved.

**Outcomes**

We obtained data, in the form of a questionnaire and/or a genitourinary sample, on 42 of 143 participants (29%) who did not attend follow-up at seven months in college. Table 1 shows the types of response obtained. **[Table 1 here]**

This increased the overall response rate in the three colleges from 43% (109/252) to 60% (151/252). This follow-up took 14 hours 10 minutes of medical student time spread over three weeks (contacting participants and college visits), plus support from the research team (sending the texts with questionnaires and postal testing kits). Table 2 shows the breakdown of medical student time on follow-up activities. **[Table 2 here]**

**Conclusions**

Medical students learned that persistence is required to follow up this population of ethnically diverse, sexually active teenagers, and that running clinical trials can be difficult. We had wrongly expected participants would be keen to have rapid STI tests and a £10 honorarium. However, with persistence, the methods used achieved an important increase in response rate. This reduces potential for bias and increases statistical power [3]. The increased response rate was achieved in a relatively short amount of time, and such data are crucial to inform planning for a possible future trial.

Through working on the follow-up, we had significant contact with participants from this population and developed a greater understanding of their attitudes towards sexual health. We reflected on how little some participants appeared to know about the risks and consequences of sexually transmitted infections. Such information will be invaluable in our future clinical encounters with this age group, where opportunities for education may arise. Furthermore, this first-hand experience of the challenges of engaging young people in research has taught us important lessons in developing health service provision. Delivering a new service may not be successful if there is not sufficient interest from a population, even if there are potential clinical benefits for them. This highlighted the importance of promoting new services as well as building awareness of sexually transmitted infections.

**Word Count**: 864

**Acknowledgement**. We are very grateful to students and staff at the participating FE Colleges.

**Author’s contributions**

AG, SKB, CF and FA designed the follow up study with support from PO. AG contacted the participants by phone, text, and college visits, and wrote the first draft of the manuscript to which all authors then contributed. SKB analysed participant data. All authors read and approved the final manuscript.

**Funding**

This independent research is funded by the NIHR under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number **PB-PG-1014-35007**). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR, or the Department of Health. The funding body had no role in the design of the study, the collection, analysis or interpretation of the data, or the write-up of the manuscript.

**References**

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**Table 1. Responses when attempting to obtain samples and questionnaires from 143 hard to reach trial participants who did not attend follow-up at seven months in college**

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| --- | --- |
| **Type of response** | **Percentage of participants** |
| Questionnaire only | 16% (n=23) |
| Sample only | 1% (n=1) |
| Sample and questionnaire | 13% (n=18) |
| Declined/hung up | 8% (n=12) |
| Could not contact (by phone/text/email), or did not provide sample | 62% (n=89) |

**Table 2. Breakdown of medical student time spent on follow-up activities**

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| --- | --- |
| **Follow-up activity** | **Time spent** |
| Phone calls/texts/emals | 12 hours 25 minutes |
| College visits | 1 hour 45 minutes |
| Total | 14 hours 10 minutes |