Incentives for participants in research

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Introduction

An adequate sample is required in studies to give acceptable power levels and generalizability. Timeliness is also an issue, hence a number of approaches are used to increase speed of recruitment and sample sizes, including incentives (Jerosch-Herold et al, 2011). Draper et al (2009) also noted that to do high quality research necessitates recruitment of sufficient participants if conclusions are to be drawn, and questioned the morality of conducting research with low numbers of participants. A number of studies have looked at the use of incentives in clinical trials, rather less in relation to other forms of research. Controversy still exists over the form and level of incentive, and also whether ‘reward’ is considered as incentive or compensation (Mduluza et al, 2013).

Clinical trials

Financial incentives to encourage participation in clinical trials is widespread, but controversial (Dunn et al, 2009). Martinson in Caldwell et al (2010) found that the prospect of any monetary incentive resulted in greater willingness to be contacted about a trial (the study did not measure actual recruitment to the trial). The consent rate increased from 29% to 44% ($15 incentive on completion), with smaller increases with smaller incentives. Halpen in Caldwell et al (2010) also noted that a greater payment (comparing rates between $100 and $2000) increased willingness to participate, irrespective of the prospect of being assigned the placebo.

Mduluza et al (2013) found that compensation and incentives were the main stimuli to adults’ participation in trials, the use of these doubling participation rates. Similarly, reviewing the use of incentives in 13 clinical trials, Stunkel & Grady (2011) found that in 12 of 13 studies, the financial reward was the primary motivator for healthy volunteers to take part. Other motivators included contributing to science, helping others, meeting other people and personal interest. In no study did the authors find that the money was the only incentive, although those on low incomes, with less education and who were younger valued financial rewards more (Stunkel & Grady, 2011). They also found that even where money was not the motivator, it was not refused.

Non-clinical research

Nakash et al (2006) reported that incentives were useful in improving response rates to questionnaires, with the largest effects being seen for monetary incentives. Other positive effects on response rates were short questionnaires and intensive follow up (although if overused this can be perceived as harassment). Similarly, Byrne et al (2012) reported that financial incentives resulted in
more rapid recruitment and also better compliance and retention in behavioural interventions, and increased response rates in mail surveys. When asked 30% of those agreeing to take part in a study had done so because of the financial incentive, and c 20% would not have taken part without an incentive.

Sauermann & Roach (2013) found that personalisation was more effective at increasing response rates than a lottery ($100) – 48% cf 30% increase in response rates. They also noted that the increase did not affect data quality, and that some would consider that the larger sample would mean that results would be more reliable.

**Ethical issues**

**Clinical research**

Mduzulu et al (2013) found that guardians of children to be recruited to a clinical trial felt that there should be compensation. The authors also argued that there was an ethical and legal obligation to protect and satisfy human participants – the principle of justice. Similarly, Zengeneh et al (2008) suggested proponents of incentives consider them to be a mark of respect, whilst opponents suggest they are exploitative. They also suggest that people may take part who would not otherwise, and that their judgement of risks/benefits may be affected. Dunn et al (2009) and Sauermann & Roach (2013) also noted the possibility that too great an incentive might encourage taking risks that the participant would otherwise not take, and that such risk taking may be more likely amongst lower income groups. They also noted, however, that some studies have found that high levels of compensation do not cause non-psychiatric patients to overlook risks, but question remains about those with mental impairments (although other ethical issues may be at play here in terms of informed consent). Stunkel & Grady (2011), however, found that even those motivated by money did consider risk, although the authors noted that those with a low education level and poor financial state may be unduly motivated by reward and therefore possibly were open to exploitation.

Draper et al (2009) discussed the difference between incentives and reimbursement in healthcare-related research. They suggest that incentives can be problematic, but that not to reimburse was in itself ethically problematic. They also discussed whether incentives/reimbursement acted as inducement to take part, concluding that some inducement is acceptable. The authors also noted that incentives should be available to all, thus to introduce incentives later to improve recruitment is unethical, unless the same is also offered to those who have already agreed to take part. It is also possible that those on lower incomes will be more attracted by financial incentives, possibly resulting in recruitment bias. They also note, however, that in the absence of incentives, the sample may be biased towards those who are more altruistic. They concluded that the morality of a resistible incentive is ambiguous.

**Non-clinical research**

Zangeneh et al (2008) found that the use of incentives can change the motivation to take part in studies, with potential participants being motivated by personal gain rather than wanting to help researchers.

Zangeneh et al (2008) also discussed whether use of lotteries in particular might encourage gambling, particularly amongst those less able to assess the probability of winning. This, they suggest, throws question on whether consent can be viewed as ‘informed’. There is, however, little
evidence to support the transition to problem gambling behaviour. They also note those on low incomes may be disproportionately attracted by incentives, and find it difficult to say no to participation. The authors also question whether, in the case of lotteries, all participants can be viewed as being treated equally.

Level of incentive

There are few guidelines over an acceptable level of incentive (Zangeneh et al, 2008), and no clear direction over how this should be determined, for instance through local ethics committees, local guidelines or in-line with funding (Mduluza et al, 2013).

Too large an incentive may be viewed as undue inducement, and undermine consent (6). The authors view persuasion as acceptable, but coercion unacceptable, where the former can still be viewed as free choice, but the latter not. The latter is seen as immoral. 9 also stated that the informed consent process should be free of coercion. Stunkel & Grady (2011) found that some volunteers consider financial rewards in clinical trials as compensation for time or discomfort, with some participants suggesting the level should be proportional to risk or discomfort (e.g. where bloods are taken).

Sauermann & Roach (2013) discussed the form the incentive might take and when it may be offered. Many studies have shown that sending money with a questionnaire is effective as it conveys a sense of trust in the participant, and a contingent feeling that they should reciprocate. This approach is, however, expensive, even where the incentive is small. The effectiveness of post-paid incentives or lotteries is less clear, possibly because the same norms of reciprocity do not apply. These authors also found that one large prize in a lottery was more effective at improving response rates than several small prizes, even though the chance of winning something was lower. This was related to the possibility that respondents did not know the numbers responding, and thus were not able to accurately estimate the odds of winning.

Conclusion

The use of compensation (rather than incentive) in clinical trials is well established, and some would argue morally defensible. The practice is widespread and accepted. It is important, however, that the level of incentive is not such that personal judgement is impaired. This would be particularly pertinent if students were targeted, as many are on low incomes and a financial reward may be difficult to resist.

The use of incentives in other forms of research is also widespread, taking different forms. A key issue is equity of treatment of participants and whether the incentive could be viewed as coercion. Ideally, all participants would receive the same ‘reward’, however, in most studies this is not possible within the funding level of projects. As a result, lotteries are often used. These have generally been found to be effective in increasing response rates, with one large prize being more effective than several smaller prizes. Although only one or two participants will ultimately receive the reward, arguably, all have an equal chance of winning, so all could be viewed as being treated equally. Although concerns have been raised over the use of lotteries encouraging gambling behaviours, there is little evidence to substantiate this. The level of ‘reward’ is again important, and it is suggested that incentives, whether offered to all or as part of a lottery, should be maintained at moderate levels to avoid concerns over coercion, and to make them resistible. Within a lottery, it is suggested that the value of the prize, especially if the target sample is students, should not exceed £100. The arguments over whether some would take part because of the incentive, but would not have done otherwise, is pertinent, but perhaps of less importance here where risk is usually much
Participant incentives lower (than in clinical trials) – we may wish to look more closely at instruments that have the potential to induce psychological distress. It is also notable, that it is often of direct benefit to a study to have respondents from groups that are otherwise difficult to reach.

References


