

What can research evidence tell us about:

Should All Research Participants be Paid for Participation in Research?

Key messages

- Available evidence on payment of research participants is majorly based on opinions and views of bioethicists, researchers and research participants, with little evidence supported by high-quality trials.
- We found no evidence specifically addressing payment to Key Informants; however, information can be extrapolated from payment of other research participants.
- The discussions about payment of participants are majorly about the role monetary payment plays on enrollment and follow up of research participants and the participants' benefits from the study.
- The reasons against payment of research participants revolve around undue inducement to join the study and concealment of information by study participants which might increase a participants' exposure to unnecessary risk. However, many authors do not agree with these.
- In the event the research participant has to be paid, there is a need to address whether the amount being paid is just enough to avoid extortion and or undue inducement.
- The discussions between payment or not are still ongoing; however, the decision to take would require a careful weighing of the reasons on both sides of the divide.

Where did this Rapid Response come from?

This document was created in response to a specific question from a policy maker in Uganda in 2019.

It was prepared by the Center for Rapid Evidence Synthesis (ACRES), at the Uganda country node of the Regional East African Community Health (REACH) Policy Initiative.

+ Included:

- **Key findings** from research
- **Considerations about the relevance** of this research for health system decisions in Uganda

✗ Not included:

- Recommendations
- Detailed descriptions



Summary

Background:

There is a split of opinion among the bioethicists and researchers on whether research participants need to be paid for participation in research. The payment is typically in terms of compensation for time spent by a participant on a study related activity and or reimbursement for expenses incurred. However, once payment has been agreed upon, there are no clear guidelines of how much is enough to avoid undue inducement or exploitation that might expose the participants to unnecessary risks.

Rapid Response Question:

Should Research Participants be paid for Participating in a Research study and what are the effects of the payment on the Research process and participants?

Findings:

Opinions for and against the need for- and or the amount of payment of research participants in a study can be divided into effects on individuals and or the research process. There is paucity of evidence pertaining to payment of Key Informants, however evidence from payment of other research participants can be extrapolated to them.

The reasons for paying research participants have centered mostly around the benefits obtained from the research by the participants and its impact on the enrollment of participants into the study. Below are the reasons in support for payment of research participants, however there have been a few rebutals against them;

- | | |
|---|---|
| <ul style="list-style-type: none">* Research participants- Respect of participants- Incetivising research participation- Expanding earning options- Distribution of burdens and benefits- Defferentiating between research and care- A transaction- Clears the participant feeling that they are being exploited | <ul style="list-style-type: none">* Research- Achieving enrollment targets- Ease of followup of participants- More inclusive enrolment- Participant retention and cooperation |
|---|---|

The reasons forwarded against payment of research participants revolve around undue inducement and concealing of information that might expose the research participants to unnecessary risks . The reasons against payment include;

- | | |
|--|---|
| <ul style="list-style-type: none">* Research participants- Undue inducement- New drug abuse among drug users- Creates a feeling that participants are commodities that can be bought and therefore bound to stick to research participation- Undermines altruistic intentions for research participation | <ul style="list-style-type: none">* Research- Undermine process of informed consent- Concealing or misrepresentation of information- Increases the cost of conducting research |
|--|---|

However, a good number of individuals involved in this discussion have pushed back against these reasons in efforts to explain why payment is necessary. .

In the event that a research participant should be paid, there is inadequate guidance to how much is sufficient. The following points have however been suggested as guidance;

- Paying a fair wage to participants
- Establishing a minimum pay for participation in research
- Payment based on available alternative sources of income
- Paying more to those who donot stand to benefit directly from the research

Some of the opinions have suggested that it is possible to establish a balance between paying and not paying the research participants for participation in research depending on the degree of risk. In studies with minimal, it might be considered ethical to pay research participants, but in studies with more than minimal risk, payment for research might be considered to represent an undue influence.

Conclusion:

There are a lot of reasons pro and against payment, with some suggesting reaching a balance between the two. The decision would require a careful weighing of the discussions on both sides of the divide.

Background

The three ethical principles for research among human subjects are; Justice, Respect for persons and non-maleficence and or beneficence. These have guided research from the time of the Belmont Report, and have resulted in the protection of human subjects. Payment of research participants started as far back as the yellow fever trials (1901) and the Syphilis trails (1932-1972), however its guidelines have changed over time to protect human participants from exploitation and unnecessary risks from the research studies.

The debate about the need for- and amount of- payment of research participants has split opinions of researchers and bioethicists. Some researchers and bioethicists perceive it as completely unethical while others note that it is look at it as necessary for research [1]. Payment in research can be regarded as reimbursement for different expenses incurred by the research subject as a result of participation in research, or compensation for time spent while on research, and can either be as cash or its equivalent in kind. Payment could also be used as an incentive for individuals to participate in a research study [2]. Basing on this, some bioethicists find it fit to compensate each and every participant in research with the inclusion of key informants who, historically, haven't always been compensated for their time in research. However, other bioethicists and researchers argue that payment might cause undue inducement for participation in high risk research.

Therefore, Uganda National Council of Science and Technology requested for a rapid response brief about the potential impacts of payment for research participants on both the research participants and the research at large.

This rapid response brief, therefore, summarizes the reasons why research participants need to be paid (reasons for payment), and the potential effects that payment has on the research participants and the research at large (reasons against payment).

Summary of findings

In this rapid response brief, we have summarized the different reasons for and against payment, and also give the possible effects of payment. This evidence is majorly obtained from expert opinion pieces, qualitative studies including; focus group discussions, key informant interviews, and cross-sectional studies. Most of the evidence provided is subjective in nature, as there was paucity of studies conducted with objectively measured outcomes.

Most of the studies and opinions come from the developed countries, however the concept of payment for research is a universal phenomenon. These can, thus, be used to inform decisions in a low- and middle-countries, but with caution because the amounts used for payment often differ significantly in the two contexts based on the standards of living.

Payment of Key informants

We did not find evidence directly relating to the payment of Key Informants (KIs). Key informants are often considered to be economically well off research participants and thus usually are not compensated. However, information about payment to other special groups can be extrapolated to the KIs.

There are several rich discussions from the researchers, bioethicists and research participants about payments including reasons for and against payment, and some going an extra mile of asking if payment of research participants is enough [2, 3];

How this Rapid Response was prepared

After clarifying the question being asked, we searched for systematic reviews, local or national evidence from Uganda, and other relevant research. The methods used by the SURE Rapid Response Service to find, select and assess research evidence are described here:

www.evipnet.org/sure/rr/methods

Supporting the payment of research participants

Some authors argue that research can be related to any other activity an individual can participate in, and not as an exception. This is because, just like any other activity, there are possibilities of risk for example among truck drivers, police officers, fire fighters, etc. Ruling out the exceptionalism, then research participants need to be paid for research [2]. These arguments for payment can be broadly divided into effects on the research participant and effects on the research at large.

Effects on research participants;

- Respect for the research participant; An amount that is not excessive but is calculated on the basis of time or contribution or inconvenience experienced from the research participants would not constitute an undue inducement, but an indication of respect for the participants' time and contribution to the research [4].
- Expanding options; The offer of money for research participation may actually expand options for some people, while not restricting their options to do anything else they could otherwise have done [4, 5]. This was further viewed among the drug users as an honest way of obtaining money [5].
- Distribution of burdens; Restricting payment of participants in research may result in an unfair distribution of risks and benefits from the research. This is as a result of the failure to attract a more diverse group of research participants [2].
- Differentiating between clinical care and research; patient subjects can be very vulnerable. Some have a therapeutic misconception and cannot differentiate between participation in clinical research and receiving clinical care. However, receiving payment from participation in clinical research might be helpful in differentiating the two and thus taking an informed decision [6].
- Healthy subjects; Some bioethicists point out that healthy subjects receive little to no benefit from participating in clinical research. Therefore, getting the healthy subjects to participate, there is a need for motivation, which typically is financial motivation [6].
- Transaction; Some participants feel that it is only fair for them to be paid to take part in a study. This is because as researchers, they need the participants to appreciate and understand their experiences. The participants are uniquely positioned and require equitable compensation [7].
'We are giving you something so we get something in return'

Effects on the research;

- Enrollment; Payment of research participants is an essential tool to reach enrollment targets during the conduct of a study [2]. Research participants also recognize that payment could increase recruitment into research, and thought it justifiable for its use if recruitment is proving to be challenging [8].
Ethical concerns about payment for research [6];
 - Coercion, undue inducement, disproportionate research burden on the poor, commodification
 - The risk involved in the study might or not occur, however the payment is 100% guaranteed to occur. This balance biases the decision towards participation as payment is the only guaranteed outcome [9].
- More inclusive enrollment; Research participants have pointed out that individuals with less education and lower socio-economic status may not recognize potential benefits of studies. In such instances, incentive of payment may be warranted to enroll a more inclusive group of participants [8].
- Payments on top of being an incentive to enrollment, it is a motivation to cooperate with research procedures including those that require sore endurance [10].
- Follow up of research participants; Payment has been shown to increase the follow up rates. The higher the payment, the higher the follow-up rates and the less the costs of tracking research participants [11]. Payment of research participants maybe a cost-effective follow-up strategy in research that could help achieve the acceptable retention rates of 70-80%. It was however apparent that participants who received cash were more likely to return for follow-up as compared to those with gift cards [11].
 - The cited drawback of this strategy is potential for coercion and impaired judgement.

Against the payment of research participants

There have been several discussions pointing to the payment of research participants as being ethically controversial with some individuals in the research and bioethics believe that the love for progress in humanity should be the sole motivation for research participation [2]. These have suggested that payment should not merely be viewed as one of many other influencers to participate in research, but rather a unique one [9]. The arguments against payment can broadly be divided into effects on the research participant and effects on the research at large.

Effects on research participants;

- Undue inducement; Ethicists have raised undue inducement of research participants as a result of payment. This has resulted into research participants ignoring the risks involved in the study and focusing on the payment they are to receive from their participation [12]. There has also been a suggestion that with large amounts of money used in payment of research participants, there is distorted ability by participants to consider the risks involved in the research [3].

Arguments against the raised point are;

- Ethical guidelines that govern the conduct of research provide little guidance on about what factors or features render a given payment as ethically acceptable or not [2].
 - There are some circumstances, although rare, where money could possibly constitute an undue inducement, however prohibiting its use is not the solution [4]. This stems from the role money plays in the conduct of research and thus cannot be completely eliminated.
 - A study by Scott et. al, showed that the participants willingness to participate decreased with higher risks of adverse events or higher possibility of being assigned to a placebo arm of a study [13]. Furthermore, the same study showed that increase in payment does not alter the individual's perceptions of risk. This further augmented by a study that showed that higher monetary payments did not appear to blind the respondents to the risks of a study [14].
 - It is popularly believed that money is a potential undue inducer when an offer that cannot be rejected is made [14]. This is believed to be more prudent among the economically disadvantaged who have no other options for acquiring comparable amount of money. However the question is, do we protect this population by allowing them to participate without receiving money or by not allowing them to participate at all? [4].
 - Contrary to what is commonly believed, payment was shown to influence willingness to participate more among the wealthier participants as compared to their other colleagues [13]. This therefore indicated that much as payment motivates participation, there is a lack of evidence that the commonly used payment levels represent undue or unjust inducements.
 - There is rarely a single reason for doing something. This holds true for research participants which include but not limited to; physical, psychological, social, economic and cultural experiences among others. If inducements can be compatible with voluntary choice, then money, as an inducement, does not inherently obviate or compromise voluntariness [4, 15].
 - A study among research participants in a cohort in Canada indicated that participants were able to distinguish between paying subjects as an incentive for participation, reimbursement for expenses incurred, and compensation for injury, time and effort [8].
- New drug abuse among drug users; There are fears that the offer of payment among drug users may be a source of money for even more drug abuse.

However contrary to the above, the following evidence has been noted; A Randomized Controlled Trial showed that neither the magnitude nor the mode of payment had a significant effect on new abuse. However, some research participants indicated that this money keeps them from looking for other riskier sources so as to access drugs [5, 11].

- Compromise of autonomy of subjects: Enrolling participants for any form of desecracy, be it monetary or disease, may compromise the participants autonomy, leading to exploitation [16]. The compromised argument can lead to enrollment were otherwise they wouldn't, or remain in a study where they would otherwise withdraw [1]. The argument to separate disease as motivation and money is that in case of disease, the research is at least related to the patients' condition. However for healthy individuals, the motivator is majorly monetary [16].

Contrary to the above, the following evidence has been noted;;

- If different sources of desecracy can compromise autonomy, then how do you choose payment as the issue to address? It is then prudent to appreciate that ensuring an exhaustive informed consent process maybe the best way to empower research participants and avoid exploitation.
- An individual's susceptibility to distorted judgement is heavily determined by their values. This is evidenced by some individuals, who even in dire conditions, cannot be bought [4].

Effects on the research;

- Undermines the process of informed consent; The use monetary payment has a potential of undermining the process of informed consent, where a participant will potential not pay attention to the different aspects of the study during consenting as the ultimate goal is on payment.

Contrary to the above, the following evidence has been noted;

- There are several motivators to join research including better health care than what the standard of care provides, potential cure of a disease, attachment to the study being conducted, altruism and

money. Among others. If monetary compensation is being questioned as a motivator for joining a study as a participant, then there is need to question some other motivators such as the promise of better care and the desperation for cure[4]. The proposed intervention is to ensure and be able to demonstrate that the subjects truly understand the risks and benefits inherent in participating in the study[4].

- Misrepresent; The offer for money could cause potential participants to misrepresent something about themselves which would otherwise render them ineligible for participation in a study. This may jeopardize the informed consent process and possibly put the participant's well-being at risk as well as the integrity of the study [4, 14].

Arguments against the raised point are;

- Other inducers such as the promise of better standard of care or can potentially cause the same effect as monetary payment for research participation.

How much is appropriate?

In the event that payment is to be made to research participants, the questions raised is how much is appropriate for the different studies [3]. While payment is thought to influence decision making but also thought to be necessary for research, there is little or no guidance about the appropriate amount of payment [1]. There are a number of payment models that have been suggested for consideration. These models include; 1) the market model, 2) the wage model and 3) the re-imbusement model [17]. The different arguments around the payment and how much can be considered appropriate are in line with these payment models as shown below;

- ◇ A recurring argument among individuals who are pro-payment is that in the event that a participant is in the study as a way of making money, then it is only fair that the researchers pay them a fair wage [3]. This has been based against the background that we cannot fully escape from the fact that some participants join research for the money, but also as researchers, they also are earning from the research activities.
- ◇ Another school of thought pertaining to the amount to be paid is the establishment of a minimum amount that can be paid to research participants. This is meant to restrict researchers from offering less than the fair wages, however if that amount cannot be reached, then no payment should be offered at all to the participants [3].
- ◇ In contrast to the establishment of a minimum amount to be paid, there is a suggestion of putting restrictions on the amount offered for participation, calibrating it basing on the available alternatives in the community for making money, not indexed on the earnings and opportunities that have been forfeited by the each individual research participant[4].
- ◇ The other option raised among the bioethicists is that participants who stand to directly benefit from the study, by virtual of the disease status, should be generally paid less than those in studies with no prospect of benefit [1]. The argument is that healthy participants for example in a phase I clinical trial should be paid higher than a sick participant in a phase III clinical trial. This is so because the sick participant is likely to benefit directly from the interventions being tested [17].

However, using the suggested payment models or suggested ways to reach an agreement about how much is appropriate still doesnot provide a concrete solution to the dilemma of how much is appropriate. Taking the assumption that payment for research participation has been agreed upon, and that a consensus about the amount to be paid has been reached, the argument of the form the payment has also been a factor in research. Some bioethicists prefer cash payments while others are in favor of vouchers, however, vouchers might be impractical in a low income setting like Uganda. Some have pushed for a recognition that payment can be different for different groups in response to the situations for example shelter and food for the homeless[15].

Reaching a balance

As the decision for payment or no payment for participation in research remains in the balance, then probably reaching a balance is the way forward as suggested by some bioethicists. The argument is that there is a need to balance payment that will not be too high cause undue influence or too low to create a feeling of exploitation. There is a suggestion for the need to establish a balance against the probability of harmful risks and guaranteed payment to participants [9]. Some have suggested that in studies with minimal risk, it might be considered ethical to pay research participants, however in studies with more than minimal risk, payment of participants might be deferred because it might represent an undue influence [9].

Conclusion

Payment for participation in research continues to draw a lot of debate from researchers and bioethicists. There are a lot of reasons for and against payment, with some suggesting reaching a balance between the two. The decision to take would require a careful weighing of the arguments on both sides of the divide so as to draw an informed conclusion on the need for or lack thereof for payment for participation in research.

References

1. Largent, E.A., et al., *Money, coercion, and undue inducement: attitudes about payments to research participants*. IRB, 2012. **34**(1): p. 1-8.
2. Largent, E.A. and H. Fernandez Lynch, *Paying Research Participants: Regulatory Uncertainty, Conceptual Confusion, and a Path Forward*. Yale journal of health policy, law, and ethics, 2017. **17**(1): p. 61-141.
3. Phillips, T., *EXPLOITATION IN PAYMENTS TO RESEARCH SUBJECTS*. Bioethics, 2011. **25**(4): p. 209-219.
4. Grady, C., *Money for Research Participation: Does It Jeopardize Informed Consent?* The American Journal of Bioethics, 2001. **1**(2): p. 40-44.
5. Slomka, J., et al., *Perceptions of financial payment for research participation among African-American drug users in HIV studies*. Journal of general internal medicine, 2007. **22**(10): p. 1403-1409.
6. Grady, C., *Payment of clinical research subjects*. The Journal of clinical investigation, 2005. **115**(7): p. 1681-1687.
7. Collins, A.B., et al., *"We're giving you something so we get something in return": Perspectives on research participation and compensation among people living with HIV who use drugs*. The International journal on drug policy, 2017. **39**: p. 92-98.
8. Russell, M.L., D.G. Moralejo, and E.D. Burgess, *Paying research subjects: participants' perspectives*. Journal of Medical Ethics, 2000. **26**(2): p. 126.
9. Wong, J.C. and M. Bernstein, *Payment of Research Subjects for More Than Minimal Risk Trials Is Unethical*. The American Journal of the Medical Sciences, 2011. **342**(4): p. 294-296.
10. Devine, E.G., et al., *Payment expectations for research participation among subjects who tell the truth, subjects who conceal information, and subjects who fabricate information*. Contemporary clinical trials, 2015. **41**: p. 55-61.
11. Festinger, D.S., et al., *Higher magnitude cash payments improve research follow-up rates without increasing drug use or perceived coercion*. Drug and alcohol dependence, 2008. **96**(1-2): p. 128-135.
12. Cryder, C.E., et al., *Informative inducement: Study payment as a signal of risk*. Social Science & Medicine, 2010. **70**(3): p. 455-464.
13. Halpern, S.D., et al., *Empirical Assessment of Whether Moderate Payments Are Undue or Unjust Inducements for Participation in Clinical Trials*. JAMA Internal Medicine, 2004. **164**(7): p. 801-803.
14. Bentley, J.P. and P.G. Thacker, *The influence of risk and monetary payment on the research participation decision making process*. Journal of medical ethics, 2004. **30**(3): p. 293-298.
15. Vanderpool, H.Y., *Payments to Participants: Beware of the Trojan Horses*. The American Journal of Bioethics, 2001. **1**(2): p. 58-60.
16. Kuczewski, M., *Is Informed Consent Enough? Monetary Incentives for Research Participation and the Integrity of Biomedicine*. The American Journal of Bioethics, 2001. **1**(2): p. 49-51.
17. Dickert, N. and C. Grady, *What's the price of a research subject? Approaches to payment for research participation*. New England Journal of Medicine, 1999. **3**(0028-4793 (Print)).

What is a Rapid Response?

Rapid Responses address the needs of policymakers and managers for research evidence that has been appraised and contextualised in a matter of hours or days, if it is going to be of value to them. The Responses address questions about arrangements for organising, financing and governing health systems, and strategies for implementing changes.

What is ACRES?

ACRES – The Center for Rapid Evidence Synthesis (ACRES) is a center of excellence at Makerere University- in delivering timely evidence, building capacity and improving the understanding the effective, efficient and sustainable use of the rapid evidence syntheses for policy making in Africa. ACRES builds on and supports the Evidence-Informed Policy Network (**EVIPNet**) in Africa and the Regional East African Community Health (**REACH**) Policy Initiative (see back page). ACRES is funded by the Hewlett and Flora foundation. <http://bit.do/eNQG6>

SURE collaborators:

SURE
Supporting the Use of Research Evidence

REACH
Regional East African Community
Health Policy Initiative

**Regional East African
Community Health Policy
Initiative**

www.eac.int/health

EVIPNet
EVIDENCE INFORMED POLICY NETWORK

EVIPnet
www.evipnet.org

Glossary

of terms used in this report:

www.evipnet.org/sure/rr/glossary

This summary was prepared by

Edward Kayongo, Ismael Kawooya, and Rhona Mijumbi-Deve, The Center for Rapid Evidence Synthesis (ACRES), Regional East African Health (REACH) Policy initiative node Uganda, College of Health Sciences, Makerere University, New Mulago Hospital Complex, Administration Building, 2nd Floor, P.O Box 7072, Kampala, Uganda

Conflicts of interest

None known.

Acknowledgements

The following people provided comments on a draft of this Response: Mr. Paul Kutwabami, Chair, School of Health Sciences Institutional Review Board and Lecturer, Pharmacy Department, Makerere University.

This Rapid Response should be cited as; Edward Kayongo, Ismael Kawooya, Rhona Mijumbi-Deve; Should Research Participants be Paid for Participation in Research? A Rapid Response Brief. July 2019

For more information contact

Edward Kayongo

Email address: kaydfirst@gmail.com