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Matters Arising: on the willingness to trade-off years of life for an HIV cure

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Abstract

This Matters Arising explores the article titled "Willingness to Trade-Off Years of Life for an HIV Cure– An Experimental Exploration of Affective Forecasting," published in *AIDS Research and Therapy* in August 2024. We highlight the importance of considering ethical concerns and the inclusion of people with HIV (PWH) in the design of socio-behavioral research focused on HIV cure. While the authors suggest that PWH with lower quality of life may be more willing to trade years of life for a cure, we encourage further reflection on the potential emotional and psychological impacts of such hypothetical scenarios. The term "cure" could be clarified, as it traditionally implies an improvement in quality of life. We also note that future studies would benefit from clearer objectives and terminology that respects the dignity of PWH. We suggest that future research in this area prioritize the lived experiences of PWH and aim for both quality and quantity of life improvements, ensuring that research outcomes are aligned with the real-world needs and perspectives of PWH.

Purpose of this article

The purpose of this Matters Arising article is to reflect on the study regarding PWH's willingness to trade years of life for a potential HIV cure, emphasizing the need for community input in research design. We also highlight the importance of focusing on both quality and quantity of life improvements for PWH in future research and care efforts.

Keywords Willingness to participate, HIV cure research, People with HIV, Socio-behavioral research, Ethics

This Matters Arising discusses the article titled "Willingness to Trade-Off Years of Life for an HIV Cure– An Experimental Exploration of Affective Forecasting," published in *AIDS Research and Therapy* in August 2024. The paper explores the willingness of people with HIV (PWH) to trade years of life for a potential cure, and we reflect on the ethical considerations, methodological challenges, and the importance of involving the community in HIV cure research. This discussion builds on a previous paper [1] and related research [2, 3] exploring the willingness of PWH to take risks for a cure.

The study employed the time trade-off approach, which is widely used in health economics. The main finding is that PWH with lower quality of life were more willing to trade time for a hypothetical HIV cure. This paper offers an opportunity to reflect on various aspects of socio-behavioral sciences research in the context of HIV cure, including ethics, methodological clarity, and participant experiences. We advocate for a more nuanced approach to understanding the perspectives of PWH, especially as it relates to future studies on HIV cure research.

Our primary concern centers on the ethics of asking PWH to consider trading years of their life for a

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hypothetical cure. The idea of sacrificing years of life, even for a potential cure, is ethically complex. The goal of any HIV curative intervention should be to improve both the quality and quantity of life, rather than shorten lifespan. We feel that framing a cure as something that could reduce lifespan does not align with the real-world goals of HIV cure research, which aims to enhance quality and quantity of life for PWH. For example, the study presented participants with a scenario where they could trade up to 20 years of life. Given the average age of participants in the study (52 years), this scenario could imply a much shorter life expectancy post-cure. Since no HIV cure has yet been approved by regulatory bodies, and there is no evidence suggesting that a cure would result in shorter life, the study's design raises important questions about how PWH might perceive such a decision and whether they fully understood the long-term implications.

Moreover, the study appears to conflate the concept of an HIV cure with life-threatening procedures like stem cell transplants, which have been used in very specific clinical settings where participants with HIV also had life-threatening cancers [4, 5]. An HIV cure, in its true sense, should aim to improve the quality of life, not compromise it.

Moreover, the study design presents methodological challenges. The notion of "affective forecasting" is central to the research, yet it is not clearly defined. This ambiguity, along with the unclear distinction between the defocusing and adaptation interventions, could cause confusion among participants and affect the reliability of the responses. Additionally, a significant proportion of participants did not complete the Time Trade-Off (TTO) section of the survey, which may suggest that the hypothetical scenario presented was not fully resonating with their real-life experiences.

We also suggest that future research would benefit from more precise definitions and explanations of key concepts, such as defocusing, and how these might influence decision-making processes. It would also be helpful for the authors to explore how these findings might inform future HIV cure trials, especially in terms of participant expectations and motivations.

The paper presents some internal inconsistencies that could be clarified. For example, the introduction raises the question of how much risk is acceptable for PWH in HIV cure research, but the study focuses solely on a hypothetical "cure" scenario. This distinction between actual research trials and hypothetical cures could have been more clearly addressed to avoid confusion. Socio-behavioral sciences experiments should ideally differentiate between ongoing research for a cure and what a future cure might look like.

Additionally, a more targeted analysis could involve looking at how willingness to trade years varies with age, as long-term survivors of HIV may have different perspectives based on their lived experiences. For instance, older PWH are more likely to have a nuanced understanding of the impacts of living with HIV and may not view a cure in the same way as those who are newly diagnosed.

Further, the study's focus on the affective forecasting of a cure overlooks some of the ongoing realities of living with HIV. The assumption that a cure would be perceived solely in terms of benefits—such as the elimination of medication side effects—fails to account for the broader emotional, mental, and social complexities of HIV care. It is important to consider how PWH's daily lives are influenced by their HIV status [6], and how any potential cure might change, or not change, aspects of their everyday experience. For example, post-cure, PWH might still need regular clinical visits to monitor their health status, which could affect their quality of life. A more realistic approach would be to consider how participants envision life after a cure, including not only the potential benefits but also the ongoing challenges they might face.

Finally, the paper also uses terminology that could be reconsidered. Terms such as "HIV sterilizing cure" may carry unintended negative connotations, and the term "infected" has been highlighted by community advocates for not aligning with person-centered language [7]. In addition, the discussion of the "risk of infecting sexual partners" perpetuates a narrative that can be stigmatizing, as it implies that PWH are inherently risky or vulnerable, which is not always the case [8]. More careful consideration of language could improve the inclusivity and sensitivity of future studies.

In conclusion, while the study provides valuable insights into PWH's willingness to trade years of life for a potential HIV cure, we suggest that future research consider both the ethical implications and the lived experiences of PWH. Socio-behavioral sciences research should prioritize clarity, avoid stigmatizing language, and focus on real-world outcomes. Engaging PWH and community members in the design of studies is essential to ensure that research reflects their needs and perspectives. By improving the relevance and inclusivity of HIV cure research, we can better inform future trials and contribute to more compassionate solutions for the millions living with HIV.

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Competing interests

K.D. provide advisory services to Gilead Sciences, Inc. and AbbVie, Inc. All other authors declare that they have no competing interests.

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References

1. Dubé K, Dee L. Willingness to risk death endpoint in HIV Cure-Related research with otherwise healthy volunteers is misleading. J Virus Erad. 2020;6:81–4.
2. Murray BR, Kratka A, Scherr KA, Eyal N, Blumenthal-Barby J, Freedberg KA, et al. What risk of death would people take to be cured of HIV and why?? A survey of people living with HIV. J Virus Erad. 2019;5:109–15.
3. Kratka A, Ubel P, Scherr K, Murray B, Eyal N, Kirby C, et al. HIV cure research: risks patients expressed willingness to accept. IRB: Ethics Hum Res. 2019;41(6):23–34.
4. Allers K, Hütter G, Hofmann J, Loddenkemper C, Rieger K, Thiel E et al. Evidence for the Cure of HIV Infection by CCR5Δ32/Δ32 Stem Cell Transplantation. Blood [Internet]. 2011 Mar 10 [cited 2014 Feb 21];117(10):2791–9. Available from: http://www.ncbi.nlm.nih.gov/pubmed/21148083
5. Gupta RK, Peppa D, Hill AL, Gálvez C, Salgado M, Pace M, et al. Evidence for HIV-1 cure after CCR5 Δ32/Δ32 allogeneic Haemopoietic Stem-Cell transplantation 30 months post analytical treatment interruption: A case report. Lancet HIV. 2020;1(20):1–8.
6. Arora A, Lessard D, Dubé K, Lebouché B. Brief report: it's time to embed Health-Related quality of life across all steps of the HIV care cascade. J Acquir Immune Defic Syndr. 2022;91(3):251–4.
7. Newton L, Necochea R, Palm D, Taylor J, Barr L, Patel H, et al. Revisiting the sterilising cure terminology: A call for more Patient-Centred perspectives on HIV cure-Related research. J Virus Erad. 2019;5:e18–20.
8. Rao E, Taylor J, Kaytes A, Concha-Garcia S, Riggs P, Smith D, et al. Vulnerability in biomedical research: A historical reflection and practical implications for HIV Cure-Related research. AIDS Res Hum Retroviruses. 2024;40(1):22–7.

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