Review of: "Monkeypox among linked heterosexual casual partners in Bayelsa, Nigeria"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

General review

To the authors, I would like to thank you for the opportunity to review this study. Although there are some limitations, the manuscript poses important issues in monkeypox (MPX) that may be occurred in near future.

Today, the outbreak of MPX is associated with two well-known routes; animals to humans and humans to humans through non-sexual transmission. However, men who have sex with men or people with high-risk behaviors may be the major driver of the recent MPX global outbreak. Furthermore, some men with bisexuality or people in the core group of sexually transmitted infection (STI) could also act as bridges to transmit the infections to heterosexual partners with low risk for STIs. Ultimately, spreading the population with lower risk (e.g. monogamy families) could be the final step for STI transmission. Unfortunately, we do not have enough clinical or basic data to characterize such a final step. Therefore, this paper may have invaluable initial information on MPX transmission into heterosexual partners.

Discussion

1. According to your paper, it can be assumed that the monkeypox virus (MPV) can spread to heterosexual partners through genital skin lesions or respiratory secretions. Which route is the first? In case 4, the initial site of the infection may be genital skin lesions in case 4. But others may be initially from respiratory secretion? During sex, the couple must be exposed to thick MPV particles through respiratory secretion and oral secretion. Your description of ‘complex invasive exposure” during sex may be associated with exposure to thick MPV particles and sequentially, shorter incubation periods.
2. According to one study from the Democratic Republic of Congo, the house hold attack rate of MPV infection was 50% (http://dx.doi.org/10.3201/eid2206.150579). The paper reported that higher attack and transmission rates of MPV. Your result revealed much lower spreading rates among the family members. Why? Could it be from genetic differences in MPVs?
3. I cannot find the diagnostic steps to detect MPV from genital samples. I think the diagnosis of MPX must be from genital skin lesions rather than blood, respiratory secretion, *et al*.

Which one is the most appropriated specimens for diagnosis of MPV in genital areas; crust? Pustule? Papule?

Was there any difference in the viral concentration among the genital samples (crust/Pustule/ Papule) (*Ct* value)?

4. Finally, you mentioned the potential effects of IM injections to cause a flare-up of skin lesions among MPX patients. Could you mark more specifically? It may be antibiotics, anti-inflammatory, or painkillers or anti-viral agents. These drugs are frequently prescribed globally for inflammatory skin lesions, infectious lesions, and/or fever attacks.

Conclusion.

Yesterday, Korea Disease Control and Prevention Agency reported the second case of MPX in the country. It could surely become a global issue in near future. Today, we should not repeat the mistakes made during the COVID-19 pandemics. Although several limitations are present in this paper, I can find some important issues in heterosexual casual partners in MPX. Additionally, the paper may help to understand the characteristics of MPX cases and their sexual characteristics. Thank you again for this valuable data and I appreciate your passion for your research on monkeypox.

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