Mpox knowledge, vaccination and intention to reduce sexual risk practices among men who have sex with men and transgender people : a cross-sectional study in Victoria, Australia

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INTRODUCTION

The first mpox case in Australia was reported in May 2022. As of November 10, 2022, there were 141 notified mpox cases in Australia, almost half (n=69) were reported in Victoria; and most cases had been diagnosed among men who have sex with men (MSM).

Data have shown that the first-generation smallpox vaccines are effective (~85%) at cross-protecting against mpox. In Victoria, Australia, free mpox vaccines (JYNNEOS® vaccine) have been available to eligible individuals since August 12, 2022.

AIM

To examine community understanding of mpox, attitudes towards vaccination, and potential changes in sexual practices due to the mpox outbreak among MSM and transgender people in Victoria, Australia.

METHODS

We conducted an online anonymous survey from Aug 24, 2022 to Oct 23, 2022. Individuals were eligible if they were (1) a man or trans woman who had sex with men; (2) aged ≥18 years old; and (3) currently living in Victoria, Australia. Participants were recruited from a sexual health clinic and the community.

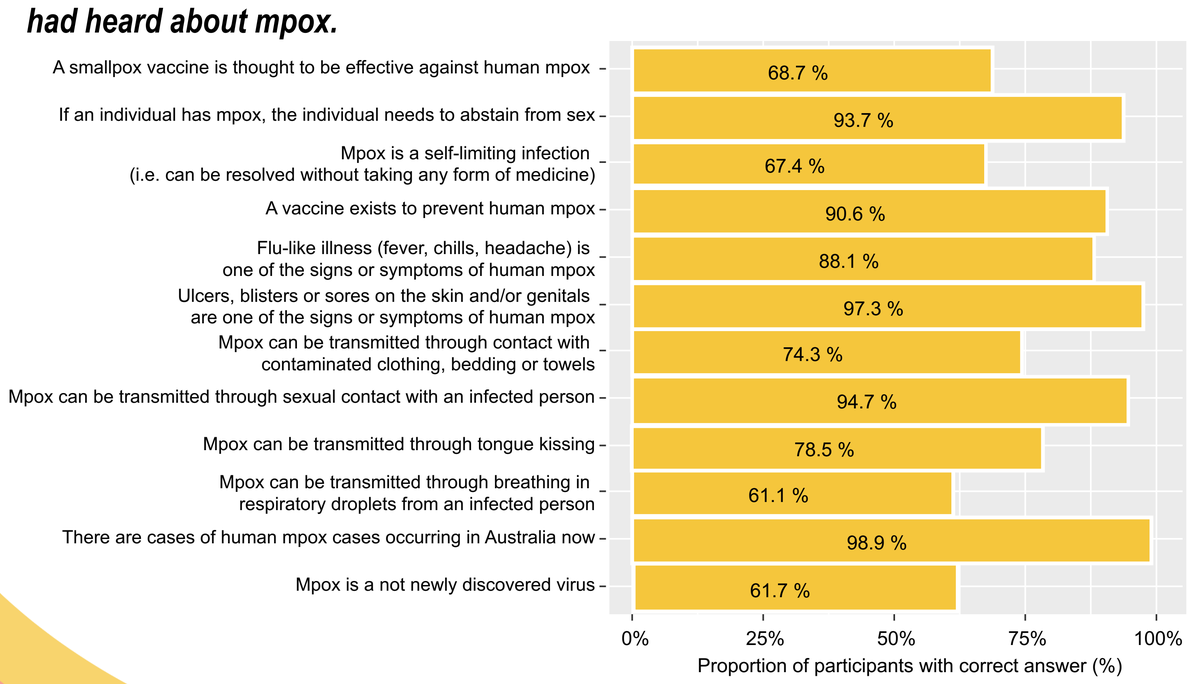
- Participants were asked about their understanding and knowledge of mpox, vaccination uptake and intentions to change sexual practices.
- Univariable and multivariable logistic regression was performed to examine the factors associated with mpox vaccine uptake.

RESULTS

- A total of 537 participants were included, most of whom were MSM (99.1%)
- 68.9% of the participants were recruited from a sexual health clinic.
- The median number of male partners in the last 12 months was 10 (IQR 4-20).
- 42.1% reported having an STI diagnosis other than HIV in the last 12 months.

Study participants had a good knowledge of mpox. Of the 12 mpox knowledge questions, the median score of correct answers was 10 (IQR 8-11) (Fig 1).

Fig 1. Knowledge of human mpox viral infection among 525 surveyed participants who had heard about mpox.



RESULTS

Most reported they would reduce having sex with casual partners (53.9%), stop having chemsex (49.8%), stop attending SOPV (49.3%), and stop having group sex (45.3%) (Fig 2). A quarter (26.2%) reported they would increase condom use for anal sex but half (51.2%) would not change.

Fig 2. Proportion of study participants who would change their sexual practices because of the mpox outbreak.

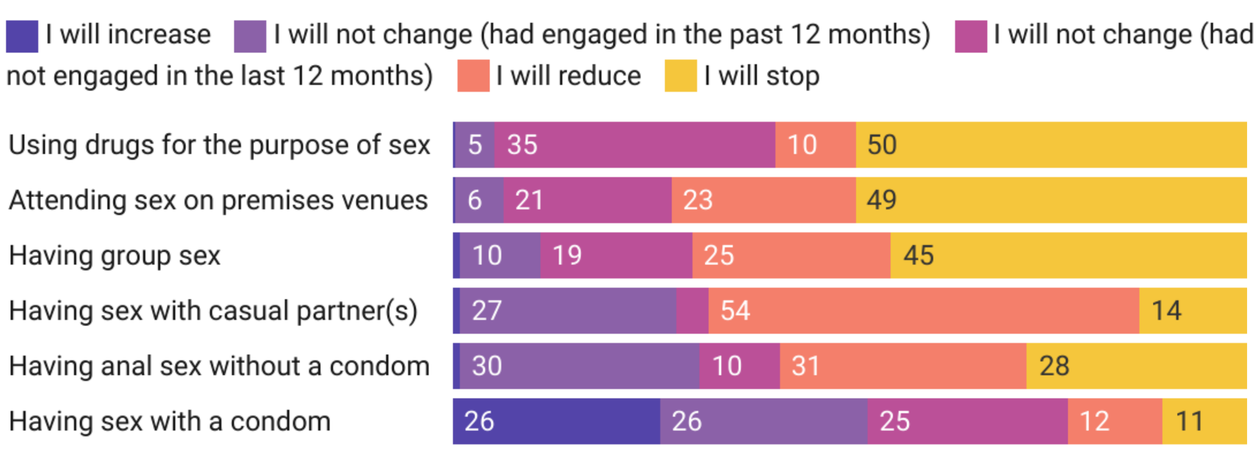
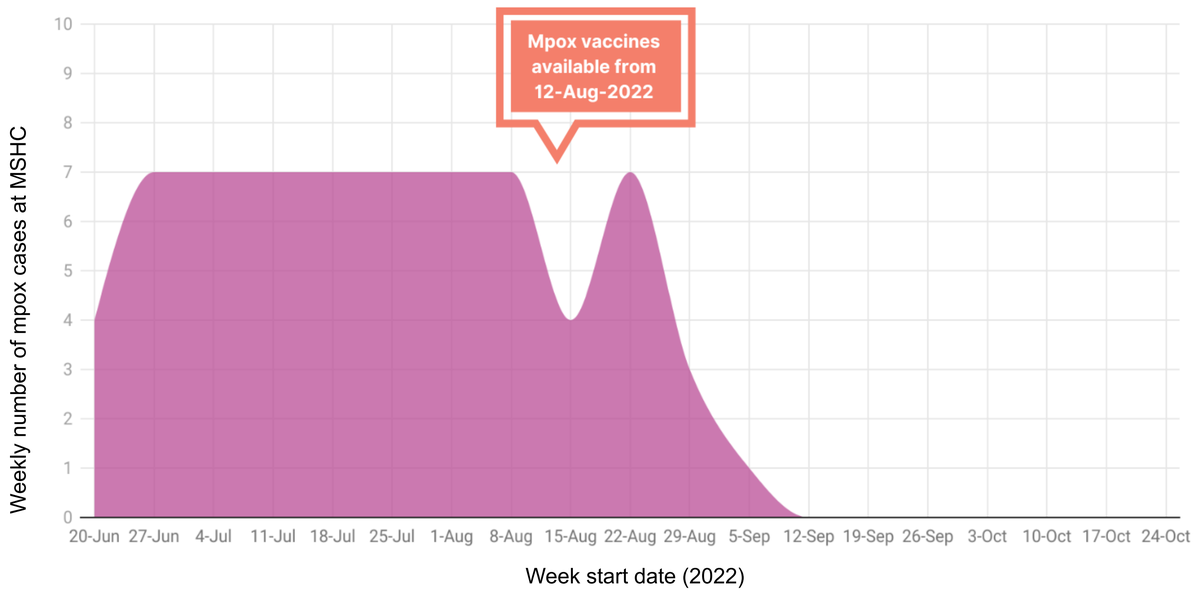


Fig 3. Weekly confirmed mpox cases diagnosed at the Melbourne Sexual Health Centre, 20 June to 30 October 2022.



61% of the mpox cases in Victoria were diagnosed at MSHC. The weekly mpox cases diagnosed at MSHC peaked in mid/late August, and it dropped significantly in early September after the implementation of the first phase of mpox vaccination program in mid-August (Fig 3).

36.6% had been vaccinated against mpox. Participants who had good knowledge of mpox had the highest odds of receiving mpox vaccine.

CONCLUSIONS

One-third of high-risk participants and a substantial proportion of participants intended to reduce or stop certain practices which may explain the large reduction in mpox cases.

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