

Exploring Effective Risk Communication Displays for HIV/STI Testing: A Vignette-Based Study

Authors:

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Background:

HIV and sexually transmitted infections (STIs) are a global public health concern, with increasing incidence rates in Australia. Despite the importance of early detection and prompt treatment, many individuals do not seek testing for various reasons. Effective risk communication is crucial in encouraging early detection and prompt treatment of HIV/STIs, and clear and understandable risk display formats have been shown to improve patients' understanding and decision-making. This study investigates the effectiveness of five risk communication displays in promoting HIV/STI testing.

Methods:

We conducted a cross-sectional, observational, and vignette-based study with 600 eligible clients from the Melbourne Sexual Health Centre (MSHC), categorized into four groups based on sexual orientation and gender identity. Participants were shown five different risk presentations for hypothetical high-risk scenarios and were asked if they chose to get tested for HIV/STIs after seeing each display option. The risk display formats consisted of the icon array, colour-coded risk meter, colour-coded risk bar, detailed text risk report, and guideline recommendations. Logistic regression was used to explore the associations between their intention to get tested and different risk display formats.

Results:

The study demonstrated that color-coded risk meter and risk bar formats were statistically associated with a greater likelihood of HIV/STI testing, with odds ratios of 2.18 (95% confidence interval: 1.27-3.74) and 2.05 (95% CI: 1.23-3.44), respectively. Similarly, the risk meter format was the most preferred option, with 57.6% of participants indicating it was the easiest to understand. This preference was consistent across all three populations: MSM (56.7%), heterosexual men (56.6%), and women (57.6%). Moreover, the risk meter was also the most preferred option for display on a website, with 44.2% of respondents indicating a preference for this format.

Conclusion:

In conclusion, the study demonstrates that the colour coded risk meter and risk bar formats can encourage more people to get tested for HIV/STIs if they are identified as high-risk. The study findings will inform the development of *MySTIRisk* (<https://mystirisk.mshc.org.au/>), a public-facing website for HIV/STI risk prediction, and ultimately benefit public health outcomes by increasing the uptake of HIV/STI testing and reducing transmission rates.

Disclosure of interest Statement:

No conflict of interest declared.