

The impact of sexual health knowledge on STI and HIV testing in domestic and international university students in Australia

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Background:

There is an emerging body of literature regarding the health and well-being of international university students including their sexual and reproductive health. Studies suggest they have lower levels of sexual health knowledge than domestic students, however little is known about whether this affects STI and HIV testing.

Methods:

A cross-sectional on-line survey of university students in Australia was conducted in 2019 (N=4291). STI/HIV testing patterns of the 3,075 sexually active respondents were compared across three groups: domestic Australian born students (DABS), domestic overseas born students (DOBS) and international students (IS). The associations of STI/HIV testing with aggregated STI knowledge (16-items), HIV knowledge (12-items) and sexual risk behavior scores (SRBS) (4-items) and demographic factors were investigated through multivariate regression and mediation analyses.

Results:

STI testing in the last 12 months was highest in DABS (38%), followed by DOBS (34%) and IS (32%). Lower testing rate among IS is driven by students from Southern Asia (13%), South-eastern Asia (26%) and Eastern Asia (20%). STI knowledge was positively associated with STI testing ($p < 0.001$). STI knowledge was significantly lower in IS than DABS, accounting for half of the difference in STI testing rates between these two groups. Conversely, HIV testing rate in the last 12 months were highest among IS (28%), compared to DOBS (23%) and DABS (22%). HIV knowledge was positively associated with HIV testing ($p < 0.001$); HIV knowledge levels were comparable among the three student groups. Higher SRBS were also positively associated with higher STI/HIV testing rates as was sexual orientation.

Conclusion:

The significant mediating effect of STI knowledge on STI testing supports investment into sexual health education for international university students to improve testing and prevention. Education programs which cater to diverse cultures of international students should be developed and delivered in an effective and culturally-responsive manner.

Disclosure of Interest Statement:

No conflicts of interest.