

Does a direct referral pathway improve attendance at medical follow-up after sexual assault and can we predict who will attend?

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Background

Testing for sexually transmitted infections (STIs) and pregnancy is strongly recommended after a person experiences sexual assault^{1,2}. Worldwide, small numbers of individuals present for follow-up sexual healthcare following an acute sexual assault presentation^{3,4,5,6}.

This study examined the impact of a pathway developed between an inner-city sexual assault service and a public sexual health service on the same hospital campus, with the aim of improving the number of individuals attending post-sexual assault medical follow-up. In addition, the study aimed to examine factors associated with attendance for follow up care. The referral pathway, introduced in January 2014, consisted of the forensic medical officer referring the victim to RPA Sexual Health (RPASH) for follow up care, if agreed to. A sexual health counsellor then contacted the individual and invited them to attend medical follow-up using a trauma-informed approach.

Methods

A retrospective review was conducted of individuals attending Sydney Local Health District Sexual Assault Service following a sexual assault between January 2014, and June 2016. The study population consisted of 440 individuals who presented to the service over the 30-month period. Descriptive statistics were used to compare attendances before and after the pathway was introduced. Logistic regression was used to determine factors associated with attendance at RPASH for follow-up, among those who were referred. Penalized maximum likelihood estimation⁷ was used to reduce the small-sample bias of the maximum likelihood coefficients.

Results

Medical follow-up attendances pre and post introduction of the pathway

- In the 12-month period prior to the pathway being implemented (2013), 240 individuals presented to the Sexual Assault Service for acute sexual assault care. Twenty-three (10%) individuals attended RPASH for post sexual assault medical follow-up.
- In the first year of the pathway (2014), of the 219 total acute sexual assault presentations, 84 accepted a referral and 39 (46%) attended medical follow-up. 18% of total presentations.
- Over the entire 30-month study 187 individuals accepted the referral with 98 (52%) attending medical follow-up, 22% of total presentations.

Results

Sexually transmitted infections diagnosed

- 37 individuals (8%) tested positive for an STI when they attended the acute sexual assault presentation, 29 had Chlamydia (7%).
- 5 individuals who did not have an STI at the acute presentation, tested positive for an STI at the first follow-up visit, 4 (4%) had Chlamydia and 1 had pharyngeal gonorrhoea.
- Two women were diagnosed clinically and treated for pelvic inflammatory disease, but no pathogens were identified on laboratory testing.

Of those who accepted referral we compared those who attended with those who did not.

On unadjusted analysis

Factors associated with attendance at medical follow-up:

- Received HIV Post Exposure Prophylaxis (PEP) aOR[95%CI]: 2.70[1.10, 6.62] p=0.02
- Knowing their assailant aOR[95%CI]: 2.07[1.14, 3.75] p=0.02

Factors associated with a lower likelihood of attendance at medical follow-up:

- belief that they had been unknowingly drugged aOR[95%CI]: 0.6[0.35, 1.18] p=0.15
- being assaulted by two or more assailants aOR[95%CI]: 0.42[0.14, 1.26] p=0.11
- suffering physical injuries aOR[95%CI]: 0.58[0.32, 1.05] p=0.07

On adjusted analysis

Factors associated with attendance at medical follow-up:

- Being prescribed HIV PEP
- Knowing their assailant

Factor associated with a lower likelihood of attendance at medical follow-up:

- suffering physical injuries

Multivariable results for attendance at follow-up amongst individuals with referral to RPA Sexual Health (Penalized Maximum Likelihood regression) for n=178*

Characteristic	OR	95% CI	P-value
Sex			0.63
Male	0.70	[0.17, 2.96]	
Female	1.00		
Age (years)			0.53
<25	0.71	[0.36, 1.40]	
25-34	1.00		
≥35	0.64	[0.23, 1.74]	
Know assailant	2.25	[1.20, 4.22]	0.01
Received HIV PEP#	3.39	[0.92, 12.58]	0.05
Physical injuries	0.59	[0.32, 1.09]	0.09

*9 excluded: 2 transgender women (small numbers), 6 missing physical injuries and 1 missing if HIV PEP was prescribed

#Post Exposure Prophylaxis (PEP)

Conclusion

The improvement in numbers attending medical follow-up after sexual assault highlights the benefit of introducing a trauma-informed pathway between sexual assault and sexual health services. Many sexual health services are well placed to offer this proactive approach to individuals who have experienced sexual assault.

The study found no modifiable characteristics associated with non-attendance for medical follow-up. The prevalence of chlamydia detected at follow-up suggests a need to look for novel ways to improve follow-up in this population, such as home testing⁸.

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