Original article

Young working women utilise the after hours service at Sydney Sexual Health Centre

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Objective: To analyse patterns of patient utilisation of the after hours service at Sydney Sexual Health Centre (SSHC).
Method: A retrospective cross sectional database study compared all new daytime and after hours patients who registered for a medical consultation at SSHC between August 1994 and February 1995. Daytime and after hours attenders were compared using demographic and behavioural factors and for prevalence of STDs and HIV using logistic regression analysis.
Results: Of the 1662 eligible patients, 1362 (81.9%) attended during daytime hours, and 300 (18.1%) attended after hours. There was no significant difference in after hours attendance between patients living in inner compared with outer metropolitan zones. Using logistic regression analysis, being female (p=0.0008), being between 20 and 39 years of age (p=0.008), being employed (p<0.001), and having no previous STD/genitourinary condition (p=0.034) were the factors significantly associated with after hours attendance.
Conclusions: The evening service was disproportionately utilised by a patient group not defined as "high risk" in the objectives of the service. This study challenges the assumption that evening clinics are always the way to reach high risk groups.
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Keywords: patients; after hours service; clinics; sexually transmitted diseases

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Introduction

After hours sexual health services are generally instigated to improve patient access to services. The Sydney Sexual Health Centre (SSHC) established an after hours clinical service in 1987 which expanded in response to perceived patient need and popularity of evening clinics. The main objective of the service was to provide high quality care to patients requiring investigation and management of sexually transmissible diseases at times which were convenient to them. The primary target group was sexually active young adults with particular focus on homosexual males, HIV positive people, injecting drug users (IDU), and female commercial sex workers.

We devised a study to analyse patterns of patient utilisation of the service and to compare patients attending after hours with patients attending during daytime hours on demographic and behavioural factors and morbidity profiles using logistic regression analysis. In this way we could assess the extent to which the aims of the service had been met, and weigh the benefits of the after hours service against the requirement for extra resources the service generated.[1] Previous work has centred on data from healthcare workers[2 3] and patient satisfaction surveys.[4–6] This can be problematic as the subjects who are available to complete the questionnaires may not reflect the target group who may find it difficult to access existing services.[7]

Patients and methods

The SSHC is a public sexual health clinic in the central business district of Sydney. The clinic offered appointments and a "walk in" service from 0830 to 1900, 5 days a week. The majority of patients were self referred. The area health service research ethics committee approved this study.

New, non-appointment patients who registered for a medical consultation between 0830 and 1900 on Mondays, Tuesdays, Thursdays, and Fridays during a 28 week period of stable clinic operating hours between August 1994 and February 1995 inclusive were included. First episode of attendance was used to avoid possible bias from multiple attendances. Daytime attenders were new patients who registered between 0830 and 1629 hours and after hours attenders were patients who registered at or after 1630 hours.

Exclusions included Wednesday attendances as the clinic was closed from 1300 hours and attenders of non-English speaking clinics (Thai and Chinese) as time of attendance was restricted by interpreter availability.

Demographic, behavioural and clinical data, and attendance times were obtained from computerised standardised medical records held on the clinic database. The SSHC listing of diagnostic codes was divided into four categories: "current STD"—chlamydia, gonorrhoea, genital warts, genital herpes, trichomoniasis, syphilis, the hepatitides, HIV, and the tropical STDs; "sexual health diagnosis"—contraception, cervical dysplasia, genital trauma, or mass; "other diagnosis"—dermatological conditions, drug reactions, or conditions unrelated to sexual health; and "no diagnosis"—no pathology detected.

Patient residence was analysed by postcode. Inner and outer metropolitan zones were delineated by circles 10 and 30 kilometres from the clinic.

Table 1 Variables independently associated with after hours attendance using logistic regression analysis

Variable	*% after hours patients*	*Crude OR (95% CI)*	*Adjusted OR (95% CI)†*
Sex			χ_1^2=11.20, p=0.0008
Male*	59.7	1.0	1.0
Female	40.3	1.4 (1.11–1.86)	1.6 (1.23–2.06)
Age group (years)			χ_2^2=10.21, p=0.008
15–19*	4.3	1.0	1.0
20–39	86.0	1.6 (0.85–2.84)	1.5 (0.84–2.78)‡
40+	9.7	0.8 (0.41–1.68)	0.8 (0.41–1.68)‡
Employment status			χ_4^2=56.43, p<0.001
Employed*	79.0	1.0	1.0
Unemployed	9.8	0.3 (0.22–0.50)	0.3 (0.22–0.49)
Student	9.5	0.4 (0.29–0.67)	0.4 (0.26–0.60)
Home duties	0.3	0.1 (0.02–0.97)	0.1 (0.02–0.85)
Receiving benefit	1.4	0.3 (0.10–0.75)	0.4 (0.13–1.01)
Previous STD/genitourinary condition(s)			χ_1^2=4.5, p=0.034
Yes*	49.7	1.0	1.0
No	51.3	0.9 (0.66–1.10)	0.8 (0.58–0.96)

OR = odds ratio, CI = confidence interval.
*Reference group.
†Logistic regression with variables shown to be associated with after hours attendance using univariate analysis. Each variable was adjusted for all other variables.
‡Non significance is statistical artefact, age was entered into the logistic regression model as a categorical variable.

Initial comparisons between after hours and daytime attenders were performed using χ^2 tests. Variables that gave p<0.25 were further assessed using logistic regression analysis to permit statistical control of confounding variables. Sex was not shown to be an effect modifier, so the data for males and females were combined. All variables were categorical including age, where groupings were chosen to reflect the known age distribution of clinic attenders. The adjusted odds ratios (ORs) with their 95% confidence intervals (CI) were then calculated at the 5% level for the variables significantly associated with after hours attendance. Statistical analysis was performed using the SPSS and SAS statistical packages.

Results

The after hours service made up 31% of the clinic opening hours. A total of 1662 attenders were eligible and included; 300 (18%) patients attended during the evening and 1362 (82%) during daytime hours. Eighty five per cent resided in the Sydney metropolitan area and 90% spoke English at home. Overall, 79.1% of the study population was aged between 20–39 years and 61.3% were employed. Seventy two per cent of patients had never been married and 52.9% reported only one partner in the previous 3 months. Just over half of the study population reported a previous STD/genitourinary condition.

Two thirds (1106/1662) of the study population were men. Homosexual men made up 20.6% of all attenders and all 21 HIV positive patients were male. Nine per cent of the study population reported injecting drug use and 13.7% of the women reported commercial sex work.

On univariate analysis, after hours attendance was associated with being female, 20–39 years of age, being employed, speaking English at home, having one partner in the previous 3 months, having unprotected sex, having sex within Australia only, not having a "current STD" or current "other" diagnosis and not reporting a previous STD/genitourinary condition. There was no significant difference between daytime and after hours attenders in the proportion who resided in the inner metropolitan zone (χ_1^2= 0.04, p = 0.86).

The variables for which a significant association with after hours attendance persisted on logistic regression analysis were being female, being between 20 and 39 years old, being employed and not reporting a previous STD/genitourinary condition (table 1).

Discussion

Provision for extended hours of consulting within STD medicine has been advocated since 1916 when the Public Health (Venereal Diseases) regulations of the United Kingdom stipulated that some sessions should be held after 1700 hours, to cater mainly for those in full time employment,[7 8] sentiments echoed most recently in the Sigma report.[9]

After hours services require extra resources. The benefits to patients need to be balanced against funding, administration, staff acceptance and time and training issues, the availability of additional laboratory staff, liaison with other hospital services (for example, pharmacy and radiology), and security issues.

In this study 79% of patients attended after hours and significant financial, health, and confidentiality issues could be anticipated had an after hours clinical service not been available. However, the evening service was disproportionately used by employed women aged between 20 and 39 years who had a lower risk of previous STDs. This group was not defined as "high risk" in the objectives of the service and the after hours service failed to attract higher levels of attendance in the target groups. The patient population may have changed over time. Relocation of the clinic in 1987 to a city centre site may have increased attendance by employed people at the expense of the target groups who may have shifted their care elsewhere. In addition, two clinics located close to SSHC which target our high risk groups also operate after hours.

Logistic regression analysis showed that after hours and daytime attenders were broadly similar and it could be concluded that the daytime sessions did attract the target groups and by opening in the evening higher numbers of them were attracted to the service. Indeed patient attendance did increase during the study period, particularly for new patients, following a change in clinic hours. A longitudinal study of non-appointment patients attending between November 1994 and June 1995, a period overlapping that of the current study, showed that a change in clinic hours to include an after hours service increased the clinic workload by 98% for new and 65% for new and returning patients.[10] Twenty six per cent of new and 30% of patients overall who attended the clinic after the change registered for the evening clinic.[10] While the proportion of current STD and other sexual health problems did not differ significantly between daytime and after hours attenders, the evening clinics have functions beyond diagnosis and treatment of STDs which have not been measured here.

The increase in patient numbers coincident with a change in clinic hours means that many more patients may benefit from these services. Thus, increased access to clinical services is likely to have been achieved even though we have not shown that the after hours service reached patients who would otherwise not have attended at all.

The results of this study challenge the assumption that after hours clinics are always the way to reach high risk groups.

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