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ORIGINAL PAPER

Health Care Utilization in Homeless Youth

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Abstract To examine common reasons for utilization of health care services at a free homeless youth clinic. This is a retrospective chart review for visits over a 1 year period. Data on age, gender, and up to 3 chief complaints per visit were collected from the electronic medical record. Of the 744 clinical encounters, the mean age of youth was 18.8 years and 53.2 % involved female patients. The most common reasons for utilizing services include screening and treatment of sexually transmitted infections (STI) 14.3 %, physical exam for housing 13.7 %, dermatologic complaints 13.5 %. Chief complaints were different for males and females ($p \leq 0.001$). Females were more likely to receive laboratory testing for STI than males ($p \leq 0.001$). Females were most likely to seek care for sexual and reproductive health needs and males were more likely to come for acute concerns. These differences can inform providers working with this vulnerable population.

Keywords Homeless youth · Adolescent · Reproductive health · Health care utilization

Introduction

It is estimated that between 1.6 and 2.8 million youth in the USA runaway or are thrown away each year and youth ages 12–17 are at higher risk for homelessness than adults [1]. In Washington State, the 2010 Annual One Night Count of people who are homeless in King County found that of the 6,236 people staying in emergency shelters or transitional housing on the night of the count, 1,009 (16 %) were between the ages of 13–25 years [2].

Homeless youth acknowledge the need for help in maintaining their physical well-being. They are more likely to report poorer overall health, more emotional disturbances, and have higher rates of traumatic stress than non-homeless children from middle income families. In order to survive on the streets, they may resort to dangerous behaviors, such as drug use and sex industry work. Even if not permanently homeless, chronic periods of homelessness have been associated with survival sex, increased HIV rates, and sexual victimization [3].

Homeless youth identify access to reproductive health services as a fundamental need [4, 5] and value being offered allopathic and complementary medicine services [6, 7]. Youth have reported that peers provide anecdotal remedies for ailments and may discourage seeking help from medical professionals [5]. Those who do attempt to access mainstream healthcare may be without health insurance. If they have insurance, they may refuse to make use of it for reasons such as not wanting to provide a real name or contact information. They may also be ineligible for services as a minor who is unaccompanied by a consenting adult. Therefore, medical drop-in services that are based on a sliding scale fee for income or free of charge are invaluable and depended upon by this population [8].

The purpose of this study is to describe service utilization at a free clinic for homeless youth in Seattle, Washington. Specific aims include: determining the common reasons for seeking services and a comparison of patterns of use by males and females. This drop in clinic provides acute care, preventive care, reproductive health care, and

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limited medications for homeless youth between the ages of 12–23 years free of charge. In addition, youth are often referred for temporary housing, meals, clothing, alternative drop-in school, case management, employment training, and mental health and substance use counseling. Alongside allopathic medical services, complimentary medicine in the form of acupuncture and/or massage is available. There are two paid staff members, the clinic manager and an attending physician. The remainder of the staff are volunteers or trainees (medical students, Pediatric and Family Medicine residents, and fellows in Adolescent Medicine).

Methods

A retrospective chart review of electronic medical records (EMR) at the Country Doctor Free Teen Clinic was performed by the two co-investigators, Y. Evans and S. Handschin. Permission to access the electronic medical records was granted by the Director of Operations at the Country Doctor Community Health Center, the facility where the Country Doctor Free Clinic operates. The entire study was approved by the University of Washington Human Subjects Division. The medical records were reviewed to gather eleven different items for each patient encounter: patient stated age, stated gender, up to three chief complaints (or reasons for visiting the clinic that evening), whether or not a urine HCG was obtained (if female), sexually transmitted infection (STI) laboratory studies [including gonorrhea, chlamydia, HIV, or rapid plasma reagin (RPR)], contraception dispensed including oral contraceptive pills, NuvaRing, Ortho Evra Patch, Depo Provera injections, or Plan B emergency contraception (if female), the use of complimentary and alternative medicine (CAM), discharge diagnosis, and medications dispensed. For the purposes of this study we focused our descriptive analysis on the following variables: stated age, stated gender, chief complaints, urine HCG, STI laboratory studies, contraception dispensed.

The Country Doctor Free Teen Clinic previously used hand written notes to document patient encounters without a standardized template. In February 2010, the clinic converted to the use of electronic medical records. Review of the EMR for this study included reading hand written paper notes that had been scanned into the EMR. Information from the patient encounter notes was entered into Excel spreadsheets. To confirm that the two co-investigators recorded the same variables after reading the scanned hand written documents, 10 patient encounters were separately reviewed by each co-investigators, with agreement on 106 out of 110 variables recorded (96.4 %).

Data was transferred directly from Excel into STATA version 10. Analyses included descriptive summaries of stated age, stated gender, chief complaints, urine HCG, STI laboratory studies, contraception dispensed. Patient encounters were stratified by gender and Chi2 analysis was used to compare the reasons for clinic visits and STI screening tests performed between males and females.

Results

All patient encounters that occurred between January 5, 2009 and January 5, 2010 were included in the chart review. Patients who left without being seen or charts with missing information on the items of interest were excluded from the study. A total of 31 encounters were excluded. A total of 744 patient encounters met inclusion criteria with 371 individual patients utilizing the clinic during this time frame.

Study results are summarized in Table 1. The average number of visits per patient over the study period was two. The mean age of patients served was 18.8 years with 53 % reporting female gender and 47 % reporting male gender. Among the overall sample, the most common reasons for visiting the clinic were for STI testing (14.3 %), the need for physical exam to obtain housing (13.7 %), and a dermatologic complaint (13.5 %). The chief complaints were different for males and females ($p \leq 0.001$).

For females, the most common reasons for visiting the clinic included STI testing (18.2 %), contraception (17.5 %), and a physical exam for housing (12.4 %). There were a total of 222 screening STI tests performed among females. Females were more likely to receive laboratory testing for STI than males ($p \leq 0.001$) For males, the most common reason for visiting the clinic was a dermatologic complaint (16.4 %), a physical exam for housing (15.2 %), and upper respiratory infection symptoms (12.2 %). There were 122 STI screening tests performed among males.

Discussion

Screening and treatment of STIs was the most common reason for homeless youth to access health services in our study. There were differences by gender. Young women were most likely to seek care for sexual and reproductive health needs and had a higher proportion of visits for these concerns. Young men had higher proportions of visits for acute concerns including URI symptoms, dermatologic and musculoskeletal complaints. Our findings are consistent with previously documented health needs in this population, where homeless youth requested reproductive health and STI screening [9, 10].

One reason for the gender difference could be the requirement of many shelters in the Seattle metro to require a physical examination prior to admission. This requirement

Table 1 Summary of demographics and chief complaints

	Male		Female		Sample total	
Total encounters (*N*)	348 (46.8 %)		396 (53.2 %)		744 (100 %)	
Mean age in years (SD)	19.2 (2.3)		18.4 (2.5)		18.8 (2.4)	
Chief complaint (%)	Dermatologic	16.4	STI testing	18.2	STI testing	14.3
	Physical exam for housing	15.2	Contraception	17.5	Physical exam for housing	13.7
	Respiratory/URI symptoms	12.2	Physical exam for housing	12.4	Dermatologic	13.5
	Musculoskeletal	11.4	Dermatologic	11.0	Respiratory/URI symptoms	10.7
	Other	11.0	Respiratory/URI symptoms	9.5	Other	9.8
	STI testing	9.8	Other	8.8	Contraception	9.5
	Test results	5.8	Test results	6.1	Musculoskeletal	7.7

STI sexually transmitted infection, *URI* upper respiratory infection

may increase the number of teens, especially males, seeking care. Males are less likely to seek health services overall [11], yet our study found nearly equal numbers of males and females utilizing the homeless teen clinic. Another explanation for the gender difference could involve the provision of reproductive health (contraception) and STI screening offered at our site. Homeless females have been found to request and seek out services for contraception and STI screening and treatment [10]. Because our clinic is known by local youth to offer these services, it is not unexpected that a high proportion of homeless females would request them.

Our findings indicate that homeless youth will seek contraception and commonly prescribed methods include combination birth control pills and Depo Provera. However, long acting reversible contraception, such as the implantable rod or intra-uterine device, were not available. Condoms were offered, but provision to patients was not routinely documented in the EMR and was therefore excluded from analyses.

The findings of this study are unique to this particular clinic and can not be generalized to other populations. Our results do not reflect services that were declined or patients who did not receive services because they were recently conducted elsewhere, such as through another clinic, shelter or the juvenile justice system. Nor do they reflect the number of patients who received health education regarding STIs or contraceptive counseling, but declined any of the options.

This study provides further evidence that homeless youth do seek health care and will utilize vital services, such as acute care and reproductive health care, when offered. Though males and females may seek care for different reasons, these clinic visits provide the opportunity for important screening and preventive care. Care providers should be educated and competent in sexual and reproductive and be prepared to provide such services to this vulnerable population.

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Conflict of interest The authors have no conflicts of interest to disclose.

References

1. Youth noise (Internet): YouthNoise Homelessness Archive. (2010). cited 10/20/2010. Available from: http://www.youthnoise.com/page.php?page_id=6144.
2. Seattle king County Coalition on Homelessness. (2012). 2012 annual one night count of people who are homeless in king county, Seattle, WA. http://www.homelessinfo.org/what_we_do/one_night_count/2012_results.php.
3. Marshall, B. D. L. (2008). The contextual determinants of sexually transmissible infections among street-involved youth in North America. *Culture, Health & Sexuality, 10*(8), 787–799.
4. Ensign, B. J. (2006). Perspectives and experiences of homeless young people. *Journal of Advanced Nursing, 54*(6), 647–652.
5. Ensign, J., & Panke, A. (2002). Barriers and bridges to care: Voices of homeless female adolescent youth in Seattle, WA, USA. *Journal of Advanced Nursing, 37*(2), 166–172.
6. Ensign, J. (2004). Quality and improvement. Quality of health care: The views of homeless youth. *Health Services Research, 39*(4), 695–707.
7. Breuner, C., Barry, P., & Kemper, K. (1998). Alternative medicine use by homeless youth. *Archives of Pediatric Medicine, 152*(11), 1071–1075.
8. De Rosa, C., Montgomery, S., Kipke, M. D., Iverson, E., Ma, J., & Unger, J. (1999). Service utilization among homeless and runaway youth in Los Angeles. *Journal of Adolescent Health, 24*(3), 190–200.
9. Ensign, J., & Santelli, J. (1998). Health status and service use. Comparison of adolescents at a school-based health clinic with homeless adolescents. *Archives of Pediatrics Adolescent Medicine, 152*(1), 20–24.
10. Ensign, J. (2000). Reproductive health of homeless adolescent women in Seattle, WA, USA. *Women & Health, 31*(2–3), 133–151.
11. Marcell, A. V., Klein, J. D., Fischer, I., Allan, M. J., & Kokotailo, P. K. (2002). Male adolescent use of health care services: Where are the boys? *Journal of Adolescent Health, 30*(1), 35–43.