

The Girls' Health Screen Pilot Study: A Screening Instrument for Girls in the Juvenile Detention System

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The purpose of this study was to assess the validity of the Girls' Health Screen as a screening instrument compared to a standard history and physical examination among females entering juvenile detention. Chi-square analyses were performed to evaluate the association between the results of the self-administered screen and the history and physical examination performed by a provider. The screen was administered to 119 females. A number of acute issues were elicited that were also statistically correlated with the history and physical exam making it a valid screen for urgent issues at the time of detention.

Keywords: Juvenile detention, female detention, screening, underserved youth

INTRODUCTION

Female adolescents are the fastest growing segment of the juvenile justice system across the United States (Lederman et al., 2004; Zahn et al., 2008). In 2008, female youth accounted for a third of all delinquency arrests nationally (U.S. Department of Justice, 2009). The juvenile justice system is now struggling to address this growing number of females, a disproportionate number of whom are minority youth from low income families with limited access to health care (Elster et al., 2003; Morris et al., 1995; Piquero, 2008). The time of detention often represents one of the

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few contacts that this population has with a health care provider. As a result, there are often both acute and chronic medical conditions that need to be addressed during detention (Golzari, Hunt, & Anoshiravani, 2006; Committee on Adolescence, 2011). Unfortunately, there are currently no efforts in place, outside of mental health, aimed at addressing medical issues for female youth in detention in a timely or streamlined manner.

The Girls' Health Screen (GHS) instrument was developed by one of the investigators. A team which included social workers, physicians, and nurse practitioners conducted a pilot study in order to validate the instrument. This computer-based health screen is intended to serve as an age- and gender-appropriate screening tool for detention centers to assist with identifying both urgent and non-urgent medical and social needs. Current legislation mandates an initial health screen by medical detention staff within the first 48 to 72 hours of detention, with the timing varying by state (Pajer et al., 2007). Because the GHS is self-administered, it serves as a tool to conduct a preliminary needs assessment at the time of initial intake with little impact on staff resources. This allows for urgent health needs to be identified early in the detention process.

Methods

The GHS was administered in three detention centers across the country—Santa Cruz and San Diego, CA, and Philadelphia, PA. A total of 119 female participants completed the GHS after giving their consent (see Table 1 for participant demographics). The purpose of this study was to assess the validity of the GHS as a screening instrument compared to a standard history and physical exam (HPE) by comparing the outcomes of the two assessments. In addition to descriptive statistics, chi-square analyses were performed to evaluate the strength of association between the related questions of the self-administered GHS done at the time of initial detention and the on-site HPE performed by a healthcare provider two days after initial detention. Institutional review board approval and informed consent were obtained prior to the administration of the study at all sites. Particular attention was paid to urgent health issues that require immediate attention or awareness of by detention healthcare staff.

TABLE 1
Participant Demographics

<i>Characteristic</i>	<i>Data</i>
Total sample (<i>N</i>)	119
Total per site	
Santa Cruz	4
San Diego	92
Philadelphia	23
Age (years)	
Range	12–18
Mean	15.64
Standard deviation	1.27
Race (%)	
African American	32 (26.9%)
Latina	33 (27.7%)
Caucasian	21 (17.6%)
Asian or Pacific Islander	3 (2.7%)
Native American	2 (1.6%)
Mixed racial background	28 (23.5%)

Results

A number of acute or potentially acute conditions were elicited from the GHS. Many of these were statistically correlated with the HPE (see Table 2). Fifteen participants (12.6%) said they had been injured in the past week, and six of those had not received medical care. Among these 15 injured participants, six reported loss of consciousness in the past two days. Of those who reported recent injuries, these injuries were noted on the HPE ($X^2 = 4.56, p < .04$). In addition, a history of forced sexual activity was reported by 26 participants (21.8%), with three (2.5%) participants reporting being sexually assaulted in the past five days. Although no physical signs of sexual trauma were observed among these participants on HPE, the HPE identified concern for suicidal ideation ($X^2 = 17.4, p < .01$) as well as problems with depression ($X^2 = 19.19, p < .01$), and fatigue ($X^2 = 6.29, p < .02$) among those who reported a history of forced sexual activity.

Forty-nine of the participants (41.7%) reported on the GHS that they were currently in pain, with an average Likert scale (1–10) rating of six (SD = 1.98). Pain that was identified by the healthcare provider as a significant health concern during the HPE was also associated with this question on the screen ($X^2 = 5.3, p < .03$).

Eight participants (6.7%) reported current asthma symptoms or breathing problems on the GHS. Providers observed wheezing ($X^2 = 5.75, p < .02$) on the HPE among these participants. Twelve participants (10.1%) reported urinary tract infection symptoms (pain on urination, frequent urination) on the GHS. Discomfort or pain during urination on the HPE was associated with GHS items for pain on urination ($X^2 = 21.74, p < .01$) and frequent urination ($X^2 = 11.14, p < .01$). Two participants (1.7%) reported having vaginal discharge, one (0.8%) reported vaginal sores, and four (3.4%) reported vaginal itching on the GHS. Among these participants reporting vaginal issues on the GHS, the HPE was associated with observed vaginal discharge ($X^2 = 4.32, p < .04$) and their sexually transmitted infection test results were 100% positive ($X^2 = 10.82, p < .01$).

A history of any self-harm was reported on the GHS by 27 participants (22.7%), with 21 participants (17.6%) reporting explicit suicidal ideation, and 8 participants (6.7%) reporting recent

TABLE 2
Association Between GHS Report and HPE Findings

<i>GHS Self-Reported Condition</i>	<i>Total Number (%)</i>	<i>HPE Finding</i>	<i>X²</i>	<i>p-Value</i>
Recent injury	15 (12.6%)	Injury noted	4.56	<.04
History of forced sexual activity	26 (21.8%)	Suicidal ideation	17.4	<.01
		Difficulty concentrating	2.96	.086
		Depression	19.19	<.01
		Fatigue	6.29	<.02
Currently in pain	49 (41.7%)	Pain as a significant health concern	5.3	.03
Current asthma symptoms or breathing problems	8 (6.7%)	Wheezing	5.75	<.02
		Rales	2.85	.091
History of visiting the emergency department for asthma problems	21 (17.6%)	Wheezing or rales	3.08	.079
Discomfort or pain during urination	12 (10.1%)	Pain on urination	21.74	<.01
		Frequency	11.14	<.01
Vaginal discharge	2 (1.7%)	Vaginal discharge	4.32	<.04
Vaginal sores	1 (0.8%)	Positive STI test	10.82	<.01
Vaginal itching	4 (3.4%)			
History of self-harm	27 (22.7%)	Confusion	3.3	.069
Current suicidal ideation	21 (17.6%)	Depression	4.36	<.04
Suicide attempts in last month	8 (6.7%)	Suicidal ideation	3.26	.071

attempts at suicide within the past month. Recent self-harm (in the past month) on the GHS was associated with other self-harm in the previous year ($X^2 = 9.38, p < .01$), suicidal ideation ($X^2 = 5.49, p < .01$), and suicide attempts ($X^2 = 6.45, p < .02$) on other questions on the GHS. Among these participants who endorsed self-harm behavior, providers on the HPE observed depression ($X^2 = 4.36, p < .04$) as a primary health concern.

Discussion

The GHS pilot study results showed that the participants had medical issues typical of detained populations. The participants were generally willing to answer questions about sensitive areas of their lives and their answers provided information that could be used to identify areas requiring immediate medical attention. Overall, responses on the GHS were consistent with related questions and physical exam findings on the HPE. Such an association makes the GHS a valid screening instrument for urgent issues at the time of detention. Juvenile detention centers across the country have been cited for not addressing the medical issues of their detainees in a timely manner (Gallagher, & Dobrin, 2007). Addressing these issues upon admission will enable providers to triage urgent and potentially dangerous health issues. This is particularly important because female youth in the juvenile justice system are among the sickest and most medically underserved adolescent populations (Piquero, 2008; Morris et al., 1995; Elster et al., 2003). The GHS can be used as a preliminary needs assessment of the healthcare status of females entering juvenile detention centers with little impact on staff resources. As the population of detained female youth grows, the GHS has the potential to serve a needed role in the intake process.

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