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Primary Care Providers' Reports of Time Alone and the Provision of Sexual Health Services to Urban Adolescent Patients: Results of a Prospective Card Study

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Introduction

Adolescents residing in impoverished urban environments are at considerable risk for negative health consequences of sexual activity, such as exposure to STIs and unplanned pregnancy [1-2]. Confidential care (time alone with an adolescent) is essential for quality adolescent primary care, especially to counsel about sexual health risks. Professional guidelines recommend routine provision of confidential care [3], yet many adolescents never have time alone with a health care provider [4-6]. Only 60% of urban youth reported private time with physicians during their last visit [7]. Most research has relied on retrospective accounts from adolescent patients [4-7]. This study required providers document prospectively the provision of time alone and content of adolescent visits.

The purpose of the study was to track primary care providers' (PCPs) time alone with adolescent patients, and to identify key factors associated with its provision. Patient age and gender, history of care, type of visit and complaint were assessed. We also examined key factors associated with provision of sexual health services.

Methods

Sample

We used purposeful stratified sampling to enroll providers (family physicians, pediatricians and adolescent specialists). A list of randomized names across five community health centers and one adolescent practice was generated. All practices were located in low-income, primarily minority communities in New York. Those who worked at least 50% time at the clinic were eligible. The first 25 providers were approached. Twenty-one provided informed consent and were enrolled into the study.

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Measures

Each card assessed patient age, gender and type of visit (physical, follow-up, same-day, or walk-in). Providers indicated: (1) whether the adolescent had attended the clinic alone; (2) the provider's history of care for the parent and adolescent; (3) whether time alone was offered; (4) how the accompanying parent responded when asked to leave the room (1-*not at all well* to 4-*extremely well*); (5) the amount of time (if any) spent alone with the adolescent patient during the visit (0%-100%); (6) whether a sexual history was obtained; (7) the type of sexual health services that resulted (if any) from a checklist; and (8) any needs identified that warranted confidential care follow-up. Piloting showed cards took less than one minute to complete.

Procedures

Providers were trained to complete index cards in 10-minute sessions by the third author and instructed to complete one immediately following each adolescent encounter. Adolescents were defined as any patient between the ages of 12 and 18. Each provider was given 12 index cards with a unique provider identifier; no patient or parent identifying information was collected. Study personnel collected completed cards directly from the providers. The current study was approved by our human subjects research board.

Data Analysis

Data collection time ranged from 2-8 weeks. One provider was omitted from analyses for completing only one card. Means and proportions were used to describe visit characteristics from the remaining 20 providers' reports. ANOVA was used to compare adolescents' ages for visits with vs. without a parent. Logistic regression was used to identify correlates of provision of time alone with the PCP for those adolescents whose parent attended the visit, and correlates of provision of sexual health services in all visits.

Results

Descriptive statistics

Providers returned an average of 10.8 cards (range 8-12) documenting 215 visits, 43% of which were physicals. Patients were on average 15.6 (SD = 1.9) years, female (64%), and most (73%) had seen the provider previously. Almost half of parents received care at the clinic (46%), occasionally from the same provider (29.4%). Most visits (72.1%) involved taking a sexual history, and 53% involved providing sexual health services, typically safer sex/disease counseling, STI tests, or prescribing contraception. PCPs noted 40% of the 215 visits required confidential follow-up. (Table 1)

A parent was absent for 71 of the 215 visits (33%), usually parents of older adolescents ($M_s = 16.9$ and 14.9 years, $F(1,212) = 64.09$, $p < .001$). Of 144 visits attended by a parent, 98 (68.1%) involved time alone with the adolescent. This time alone was provided on average for 51% of visit time (range 5%-100%). PCPs indicated parents reacted well when asked to leave the room ($M = 3.63$ on a scale 1-4).

Logistic regression to identify correlates of time alone

Adolescent's age, gender, type of visit (physical, follow-up, same-day/walk-in), sexual complaint (yes/no), whether the provider had seen the adolescent or parent previously and provider type were entered into a regression model predicting time alone with providers (Table 2). Odds of time alone with a PCP were 129 times higher for physicals than same-day/walk-in visits, and 6 times higher if presenting a sex complaint.

Logistic regression to identify correlates of provision of sexual health services

Time alone was added as a predictor of provision of sexual health services. Those who had time alone (versus none) with their PCP had 3.2 greater odds of receiving sexual health services. Odds increased 50% with each year of age; girls had double the odds of receiving these services compared to boys. The odds for physicals were 4 times higher than same-day/walk-ins and 15 times higher if presenting a sex complaint.

Discussion

Most visits involved taking sexual histories and providing sexual health services. Despite time pressures and competing demands [8], providers consistently delivered time alone during preventive visits, but were relatively unlikely to provide it in the context of acute care. Time alone and presenting a sex complaint clearly drive provision of sexual health services. Given that many adolescents access care episodically or do not make preventative care appointments [7], the result may be many missed opportunities to deliver needed services to at-risk populations, particularly among boys.

Study limitations include a small, non-representative sample, and no corresponding adolescent data. Monitoring effects likely influenced some behavior and it was impossible to ensure full compliance. However, findings support the literature documenting the impact of time alone between providers and adolescents in primary care settings on the provision of sexual health services [9-10]. Health services research is needed to evaluate means of promoting time alone and its effects on important sexual health outcomes. This information may inform interventions to increase provision of preventive health to all teens and ultimately improve quality of adolescent primary care.

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Table 1

Visit Characteristics of All Visits and Visits Attended by Parents

Variables	All Visits		Visits Attended by Parents	
	N=215	%	N=144	%
Type of Visit				
Physical	88	43.3	73	50.7
Follow-up	55	27.1	27	18.8
Same-day	36	17.7	22	15.3
Walk-in	24	11.8	12	8.3
Not classified by provider	12	5.6	10	6.9
Adolescents' reasons for visit				
Acute visit	58	27.0	41	28.5
Preventative exam	71	33.0	57	39.6
Sexual/reproductive health mentioned at all	43	20.0	21	14.6
Routine care or chronic disease management	35	16.3	18	12.5
Other	8	3.7	7	4.9
Parent/guardian attended visit with adolescent	144	67.0	144	100.0
Confidentiality explained to adolescent during visit	120	83.3	85	59.0
Confidentiality explained to parent during visit	60	41.7	60	41.7
Parent asked to leave room ¹	93	64.6	93	64.5
Provider obtained sexual history	155	72.1	98	68.5
Sexual health services provided	114	53.0	65	45.8
STI test	54	25.1	24	16.7
Contraception	41	19.1	14	9.7
Pregnancy test	22	10.2	9	6.3
Discussion about safe sex/STI prevention	102	47.4	57	39.6
GYN examination	23	10.7	7	4.9
Other	34	15.8	27	18.8
Identified needs requiring confidential care follow-up	85	39.6	42	29.2

¹ Provider indicated parent left room without being asked in an additional three cases.

Table 2

Predictors of Time Alone with Provider and Provision of Sexual Services

Background Variable	Time Alone with Provider (N = 144)		Provision of Sexual Health Services (N = 215)	
	Unadjusted Odds Ratio ¹	95% Confidence Interval	Unadjusted Odds Ratio ²	95% Confidence Interval
Age (years)	1.10	0.86 – 1.42	1.53	1.23 – 1.90
Gender (female)	0.97	0.37 – 2.54	1.56	0.75 – 3.25
Type of visit (same-day/ walk-in)				
Physical	129.01	11.35 – 1465.98	4.01	1.31 – 12.26
Follow-up	3.10	0.94 – 10.20	0.95	0.36 – 2.51
Present sex complaint (yes)	6.31	1.12 – 35.64	14.98	4.27 – 52.51
Seen patient prior (yes)	0.77	0.29 – 2.10	1.00	0.46 – 2.18
Parent also patient (yes)	0.57	0.20 – 1.59	1.25	0.55 – 2.86
Time alone with PCP (yes)	---	---	3.21	1.31 – 7.83
Provider type (adolescent)				
Family medicine	2.15	0.52 – 8.93	1.72	0.59 – 5.01
Pediatric	0.17	0.02 – 1.82	1.86	0.52 – 6.66

¹ Nagelkirk $R^2 = .39$ for the full model.² Nagelkirk $R^2 = .40$ for the full model.