

Evaluation of a Curriculum to Improve Clinician Communication With Adolescents

Amy Olejniczak, MS, MPH; Hannah Otolara-Fadner, BA; Christina Hanna, MPH; Emma Hudson, MPA, MPH; Joanna Tess, MPH; Heather Royer, PhD, RN

ABSTRACT

Introduction: While guidelines for health care clinicians working with adolescent patients encourage open communication and confidential visits, current practices often fall short and many adolescents do not receive confidential care or adequate communication about sexually transmitted infections, reproductive health, and other sensitive health topics.

Methods: The Providers and Teens Communicating for Health (PATCH) program in Wisconsin aims to bridge communication gaps between adolescents and health care clinicians. Teen educators are hired and trained to lead 2 types of workshops—one targeting peers and one targeting clinicians.

Results: Pre- and post-intervention evaluations show improvements in clinician and teen knowledge, intentions to seek and provide quality care, and reported change in care delivery.

Conclusion: The PATCH program curriculum shows promise for improving the care of young people throughout Wisconsin.

INTRODUCTION

In the United States, around 20 million new sexually transmitted infections (STIs) occur each year, with roughly half occurring in individuals aged 15 to 24 years.¹ In Wisconsin, while nearly half of high school students are currently sexually active, only 61% report using condoms during their last sexual encounter.² Approximately 6000 Wisconsin teens become pregnant each year.^{2,3}

While adolescents demonstrate a need for access to sexual health services, nearly half report never having discussed their sexual health history with a clinician, and less than one-third report ever having discussed birth control, STI testing, proper condom

use, or counseling about sexual abuse.⁴ Health care clinicians are a reliable source of knowledge, and adolescents not receiving the information they need points to a critical gap in communication.^{4,5} Moreover, 48% of young people aged 13 to 24 report wanting more sexual health information from doctors than they currently are receiving.⁶

The Guide to Adolescent Preventive Services (GAPS) recommends that clinicians regularly communicate office confidentiality policies and communicate with patients in a nonjudgmental manner. This is particularly important as many adolescent patients report feeling uncomfortable

discussing health topics with clinicians if privacy and confidentiality have not been assured and if they feel as if the clinician is judgmental or condescending.⁷ Awareness of these concerns could help clinicians better communicate and ultimately improve the overall health of adolescent patients.

METHODS

Providers and Teens Communicating for Health (PATCH), formally the Wisconsin Adolescent Health Care Communication Program, is a program run by the Wisconsin Alliance for Women's Health with the goal of bridging gaps in communication between adolescents and clinicians. Recognizing that teens are best equipped to offer clinicians authentic insight into teen experiences and concerns, the program curriculum includes evidence-based content and delivery format and enables clinicians to learn directly from teen educators. The program also employs peer education to empower Wisconsin teens to seek quality sexual health care.⁸

The program curriculum includes facilitation of 2 workshops based on program structure developed by the National Institute for Reproductive Health: (1) PATCH for Providers—an interactive workshop in which teen educators present to health care clinicians using skits, small group discussions, worksheets, and

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Author Affiliations: Wisconsin Alliance for Women's Health, Madison, Wis (Olejniczak, Otolara-Fadner, Hanna, Hudson, Tess); University of Wisconsin School of Nursing, Madison, Wis (Royer).

Corresponding Author: Amy Olejniczak, MS, MPH, Associate Director, Wisconsin Alliance for Women's Health, PO Box 1726, Madison, WI 53701-1726; phone 608.251.0139; fax 608.256.3004; e-mail amy.olejniczak@wiawh.org.

Table 1. Demographic Characteristics of Teen Workshop Participants (n=371)

Demographic Characteristic	n	%
Age		
12	4	1
13	4	1
14	12	3
15	57	15
16	101	27
17	97	26
18	58	16
19	9	2
20 or older	13	3
Unknown/No response	16	4
Gender		
Male	189	51
Female	161	43
Other	2	0.5
Race		
White	281	75
Black/African-American	31	8
American Indian/Alaska Native	5	1
Asian	5	1
Native Hawaiian/Pacific Islander	3	0.8
Multiracial	30	8
Other	6	2
No response	11	3
Ethnicity		
Not Hispanic/Latino	250	67
Hispanic/Latino	32	9
No response	89	24
Sexuality		
Heterosexual	315	84
Homosexual	5	1
Bisexual	9	2
Asexual	5	1
Questioning	7	2
Other	12	3
No Response	18	5
Primary Guardian Education		
Less than high school	46	12
High school/General educational development	109	29
Some college	51	14
2-year degree	46	12
4-year degree	44	12
Master's degree	37	10
Doctoral degree	11	3
Professional degree (MD/JD)	8	2
Unknown/No response	17	5
Secondary Guardian Education		
Less than high school	39	11
High school/General educational development	125	34
Some college	48	13
2-year degree	42	11
4-year degree	53	14
Master's degree	23	6
Doctoral degree	7	2
Professional degree (MD/JD)	5	1
Unknown/No response	29	8

Table 2. Demographic Characteristics of Provider Workshop Participants (n=177)

Demographic Characteristic	n	%
Gender		
Male	32	18
Female	132	75
Other	2	1
No response	11	6
Years in the Field		
<5 years	91	51
5-10 years	51	10
11-20 years	28	16
>20 years	35	20
No response	6	3
County		
Dane	35	20
Milwaukee	20	11
Wood	14	8
Marathon	16	9
Clark	12	7
Rock	14	8
Taylor	7	4
Unknown	59	33
Provider Type		
Practicing clinician	48	27
Resident	44	25
Student	22	12
Other	57	32
No response	6	3

activities to help clinicians develop communication strategies; and (2) PATCH for Teens—a complimentary workshop where teen educators educate peers about health care rights and confidentiality laws in Wisconsin, and encourage them to seek positive health care experiences.

The PATCH for Teens workshop introduces teens to the confidentiality of certain sexual health services, equips students to think critically about the stigma that surrounds sexual health in our society, and empowers students to seek the health knowledge and services that clinicians offer. A skit at the end uses student volunteers to illustrate the importance of practicing open communication with one's clinician and provides tips and tools for doing so.

In the PATCH for Providers workshop, teen educators lead clinicians through a series of interactive activities in which clinicians are asked to respond and suggest ways in which communication with teens could be improved. For example, the workshop begins with a "Myth or Fact" exercise in which clinicians are shown statements about teen concerns or preferences and must determine the validity of that statement. Clinicians also are given the opportunity to volunteer in a skit that mimics an office visit in which they are asked to respond to a teen patient using strategies and methods taught throughout the workshop. As a group, the teen educators and clinicians watch a series of short standardized patient interactions and discuss what went well and

Table 3. Outcome Measures Descriptions and Percent Correct for Pretest and Posttest

Outcome Measure Title	Measure Description	Teens (N = 398)			Providers (N = 180)			
		Pretest	Posttest	Change	Pretest	Posttest	Follow-up	Change
Knowledge	Assesses understanding of youth-clinician sexual health communication, appropriateness of parent involvement in teen clinic visits, and knowledge about confidential health care services in Wisconsin. (% Correct)	58.61%	79.34%	Gain: +50.1% ^a	73.64%	80.30% (n = 146)	80.95% (n = 44)	Gain: +27.7% ^b
Internal Stigma (Clinicians)	Measures perceptions of teen sexual activity and teen communication skills. (4 = High Stigma; 1 = Low Stigma)				2.09	2.04 (n = 155)	1.92 (n = 52)	<i>P</i> = 0.000 ^a <i>P</i> = 0.731 ^b
Anticipated and Internalized Stigma (Teens)	Assesses perceptions of teen sexual activity and the need for sexual health services. (4 = High Stigma; 1 = Low Stigma)	2.52	2.35	<i>P</i> = 0.024 ^a				
Self-Efficacy	Assesses clinicians' and teens' confidence in talking with each other about sexual health, confidentiality, and other sensitive health topics. (4 = High Self-Efficacy; 1 = Low Self-Efficacy)	2.97	3.10	<i>P</i> = 0.002 ^a	2.97	3.24 (n = 152)	3.40 (n = 47)	<i>P</i> = 0.000 ^a <i>P</i> = 0.002 ^b
Current and Intended Behavior: (Teens)	Measures percentage of teens that have brought up sexual health and confidentiality with a clinician and percent of teens that intend to during future visits. (% Teens)	15.2%	44.7%	Gain: +34.8% ^a				
Current and Intended Behavior (Clinicians)	Measures self-reported current and intended behaviors for defining sex for teen patients. (1 = At every appointment; 4 = Never)				1.88	1.31 (n = 120)	1.72 (n = 44)	<i>P</i> = 0.010 ^a <i>P</i> = 0.670 ^b
	Measures self-reported current and intended behaviors or discussing confidentiality with teen patients. (1 = At every appointment; 4 = Never)				1.39	1.10 (n = 122)	1.42 (n = 44)	<i>P</i> = 0.021 ^a <i>P</i> = 0.443 ^b
	Measures self-reported current and intended behaviors for asking parents to leave the room during teen visits. (1 = At every appointment; 4 = Never)				1.70	1.13 (n = 120)	1.48 (n = 44)	<i>P</i> = 0.061 ^a <i>P</i> = 0.289 ^b

^aChange from pretest to posttest^bChange from pretest to follow-up test

what areas need improvement. Teen educators also are trained as standardized patients and allow for practice interviews when appropriate.

Data was collected from 398 teens (Table 1) and 180 clinicians (Table 2) who participated in 28 1- to 2-hour workshops (10 for clinicians and 18 for teens) between September 2012 and May 2013. (Note that data was not available for all participants.) Participants were recruited through community connections and outreach, as well as an online workshop request form. Attendees were given pre- and posttests to assess outcome measures related to sexual health communication (Table 3). Providers completed a 3-month follow-up to assess medium-term impacts and an additional self-reported behavioral change measure. Gain scores were calculated to determine cumulative knowledge increases from pre- and posttests which, in this context, can be understood as the percentage of workshop attendees who answered the questions incorrectly on pretest, who then answered correctly on posttest. Gain scores demonstrate the program's impact on those who did not have the knowledge prior to the workshop. To analyze data, 2-tailed *t* tests were conducted with an alpha of 0.05. Paired analysis was used for clinicians but was not possible with the teen data (see Limitations).

RESULTS

Teens (N = 398) demonstrated the greatest increase in knowledge related to patient/clinician responsibilities when bringing up sensitive health conversations during a visit (gain = 32%, *P* = 0.001), and confidentiality policies around sexual and general health services (gain = 50%, *P* = 0.001). Teens also demonstrated significant improvements in self-efficacy. They reported greater confidence in talking to clinicians about sensitive health topics (*P* = 0.08) and from the pretest to the posttest, nearly twice as many teens intended to bring up sexual health and confidentiality with their clinician.

With an overall knowledge gain of 27.7% from pretest to follow-up, clinicians (N = 180) demonstrated the greatest gains in knowledge of adolescent concerns and preferences (gain = 71%, *P* = 0.001) and in an understanding of the role that confidentiality plays in adolescent health (gain = 70%, *P* = 0.001). Providers also reported increases in their confidence in talking to youth about sexual health (from 2.97 in pretest to 3.40 in follow-up with *P* = 0.002). Providers similarly showed a significant increase in intended behavior and a slight increase in self-reported actual behavior change—meaning they reported discussing confidential-

ity, definitions of sex terms, and asking parents to leave the room for a period during visits with youth in the follow-up test.

DISCUSSION

There was significant improvement in the areas of knowledge, self-efficacy, and reported behavioral intentions to seek and provide quality sexual health care for teens and clinicians. For clinicians, there was evidence of self-reported behavioral changes at the 3-month follow-up. Teens exhibited the greatest growth in learning confidentiality policies and the importance of patient/clinician communication.

Workshops were well-received with 93% of clinicians and 74% of teens rating the experience as very good or excellent. Additionally, 100% of teen educators who implemented workshops over the course of a year found the experience to be valuable and reported increases in knowledge and self-efficacy related to sexual health.

Limitations

Although this program evaluation shows evidence of a promising program, several limitations should be noted. First, occasional variations in workshop length and content occurred due to attendee scheduling constraints and natural variation between teen educators. Second, we experienced challenges when matching teen pre- and posttests, as well as tracking teens and clinicians for our 3-month follow-up (33% response rate).

CONCLUSION

The PATCH program demonstrated evidence of early efficacy, feasibility, and statewide demand. Projected goals for workshop delivery were exceeded by nearly 3 times. Providers and teens experienced significant improvements in knowledge, self-efficacy, and behavioral intentions to seek and provide quality sexual health care. PATCH hopes to continue its program expansion

in Wisconsin in order to be more accessible to teens and clinicians throughout the state. Clinicians can visit www.wipatch.org to learn more or to schedule a workshop.

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REFERENCES

1. Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2012. <http://www.cdc.gov/std/stats12/default.htm>. Published 2013. Accessed September 11, 2015.
2. Wisconsin Department of Health Services, Division of Public Health, Bureau of Health Information and Policy. Wisconsin Youth Sexual Behavior and Outcomes, 1993-2007 – Update (P-45706-07b). February 2009.
3. Planned Parenthood Advocates of Wisconsin Website. Healthy Youth Act. <http://www.ppawi.org/home/issues/current-issues-legislation/healthy-youth-act.cmsx>. Published 2011. Accessed September 11, 2015.
4. Hoff T, Greene L, Davis J. *National Survey of Adolescents and Young Adults: Sexual Health Knowledge, Attitudes, and Experiences*. Menlo Park, CA: Kaiser Family Foundation; 2003. <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/national-survey-of-adolescents-and-young-adults.pdf>. Accessed September 11, 2015.
5. Klein JD, Wilson KM. Delivering quality care: adolescents' discussion of health risks with their providers. *J Adolesc Health*. 2002;30(3):190-195. doi:10.1016/S1054-139X(01)00342-1.
6. Hardoff D, Schonmann S. Training physicians in communication skills with adolescent using teenage actors as simulated patients. *Med Educ*. 2001;35(3):206-210. doi:10.1111/j.1365-2923.2001.00764.x.
7. Merzel CR, Vandevanter NL, Middlestadt S, Bleakley A, Ledsky R, Messeri PA. Attitudinal and contextual factors associated with discussion of sexual issues during adolescent health visits. *J Adolesc Health*. 2004;35(2):108-115. doi:10.1016/j.jadohealth.2003.09.011.
8. Ross DA. Approaches to sex education: peer-led or teacher-led? *PLoS Med*. 2008;5(11):e229.

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