

Decreasing Barriers for Teens: Evaluation of a New Teenage Pregnancy Prevention Strategy in School-Based Clinics

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In 1997, the pregnancy rate among 15- to 17-year-old adolescents in Minneapolis was 79.4 per 1000 (unpublished data, Minneapolis Department of Health and Family Support, 1997), compared with state and national rates of 32.0 and 57.1, respectively.¹ In response to this major public health concern, the Minneapolis Department of Health and Family Support looked to its high school-based clinics to help improve pregnancy prevention.

The Minneapolis Department of Health and Family Support operates comprehensive school-based clinics (SBCs) in 5 traditional high schools. Parents have the choice of allowing their child to receive (1) any SBC service, (2) any service other than contraceptive counseling and birth control prescriptions, or (3) no services.

In the past, students requesting contraceptives from SBCs had been given vouchers to pick up the contraceptives at community clinics at no cost. Because many vouchers went unfilled, a new policy involving direct on-site distribution of contraceptives was instituted in May 1998. (Appointments were necessary for requesting contraceptives.) In the present study, we sought to evaluate the effects of the

change in distribution systems on students' receipt of requested contraceptives and demand for contraceptives from SBCs.

METHODS

We conducted a retrospective chart review of all students in the class of 1998 requesting contraceptives from an SBC under the voucher system and all students in the class of 2000 requesting contraceptives under the direct distribution system. We examined charts from the junior and senior years of each class. The study sample of 302 students was 79.1% female, 39.1% White, and 36.8% African American. The 2 classes had similar demographic characteristics.

To compare receipt of contraceptives under the 2 systems, we computed, for each method separately as well as all methods combined, the proportions of contraceptives requested that were, in fact, received. To assess demand, we compared the proportions of all students enrolled who requested contraceptives under each system.

RESULTS

Under the voucher system, 41% of students received all requested contraceptives, and 59% received at least one. In contrast, 99% of students received all requested contraceptives under the direct distribution system (Table 1). Under the voucher system, only 25% to 50% of students received requested condoms or oral contraceptives, compared with 100% under direct distribution.

The percentage of students requesting contraceptives from an SBC was 11% in both study periods. However, demand for hormonal methods increased slightly under direct distribution (from 6.1% to 7.3% of students; see Table 2). The average number of requests per student was higher under the voucher system, possibly as a consequence of expired vouchers resulting in repeated requests.

DISCUSSION

This study demonstrates the efficacy of a direct distribution system, relative to a

voucher system, in ensuring that sexually active students receive contraceptives. Because clinical policy changes can be implemented and enforced inconsistently, it was encouraging to see that the switch to a direct delivery system did indeed increase receipt of contraceptives. Although we were unable to examine actual method use in our sample, there is cause for optimism in light of evidence that improving adolescents' access to contraception increases actual rates of use.²

Overall demand for contraceptives did not change with the implementation of the direct delivery system. However, there was an increase in the proportion of requests for hormonal contraception methods. This is a promising result in terms of pregnancy prevention, because "use" of medroxyprogesterone (Depo Provera) is ensured once the injection is given, and oral contraceptives are highly effective in preventing pregnancy when they are used properly. It should be noted, however, that neither hormonal method used alone protects against sexually transmitted infections.

It is possible that overall demand would have increased had there been greater publicity about the change in delivery system. The Minneapolis Department of Health and Family Support did not widely promote the policy change; rather, staff informed current SBC users, school administrators, and some classrooms via presentations describing the services offered. Thus, students who had not previously used an SBC may have been unaware of the policy change. It is plausible that the voucher system was the key barrier preventing some of these students from using SBCs, and greater publicity regarding the direct distribution system may have resulted in students being more likely to visit an SBC to obtain contraceptives. Unfortunately, we do not have data to explore this possibility.

Results of a recent national survey indicated that, of the SBCs housed in US secondary schools, only 18% actually dispense birth control pills and about 28% dispense condoms.³ Our findings suggest that SBCs could go a step further in reducing adolescents' barriers to accessing contraceptives by adopting an on-site direct delivery system.

Because our investigation involved a retrospective chart review technique, our ability to draw conclusions regarding the impact of the

TABLE 1—Receipt of Contraceptives Under the Voucher System (Class of 1998) and the Direct Distribution System (Class of 2000)

	Voucher (n = 149), No. (%)	Direct Distribution (n = 153), No. (%)
Receipt of contraceptives requested (all methods combined)		
Received all requests	61 (40.9)	152 (99.3)
Received some requests	27 (18.1)	0
Received no requests	61 (40.9)	1 (0.7)
Receipt of contraceptives, by method requested		
Condoms		
Received all requests	21 (25.3)	77 (100)
Received some requests	7 (8.4)	0
Received no requests	55 (66.3)	0
Oral contraceptives		
Received all requests	11 (50.0)	48 (100)
Received some requests	1 (4.5)	0
Received no requests	10 (45.5)	0
Medroxyprogesterone (Depo Provera)		
Received all requests	5 (62.5)	29 (100)
Received some requests	2 (25.0)	0
Received no requests	1 (12.5)	0
Combined (hormonal and condoms)		
Received all requests	40 (59.7)	46 (97.9)
Received some requests	14 (20.9)	0
Received no requests	13 (19.4)	1 (2.1)

TABLE 2—Demand for Contraceptives Under the Voucher System (Class of 1998) and the Direct Distribution System (Class of 2000)

	Voucher (n = 1365)	Direct Distribution (n = 1419)
Students requesting contraceptives, No. (%)	149 (10.9)	153 (10.8)
Students requesting condoms at least once, No. (%)	83 (6.1)	77 (5.4)
Students requesting prescription method at least once, No. (%)	83 (6.1)	104 (7.3)
No. of requests per student, mean (SD)	1.69 (1.12)	1.40 (0.74)

direct delivery system is limited. Complete data were available on receipt but not on use of contraceptives. In situations in which factors other than access were responsible for students' failure to fill vouchers (e.g., students changing their minds), the direct delivery system would not have removed all barriers to actual contraceptive use. Future studies and access to data on pregnancies will help to further elucidate this issue. ■

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Contributors

A. Sidebottom worked on initial research question conceptualization, created the abstraction tool, wrote the initial draft, and worked on the data analysis. A. S. Birnbaum worked on initial research question conceptualization, data analysis, and writing and editing of the article. S. S. Nafstad contributed to data abstraction and conceptualized the initial research question.

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Human Participant Protection

This research was approved by the University of Minnesota institutional review board. Because of the chart review technique used in this study, informed consent was not required.

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