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Access to Reproductive Health Care for Adolescent and Young Adult Women in the United States

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PRELIMINARY

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Background

The risk of unintended pregnancy is higher in the U.S. than in other developed countries. The fragmented nature of the U.S. health care system could contribute to this fact given that the most effective methods for preventing pregnancy require a health care visit, yet not all women have health insurance or simple access health care providers or clinics. Abortion rates are highest among women ages 20-24 [1] as are rates of unintended pregnancy [2, 3]. The peak in unintended pregnancy occurs during the transition from adolescence to adulthood, as young women become sexually active, and tend to experience major shifts in their living arrangements, occupation (i.e., transition from school to employment or higher education), and relationships. In the United States, these changes may disrupt already tenuous health care contacts or the necessity of reproductive health care may become more acute without a corresponding level of knowledge about how to navigate the complicated health care system. Moves toward greater independence, changes in living situations, initiation of employment or higher education, and family formation may contribute to differing levels of access to health care, and the most effective contraceptive methods.

The transition from adolescence to adulthood is a period of the life course that has drawn considerable attention from social scientists The average age of first intercourse, completion of compulsory education, marriage, or birth of first child, mark important shifts in the life course for a majority of the population, although there exist many social and cultural differences in the timing and significance of these events. Normative expectations and social meanings applied to biological developments (e.g., puberty), and passage into and out of social and cultural institutions (e.g., formal education, marriage, paid labor) produce socially recognized divisions of the life course [4, 5]. These divisions contribute to individual identity formation and socialization, social relationships, and expectations regarding appropriate behavior and roles. The life course is also defined by a historical context that is shared by a cohort of individuals that pass through life and social institutions at the same

time [6]. Thus, birth age, historical events, and normative social and cultural expectations influence the experience and meaning of the life course of an individual or a cohort.

In the absence of formal rites of passage, the pace of these changes will vary considerably according to differences in social and structural constraints and opportunities. The complexity of this developmental process is most apparent when considering the interactions between these changes for an individual. For example, a woman pursuing post-graduate education commonly delays marriage and parenthood compared to women with lower education attainment. Jessor and Jessor [7, 8] identify specific behaviors, such as the initiation of sexual activity and the onset of drinking, as important contributors to the transition from adolescence to adulthood. Both of these activities are viewed by society as adult activities, and are the subject of strong social and institutional norms. As such, many adolescent behaviors are viewed as defiant, non-normative, and as presenting risks to their health.

Engagement in risky activities, can be viewed as part of a developmental transition from adolescence to adulthood [9]. Furthermore, risky behaviors can be functional and goal-directed in terms of peer-respect, establishing autonomy from parents, resisting the norms and values of authority, dealing with the anxiety surrounding a move to greater independence [10]. The clustering of risk behaviors and their increased prevalence during the period roughly viewed as the average transition to adulthood in U.S. society (18 to 21), can be considered from a life course transition perspective [11].

The view of sexual activity, especially in early adolescence, as a deviant, non-normative behavior pervades social institutions, including school and health care. These institutions enforce social norms with messages of abstinence from activities that in a just a few years will be considered acceptable [10]. Risk behaviors in the transition from adolescence to adulthood are the subject of much research and public debate. However, the potentially protective role of health care, and ways to optimize care to reduce harm during a period of transition is less often a topic of public discourse. For girls and young women, significant sex-specific consequences of sexual activity exist and effective contraception is available only with a prescription, making access to health care critically important. For adolescent

women, seeking health care could be a transformative step toward adulthood, exemplifying greater agency and self-care. The extent to which the health care system and health care providers respond to their particular interests and needs, however, may limit the protective role health care could serve.

Obtaining access to needed health services and information during adolescence and early adulthood is likely to pose new challenges given a relative lack of experience with the health care system, and changing health care needs that require a shift into adult health care settings. Many factors contribute to unintended pregnancy risks, but health care factors could have a significant role in reducing these risks. Investigating the health care experiences of young women as they pass from adolescence to adulthood is a first step in designing programs and interventions to optimize the quality of services provided during this phase of life. There has been no comprehensive investigation of the health care use patterns of young women as they transition from adolescence to adulthood.

Access to health care in the United States poses challenges to nearly everyone at some time, due to the absence of an organized system of care with clearly defined points of entry. The complicated funding of health care compounds these challenges by linking health insurance to either employment, enrollment in certain education institutions, poverty, disability, age, service in the armed forces, or membership in a recognized tribal group. Each of these categories delivers different levels of health coverage and different structures and processes that affect the delivery of care. As a result, and not surprisingly, there is great variation in access to health care depending upon one's social position and one's stage of life. Women who are at highest risk of experiencing unintended pregnancies and sexually transmitted infections are generally also less able to access health care. A national study of adolescents found that forgoing needed health care is associated with not being continuously insured, belonging to a racial or ethnic minority, and having had sexual intercourse and engaging in health risk behaviors such as smoking and heavy alcohol consumption [12].

Young women often lack health insurance and/or do not have a regular source of health care.

Consequently, when reproductive health services are needed, some women forgo needed care while

others manage to obtain services. Multiple sources of health care are utilized by young women. For women in need of contraceptive counseling and services, clinics such as Planned Parenthood provide reproductive health care at moderate cost. Alternatively, many women receive health care at private doctors offices or hospitals. Even adolescents with health insurance are likely to seek health services outside of their health plans, over 80% of adolescents in one study; convenience and a desire for confidentiality were the primary reasons cited [13]. The multiple types of health care sites that can provide reproductive health services result in complex and diverse patterns of health care use. An additional level of complexity arises from the diversity in types of health care professionals. Internists, family practitioners, and other general practitioners provide primary care to women, but specialists in obstetrics and gynecology provide more primary health care to women of reproductive age than any other type of physician [14, 15]. Women also make primary care visits to advanced practice clinicians for primary health care (e.g., NP, CNM, PA).

Research on young women's reproductive health tends to focus on personal and relationship factors that have been found to influence sexual risk taking and health protective behaviors. And, indeed, important findings have arisen from these inquiries. The proposed study extends beyond individual level risks and behaviors to examine structural conditions that may hinder effective contraceptive use during the transition from adolescence to adulthood. Specifically, this study considers differences in reproductive health services use for adolescent and young adult women, with attention to life stage specific factors that may influence access. The type of health insurance women have, or lack, and life circumstances are compared across age groups intended to capture the transition from adolescence to adulthood, and shifting reproductive health care use across life stages characterized by the highest risk of unintended pregnancy.

Methods

Data

The most recent National Survey of Family Growth (NSFG-Cycle 6) was completed in 2002 and is an area probability sample of 12,572 non-institutionalized men and women ages 15 to 44 – a nationally representative, population based sample. In-person interviews were conducted using Computer Assisted Personal Interview (CAPI) technology, with more sensitive interview items administered using an Audio-assisted Computer Self Interview (ACASI). The survey of women takes an average of 85 minutes. The survey was completed for 1,150 women ages 15-19, 1,363 women ages 20-24, and 5,130 women ages 25-44. The survey design included racial/ethnic oversamples, and, therefore, nearly a quarter of the women in the sample are Hispanic (21%) and a similar number are black (20%). The response rate for Cycle 6 of the survey was 79%.

Complex survey analytic techniques are used to produce point estimates and standard errors that account for clustering, stratification, and sample weights (Stata 10). Subpopulation commands available in Stata were used to ensure appropriate variance estimates. Design-based Pearson chi-squared test for independence and multiple variable logistic regression models are reported. The analytic subsample for the study consists of 1,750 women ages 15 to 25 who have had sex, are not pregnant or postpartum, and are not actively trying to become pregnant.

Measures

The main questionnaire for the NSFG contains a comprehensive set of sociodemographic items including demographic characteristics in addition to childhood background characteristics. Life stage contextual factors such as whether women are working for pay (full or part time), living with parents, and/or attending school are also available. The health care access questions included in the NSFG are focused on specific reproductive health services. Using the NSFG data, it is possible to examine whether in the past year women received any of the following services from a health care provider: a check-up

or medical test related to using contraception, a method of contraception or a prescription for contraception, a pelvic exam, a Papanicolaou (Pap) test, or counseling, testing or treatment for a sexually transmitted infection. Variables for insurance coverage can be used to measure the type of health insurance and whether there were gaps in coverage in the past year.

The analytic sample for our investigation focuses on women ages 15 to 25 that are potentially subject to unintended pregnancy and sexually transmitted diseases because they are: 1.) sexually experienced; 2.) not pregnant or postpartum, and; 3.) not actively trying to conceive. There were 1,750 women (weighted n) fitting these criteria, with a lower proportion of women in early adolescence contributing to the sample. Specifically, for women ages 15 to 17, there were 184 respondents in the analysis, among women ages 18 to 19 there were 310 respondents, among women ages 20 to 22 there were 600, and among women ages 23 to 25 there were 656 women included in the analysis. An inherent challenge of life course analysis, particularly when examining risk factors related to reproductive health, is the shifting risk profiles defined by age—the key independent variable. Earlier age of sexual debut is associated with other socioeconomic and family background disadvantages. Therefore, comparisons made between different stages of life must take into account the changing composition of age groups. Our discussion of the results attempt to contend with this methodological predicament by considering its implications.

Results

Adolescent and young adult women reporting that they are sexually active, but not pregnant, postpartum, or trying to conceive do not differ markedly in their race ethnic distribution, reported household incomes, or the educational attainment of their mothers (Table I). A smaller percentage of the youngest adolescents, however, reported growing up in a household with two biological or adoptive parents (i.e., an "intact" family). Earlier sexual debut among girls living in non-intact households may account for this difference.

Rates of marriage increase with age as expected: only 5% of 15-17 year olds were married, but a third of young women ages 20-22 were married and over half women ages 23-25 years (53.6%) (Table 2). Residential changes were extremely common among early and late adolescent women, and the proportion of women residing with both parents declined across the age groups.

Health insurance gaps were most common among the young adults ages 23-25, with over one third having lacked health insurance at some time in the past year (36.6%) (Table 2). Similarly, rates of uninsurance increased from adolescence to young adulthood. The youngest adolescents were most likely to have public insurance (26.0%), but young adults (ages 23-25) were least likely to have health insurance, with nearly a quarter reporting having none (22.9%). Significant differences in parity and in the number of sexual partners in the past year were also found. Similar to the trend in marriage rates, the percent of women having had at least one pregnancy increases across the age groups. By ages 23-25 over half of the women reported at least one pregnancy (55.9%), whereas only 17.3% of the 15-17 year olds had had a pregnancy. Reporting two or more sexual partners in the past year was highest among women ages 19-19 (31.9%) and lowest among 23-25 year olds (16.6%).

Over 1 in 5 young women (22.0%) did not report a reproductive health visit in the past year among 15-17 year olds, and similar levels of use were found for older adolescents (18-19) and for 23-25 year olds (Figure 1). The highest use was found for 20-22 year old women, but over 10% did not report a visit. Fewer than half of women reported having had a visit for birth control. Over a quarter of young adult women ages 23-25 did not report having a Papanicolaou (Pap) test in the past year, despite the recommended interval for this cancer screening test at that point in time (2002) being for a yearly Pap test for all sexually active women.

Multiple variable analysis of the predictors of reproductive health care use for adolescents and young adults was carried out separately because of differences in the meaning of predictor variable at different ages, and composition of the life stages. Different significant predictors of use were found for the two groups. Indicators of need, such as having more sexual partners and at least one pregnancy

were highly associated with repro-HC use, but family background and life circumstances and health insurance also were independently associated with use (Table 5).

Discussion

Life course transitions and changing health care needs were hypothesized to account for age differences in health care use in adolescence and young adulthood. Significant differences in use of reproductive health care use by age were observed in bivariate and multivariate analyses. Adolescents and young women experience rapid changes in their life circumstances that have implications for their use of health services. In order to maintain use of the most effective contraceptive methods available in 2002, a health care visit would be necessary at least once a year.

Policy and practice implications

A great deal of research has focused on reproductive health care for adolescents [16-19], and on health care during pregnancy [20-22]. Much less attention has been given to reproductive health care in early adulthood, perhaps in part because great variation in life experiences and trajectories emerge in early adulthood making it difficult to conceptualize a distinct group with common interests and needs. The variation is shaped primarily by social factors; for some groups of women, early adulthood is characterized by educational pursuits while for others childbearing and paid employment begin. The timing of fertility shapes the experience of early adulthood and is also affected by social factors; women of higher socioeconomic status tend to delay childbearing, and they have both the incentives and resources to do so.

Missed opportunities for counseling or services at health care visits, and problems accessing care may contribute to less than optimal care for young women. Although rates of uninsurance are high among adolescents and women in early adulthood, the majority manage to obtain health services. Nearly two-thirds of all women (63%) ages 20 to 24 reported receiving one or more family planning service from a medical provider in the previous year, according to another analysis of data from the NSFG [23].

The majority of non-illness health care visits made by women ages 18 to 44 are to obstetrician gynecologists [15]. Young women tend to be in good health and have few diagnosed chronic conditions, therefore, reproductive health concerns, primarily the need for contraception, are the main reason for health care visits. The high rates of utilization of reproductive health services among young adult women might be expected to contribute to improved health and protection from unintended pregnancy and STIs. Yet health care visits may fail to deliver on this potential, possibly due to failings in the content of care. For example, inadequate screening for Chlamydia has been observed even among adolescents reporting receipt of routine health care [24] and advance prescriptions for emergency contraception are not routinely offered to patients at risk of unintended pregnancy [25].

Access to health care is very important for both the initiation and continuation of contraceptive methods. Having an ongoing relationship with a health care provider able to address method problems would presumably improve contraceptive use. Follow-up with a known provider, however, is often difficult to obtain, especially for low income and uninsured women [26]. A randomized controlled trial assessed whether helping women attending an STD clinic to establish contact with a primary care provider would increase contraceptive use [27]. The use of effective contraception was higher in the intervention group, but the effect declined over time. A separate analysis of the data found that method-related problems were highly associated with method discontinuation [28]. Establishing and maintaining regular contact with a health care provider poses challenges, particularly for young women.

While some women opt to use only condoms or other over-the-counter options even when they receive contraceptive counseling from a health care provider, the lack of a health care visit for a portion of the women included in the present analysis represents a lower likelihood that contraceptive choices are based on full information and access to methods. The association of health insurance status and health care use in these age groups highlights the critical need for health care reform in the United States, as employer-based health insurance is particularly problematic for women in early adulthood. The effectiveness of public health insurance for ensuring reproductive health care visits among young

adolescent women is also notable, given the independence it may afford young women. The absence of an association between having private insurance and health care use for adolescents suggests that a connection to parental health insurance may serve as a barrier to obtaining protective reproductive health services.

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Table I. Sociodemographic and Background Characteristics, unweighted n=1,750

	Ages	Ages	Ages	Ages	P
	15-17	18-19	20-22	23-25	'
	n = 184	n = 310	n = 600	n = 656	
Race/ethnicity (%):					.06
Black, non-Hispanic	22.17	17.02	14.49	14.55	
White, non-Hispanic	64.84	64.72	66.31	61.02	
Hispanic	10.32	11.93	14.4	18.54	
Other	2.67	6.33	4.79	5.89	
Household income (%):					.14
100% of poverty and below	26. 4 8	28.26	25.14	30.31	
101-200% of poverty	63.38	55.53	54.04	52. 4 1	
Over 400% of poverty	10.13	16.22	20.81	17.28	
Mother or mother figure with some					.52
college or more education (%)					
	47.4	49.86	52.87	48.34	
Childhood lived with two biological or					<.001
adoptive parents (%)					
	38.15	55.9	67.I	59.21	
Married or living with a partner (%)	5.13	17.09	33.64	53.55	<.001
Currently attending school (%)	86.66	65.29	50.72	28.14	<.001
Currently employed full- or part-time (%)	47.57	56.7	67.71	73.66	<.001
Changed residence sometime in the past	76.69	56.66	35.93	35.91	<.001
2-3 years (%)					
Currently living with both biological					<.001
parents (%)	39.62	27.81	20.39	7.1	

Design-based Pearson chi-squared test for independence

Table 2. Health Care Access and Indicators of Reproductive Health Care Need, unweighted N=1,750

	Ages 15-17 n = 184	Ages 18-19 n = 310	Ages 20-22 n = 600	Ages 23-25 n = 656	P- value ¹
Lacked health insurance	19.45	23.44	30.66	36.64	.002
at some time in the past					
12 months (%)					
Type of health insurance					.01
(%):					
None	10.36	18.41	17.47	22.91	
Private	63.63	60.21	66.12	56.23	
Public	26.01	21.38	16.41	20.87	
Number of pregnancies					<.001
(%):					
0	82.74	71.56	65.95	44.13	
1+	17.26	28.44	34.05	55.87	
Two or more sexual					<.001
partners in past year (%)	25.58	31.89	25.26	16.59	

Design-based Pearson chi-squared test for independence

Table 3. Adolescent and Young Adult Women's Reproductive Health Care Use, Last 12 $Months^{1}$, unweighted N = 1,750

	Ages 15-17 n = 184	Ages 18-19 n = 310	Ages 20-22 n = 600	Ages 23-25 n = 656	P-value ²
Made at least one reproductive health care visit in the past year (%)	77.66	79.22	88.08	80.1	.006
Pelvic exam in past year (%)	44.41	47.71	66.25	64.59	<.001
Pap test in past year (%)	58.92	63.73	77.66	71.03	<.001
STI counsel/treatment/test in past year (%)	30.00	28.26	27.64	17.82	.001

Women who have ever had sex, are not currently pregnant or postpartum, and not actively trying to become pregnant

Design-based Pearson chi-squared test for independence

Table 4. Predictors of Reproductive Health Care Use for Adolescents and Young Adults, Adjusted Multiple Variable Logistic Regression Odds Ratios

	Ages 15-19	Ages 20-25	
	n = 553	n = 1452	
Age:			
15-17 20-22	Reference	Reference	
18-19 23-25	0.72	0.49**	
Race/ethnicity:			
Black, non-Hispanic	Reference	Reference	
White, non-Hispanic	1.46	0.88	
Hispanic	1.03	0.57	
Other	0.67	0.66	
Mother or mother figure with some	1.21	1.56*	
college or more education (%)			
Childhood lived with two biological	1.52	1.54*	
or adoptive parents (%)			
Married or living with a partner (%)	0.79	1.55*	
Currently attending school (%)	1.06	0.86**	
Currently employed full- or part-	2.50**	0.97	
time (%)			
Moved sometime in the past 2-3	1.99*	0.89	
years (%)			
Type of health insurance (%):			
None	Reference	Reference	
Private	1.99	3.27***	
Public	3.27**	3.26***	
Have had at least one pregnancy (%)	6.05***	2.09**	
Two or more sexual partners in past	2.41**	0.80	
year (%)			

[~] p <.1, *p<.05, **<.01, p<.001

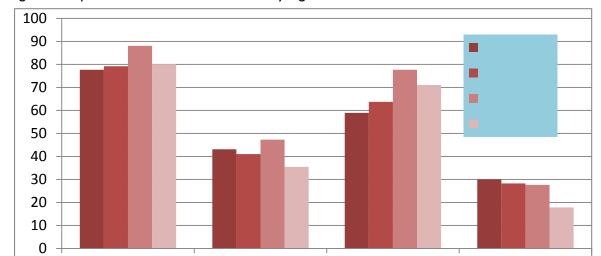


Figure 1. Reproductive Health Services Use by Age, Past Year $\,$