The ability to plan if and when to have children is fundamental to the health of women and critical to the equal functioning of women in society.1 In the United States, rates of unintended pregnancy, including both mistimed and unwanted pregnancies, unintended birth, abortion, and adolescent pregnancy differ across racial, ethnic, and socioeconomic lines. These disparities have profound short- and long-term consequences for women, their children, and society. Women with unintended pregnancies that are continued to term are more likely to receive inadequate or delayed prenatal care and have poorer health outcomes such as infant low birthweight, infant mortality, and maternal mortality and morbidity.2-7 Children resulting from unplanned pregnancies have been found to be more likely to experience developmental delay and have poorer relationships with their mothers.8 These risks of unintended birth are magnified in adolescent mothers, who experience increased risk for pregnancy complications and are often forced to make compromises in education and employment opportunities that subsequently lead to poverty and lower educational attainment.9-12 Further, the children of adolescent mothers experience higher rates of neglect, behavioral problems, poverty, and lower educational achievement.12 Undesired or mistimed pregnancies therefore significantly impact the course of a woman’s life, and disparities in the ability to plan pregnancies as desired can contribute to the cycle of disadvantage experienced by vulnerable populations.7,8,13

Recognizing these disparities in family planning outcomes and working toward understanding and addressing their causes is critical for both providers and policy makers. In this article, after a brief discussion of the social context, we will review the available information about these disparities in family planning outcomes, discuss what is known about possible etiologies, and suggest future areas for research and action.

Cultural and historical context

Although the epidemiology of family planning disparities is similar to disparities in other areas of health, with poor and minority women experiencing worse outcomes, the unique historical and cultural context of family planning provides added complexity. Specifically, consideration of disparities in unintended pregnancy and adolescent pregnancy requires consideration of a broad range of social and cultural issues, ranging from sexuality to attitudes toward pregnancy to sex relations to beliefs about contraception and abortion. In addition, although disparities in undesired fertility are the focus of this review, it is essential to acknowledge that disparities in access to desired fertility have and continue to play an important role in the issue of family planning disparities. The historical relationship between discriminatory beliefs toward poor and minority populations and some family planning programs and policies, including the nonconsensual sterilization of mentally ill, poor, minority, and immigrant women14,15 and coercive family planning programs,16 affects the relationship between these communities and family planning providers. In fact, coercion around family planning has never receded completely to the background, as evidenced by controversy over recent programs in which specific populations...
were paid to use highly effective contraceptive methods. Furthermore, decisions about childbearing in the United States occur in a social and economic context in which vast differences in resources to devote to child rearing exist. The family planning experiences of disadvantaged women are inevitably affected by these inequities. Attention to the unique personal, historical, economic and cultural context in which family planning decisions and outcomes occur is an indispensable consideration in promoting reproductive health for all women.

Disparities in family planning outcomes

All adverse family planning outcomes—unintended pregnancy, unintended births, abortions, and teen pregnancies—occur more commonly among minority and low socioeconomic status (SES) women. Although how best to measure unintended pregnancy is debated in the literature, with concern that standard survey questions used may not adequately assess intention, and with some evidence that this construct may have variable meanings across cultural and socioeconomic groups, the National Survey of Family Growth provides the most commonly used data on this subject. The most recent of these surveys found that approximately 69% of pregnancies among black women and 54% among Hispanics were unintended, compared with 40% among white women. Having low income and lower levels of education (the most commonly used measures of SES) were also associated with increased risk for unintended pregnancies, with 62% of pregnancies being unintended among those earning less than 100% of the Federal Poverty Level (FPL), compared to 38% of pregnancies in those earning more than 200% of the FPL. As race/ethnicity and SES are often correlated in the United States, whether these demographic factors are independently related to unintended pregnancies has also been investigated. Race/ethnicity was found to be a predictor of unintended pregnancies even within each income group, and having a lower income was found to be a predictor of unintended pregnancies within each racial/ethnic group.

This higher rate of unintended pregnancies among minority and lower income women results in higher rates of both unintended births and abortions. Births to both Hispanic and black women as well as to women with lower levels of education are more likely to be reported as unintended, and these differences have increased over time. Abortion rates are also strikingly different across racial/ethnic and SES categories; in 2000 black women had a rate of 49 per 1000, Hispanic women 33 per 1000 women of reproductive age, and women with an income of less than 100% of the FPL 44 per 1000. In contrast, the rate for both white women and women earning more than 200% of the FPL was only 13 per 1000. Between 1994-2000, the proportion of women having abortions who were low SES or minority women increased markedly.

Although rates of adolescent childbirth have been decreasing in the United States over the past few decades, significant disparities by both race/ethnicity and SES persist. In 2005, the birth rate in women between the ages of 15-19 years was 26 per 1000 among whites, whereas the equivalent rates among blacks and Hispanics were 61 per 1000 and 82 per 1000. Adolescent childbirth has been an issue for Hispanics in particular, as this group has both the highest overall rate and the smallest decrease over the past 15 years. Lower SES has also been shown to be associated with earlier initiation of sexual intercourse and with adolescent pregnancy and childbirth.

Disparities in family planning outcomes are related to disparities in patterns of contraceptive use

Given the consistent finding that race/ethnicity and SES factors are associated with higher levels of unwanted fertility, it is not surprising to find that studies have found strong relationships between these demographic factors and less effective use of contraception. There is evidence that minority and low SES women are less likely to use contraception overall, use different contraceptive methods, and have higher rates of contraceptive failure than white and higher SES women.

The 2002 National Survey of Family Growth found that, of women at risk for unintended pregnancy, 9% of whites, 12% of Hispanics, and 15% of blacks did not use contraception. With respect to income, 12% of women earning less than 150% of the FPL were not using contraception, compared to 9% of those earning more than 300% of the FPL. Between 1995-2002 (the last data available), the gaps in contraceptive use between poor and nonpoor women and minority and white women increased.

Studies have also found that different demographic groups choose to use different methods of contraception. Although approximately equal percentages in each racial/ethnic group rely on sterilization, the distribution between male and female sterilization is quite different. Black and Hispanic women are more likely to use female sterilization, with 22% and 20% of sexually active women in these racial/ethnic groups using this method. In contrast, only 16% of white women depend on female sterilization. This pattern is reversed for male sterilization, with 8% of white women relying on male sterilization for birth control, compared to 1% and 3% of black and Hispanic women. Other differences in method choice include that black and Hispanic women are more likely to use the contraceptive injection and condoms, and white women are more likely to use oral contraceptives. With increasing levels of education, women are also more likely to use oral contraceptives, and less likely to rely on female sterilization. Although the overall effect of these differences in contraceptive methods on the risk of unintended pregnancies by race/ethnicity and SES is difficult to determine, the higher rate of use of lower effectiveness barrier methods by black and Hispanic women may shift the overall effect of method choice to increased risk among minority women, whereas the effect by SES is less clear.

Additional studies have identified that even when using the same method of contraception, minority and poor women experience higher rates of
method failure and discontinuation.37-40 For example, analyses of the National Survey of Family Growth have found that 14% of those earning <100% of the FPL experience a pregnancy in the first year of oral contraceptive use, compared to 5% of those earning >250% of the FPL.37 Similar findings were noted by race/ethnicity and across different contraceptive methods.

In summary, minority and low SES women are at increased risk of experiencing unintended pregnancies, and its consequences of unplanned birth and abortion, as well as teen pregnancy. Differences in contraception choices and use of contraception likely explain some of these differences in undesired fertility.

What causes these disparities in family planning outcomes?

Following the framework of Kilbourne et al41 in their seminal work on health disparities research, we consider 3 major factors that have been identified in the literature as likely contributors to these disparities: patient preferences and behaviors, health care system factors, and provider-related factors. Although we review each of these factors individually, in accordance with the available literature, we encourage the reader to consider the complex and multifaceted ways in which these factors undoubtedly interact.

Patient preferences and behaviors

Differences in knowledge and attitudes about contraception and pregnancy may contribute to disparities in contraceptive use and family planning outcomes. Contraceptive safety concerns, as well as apprehension about side effects, appear to be more prevalent in minority communities.42-44 Safety concerns for many black women are shaped by conspiracy beliefs about contraception arising from the history of the use of contraception to control the fertility of vulnerable populations.16,45,46 A recent study assessing these concerns found that more than one third of respondents agreed that “medical and public health institutions use poor and minority people as guinea pigs to try out new birth control methods.”45 There is also evidence that this distrust extends to Hispanics as well.47 Concerns about side effects from hormonal contraceptives appear to be particularly prevalent.44,48-50 Emotional side effects were found to be of particular concern to Latina women,43 whereas for black women, menstrual irregularities caused by hormonal contraceptive methods were of particular concern, with menstruation seen as important for physical health and fertility as well as an important indicator regarding pregnancy.37,51

These concerns about contraception, as well as difficulty using contraception effectively, may be partly a result of less knowledge about birth control and reproductive health among poor and minority communities.52-55 Differences in knowledge may be related to broader societal factors, including lower levels of education,56 culturally based health myths, and differences in familial communication about reproductive health.57-60 The means by which information about contraception is provided to patients may also play a role; studies of patient information for contraception have found that these are often at a reading level of high school or above.61-63 Further, the medical model for provision of contraceptive information may not be equally acceptable to all populations; studies have found that many minority women trust and rely more often on information from peers and family than from health care professionals.43,44,47

Another patient-level factor that may contribute to disparities in the rate of unintended pregnancies is differing levels of ambivalence toward pregnancy. In 1 study, 39% of black women and 44% of Hispanic women reported some ambivalence about pregnancy, compared to only 20% of whites.64 Ambivalence is associated with decreased likelihood of using effective contraception34,65-68 and increased likelihood of unintended pregnancy. As such, this ambivalence may play a role in differences in contraceptive use and family planning outcomes.

Differences in perceptions of the desirability of teen childbearing may also underlie some of the disparities in adolescent pregnancy. A more positive orientation toward early motherhood has been found among those with lower levels of maternal education or black or Hispanic race/ethnicity, and these positive attitudes, in turn, were associated with teenage pregnancy.69 In a study of adolescents in the United Kingdom, lower SES women believed the ideal age to start a family was between 17-25 years, whereas higher SES women thought the late 20s or early 30s was the most appropriate time.70 Finally, a survey of black girls and women between the ages of 13-19 years found that motherhood was perceived to have many positive aspects, including closer relationships with families and partners, and that these affirmative attitudes predicted having an unintended teenage pregnancy.71

Health care system factors

Access to family planning services is limited among vulnerable segments of our population, including among immigrants to the United States and with important inequities across racial, ethnic, and socioeconomic groups. Although changes in federal and state legislation, including the introduction of Medicaid expansions and Title X programs, have resulted in improved family planning services for women in low socioeconomic groups,72 access is still limited, and there remains a large demand for publicly funded contraception. Approximately half of all sexually active women of reproductive age are estimated to be in need of publicly funded services, and only 50% of them are served under the current system.72,73 As low SES and minority women are disproportionally uninsured in the United States,74 and women with no insurance coverage are 30% less likely to use prescription contraception,75 lack of insurance coverage for contraception is a likely contributor to disparities in unintended pregnancy.

For poor and minority women who wish to obtain abortion services, barriers to access to safe and affordable abortion often exist. The Hyde Amendment prohibits federal Medicaid funds from being used to pay for abortion except in rare circumstances. Although approximately one third of states cover these services with their own funds, poor women still bear the financial responsibility and additional burden of finding a provider.
who accepts Medicaid.76 Difficulty in making financial arrangements is a commonly cited reason for delay in obtaining abortion, which results in poor women having later, and therefore less safe, abortion procedures. 27-79 Poor women are more likely to carry an unintended pregnancy to term, 23 and although many sociocultural factors likely play a role in this difference, there is also evidence that difficulty paying for abortions is an important contributor. One study found that, in a state with inconsistent public funding of abortion, when no funding was available a third of all pregnancies that would have been aborted were carried to term, and that this funding limitation disproportionately affected black women and women with lower levels of education. 80 An additional barrier to access to abortion care is geography, as 87% of all counties in the United States do not have an abortion provider, 81 and the number of facilities providing abortion has been decreasing over time. 81 The need to travel long distances to obtain abortion care likely represents a larger burden for vulnerable populations.

Immigrants often face unique challenges accessing family planning services due to language and insurance coverage barriers. 82 Further compounding these barriers, key legislative changes over the last decade have eroded immigrants’ access to health care. The Personal Responsibility and Work Opportunity Act of 1996 restricted legal immigrants’ access to publicly financed health care for their first 5 years of residence. New immigrants are therefore only eligible for Emergency Medicaid, which covers acute illnesses and obstetric deliveries, but does not cover preventative care such as contraception. These policies persist despite research that has shown that restricting access to contraception for immigrants is not cost-effective. 82,83 Access to abortion is also limited for immigrants, for although some states use state funds to pay for abortion for low income women, most do not cover this service for noncitizens.

Provider-related factors
Although differences in patient-level factors and health care access are likely the largest contributor to the disparities in undesired fertility, health care providers may also play a role. The contribution of providers to health disparities is a growing area of research, 84-87 with multiple studies suggesting that health care providers treat patients differently based on their race/ethnicity. 88-92 The Institute of Medicine addressed this issue in its publication “Unequal Treatment,” in which they stated “research suggests that health care providers’ diagnostic and treatment decisions, as well as their feelings about patients, are influenced by patients’ race or ethnicity and that these differences may contribute to disparities in health outcomes.” 86 Although this has been less well studied with respect to SES, low SES patients have been found to be judged more negatively and treated differently 94-96 than higher SES patients. 90,97,98

In the family planning context, there is evidence that minority and low SES women do experience disparities in care, with black and Hispanic women and women with lower levels of education having been found to rate their family planning visits less positively. 99,100 In addition, research on both providers and patients suggest that there may be a tendency for low SES and minority patients to experience pressure to use contraception and to limit their family size. In the only study of providers, physicians provided with clinical vignettes describing patients were more likely to agree to sterilize women who were black and poor than white and higher-income women. 101 A study of patient experiences with medical care during pregnancy found that low-income black and Latina women were more likely to report being encouraged to limit their family size than middle-class whites, 102 and a survey of family planning clients found that blacks were more likely to report being pressured to start a contraceptive method than whites. 99 In a survey of black women, 28% reported they had been encouraged to use 1 form of birth control when they preferred another, and 67% reported that they had experienced race-based discrimination when obtaining family planning services. 103 An analysis of the National Survey of Family Growth also indicated that black and Hispanic women were more likely to report having received counseling about birth control than white women, and that Hispanic women were more likely to be counseled about sterilization. 104

Although the majority of these data are all based on self-report and therefore cannot be verified, the subjective experience of a patient is undoubtedly relevant to contraceptive decision-making. Women who are more satisfied with their relationships with their providers and with their birth control method are more likely to both continue their birth control methods and use them consistently. 34,105 If providers pressure low SES and minority women to use contraception, or are perceived to be doing so, this could contribute to patients’ distrust of family planning methods, 46 decrease their satisfaction with their family planning care, and ultimately negatively impact their use of contraception.

Next steps: addressing disparities in family planning
The concentration of undesired and adolescent pregnancies among poor and minority women in the United States has important implications for the ability of these women to choose their life paths and to experience equal opportunity in our society. Although the etiologies of these disparities are embedded in a complex historical and cultural framework, providers and policy makers have several opportunities for change that could dramatically affect the reproductive health of these populations.

1. Universal coverage for contraceptive methods will likely decrease unintended pregnancies for all women, especially those who currently have limited access. Experience with the Family PACT program in California, which provides contraception to all women <200% of the FPL, indicates that this is a cost-effective approach, with over 100,000 unintended pregnancies averted each year in that state alone. 106,107 If this coverage was extended to all women in the United States, it would likely decrease unintended pregnancies and costs for the health care system, and provide a health care and reproductive health education benefit over and above the contraceptive benefit. 108,109
These solutions clearly do not address all aspects of the complex web that affects family planning disparities, including the inequitable social circumstances that impact a woman’s ability to have and raise children. However, they offer a starting point from which to begin the process of ensuring that all women, regardless of race/ethnicity or SES, have equal access to the knowledge and medical care necessary to make informed decisions about family planning.

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