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RESEARCH BRIEF

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Racial disparities in pregnancy options counseling and referral in the US South

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Abstract

Objective: The objective of this study is to examine racial variation in receipt of counseling and referral for pregnancy options (abortion, adoption, and parenting) following pregnancy confirmation. Equitable offering of such information is a professional and ethical obligation and an opportunity to prevent racial disparities in maternal and child health.

Data Source: Primary data from patients at southern United States publicly funded family planning clinics, October 2018–June 2019.

Study Design: Patients at 14 clinics completed a survey about their experiences with pregnancy options counseling and referral following a positive pregnancy test. The primary predictor variable was patients' self-reported racial identity. Outcomes included discussion of pregnancy options, referral for those options, and for support services.

Data Collection: Data from eligible patients with non-missing information for key variables (n = 313) were analyzed using descriptive statistics, χ^2 tests, and multivariable logistic regression.

Principal Findings: Patients were largely Black (58%), uninsured (64%), and 18–29 years of age (80%). Intention to continue pregnancy and receipt of prenatal care referral did not differ significantly among Black as compared to non-Black patients. However, Black patients had a higher likelihood of wanting an abortion or adoption referral and not receiving one (abortion: marginal effect [ME] = 7.68%, $p = 0.037$; adjusted ME [aME] = 9.02%, $p = 0.015$; adoption: ME = 7.06%, $p = 0.031$; aME = 8.42%, $p = 0.011$). Black patients intending to end their pregnancies had a lower probability of receiving an abortion referral than non-Black patients (ME = −22.37%, $p = 0.004$; aME = −19.69%, $p = 0.023$). In the fully adjusted model, Black patients also had a higher probability of wanting access to care resources (including transportation, childcare, and financial support) and not receiving them (aME = 5.38%, $p = 0.019$).

Conclusions: Clinical interactions surrounding pregnancy confirmation provide critical opportunities to discuss options, coordinate care, and mitigate risk, yet are susceptible to systemic bias. These findings add to limited evidence around pregnancy

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counseling and referral disparities. Ongoing assessment of pregnancy counseling and referral disparities can provide insight into organizational strengths or the potential to increase structural equity.

KEYWORDS
program evaluation, health workforce: Distribution/incomes/training, maternal and perinatal care and outcomes, medical decision making, patient assessment/satisfaction, quality improvement/report cards (interventions), racial/ethnic differences in health and health care, referrals and referral networks, rural health

What is known on this topic

- US public health and medical guidelines describe providers' professional and ethical obligation to offer pregnant patients information for all pregnancy options, and this practice is associated with higher patient satisfaction.
- Racial biases are reflected in the content and quality of information pregnant patients receive in prenatal counseling on topics such as substance use and intimate partner violence.
- Prenatal counseling is often patients' first medical interaction in pregnancy and provides an important opportunity to address the systemic bias that can lead to racial disparities in maternal and child health.

What this study adds

- Black patients are less likely than non-Black patients to receive the information and referrals they are seeking for pregnancy options and support services.
- Providers can help reduce racial bias by consistently offering discussion and referral for all pregnancy options (abortion, adoption, and parenting) and support services in a way that communicates non-judgment.

1 | INTRODUCTION

Racial disparities in access to reproductive health care in the United States are evident across a spectrum of services, from fertility treatment[1] to breastfeeding support.[2] Sexual and reproductive health care discrimination is a historical issue in the United States,[3] and gaps in the provision of quality care to patients of color remain. Providers' racial biases have been shown to influence their perceptions, assumptions, and care recommendations.[4,5] Patients of color experience less satisfaction with health care, leading to lower levels of trust in the health care system[6] and reinforcing lower health care usage.[7]

Systemic racial biases in health care are especially problematic for pregnant patients, for whom follow-up care is essential. Confirmation of pregnancy and the discussion that follows is often the first health care system interaction that patients experience in the course of pregnancy, creating a unique opportunity to facilitate patients' access to care, offer support services that can help overcome access barriers, help patients reach their desired pregnancy outcome, and mitigate pregnancy-related risk.[8–11] The guidelines of US public health and medical organizations[12–14] describe providers' professional and ethical obligation to offer patients information and referrals for all pregnancy options (including adoption, abortion, and parenting) and to demonstrate responsiveness to—and respect for—patient preferences, needs, and values.[15] In a qualitative study of preferences regarding options counseling, patients seeking prenatal care and abortion emphasized that providers should not assume what their patients want.[16] Offering pregnancy options counseling and referrals for all pregnancy options to all patients facilitates pregnant patients' ability to make voluntary decisions about their care, considering key information on possible treatment outcomes.[17]

Prior research indicates that racial biases are reflected in the content and quality of information pregnant patients receive. In a national survey, Black patients were less likely to receive information in prenatal care visits that could reduce their chances of adverse pregnancy outcomes, such as information about drinking and smoking cessation.[18] In another study, patients from several Asian-American racial groups were significantly less likely to report receiving prenatal health care counseling about intimate partner violence compared to White patients.[19] However, little evidence is currently available regarding whether the information pregnant patients receive about pregnancy options differs by race.

Possible racial disparities in pregnancy options counseling could have implications for population health equity. Some information and resources that patients may receive at pregnancy confirmation are time-sensitive and delay in receipt can be consequential. For instance, those who carry pregnancies to term benefit from being directed to prenatal care early, as delayed initiation of prenatal care may increase the risk of insufficient prenatal weight gain, prenatal smoking,

premature rupture of membranes (PROM), and precipitous labor.[20] Those seeking an abortion would also benefit from early information and referral, given that increasing gestational age limits on abortion in US states create difficulty accessing abortion later in pregnancy.[21]

Studies suggest that non-comprehensive pregnancy options counseling favors counseling around continuing pregnancy over abortion counseling.[22,23] Such pregnancy options counseling bias can coerce patients into continuing pregnancy, and may in turn lead them to face downstream maternal and infant mortality risks.[21,24,25] Inadequate counseling at the point of initial pregnancy confirmation may also play a role in further reducing patients' trust in medical systems, with implications for pregnancy care and beyond.[6,7] In the current US context, where lack of access to abortion and quality obstetric care already disproportionately affects Black women,[25–27] and maternal mortality in the US is 2–3 times higher for Black women as compared to White women,[28] especially in the South,[29,30] disparate pregnancy options counseling and referral would likely exacerbate these existing racial inequities.

The primary aim of this study was to examine racial variation in receipt of information about pregnancy options and support services during the clinical confirmation of pregnancy. This study seeks to reflect on current practices in pregnancy options counseling and their implications for patients from different racial backgrounds. Study findings may present new opportunities for the evaluation and development of pregnancy-related care to reduce structural inequities and improve health equity.

2 | METHODS

2.1 | Study design and population

Survey data were collected from October 2018 to June 2019 as part of an evaluation of training on patient-centered pregnancy options counseling and referral at publicly funded clinics in a statewide family planning system in the US South. Fourteen sites were randomly selected, with the first seven sites designated to receive pregnancy options counseling and referral training and the other seven sites designated as controls. Study sites were 71% rural on average as defined by 2010 US Census county-level data.[31]

2.2 | Data collection

At the conclusion of clinic visits in which patients received counseling and referrals for a positive pregnancy test result, patients were invited by providers to participate in the training evaluation survey via iPad. Providers filled out a screening page via iPad at the beginning of the patient visit to determine if patients met the following eligibility criteria: 18 or older, literate in English, and had just received counseling following a positive pregnancy test. If the patient was eligible and willing to consider the study, the provider left the room, and the patient was directed via iPad to the consent form, followed by the survey items and then a survey completion page. The training evaluation survey captured experiences, including what pregnancy options patients discussed with their providers, what referrals they received (or wanted but did not receive), and patient sociodemographic and health care visit characteristics. Referrals—and the way they were offered—varied widely across sites, using a mixture of organization-approved brochures, pamphlets, lists, and direct referrals that were usually accessed through the organization's electronic medical records system.

When the provider returned, patients who showed the provider the survey completion page on the iPad received a $15 gift card to recognize their time and participation. The study protocol was approved by Advarra, a US-based Institutional Review Board.

2.3 | Data and analysis

The primary predictor in our analysis was race, coded as Black (including all patients who identified as Black and as Mixed Race, including Black) or non-Black (including patients who identified as White, two Hispanic patients, and two American Indian or Alaskan Native patients). Given the evidence of associations between receipt of prenatal care and these variables,[18] we included age (18–29 years, 30 years or older), education (some high school, completed high school, some college, completed college), and insurance status (public, private, no insurance/other). Other patient characteristics included desired pregnancy outcome (abortion or continued pregnancy), and whether the health care provider seen by patients was trained in patient-centered pregnancy options counseling (yes/no). Sites were assigned a site ID (1–14). Patients missing a site ID were coded to a new site (site 15) to inform sensitivity analyses.

We assessed the presence of outcome variables including provider discussion (did the provider discuss abortion, adoption, and/or parenting) and referral (did the patient receive abortion, adoption, and/or prenatal care referrals). We included variables to assess whether the patient wanted any referrals they did not receive. We assessed whether the patient left with the supportive resources that they wanted (i.e., childcare, financial support, translation, or transportation).

Using Stata SE version 15.1, we first examined patient sociodemographic and health visit characteristics by race (Black or non-Black), examining differences using χ^2 tests. We ran bivariate logistic regression models, estimating each outcome variable with race as the predictor and calculating unadjusted marginal effects. We then ran multivariable models that included provider training and all sociodemographic characteristics (age, insurance status, and education) and calculated adjusted marginal effects. The analysis of receipt of an abortion referral was conducted only among those patients who reported intending to end the pregnancy, while the analysis of receipt of a prenatal care referral was conducted only among patients who reported intending to continue the pregnancy. We conducted sensitivity analyses dropping patients missing site ID information. All models used robust standard errors to adjust for clustering by site ID,

and average marginal effects were used for all marginal effects.[32] P-values were considered significant at $p < 0.05$.

3 | RESULTS

Out of 381 clinic visits with a positive pregnancy test result recorded, ten patients were ineligible (nine were under 18 and one did not speak English), seven declined to review the consent, and two eligible patients were missed. Of the 343 patients who were eligible and reviewed the consent, 333 (97%) consented to participate. The final analytic sample included 313 patients, excluding entries with missing information on patient counseling and referral, patient satisfaction items, or race-related items involved in the primary analyses (6% of patients who consented).

Fifty-eight percent of the survey sample identified as Black (Table 1). Approximately 80% of the sample were younger than 30 years old. Just over half of the patients had completed all or some high school education at most, and 64% of the sample had no insurance. Fifty-six percent of the patients saw a provider who had not received the pregnancy options counseling training, about two-thirds of the sample intended to continue their pregnancies, and one-third intended to get an abortion. The sample differed by race in education status and receipt of care by a pregnancy options counseling trained provider; Black patients were more likely to have seen an untrained provider than non-Black patients. Black patients were less likely to have a provider discuss abortion, adoption, or all three pregnancy options than their non-Black peers (Table 2). They were also less likely to receive an abortion referral. 14.8% of Black patients reported not receiving a wanted abortion referral, compared to 7.6% of White patients. After adjusting for potential confounders, this difference was statistically significant (aME 9.02%, $p = 0.015$).

Compared to non-Black patients, Black patients had a higher probability of wanting an abortion referral but not receiving one (marginal effect (ME) 7.68%; 95% confidence interval (CI) 0.46%, 14.89%; Table 3) and a lower overall probability of receiving an abortion referral (ME −22.37%; 95% CI −37.46%, −7.28%). After adjusting for provider training and patient demographics, Black patients had a higher likelihood of leaving the pregnancy confirmation visit without receiving a desired abortion referral (adjusted marginal effect [aME] 9.02%; 95% CI 1.72%, 16.31%) and a lower likelihood of receiving an abortion referral among those planning to get an abortion (aME 9.02%; 95% CI 1.72%, 16.31%). There was no significant difference in provider discussion of abortion or adoption, nor was there a significant difference between Black and non-Black patients in receipt of adoption referrals, but Black patients were more likely to leave the clinical encounter without a desired adoption referral (ME 7.06%; 95% CI 0.65%, 13.48%; aME 8.42%; 95% CI 1.90%, 14.94%).

There were no significant differences by race in referral for prenatal care, leaving the clinical visit without a desired prenatal care

TABLE 1 Patient and clinical visit characteristics

	Total		Race				
			non-Black		Black		
	n	%	*n*	%	*n*	%	*p*-value[a]
	313		131	41.9%	182	58.1%	
Age							0.50
18–29 years	250	79.9%	107	81.7%	143	78.6%	
30 years or older	63	20.1%	24	18.3%	39	21.4%	
Education							0.02
Some high school	56	17.9%	29	22.1%	27	14.8%	
Completed high school	118	37.7%	43	32.8%	75	41.2%	
Some college	95	30.4%	47	35.9%	48	26.4%	
Completed college	44	14.1%	12	9.2%	32	17.6%	
Insurance status							0.05
Public	78	24.9%	24	18.3%	54	29.7%	
Private	35	11.2%	18	13.7%	17	9.3%	
No insurance/other	200	63.9%	89	67.9%	111	61.0%	
Pregnancy Options Counseling Trained Provider							0.01
Trained Provider	139	44.4%	69	52.7%	70	38.5%	
Untrained Provider	174	55.6%	62	47.3%	112	61.5%	
Desired pregnancy outcome							0.46
Abortion	108	34.5%	48	36.6%	60	33.0%	
Continue pregnancy	205	65.5%	83	63.4%	122	67.0%	

[a]*p*-value for Pearson χ^2 test.

TABLE 2 Frequencies of outcomes, Black versus non-Black patients

	non-Black *N* (%)	Black *N* (%)	*p*-value[a]
Wanted abortion referral and did not receive one			0.05
Yes	10 (7.6%)	27 (14.8%)	
No	121 (92.4%)	155 (85.2%)	
Wanted adoption referral and did not receive one			0.07
Yes	10 (7.6%)	26 (14.3%)	
No	121 (92.4%)	156 (85.7%)	
Wanted prenatal care referral and did not receive one			0.11
Yes	2 (1.5%)	9 (4.9%)	
No	129 (98.5%)	173 (95.1%)	
Provider discussed abortion			0.01
Yes	24 (18.3%)	15 (8.2%)	
No	107 (81.7%)	167 (91.8%)	
Provider discussed adoption			<0.01
Yes	24 (18.3%)	12 (6.6%)	
No	107 (81.7%)	170 (93.4%)	
Provider discussed parenting			0.47
Yes	129 (98.5%)	177 (97.3%)	
No	2 (1.5%)	5 (2.7%)	
Provider discussed all pregnancy options			<0.01
Yes	22 (16.8%)	11 (6.0%)	
No	109 (83.2%)	171 (94.0%)	
Received abortion referral			0.03
Yes	38 (29.0%)	34 (18.7%)	
No	93 (71.0%)	148 (81.3%)	
Received adoption referral			0.07
Yes	36 (27.5%)	34 (18.7%)	
No	95 (72.5%)	148 (81.3%)	
Received prenatal care referral			0.19
Yes	115 (87.8%)	150 (82.4%)	
No	16 (12.2%)	32 (17.6%)	
Wanted access to support resources and did not receive			0.28
Yes	14 (10.7%)	27 (14.8%)	
No	117 (89.3%)	155 (85.2%)	

[a]*p*-value for Pearson χ^2 test.

referral, or visiting a provider who discussed all three options. After adjusting for provider training and patient demographics, models showed that Black patients had a higher probability of leaving the pregnancy confirmation visit without desired social support resources (i.e., translation service, transportation, childcare, or financial referrals) (aME 5.38%; 95% CI 0.88%, 9.89%).

Sensitivity analyses dropping patients missing site ID data found similar patterns across outcomes, with Black patients experiencing lower rates of discussion of options and referrals. Examining the odds ratios from the logistic regressions, we found similar patterns, with additional significant relationships showing that Black patients had lower odds than their non-Black counterparts of visiting a provider who discussed all three options (abortion, adoption, and parenting) with them, and in univariate analyses, Black patients had lower odds of their provider discussing abortion or adoption with them (Table A1).

4 | DISCUSSION

This study found evidence of significant racial disparities in pregnancy options counseling for family planning clinics' patients in the US South. Black patients were significantly less likely than White patients to have provider discussions of alternatives to parenting (adoption or abortion). This finding is consistent with research on other pregnancy

TABLE 3 Logistic regression analyses examining outcomes for Black patients compared with non-Black patients, average marginal effects

	Unadjusted marginal effects, %	95% CI, %	*p*-value	Adjusted marginal effects, %[a]	95% CI, %	*p*-value
Wanted abortion referral and did not receive one	7.68	0.46, 14.89	0.037	9.02	1.72, 16.31	0.02
Wanted adoption referral and did not receive one	7.06	0.65, 13.48	0.031	8.42	1.90, 14.94	0.01
Wanted prenatal care referral and did not receive one	4.07	−1.35, 9.49	0.141	4.86	−1.16, 10.89	0.11
Provider discussed abortion	−9.76	−21.64, 2.13	0.108	−5.98	−14.81, 2.85	0.18
Provider discussed adoption	−11.38	−23.47, 0.70	0.065	−7.18	−15.67, 1.31	0.10
Provider discussed parenting	−1.31	−4.99, 2.37	0.486	−0.85	−4.72, 3.02	0.67
Provider discussed all pregnancy options	−10.46	−21.36, 0.43	0.060	−6.84	−14.54, 0.87	0.08
Received abortion referral[b]	−22.37	−37.46, −7.28	0.004	−19.69	−36.71, −2.67	0.02
Received adoption referral	−8.60	−19.49, 2.30	0.122	−7.43	−17.79, 2.93	0.16
Received prenatal care referral[c]	−2.88	−18.25, 12.49	0.713	−2.60	−18.28, 13.08	0.75
Wanted access to support resources[d] and did not receive	4.26	−0.75, 9.27	0.096	5.38	0.88, 9.89	0.02

[a]Adjusted for provider training, insurance status, education, and age category.
[b]Among those intending to end pregnancy.
[c]Among those intending to continue pregnancy.
[d]Financial support, translation, transportation, or childcare.

counseling, in which patients of color were provided with less complete advice[18] or were less likely to discuss a potentially challenging topic (e.g., intimate partner violence) in prenatal visits.[19] Prior research on contraceptive options counseling – in many ways a useful parallel to pregnancy options counseling – has found lower satisfaction among Black and Hispanic patients.[33] In our analysis, Black patients were twice as likely as White patients to leave the clinic with an unmet need for an adoption or abortion referral and were significantly more likely than White patients to leave the clinic with an unmet need for supportive resources.

Prior studies of patient preferences regarding pregnancy options counseling[16,34,35] have found that patients want to receive complete and accurate information about pregnancy options in a supportive, non-judgmental context and that discussion of all options produces a more positive experience for patients. Although the stigma of not intending to pursue parenthood can prevent patients from disclosing that intention,[36–38] available research indicates that patients are open to discussing their pregnancy intentions with their provider[16] and would answer honestly if asked.[8] Discussion of all options during pregnancy options counseling was associated with a more positive patient experience in prior research.[23] However, unpublished program evaluation data indicates that many providers prefer not to discuss alternatives to parenting unless a patient "expresses despair" about pregnancy. This places a heavier burden on patients to advocate for their needs, adding to the disproportionate barriers Black patients face in navigating health care.[39–42]

High-quality, respectful, and patient-centered pregnancy-related care, including counseling and referral for a full range of options, may prove especially important as access to abortion in the United States becomes sparser. With the *Dobbs v Jackson Women's Health Organization* ruling pertaining to Mississippi's 15-week abortion ban, the US Supreme Court overturned almost 50 years of legal precedent established by *Roe v Wade* and returned the question of the right to abortion back to the states.[43] The Southeastern US is included in the estimated 26 states likely to pass legislation or with laws or amendments in place to ban or severely restrict abortion access.[44] Southern pregnant people seeking abortion (especially Black people, who are disproportionately burdened by abortion restrictions[27]) will now require greater assistance with navigating through inevitable "abortion deserts" in a timely fashion, likely relying on out-of-region care, telemedicine abortion, and self-managed abortion.[45] Patients may also be more likely to experience abortion stigma and to have uncertainty or misconceptions around abortion legality.[46,47]

Providers of pregnancy options counseling can play a critical role in mitigating growing barriers to abortion care, including stigma, should they be legally permitted.[48] Training for those who act in this capacity is exceptionally timely. Many more pregnant people are likely to continue pregnancies in this climate. Pregnancy options counselors may also require preparation for the unique needs for health and social services information, referrals, and support (e.g., prenatal care, childcare, adoption, psychological care) that this group may require.

Disparities in options counseling and related structural inequities can be mitigated through effective monitoring, policy, health promotion, and/or provider training. Federal, state, and local policy may create conditions where Black patients are more likely to see well-trained providers, perhaps through funding to grow and diversify the workforce and health care payment reform efforts for example. Actors at these policy levels could support policies to protect or restore abortion access and improve relevant pregnancy and family-related policies (e.g., paid parental leave and free or low-cost childcare). More directly related to pregnancy options counseling and referral, an organizational policy in which providers are expected to name and offer to discuss all pregnancy options without bias or judgment could help

ensure that all patients have access to the information they need to achieve their preferred outcome.

Regular assessment of equity in pregnancy options counseling by clinics and health care systems as part of their quality assessment would ensure that these practice recommendations are followed consistently. Placing information about pregnancy options in patient waiting rooms can promote more equal information access, particularly for patients concerned about discrimination resulting from the disclosure of intention not to parent. Training in patient-centered options counseling and referral can increase providers' confidence and effectiveness in discussing all options,[49] though not necessarily for all providers or in a way that influences their counseling with all patients. While addressing implicit bias through training has limitations,[50] curricula have shown promise in teaching clinicians more robust concepts including structural determinants of sexual and reproductive health.[51] Findings indicate the need for future research to identify more effective strategies for reducing racial disparities in pregnancy options counseling.

Strengths of this study include the collection of data from a rural setting often underrepresented in research and the use of anonymous digital surveys. This study has several limitations. First, despite providers' inability to view or access patient responses, survey administration by the providers of counseling is a potential source of bias, potentially influencing patients' responses or their likelihood of participation. However, this would likely have resulted in an underestimate of the magnitude of the problem. Second, the study's generalizability is limited by its demographic composition (e.g., study site rurality, a high percentage of uninsured patients, etc.). Third, providers from half of the study sites received specialized training in how to optimize responsiveness to patients' pregnancy preferences, potentially resulting in an over-estimation of preference-concordant care for Black patients as compared to the general population. Additional limitations include this study's lack of data on (1) gestational age (which could have influenced what types of referrals were available to the patient); (2) the race of each patient's provider (which could have been an important factor in patients' experience); and (3) potential unmeasured differences between trained and untrained sites that might have accounted for Black patients being more likely to see an untrained provider as well as the other disparities observed. Future research on racial disparities in options counseling should be informed by guidelines for centering the research questions and priorities on patients of color affected by these inequities.[52]

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CONFLICT OF INTEREST

The authors have no competing interests to disclose.

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APPENDIX

TABLE A1 Logistic regression analyses for odds of outcomes for Black patients compared with non-Black patients

	Unadjusted odds ratio	95% CI	*p*-value	Adjusted odds ratio[a]	95% CI	*p*-value
Wanted abortion referral and did not receive one	2.11	1.00, 4.43	0.049	2.49	1.13, 5.51	0.02
Wanted adoption referral and did not receive one	2.02	1.02, 3.98	0.043	2.39	1.13, 5.07	0.02
Wanted prenatal care referral and did not receive	3.36	0.75, 15.07	0.114	4.40	0.74, 26.25	0.10
Provider discussed abortion	0.40	0.17, 0.94	0.035	0.55	0.24, 1.22	0.14
Provider discussed adoption	0.31	0.13, 0.75	0.009	0.44	0.19, 1.05	0.06
Provider discussed parenting	0.55	0.12, 2.61	0.450	0.70	0.14, 3.43	0.66
Provider discussed all pregnancy options	0.32	0.14, 0.74	0.007	0.44	0.19, 1.00	0.05
Received abortion referral[b]	0.34	0.14, 0.84	0.019	0.36	0.13, 0.97	0.04
Received adoption referral	0.61	0.34, 1.09	0.095	0.64	0.36, 1.17	0.15
Received prenatal care referral[c]	0.84	0.33, 2.16	0.718	0.85	0.32, 2.27	0.75
Wanted access to support resources and did not receive[d]	1.46	0.92, 2.32	0.113	1.63	1.02, 2.59	0.04

[a]Adjusted for provider training, insurance status, education, and age category.
[b]Among those intending to end pregnancy.
[c]Among those intending to continue pregnancy.
[d]Financial support, translation, transportation, or childcare.