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African American Parents' Perceptions of Partnership with their Child's Primary Care Provider

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Abstract

Objective—This study aimed to identify family, provider and healthcare setting characteristics associated with African American (AA) parents' perceptions of partnership with their child's primary care provider.

Study design—Data were collected via a telephone survey of 425 AA parents of 0-5 year-old children who had presented for a health visit 1-2 weeks prior at participating pediatric primary care practices in Washington, DC. Parents' perceptions of the level of partnership building by their child's provider were assessed using Street's Provider Communication Style instrument.

Results—Multivariate logistic regression models indicated that, after adjusting for other family and provider/setting characteristics, parents seen in community health centers (CHCs) were more likely to report high partnership building compared with parents seen at private or hospital-based practices. Parents with at least a college level of education and those who described their child's provider's race as 'other' were most likely to report moderate partnership building.

Conclusions—Future studies should examine elements of care delivery at CHCs that may lead to better partnerships between parents and providers in private and hospital based practice setting.

Keywords

provider communication; primary care; parents

Mounting research indicates that, compared with White children, African American (AA) children experience poorer health outcomes and less parental satisfaction with pediatric primary care, even after adjusting for access-related factors such as insurance coverage.¹⁻³ For example, African American children visit the emergency department for asthma related issues over 3.5 times more often than Whites.⁴ Middle income AA children are also less

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likely to get appointments for routine care when they want them, compared with their middle income white counterparts,⁵ and they are less likely to be referred to a specialist by their health care provider.⁶

Research with adult patients suggests that less participatory patient-provider communication is a modifiable contributor to racial health disparities.⁷⁻⁹ Minority patients may not express their symptoms well because of language barriers, low health literacy and educational attainment, and lack of self-efficacy regarding healthcare.¹⁰ A provider may be less inclined to use a participatory communication style with minority patients if he or she holds racial biases or has limited awareness of cultural beliefs and expectations about disease and clinical care.⁹ On the other hand, there is some evidence that a participatory communication style contributes to improved health outcomes and, in turn, reduces health disparities among AA adults.¹¹

The few pediatric studies suggest that the quality of *parent*-provider communication contributes to minority children's health outcomes because it influences parents' satisfaction with their child's health care, disclosure of important psychosocial issues, and adherence.¹²⁻¹⁵ A partnership building communication style is characterized by solicitation of parents' opinions and suggestions for their child's healthcare.¹³

Characteristics of patients, providers and healthcare settings have been shown to influence patient-provider communication in pediatric and adult populations. For example, studies of adults have found that female and minority physicians are more likely to use a partnership building communication style.^{8, 16-18} Other research indicates that, after adjusting for patient race/ethnicity, patients of higher socio-economic status (SES) have more positive interactions with their providers than lower SES patients.^{19, 20} Pediatric research also shows providers are more likely to engage older children in social communication during visits, which is associated with more partnership building communication with parents.^{12, 21, 22}

The aim of the current study was to examine characteristics of families (poverty status, parent education), providers (race, sex, previous relationship with family) and healthcare settings (visit type, practice type) as predictors of African American parents' perceptions of pediatric providers' partnership building communication style.

Methods

A telephone survey was conducted with a non-random sample of 425 self-identified AA parents of children 0-5 years of age recruited from seven pediatric primary care sites in Washington, DC between May 2004 and March 2006. Three recruitment sites were community health centers, three were private practices, and one was a hospital-based primary care clinic.

Survey participation was limited to English speaking parents. To reduce the likelihood of confounding effects, children with parents or grandparents born outside the mainland U.S. (i.e., Puerto Rico, Dominican Republic, Africa) were excluded because interactions in medical settings may differ based on ethnic background and immigration status. In addition, parents of children with special health care needs, previously identified behavior problems, or an illness requiring care by more than one sub-specialist or ever requiring more than one hospitalization were excluded to prevent bias due to greater reliance on the healthcare provider for discussion of medical, behavioral, and psychosocial issues.

The Institutional Review Board at Children's National Medical Center approved and monitored this study. Information sheets describing the study's goal of learning more about how parents communicate with their child's provider were given to parents at the seven

recruitment sites by a designated staff person or displayed in a prominent location. Parents interested in participating (n=748) filled out an information sheet and placed it in a locked box. Research assistants collected information sheets from each site weekly. Parents were contacted by phone within 2 weeks of their healthcare visit to screen them for eligibility. Eligible parents completed the 20-30 minute structured telephone interview. During the interview, verbal informed consent was obtained, and parents were instructed to respond based on their interaction with the provider at the most recent visit that they attended with their child. Parents who completed the interview were mailed a \$20 gift card to a local retail store.

The primary outcome, parent perception of provider communication style, was measured using the 3-item partnership-building subscale of the instrument developed by Street et al. to assess Parents' Perceptions of Physicians' Communicative Behavior.¹³ This instrument also assesses parent perception of provider's informativeness and interpersonal sensitivity. The current analyses focus on partnership building in order to build on previous research in African American populations that examined the closely related construct of participatory communication style.^{8, 18} The wording of items was slightly modified to be appropriate for well-child visits (i.e., "medical condition" and "health" were changed to "health/development"). Participants responded to the items ('The doctor encouraged me to express my concerns and worries,' 'The doctor asked for my opinion on what to do about my child's health/development,' 'The doctor asked for my thoughts about my child's health/development') regarding their last health care visit using a six-point Likert scale from strongly disagree to strongly agree, thus scores could range from 3-18. The internal reliability in this sample was good (Cronbach's alpha = .74).

In terms of predictor variables, parent education and household income were measured as indicators of family SES.²⁰ Parents' self-reported highest level of education was categorized as less than a high school diploma, high school degree, at least some college, and post-bachelors degree. Annual household income was reported on a seven-point ordinal scale from < \$10,000 to ≥ \$100,000. We used mid-point dollar amounts to represent family annual income,²³ and the 2006 HHS Poverty Guidelines²⁴ were used to derive the appropriate poverty threshold for each family based on self-report of the number of people in their household. We divided each family's annual income by their respective poverty threshold to calculate percentage of poverty. The 150% of poverty cut-off was used to create poverty status categories because it is a common standard for Medicaid eligibility.²⁵

We also asked parents about several provider characteristics. Parents' indicated whether the provider's race was White/Caucasian, Black/AA, Asian/Pacific Islander, American Indian/Alaskan, Latino/Hispanic, or unknown. These were combined into three categories: White/Caucasian, Black/AA, and Other. Parents also indicated whether the provider was male or female. Finally, parents were asked whether or not their child had seen this provider before (i.e., had a previous relationship).

The final set of predictor variables were healthcare setting characteristics, including whether the visit occurred in a private practice, hospital, or community health clinic, and whether parents reported that it was a regular (well) check up or a sick visit.

We also included several family demographic characteristics as covariates: parent's number of biological children, marital status (married/single), parent and child age (calculated from parent-reported dates of birth), and parent-reported child sex.

Data Analysis

First, we generated descriptive statistics for family and provider/setting characteristics as well as for partnership building. Next, we conducted one-way ANOVAs and chi-square tests to examine differences in each of the primary predictor variables by partnership building classification. Then, we tested the independent effects of significant family, provider and healthcare setting characteristics on partnership building by conducting two multinomial logistic regressions, with 'high partnership building' and 'moderate partnership building' as reference groups. This series of multivariate models estimated participants' relative risk of being classified in the reference groups as opposed to the other partnership building categories depending on levels of the predictor variables, entered simultaneously. All analyses were conducted using Stata statistical software.²⁶

Results

Of the 748 parents who completed information sheets, 81% were successfully contacted to screen for eligibility. Of those screened, 78% were eligible for the study. A total of 425 (of 472) eligible parents completed the telephone interview for a response rate of 90%.

Characteristics of the family, provider and healthcare setting are summarized in Table I. Parent average age was approximately 30 years (range 0-63). The mean number of biological children per parent was just over two (range 1-9), and the mean age of focal children was 24 months (range 0-167). Almost half of participating families had incomes below 150% of the federal poverty threshold, and approximately half had more than a high school level of education. Over half of parents reported their child's provider's race as White/Caucasian, one-third Black/AA, and 15% other (8.5% Asian/Pacific Islander, .2% American Indian/Alaskan, .2% Latino/Hispanic, 6.4% unknown). Two-thirds of children had been seen for a well-child visit, 41% in a private practice, 36% in a hospital-based clinic, and 23% in a community health clinic.

Partnership building scores in this sample were negatively skewed ($M = 15.04$, $SD = 3.76$), raising concerns with using the continuous scores in our analysis because each one-point increment in scores may not correspond to meaningful differences in parent perceptions of provider partnership building. Therefore, we assessed the distribution to create a categorical variable that captured the most variance in scores. A large number of participants with the max score of 18 were categorized as "high"; lower scores were evenly distributed into two distinct groups large enough to allow for statistical comparison. Those who disagreed with at least one of the 3 items were categorized as "low," and those who agreed with any of the 3 statements or expressed less than uniformly strong agreement were categorized as "moderate." [MH1] This 3-level classification of partnership building scores seems more behaviorally meaningful, and there are significant differences in total partnership building scores across these groups: high ($M = 18.0$, $SD=0$) vs. moderate ($M = 15.95$, $SD=1.16$) vs. low ($M = 10.41$, $SD=3.22$), $F(2, 405)=586.56$, $p < .001$.

Parents who were single/divorced and those who reported incomes below 150% of the federal poverty level were significantly more likely to report high partnership building than their married and wealthier counterparts (Table II). Also, even though most parents with a high school education or less reported high partnership building, those who had attended some college or more were more likely to report moderate partnership building. Group comparisons shown in Table III indicate that parents who saw providers who they classified as White or Other race/ethnicity were more likely to report high partnership building than parents seen by AA providers. Also, parents seen at CHCs were more likely to report high partnership building than those seen in hospital-based or private practices.

Two multinomial logistic regression models with different reference groups (high, moderate) were conducted to examine the independent effects of family, provider and healthcare setting characteristics shown to have significant associations with partnership building in bivariate analysis. These multivariate models, shown in Table IV, suggest several nuanced differences between parents in high, moderate, and low partnership building groups. First, parents who attended some college were nearly six times more likely to report moderate vs. high partnership building, and parents who had a post-bachelors education were over 20 times more likely to report moderate vs. high partnership building. However, these more educated parents were also significantly more likely than parents with less than a high school education to report moderate vs. low partnership building. Parents who saw providers of the 'Other' race category were approximately half as likely to report moderate than high partnership building [but no less likely to report low than moderate or high]. Parents seen at private or hospital-based practices were seven and four times more likely, respectively, to report low partnership building than high; similarly, parents seen in private or hospital-based practices were at least three times more likely to report low than moderate partnership building.

Discussion

Overall, most AA parents in this study perceived that their child's provider used what we characterized as a moderate or high level of partnership building communication, but this perception differed by family, provider and healthcare setting characteristics. We identified three important factors that contributed to parents' perceptions of the level of partnership building of their child's provider: 1) parents' level of education; 2) provider race; and 3) the type of practice where their child received care.

Our finding that AA parents with higher levels of education (some college or higher) were more likely than parents with less education to report moderate levels of partnership building instead of high or low are in contrast to previous research that found providers are more likely to practice partnership building with patients with higher educational levels.²⁰ However, these studies were conducted in adult populations. A 2007 study by Rosenthal et al.²⁷ found that parents with lower literacy levels (a potential marker for level of education) rated the quality of their relationship with their child's provider more positively than parents with higher literacy levels. They posited that these findings may reflect lower expectations regarding the parent-provider relationship. An alternative consideration may be that although parents with lower levels of education appreciate being "asked," as stated in the current measure, more educated parents may have additional expectations of the provider that involve a more bi-directional exchange not reflected in the Street instrument. Therefore, even though our study's findings and those of Rosenthal et al suggest a need for providers to have more cultural awareness of the diversity of health care expectations within the AA community, particularly across groups with different educational experiences, future studies should further explore parent expectations of provider response to inquiries in their assessments of partnership building.

The findings of our study also suggest that, unlike studies of patient-provider communication in adult populations,^{8, 18} there were no significant differences in AA parents' perceptions of partnership building for AA versus White providers when other family and healthcare setting characteristics were taken into account. Previous research in pediatric settings has similarly shown that racial concordance is not a determining factor in parent-provider relationships.²⁸ The current findings further highlight the importance of distinctions between predictors of adult and child health disparities. Horn and Beal proposed a conceptual model that takes the important distinctions between these fields into consideration.²⁹ Adult health disparities research may benefit from understanding the

barriers that pediatric providers may have overcome in their interactions with parents in racially discordant relationships.

Our finding that parents were more likely to report high versus low partnership building if they attended a CHC than if they attended a private practice or hospital is particularly important because CHCs provide primary care to millions of children in medically underserved communities throughout the nation.³⁰ Studies have shown that the recent economic downturn has resulted in a large increase in the number of people seeking health care at CHCs.³¹ Although funding for these centers has increased, there continues to be a workforce need.³² Our research indicates that, despite the challenges that parents may experience receiving care in CHCs due to lack of providers, parents taking their children to these CHCs perceive the providers as using a more positive, partnership building communication style, independent of other family and provider/setting characteristics.

Although this study contributes to our understanding of health disparities in pediatric care, there are also limitations of the research that must be acknowledged. First, this study is cross-sectional and non-experimental, which precludes inferences about the causal directions of associations between family, provider, and healthcare setting characteristics and parents' perceptions of providers' partnership building communication style. Second, we were unable to account for any shared variance attributable to certain providers having seen multiple participants. When developing the study protocol, providers recognized that parents would be making statements about individual provider interactions, and thus did not want to be identified in the study. Therefore providers were not consented as study subjects. Consequently, provider characteristics and other information related to the visit except for the site type were based on parent report. We may have thus erroneously attributed cultural concordance to racial concordance if, for example, parents labeled African or West Indian/Caribbean providers as Black/AA, but to our knowledge there were no African or West Indian/Caribbean providers practicing in our recruitment sites. Similarly, our measure of partnership building was based solely on parents' perceptions without taking into account that of the child or provider. However, because parents are primarily responsible for treatment adherence, we considered their perceptions particularly important for this investigation. Also, the psychometric properties of Street's parent-provider communication instrument in African American populations are unknown, and validity and reliability testing is an important direction for future research. Third, there may be other unmeasured provider/setting characteristics that predict partnership building, such as seeing a resident versus an attending pediatrician. However, differences between resident and attending physicians' communication styles have not been empirically examined, and such differences are not expected to explain the current finding regarding practice type because residents saw patients in one of the three private practices and at the CHCs and hospital-based practice. Finally, as in all community-based studies, findings from this sample may not generalize to the larger population because they refer to a select group of parents who were willing to participate in this research.

Our study findings that parents perceive providers in CHCs to be more partnership building supports the need for future research to examine the characteristics of the CHC practice environment that promotes more positive parent provider interactions that can be applied to the private practice and hospital-based practice settings. Future parent provider communication research should also examine within group differences to better understand the diversity of communication expectations of parents, particularly those of underserved populations. Finally, this study supports previous communication research in pediatric populations that indicates racial concordance between the provider and parent does not play a significant role in parent perception of partnership in their relationship with their child's provider. Future research would benefit from examining the differences in communication

in pediatric and adult health care settings to identify potential areas for more targeted intervention.

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Abbreviations

AA	African American
CHC	Community Health Center
SES	socio-economic status
CI	Confidence Interval

Table 1
Descriptive statistics for parent-reported family, provider, and healthcare setting characteristics

	<i>Mean (SD)</i>	<i>n (%)</i>
<i>Family Characteristics</i>		
Family poverty status (below 150% FPL)		186 (48.7)
Parent education		
< HS graduate		41 (9.7)
HS graduate		163 (38.4)
at least some college		184 (43.3)
post-bachelors		36 (8.5)
Parent age	29.7(7.8)	
Marital status (married)		128 (30.1)
Number of children in family	2.3(1.4)	
Child age in months	24.0(22.5)	
Child gender (female)		211 (50.5)
<i>Provider Characteristics</i>		
Provider race		
African American		140 (33.0)
White		219 (51.7)
Other		65 (15.3)
Provider gender (female)		356 (84.2)
Previous relationship with provider (yes)		289 (68.5)
<i>Healthcare Setting Characteristics</i>		
Practice type		
Private practice		176 (41.4)
Hospital-based		152 (35.8)
Community health center		97 (22.8)
Visit type (well child)		291 (68.5)
<i>Partnership Building</i>		
Low		128 (31.4)
Moderate		116 (28.4)

<i>Mean (SD)</i>	<i>n (%)</i>
High	164 (40.2)

Table 2
Associations between family characteristics and partnership building classification

	Partnership Building			χ^2 / F <i>p</i>
	High	Moderate	Low	
Family Poverty Status, <i>n</i> (%)				
below 150% FPL	86(47.3)	42(23.1)	54(29.7)	.01
above 150% FPL	61(32.6)	64(34.2)	62(33.2)	
Parent Education, <i>n</i> (%)				
< HS graduate	22(53.7)	4(9.8)	15(36.6)	<.001
HS graduate	83(52.2)	35(22.0)	41(25.8)	
college	55(31.8)	61(35.3)	57(32.9)	
> college	3(8.8)	16(47.1)	15(44.1)	
Parent age, <i>Mean</i> (SD)	28.6(7.8)	30.1(7.8)	30.7(7.6)	.06
Marital status, <i>n</i> (%)				
Married	34(28.6)	42(35.3)	43(36.1)	.01
Single/divorced	130(45.0)	74(25.6)	85(29.4)	
Number of children in family, <i>Mean</i> (SD)	2.3(1.3)	2.4(1.5)	2.3(1.4)	.70
Child age in months, <i>Mean</i> (SD)	25.9(22.0)	23.5(24.8)	22.4(21.2)	.41
Child gender, <i>n</i> (%)				
Female	82(40.8)	61(30.3)	58(28.9)	.58
Male	80(39.8)	54(26.9)	67(33.3)	

Table 3
Associations between provider/setting characteristics and partnership building classification

	Partnership Building			χ^2 / F <i>p</i>
	High	Moderate	Low	
Provider race, <i>n</i> (%)				
White	87(40.7)	62(29.0)	65(30.4)	.01
African American	41(31.3)	45(34.4)	45(34.4)	
Other	35(56.5)	9(14.5)	18(29.0)	
Provider Gender, <i>n</i> (%)				
Female	139(40.5)	95(27.7)	109(31.8)	.66
Male	24(38.1)	21(33.3)	18(28.6)	
Previous relationship, <i>n</i> (%)				
Yes	110(39.6)	87(31.3)	81(29.1)	.13
No	53(41.7)	28(22.0)	46(36.2)	
Practice type, <i>n</i> (%)				
Private	43(26.1)	56(33.9)	66(40.0)	<.001
Hospital	68(45.3)	34(22.7)	48(32.0)	
Community health center	53(57.0)	26(28.0)	14(15.1)	
Visit type, <i>n</i> (%)				
Sick	48(36.9)	37(28.5)	45(34.6)	.56
Well	116(41.7)	79(28.4)	83(29.9)	

Table 4
Family and provider/setting characteristics as predictors of partnership building classification

	Partnership Building					
	Moderate vs. High		Low vs. High		Low vs. Moderate	
	RR (95% CI)	p	RR (95% CI)	p	RR (95% CI)	p
<i>Family Characteristics</i>						
Poverty status						
below 150% FPL	ref		ref		ref	
above 150% FPL	1.28 (.65-2.55)	.48	1.64 (.82-3.26)	.16	1.28 (.61-2.66)	.52
Parent Education						
< HS graduate	ref		ref		ref	
HS graduate	2.18 (.59-8.08)	.25	.55 (.23-1.32)	.18	.25 (.06-1.01)	.05
college	5.87 (1.51-22.76)	.01	.98 (.38-2.55)	.97	.17 (.04-.69)	.01
> college	23.34 (3.54-154.05)	.001	3.02 (.59-15.39)	.18	.13 (.02-.67)	.02
Marital status						
Married	.93 (.47-1.85)	.84	.81 (.41-1.59)	.53	.86 (.44-1.72)	.68
Single/divorced	ref		ref		ref	
<i>Provider/Setting Characteristics</i>						
Provider race						
White	ref		ref		ref	
African American	1.07 (.56-2.04)	.84	1.54 (.80-2.94)	.20	1.44 (.75-2.76)	.28
Other	.39 (.16-.94)	.04	.87 (.42-1.81)	.71	2.24 (.85-5.91)	.10
Practice type						
Private	1.73 (.76-3.95)	.19	7.96 (3.16-20.06)	<.001	4.60 (1.71-12.38)	.003
Hospital	1.3 (.63-2.65)	.48	4.30 (1.94-9.55)	<.001	3.32 (1.35-8.17)	.01
Community health center	ref		ref		ref	
LR χ^2	70.67, $p < .001$					
Pseudo R^2	.09					