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Providing health care to low-income women: a matter of trust

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Background. Trust is an important indicator of quality in patient–provider relationships and predicts adherence to certain protective health behaviours. It has been relatively unexplored among low-income or minority women.

Objectives. We explored health care experiences that influence patient trust among low-income women in the USA with respect to professionals and lay health workers (LHWs).

Methods. Focus groups were conducted with 33 prenatal and postpartum women, aged 18–45 years, recruited from community-based public prenatal care programmes. Focus groups were audio-recorded, transcribed, and independently coded by readers. A model of factors associated with trust was developed based on the major thematic categories.

Results. Most women were Black (67%) and had completed high school (85%). Factors related to greater trust specific to patient–provider relationships were: continuity of the patient–provider relationship, effective communication, demonstration of caring and perceived competence. Women with less trust in their physicians reported an unwillingness to follow his/her advice. Most women reported having more trusting relationships with LHWs and nurses than with physicians, probably due to greater contact with these staff. Several women with a low level of trust reported experiences of discrimination due to lack of insurance.

Conclusions. Prenatal care presents a unique opportunity for providers to contribute to the elimination of health disparities among low-income women. Improving continuity with public health prenatal care providers and building strong relationships with LHWs may enhance quality of care and contribute to achieving this goal. Better patient–provider communication is also a practical area of focus towards improving patient trust.

Keywords. Low-income women, minority women, patient trust, prenatal care.

Introduction

Despite improvements in maternal and child health, disparities in access to quality maternal health care still exist for many women domestically and internationally.[1–4] Women who are poor are more likely to experience adverse pregnancy outcomes than non-poor women.[5] Providing quality prenatal and postpartum care is the primary prevention strategy to reduce maternal and infant death. Unfortunately, a substantial percentage of women lack access to timely and adequate care, and inequities have been found in the receipt of care (e.g. tocolysis, amniocentesis, ultrasound and physician advice).[6–12] Given the crisis of inequity in maternal and child health, organizations such as the World Health Organization, USAID and the Institute of Medicine have made commitments to improve pregnancy outcomes by improving access health services through community-based initiatives such as Maternal Health and Safe Motherhood Interventions and home visitation programmes.[2,13–15] Accessibility, however, includes more than the mere existence and availability of services, it also includes quality patient–provider relationships. Trust is an important component of these relationships.

Conceptual framework

A better understanding of patient trust among the poor and underserved is necessary, considering that a decline in patient trust may lead to lower patient and provider satisfaction, increased disenrolment from care, poorer patient compliance with treatment recommendations and, indirectly, unfavourable health status.[16–21] Patient

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trust is a central component in the delivery of quality medical care. We conceptualize trust based on prior work in medical and non-medical settings.[16,22–26] Trust has been described as an attitude directed towards a provider's character in an ongoing relationship that, at times, is forced by the exigencies of illness.[22] There are several definitions of trust, but most tend to stress the optimism and vulnerability of the patient. For example, Baier defines trust as "the accepted vulnerability to another's possible but not expected ill."[24] We draw upon Lupton's conceptualization of trust which suggests that the patient plays a more active role in so much as "trust must be earned through respect and acknowledgement of patients' lived, personal experiences".[26] Additionally, we employ Giddens' perspective that trust is "a vesting of confidence in the other" and a "gamble upon the capability of the individual actually to be able to act with integrity."[27]

Most trust studies have assessed healthy populations in primary care settings with limited representation from minorities or lower income groups.[22] Furthermore, studies have generally limited the exploration of patient trust to physicians or the health system, often excluding other members of the health care team.[22,28] Studies of patient satisfaction, however, suggest that non-medical staff influence patient's satisfaction with medical encounters.[29] Thus, exploration of patient trust should also include patients' relationships with non-physicians.

Home visitation by lay health workers (LHWs) has been employed as a strategy to extend prenatal care into community settings and link underserved women with necessary health and social services during pregnancy.[30,31] In the broadest sense, prenatal care encompasses community-based programmes which provide support for healthy lifestyles, foster linkages with health and social services, and add to existing social support networks.[11,15] Thus, by design, the continuous nature of the prenatal care relationship, and community-based programmes which enhance prenatal care with LHWs, may provide an excellent opportunity to examine patient trust.[32] This study addresses a gap in the literature by exploring patient trust in a low-income, largely minority population. Our primary goal is to increase understanding of women's medical experiences during pregnancy and how these experiences influence their trust and relationships with health care providers—both professional and paraprofessional. Our secondary aim is to explore the role of LHWs in enhancing care for low-income women.

Methods

Setting and subject recruitment

This qualitative study was conducted with patients from public health clinics offering community-based prenatal care programmes in three localities (two urban and one rural). The clinics are located in areas with high infant mortality and provide comprehensive prenatal and postpartum clinical services and home visitation by LHWs, also called 'resource mothers'.[33] These LHWs were all mothers who resided in the communities which they were serving. The role of the LHW was to improve women's access to prenatal care, provide peer support, assist in identification of service needs (i.e. Medicaid, transportation, etc.) and to engage in home-based health education.

Clinic physicians and staff recruited patients for the study and letters were sent to all eligible women (currently pregnant or within <1 year after delivery) who attended the clinic. Also, flyers were posted in the clinics inviting women to "Tell us what you think" about their health care and pregnancy experiences by participating in a research study. Women who consented to be contacted were called by research staff. Research staff verified that women met criteria. This method of recruitment would probably lead to self-selection bias in that women who participated in the groups may be more assertive about their care, or very satisfied or dissatisfied compared with women who did not volunteer to participate. To minimize sampling bias in this non-random selection process, we used multiple methods of recruitment (as described above) but ultimately sought women who would tell their stories.

Data collection

A moderator's guide was developed, piloted and revised (Box 1). The guide was piloted with two LHWs—who had received services through the clinics—and one patient. The questions were refined further after the first focus group. Revisions included the addition of prompts about ancillary medical staff, and experiences and

BOX 1 *Moderator guide*

How satisfied are you with the prenatal care you have received during this pregnancy? Please explain.

Please describe your relationship with your health care provider (doctor, nurse practitioner, etc.).

Do you feel that your doctor/health care provider really cares about you? Please explain.

Do you try to follow your doctor's (or health care provider, nurse practitioner) advice as closely as possible?

Do you feel you can trust your health care provider? (doctor, nurse practitioner) Please explain.

Please describe your relationship with your resource mother.

Do you think health care providers (doctors) treat Black, Hispanic or other minority women differently from how they treat white patients?

What if any recommendations do you have to improve care for pregnant women?

A short questionnaire was circulated and read aloud with the women at the end of each session.

perspectives regarding the US health system. The purpose of the guide was to structure the discussion and elicit information about women's pregnancy experiences in a narrative format.

Four focus groups were held: three at clinic sites (two urban, one rural) and one at an urban community centre. Prior to starting the focus groups, informed consent was obtained and participants completed a brief demographic questionnaire. The questionnaire obtained information on the woman's age, race, type of provider(s) she saw during her pregnancy and whether she was currently pregnant or had already delivered. Researchers gave participants a brief introduction to the focus group format and encouraged them to share experiences and respect everyone's opinions. Additionally, the researchers used icebreaker questions to establish rapport with the participants before beginning the main discussion. On average, focus groups lasted 2.5 h. Two African-American female researchers trained in qualitative focus group techniques facilitated the groups. Additionally, a research assistant was present at each session to take notes regarding the mood, non-verbal communication and general impressions of participants. All participants received a US $30 gift voucher at the end of each group. Each session was audio-taped and transcribed verbatim by a professional transcriptionist. A facilitator and the research associate assessed the accuracy of the verbatim transcripts reading the transcripts and comparing them with the audio-taped sessions and notes, making minor corrections as necessary.

Analysis

As observed by Miles and Huberman, most qualitative studies fall somewhere between a loosely structured, inductive grounded method and deductive, confirmatory technique.[34] So was the case in this study. The researchers approached the study with orienting ideas, specific research questions and a focus group guide. Debriefing occurred after each group, and analysis was an iterative process. Grounded theory techniques guided initial analysis.[35] Initially to avoid imposing any particular framework, the research associate and the facilitator independently reviewed the transcripts. Data were analysed and answers to specific research questions were sought, while making note of emergent categories and themes. Through data analysis, categories became more refined and deductive as linkages among concepts were established.[35] Emergent categories were similar to those in Thom and Campbell's[19] model of physician behaviour. As a result, subsequent coding was guided by their model. Labelled statements that were consistent across focus groups, but did not fit within the conceptual framework, were grouped by consensus and included in our final patient trust model.

Results

Subjects

There were 33 participants: 23 African-American, six White, two Hispanic and two multiracial women. The majority were 19 years or older (65%) and had completed high school (85%). All women were Medicaid insured, yet only 50% had first-trimester care. Half of the participants were pregnant and the rest had delivered within the previous 12 months. Women reported receiving prenatal care from the following providers: physician (47%), midwife (26%), nurse practitioner (12%), physician assistant (6%) and general clinic staff (9%).

Model of patient trust among low-income women

A model of common themes and sample quotes illustrate the findings (Fig. 1). The proposed model employs the most common themes and suggests that factors of continuity, communication, caring, competence

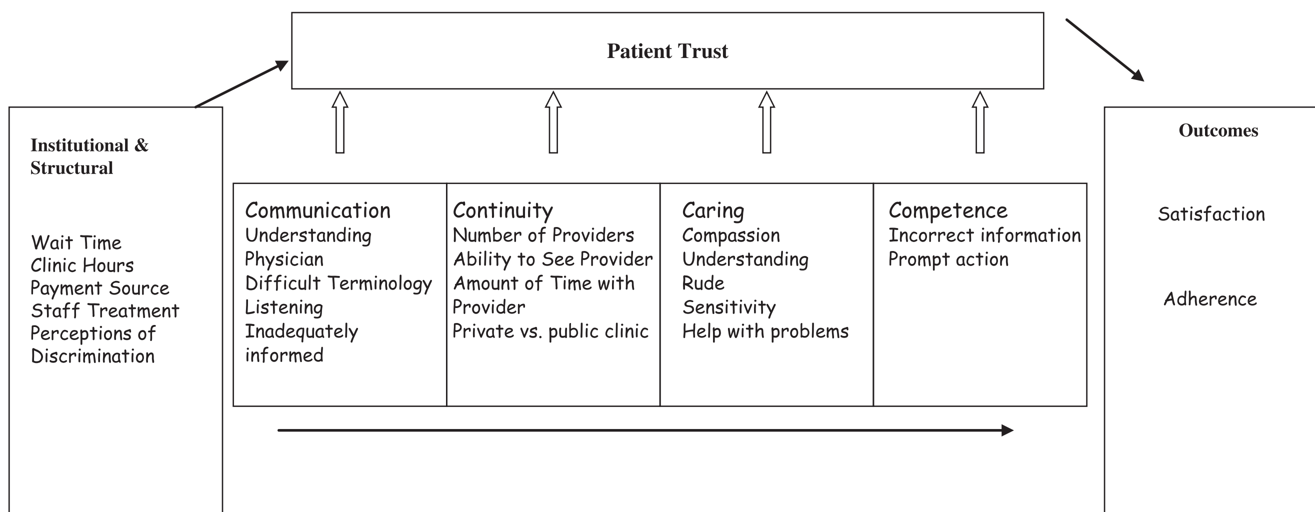

FIGURE 1 *Model of the most common themes of patient trust patient–provider relationships*

and institutional and structural factors are associated with patient trust for low-income women. These factors, in turn, influence outcomes such as satisfaction and adherence to physician recommendations. Sample comments are given in Box 2.

Communication. Women noted the importance of good communication during health care interactions with regards to their ability to understand issues related to their health and confidence that their providers understood and demonstrated empathy regarding their personal circumstances. When discussing communication with prenatal care providers (non-LHWs), women described more barriers than promoters of trust. In general, these included use of medical jargon, problems understanding non-US born physicians, perceptions that information was being withheld, and perceptions that the physicians were not listening to them. Women expressed that they wanted to clearly understand what to expect during pregnancy and to be made aware of any negative issues concerning their health or their children's health. Furthermore, women indicated that not having the necessary information from prenatal providers was unacceptable and frustrating. Mother-to-mother (LHW-to-patient) communication centred on sharing of experiences, especially when the LHW talked about her personal experiences. Information communicated by LHWs was perceived as accurate and useful and positively affected women's levels of trust. First-time mothers regarded information on health care and social services as critical.

Continuity of the patient–provider relationship. Participants shared both positive and negative experiences regarding their time with doctors, in general, and "seeing the same doctor", specifically. Women expressed lower levels of trust in situations where there was no continuous relationship with any one provider. As one woman shared, "Because you didn't see them [the doctor] until you were really far along. If you see a person a lot, you get to know them and you feel comfortable." Specific examples of lack of continuity in patient–provider relationships included seeing a variety of different practitioners (e.g. physicians, midwives) during the course of care, not seeing their personal providers until late in their pregnancies, not getting care when they first sought it, and having limited time with providers during office visits. Positive examples of trust in this category were situations in which patients experienced ongoing relationships with the same provider. This generally occurred when a woman had a chronic medical condition (e.g. high blood pressure, asthma, etc.).

Caring. Caring was described in terms of the level of concern that a provider demonstrated regarding the woman's health, the well-being of her child and empathy towards challenging circumstances (i.e. loss of job). Women shared that insensitive behaviour was unacceptable and occasionally resulted in women terminating care from the clinic. One woman stated, "They [nurses and clinic staff] just acted like you are too young to be having all these kids anyway. So after that, I never went back to (name of institution) or their clinic or nothing." Interactions with nurses and LHWs were among the positive experiences of caring that women discussed. As one participant shared, "I found one (a nurse) that really cares about your kids because she sits down and talks with you and help you any way she can." Notably, participants cited the role of LHWs in their demonstrations of caring with non-medical problems (e.g. transportation, social services) and help in alleviating stressful situations.

Competence. Trust was expressed in the context of the woman's perception of whether or not she received good quality technical care. This extended to the provider's ability to address and resolve medical problems as well as the patient's willingness to comply with advice from the provider. Women did not question their physicians' knowledge or educational preparation. Rather, women's perceptions of incompetence were based on misinformation, or an inaccurate diagnosis, which decreased their trust in care and affected women's willingness to follow their clinician's advice. Additionally, the perception of conflicting information from providers (nurse versus physician) was viewed as a 'mistake' and a threat to patient trust. As one participant described, "Two times giving me the wrong medicine—that was enough. They gave me some more pills. I didn't take them." Perceived confidence in the LHW was generally assessed by women in terms of the LHWs' knowledge of pregnancy-related issues, child health and social service linkages. Women expressed unequivocal trust in their LHWs' knowledge and ability, particularly with respect to knowledge about pregnancy, childcare, and community and social services. Rather than replace the physician's advice, they often reinforced the physician's instructions.

Institutional and structural factors. Patients' personal experiences in accessing the health care system also influenced their trust in providers. These experiences frequently involved problems accessing health care (i.e. long wait times, lack of health insurance). Several women expressed perceptions of differential treatment due to their minority race/ethnicity or socio-economic status. One Hispanic woman felt that she was treated poorly because she did not have health insurance. She commented, "I'm not saying that they treated her differently because she was Black, but because she had insurance." In addition, most women reported concerns about paying for their care and delays in getting Medicaid coverage. As another woman shared, "It depends

BOX 2 *Sample comments from focus groups organized by major themes*

Communication with providers

"I am the one going through all of this just let me know what is going on with my body. Why are you (doctor) not telling me? Before I knew [it] she was telling me to shut up and that is when I exploded."

"They don't talk to you and let you know what is going on. We don't know all of the terminology that they are talking about and [they] don't explain it to you."

"I have a doctor that I don't understand what she is saying. Bring me a doctor that I can understand what she is saying."

"I could talk to the doctor and ask questions."

"Not my OB-GYN, but my specialist I do trust. I think it has to do with my specialist actually listens to me. This is what's wrong with my body. This is what I tried and this is not working. She actually listens to me whereas when I was coming for my prenatal care visits, after care visits, or whatever they (other doctors) weren't listening to me."

"My daughter was on an albutrol-inhaler. Why didn't you (doctor) tell me that if I gave her an overdose it could kill her when you first gave it to me. She told me to give her 0.5 but it was not on the dropper. I was giving her more than what I was supposed to give her. Why didn't you (doctor) tell me before I left?"

"She (LHW) talked to me about breastfeeding. After the baby, she told me all about birth control methods that I could take."

"I didn't know I was pregnant until 5 months. Really didn't know what to do about it. She (LHW) sat down and talked to me."

Continuity of the patient–provider relationship

"The only problem with the (place of care) is that the only time you get to see the doctor is when you are very close to delivery time. I don't think that is good because you need to get on a personal level with your doctor if he is going to deliver your baby."

"I ain't seen my doctor 'til he delivered. I didn't even get to talk to him."

"When I was seen by a regular doctor then things got better."

"When I moved I was almost 3 months pregnant. She (LHW) was willing to come up there. She could still be my resource mother.

"When I lost my trailer down there and came back, she was right there helping me find an apartment and getting me straight back on my feet."

Caring and compassion

"My baby has had bronchitis since she was 2 months old. That doctor hasn't in months failed to ask me how is her bronchitis."

"I wouldn't say they don't care but not know. I only talked to one (doctor). She would come in every morning and check on me.

"When I first came to get an ultrasound. I didn't feel like she listened to me but went by what she thinks."

"I found one (nurse) that really cares about your kids because she sits down and talks with you and help you any way she can. My little girl has asthma . . . she went out of her way to get me a machine and the medicine for it. That showed me that she really cares until I get Medicaid."

"They (doctors and nurses) were real good to me. They weren't supposed to give me anything."

"She (LHW) took me to the hospital and stayed there until my friend got there. I slipped and fell on the ice. I didn't know not to walk on it. She took me to Virginia Baptist and I was hooked up to a fetal monitor and she stayed with me."

Competence

"I had a bad experience when my due date passed and the doctor wouldn't do anything. I had to tell my resource mother to go with me and talk to the doctor so that he could induce."

"There was this instance where my baby's navel kept getting bigger and bigger. I had to take him to another doctor. He ended up having an umbilical hernia. Which they could have—which I knew it was coming. They could have told me that at the beginning."

"I think they know what they are doing. They are doing the best for the child."

"I had been prescribed (treatment) for a sexually transmitted disease. Come to find out I never had it. I was treated for it eight times while I was pregnant and I didn't have it. That is why I didn't take the medication when they said I had a bladder infection. Then 2 weeks later they called and said it was the wrong medicine, you really get upset."

"If you got problems she (LHW) got the answers. She will tell you how to do it. She is a walking encyclopedia."

Institutional and structural factors

"You get there at 8.30 and still you don't leave until 1 o'clock. I have to wait so long for so little."

"You sit in the waiting room for hours. Like 2 hours."

"I sat there for 4 hours. They make everybody's appointment at the same time."

"It took the Health Department almost 1 month to work me in."

"It depends on the money you make. That's how I feel. It depends on whether you have Medicaid or insurance. When I was on insurance they treated me like a queen. But when I was off insurance they like put me in a back room."

"I didn't get my Medicaid until I was 8 months pregnant. I had to quit work to get it."

"I'm not saying that they treated her differently because she was black but because she had insurance."

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Discussion

Principal findings

This study qualitatively confirms findings from other reports in higher income and non-minority populations and expands the discussion of patient trust to lower income women in prenatal care settings. Most of the study participants' comments about trust pertain to providers' interpersonal characteristics. Other studies report an association between patient trust and provider communication skills, interpersonal skills, physician competence, attitude and compassion, along with privacy and reliability.[22,36–39] Thom and Campbell[19] identified dimensions of trust, i.e. technical competency and organization, as provider attributes that are consistent with our results on important factors (e.g. continuity, communication, etc.). Women's experiences regarding trust were also consistent with four of the five conceptual categories presented by Hall: fidelity, competence, honesty and global trust.[22] Confidentiality did not emerge as a separate conceptual category of trust. Participants' experiences with providers confirmed that perceived competence by patients is strongly associated with a provider's (professional and lay workers) interpersonal communication skills and expression of caring.[22] While the length of the physician–patient relationship or total number of weeks, months, etc. has been found to only be weakly associated with trust, time spent with providers during a visit was important to women and fostered trust in our sample.[38,40,41]

Few studies of patient trust have examined the perspective of low-income women. Not surprisingly, low-income women have preferences and perceptions which are similar to those of higher income women of what constitutes good quality care. Yet, as findings of this study highlight, they often face interpersonal, institutional and structural barriers to quality patient–provider relationships.[42] These findings also support other research which has found that complementary models of prenatal care, such as those that provide home visitation, are critical to enhancing care for low-income women.[14] The social support provided by the LHWs was an effective method of improving the pregnancy experience of study participants. Specifically, the mother-to-mother relationship provided participants with continuity, increased access to care, and knowledge. The lack of experiential knowledge of motherhood of some providers has been found to decrease credibility with low-income women.[39] Relationships with LHWs were characterized by a high level of trust on the part of participants—a finding that is consistent with the research suggesting that maternal care provided by indigenous workers is acceptable to low-income women.[15,39,42]

Limitations

The voluntary nature of focus group participation and limited sample size limit the generalizability of this study. Furthermore, women who agreed to participate may have differed from those who did not. Another limitation is that women were in different phases of the pregnancy experience, and this may have affected their recall and reporting of events. Nevertheless, the focus group approach was appropriate, given the limited information available concerning patient trust in lower income women. Widely used in social science research, focus groups are especially useful because they provide a greater depth of information than is obtainable in individual surveys, since they allow participants to respond in their own words.[43] The experiences, opinions and perspectives that women shared in these groups would not have been easily captured in a quantitative study.

Meaning of study and implications

Eliminating disparities in maternal outcomes is an international priority.[44] High-quality prenatal care can improve health care knowledge and satisfaction and increase social support, while giving women a sense of control over their lives.[45] Many poor and underserved women face barriers to quality care and lack continuity in relationships with physicians and, therefore, may be more likely to have increased distrust in medical care.[46] Patients with a low level of trust in providers have been found to have lower use of recommended preventive services, and are less likely to comply with physician recommendations than patients with greater patient trust.[47] Improving patient trust among low-income women may reduce disparities in maternal health outcomes. These findings suggest several implications in the organization and delivery of health care to poor and underserved women during pregnancy.

First, structural barriers limited continuity of patients' relationships with medical providers (physicians, midwifes, etc.) and inhibited patient trust. Women shared frustration with their limited ability to interact with prenatal care providers. While this was related to patient trust, the ability to see providers is more likely to be a function of the organization of care in a clinic setting rather than of specific behaviours that can be mediated by provider interventions. Factors such as long appointment waits and inadequate staffing further the sentiment that the poor receive unequal treatment.[16] Improvement in the structure of the context of the delivery of health care to poor women has been a persistent issue that requires more saliency in the national discourse, if reducing disparities is to be achieved.[7,48]

A second implication of the study is the importance of non-physician staff in promoting trust. Numerous examples of interactions with nurses and other medical

staff were cited with regards to patients' trust. Most studies of patient trust have centred only on the physician–patient dyad. Because many low-income women see multiple providers during pregnancy, future inquiry on patient trust should include LHWs, non-MD medical providers and other staff.

A third implication of this study is the need to better understand lower income women's willingness to follow provider recommendations. While the study did not focus on specific situations, several of the patients responded that they did not spend enough time with a provider or have enough trust in a specific prenatal care provider to ensure compliance with his/her advice. Most women indicated that they would trust the opinion or and advice given by LHWs and nurses to the same extent that they would trust their prenatal care provider. Perceived mistakes, poor communication and limited time with their provider were expressed as reasons why patients may not be willing to follow their physicians' advice. Use of LHWs to reinforce medical providers' advice may improve compliance. Given the unanimous expression of trust in LHWs and the amount of time women spent with them, increasing interaction between LHWs and the medical team may prove useful. The exchange of information between LHWs and physicians would provide valuable information to the physician, facilitate patient compliance with difficult regimens and improve aspects of patient care.

Conclusion

The prenatal care encounter presents a unique window of opportunity for the development of quality patient–provider relationships that can improve women's overall health by influencing health behaviours (i.e. smoking cessation), use of preventive services (i.e. breast cancer screening) and detecting women's health and social problems (i.e. depression). Practical strategies to improve patient trust in relationships with prenatal care providers should include a focus on improved patient–provider communication. Additionally, given the high level of trust in the LHW-to-mother relationship, future quality interventions should explore further integration of the role of LHWs in prenatal care delivery systems.

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References

1. World Health Organization. Retrieved 1/16/03 from http://www.who.int/en/.
2. Koblinsky MA, Campbell O, Heichelheim J. Organizing delivery care: what works for safe motherhood? *Bull WHO* 1999; **77:** 399–406.
3. Cook KS. *Trust in Society*. New York: Russell Sage Foundation; 2001.
4. Jewell NA, Russell KM. Increasing access to prenatal care: an evaluation of minority health coalitions' early pregnancy project. *J Community Health Nurs* 2000; **17:** 93–105.
5. Wilkins R, Sherman GJ, Best PA. Birth outcomes and infant mortality by income in urban Canada, 1986. *Health Rep* 1991; **3:** 7–31.
6. US Department of Health and Human Services. *Healthy People 2010* (Conference Edition). Washington (DC): US Department of Health and Human Services; 2000.
7. Institute of Medicine. *Prenatal Care: Reaching Mothers, Reaching Infants*. Washington (DC): National Academy Press; 1988.
8. US Department of Health and Human Services. *Assuring Access to Essential Health Care*. Rockville (MD): Health Resources Administration; 1999.
9. Kogan MD, Alexander GR, Kotelchuck M, Nagey DA. Relation of the content of prenatal care to the risk of low birth weight. Maternal reports of health behavior advice and initial prenatal care procedures. *J Am Med Assoc* 1994; **271:** 1340–1345.
10. LaVeist TA, Nickerson KJ, Bowie JV. Attitudes about racism, medical mistrust, and satisfaction with care among African American and white cardiac patients. *Med Care Res Rev* 2000; **57 Suppl 1:** 146–161.
11. Abouzahr C. Improving access to quality maternal health services. *Plan Parent Chall* 1988; **1:** 6–9.
12. Zambrana RE, Scrimshaw SC, Collins N, Dunkel-Schetter C. Prenatal health behaviors and psychosocial risk factors in pregnant women of Mexican origin: the role of acculturation. *Am J Public Health* 1997; **87:** 1022–1026.
13. Blondel B, Breart G. Home visits during pregnancy: consequences on pregnancy outcome, use of health services, and women's situations. *Semin Perinatol* 1995; **19:** 263–271.
14. Olds DL. Prenatal and infancy home visiting by nurses: from randomized trials to community replication. *Prev Sci* 2002; **3:** 153–172.
15. Sword W. A socio-ecological approach to understanding barriers to prenatal care for women of low-income. *J Adv Nurs* 1999; **29:** 1170–1177.
16. Mechanic D, Schlesinger M. The impact of managed care on patients' trust in medical care and their physicians. *J Am Med Assoc* 1996; **275:** 1693–1697.
17. Murphy J, Chang H, Montgomery JE, Rogers WH, Safran DG. The quality of physician–patient relationships. Patients' experiences 1996–1999. *J Fam Pract* 2001; **50:** 123–129.
18. Goold SD. Money and trust: relationships between patients, physicians, and health plans. *J Health Polit Policy Law* 1998; **23:** 687–695.
19. Thom DH, Campbell B. Patient–physician trust: an exploratory study. *J Fam Pract* 1997; **44:** 169–176.
20. O'Malley AS, Forrest CB, Mandelblatt J. Adherence of low-income women to cancer screening recommendations. *J Gen Intern Med* 2002; **17:** 144–154.
21. Thom DH, Bloch DA, Segal ES. An intervention to increase patients' trust in their physicians. Stanford Trust Study Physician Group. *Acad Med* 1999; **74:** 195–198.

[22] Hall MA, Dugan E, Zheng B, Mishra AK. Trust in physicians and medical institutions: what is it, can it be measured, and does it matter? *Milbank Q* 2001; **79:** 613–639.

[23] Pelligrino ED, Veatch RM, Langan JP. *Ethics,Trust, and the Professions: Philosophical and Cultural Aspects*. Washington (DC): Georgetown University Press; 1991.

[24] Baier A. Trust and antitrust. *Ethics* 1986; **96:** 231–260.

[25] Hardin R. *Trust and Trustworthiness*. New York: Russell Sage; 2001.

[26] Lupton D. Consumerism, reflexivity and the medical encounter. *Soc Sci Med* 1997; **45:** 373–381.

[27] Giddens A. *The Transformation of Intimacy. Sexuality, Love, and Eeroticism in Modern Societies*. Cambridge: Policy Press; 1994: 138.

[28] Di Angi P. Barriers to the black and white therapeutic relationship. *Perspect Psychiatr Care* 1976; **14:** 180–183.

[29] Tucker CM, Herman KC, Pedersen TR, Higley B, Montrichard M, Ivery P. Cultural sensitivity in physician–patient relationships: perspectives of an ethnically diverse sample of low-income primary care patients. *Med Care* 2003; **41:** 859–870.

[30] Earp JA, Flax, VL. What lay health advisors do: an evaluation of advisors' activities. *Cancer Pract* 1999; **7:** 16–21.

[31] American Academy of Pediatrics. Council on Child and Adolescent Health. The role of home-visitation programs in improving health outcomes for children and families. *Pediatrics* 1998; **101:** 486–489.

[32] Roter DL, Geller G, Bernhardt BA, Larson SM, Doksum T. Effects of obstetrician gender on communication and patient satisfaction. *Obstet Gynecol* 1999; **93:** 635–641.

[33] Sheppard VB, Hilton KN, Christopher JL. *Evaluation Report of the Virginia Healthy Start Initiative: Lessons Learned*. Prepared and submitted to the Virginia Department of Health and the Maternal and Child Health Bureau; 2002.

[34] Miles MB, Huberman AM. *Qualitative Data Analysis: An Expanded Sourcebook*. Newbury Park (CA): Sage Publications; 1994.

[35] Strauss AL, Corbin J. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park (CA): Sage Publications Inc; 1990.

[36] Safran DG, Taira DA, Rogers WH, Kosinski M, Ware JE, Tarlov AR. Linking primary care performance to outcomes of care. *J Fam Pract* 1998; **47:** 213–220.

[37] Kao AC, Green DC, Zaslavsky AM, Koplan JP, Cleary PD. The relationship between method of physician payment and patient trust. *J Am Med Assoc* 1998; **280:** 1708–1714.

[38] Roberts CA, Aruguete MS. Task and socioemotional behaviors of physicians: a test of reciprocity and social interaction theories in analogue physician–patient encounters. *Soc Sci Med* 2000; **50:** 309–315.

[39] Sword W. Prenatal care use among women of low-income: a matter of "taking care of self". *Qual Health Res* 2003; **13:** 319–332.

[40] Kao AC, Green DC, Davis NA, Koplan JP, Cleary PD. Patients' trust in their physicians: effects of choice, continuity, and payment method. *J Gen Intern Med* 1998; **13:** 681–686.

[41] Safran DG, Kosinski M, Tarlov AR *et al*. The Primary Care Assessment Survey: tests of data quality and measurement performance. *Med Care* 1998; **36:** 728–739.

[42] McFarlane J, Fehir J. De Madres a Madres: a community, primary health care program based on empowerment. *Health Educ Q* 1994; **21:** 381–394.

[43] Stewart D, Shamdasani P. *Focus Groups: Theory and Practice*. Newbury Park (CA): Sage Publications; 1990.

[44] UN Millenium Development Goals. Retrieved 1/16/04 from http://www.un.org/millenniumgoals/.

[45] Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington (DC): National Academy Press; 2001.

[46] LaVeist TA, Keith VM, Gutierrez ML. Black/white differences in prenatal care utilization: an assessment of predisposing and enabling factors. *Health Serv Res* 1995; **30:** 43–58.

[47] O'Malley AS, Gonzalez RM, Sheppard VB, Huerta E, Mandelblatt J. Primary care cancer control interventions including Latinos: a review. *Am J Prev Med* 2003; **25**: 264–271.

[48] Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington (DC): National Academy Press; 2002.