

# Intersections of Ethnicity and Social Class in Provider Advice Regarding Reproductive Health

Roberta A. Downing, PhD, Thomas A. LaVeist, PhD, and Heather E. Bullock, PhD

Childbearing by low-income women is stigmatized in the media and in policy arenas.<sup>1,2</sup> Low-income mothers who receive public assistance are perceived as contributing to welfare costs,<sup>3,4</sup> and welfare policy has historically contained several provisions that seek to limit reproduction by low-income women (e.g., family caps).<sup>5</sup> A large body of social science research suggests that current “welfare reform” policies are, in part, a reflection of negative attitudes toward single mothers and welfare recipients.<sup>6–10</sup>

Low-income women are stereotyped as being “dishonest, dependent, lazy, disinterested in education, and promiscuous.”<sup>11</sup> (p125) Stereotypes about welfare recipients, in particular, emphasize uncontrolled sexuality.<sup>12</sup> Women who receive welfare are stereotyped as being adolescent mothers,<sup>13</sup> part of the African American “underclass,”<sup>12,14,15</sup> and irresponsible parents.<sup>1,16,17</sup> One of the primary myths about welfare is that it encourages women to have larger families to increase the amount of their cash benefits,<sup>13</sup> although empirical evidence does not support these claims.<sup>13,18,19</sup>

These stereotypes affect low-income women’s day-to-day interactions with those who are not poor.<sup>11</sup> Low-income women experience interpersonal classism when they seek housing, use food stamps, use vouchers for public transportation, interact with welfare case workers, talk with teachers and peers at school, and in other social situations that identify them as welfare recipients.<sup>11,20–23</sup> Such contempt reflects the larger public’s disparagement of welfare and the women who receive it.<sup>1,11,14,15</sup>

The United States has a long history of attempting to control low-income women’s childbearing through policy directives.<sup>12</sup> For example, there is strong political support for providing contraception to low-income women through Medicaid and community-based family planning clinics,<sup>3</sup> and many congressional proposals have sought to encourage the use of birth control.<sup>4,24</sup> Lawmakers in several states

**Objectives.** We examined how ethnicity and social class influence women’s perceptions of reproductive health care. Of primary interest was assessing whether health care providers are perceived as advising low-income women, particularly women of color, to limit their childbearing and to what extent they feel they are discouraged by providers from having future children.

**Methods.** Ethnically diverse, low-income (n=193) and middle-class women (n=146) completed a questionnaire about their pregnancy-related health care experiences.

**Results.** Logistic regression analyses revealed that low-income women of color experienced greater odds of being advised to limit their childbearing than did middle-class White women. A separate model demonstrated that low-income Latinas reported greater odds of being discouraged from having children than did middle-class White women.

**Conclusions.** Low-income women of color were more likely to report being advised to limit their childbearing and were more likely to describe being discouraged from having children than were middle-class White women. More research is needed regarding how ethnicity and social class impact women’s experiences with reproductive health care. (*Am J Public Health.* 2007;97:1803–1807. doi:10.2105/AJPH.2006.092585)

have proposed legislation requiring (and in some states even paying) low-income women to use the Norplant birth control method.<sup>4,24</sup> State Medicaid programs spend millions of dollars on sterilization, and although federal funds cannot be used for abortion, some states provide low-income women with abortion allowances.<sup>3</sup> Moreover, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 includes goals for reducing “illegitimacy,” through “family cap” rules that deny increased welfare benefits to women who have children while receiving assistance.<sup>5</sup>

Given dominant stereotypes about low-income women’s reproduction, the bias low-income women confront in their everyday interactions, and policies aimed at restricting childbearing, it is possible that discriminatory treatment extends to health care. With so many negative stereotypes about low-income women and motherhood, low-income women are particularly vulnerable to discrimination when seeking reproductive care. Societal double standards that encourage White, middle-class women to become mothers but discourage low-income women from doing so may be used to justify discriminatory treatment.

Thus, understanding women’s perceptions and experiences of reproductive health care is crucial but understudied.

We examined whether self-reports of reproductive health care by low-income women and women of color differs from that of White and middle-class women. Low-income and middle-class women’s experiences during pregnancy were compared to assess whether low-income women, particularly women of color, were advised to limit their childbearing and whether women perceived that providers discouraged them from having children.

Consistent with research that documents high levels of discrimination against women,<sup>25</sup> people of color,<sup>26,27</sup> and the poor,<sup>28</sup> women in this study were expected to report differential reproductive health care experiences based on intersections of ethnicity and social class in the following ways: (1) low-income women, particularly women of color, were expected to report receiving more restrictive reproductive advice from providers during their pregnancies than were middle-class women; (2) low-income women, particularly women of color, were expected to report that their doctor discouraged them from having

other children during their pregnancy more so than middle-class women.

## METHODS

Low-income women ( $n=193$ ) and middle-class women ( $n=146$ ) who resided in the greater Los Angeles area completed a questionnaire about their health care experiences. The questionnaire was designed to assess potential health care differences on the basis of ethnicity and social class. The questionnaire took 15–25 minutes to complete, depending on the respondents' literacy level and number of interruptions (e.g., attending to young children). Our findings focused exclusively on the questionnaire items about reproductive health care. To ensure relatively recent experience with reproductive services, only women who were pregnant or who had given birth in the past 5 years were recruited. To assess readability and validity, the questionnaire was pilot tested with 48 women before we began data collection.

"Low-income" status was conceptualized in terms of public assistance receipt. Low-income respondents were solicited for participation by the principal investigator at offices of the Special Supplementary Food Program for Women, Infants and Children (WIC). Respondents were eligible to participate if they were receiving welfare (Temporary Aid to Needy Families), Medi-Cal (California's Medicaid program for low-income patients), or were uninsured. Because the WIC program has higher income limits than welfare or Medi-Cal, those women receiving only WIC services were not included in the study.

Respondents were classified as "middle-class" if they held an undergraduate degree or graduate degree and had health insurance (not through Medi-Cal). Middle-class women were recruited for participation by the principal investigator at children's recreational sites in demographically middle-class neighborhoods, at support groups for new mothers (e.g., La Leche League), at library book readings for toddlers, and through professional list serves. There was no overlap in the recruitment sites of low-income and middle-class respondents. Women at the recreation centers who did not hold a bachelor's degree completed the questionnaire; however, their data was not included in this study.

All respondents completed identical questionnaires in English or Spanish. Survey items assessed demographic information, sources of reproductive health care, and the topics discussed during visits to reproductive health care providers. Participants were assured of their anonymity and were told that their responses would be held in confidence.

### Demographic Information

Demographic information included participants' age, ethnicity, income, marital status, education, family size, employment status, source of health insurance, source of reproductive health care (e.g., gynecologist, Planned Parenthood, certified nurse midwife), and receipt of public assistance.

### Reproductive Advice and Support

Two scales were developed to assess reproductive health care experiences. The 3-item Restrictive Recommendations Scale ( $\alpha=0.79$ ) focused on reproductive advice received during pregnancy, specifically recommendations for limiting families (e.g., advice about sterilization, vasectomy). Respondents used a 5-point Likert scale to evaluate their experiences (in which 1 signified "never" and 5 indicated "very often"); higher scores indicated more experience with health care providers advising

respondents to limit their childbearing. Mean scale scores for this construct were created for each participant (Table 1).

The 4-item Motherhood Discouraged Scale ( $\alpha=0.75$ ) assessed perceived support from doctors and others during pregnancy using a 5-point Likert scale (in which 1 signified "never" and 5 indicated "very often"). Sample items included, "During your pregnancy, how often did you feel" (1) "supported by your doctor in your decision to have a baby" or (2) that the "doctor tried to persuade you not to have a child?" Two items were reverse-coded so that higher scores reflected a greater rate of discouraging experiences (Table 1).

## RESULTS

### Demographic Information

The demographic characteristics of low-income and middle-class respondents differed significantly in several important areas. Middle-class participants (mean=34.95, SD=4.50) were significantly older than were the low-income respondents (mean=25.75, SD=6.10;  $F(1,333)=233.10, P<.01$ ) and were significantly more likely to be married than were the low-income respondents ( $\chi^2=98.51, P<.001$ ). Most participants in both groups had 1 or 2 children; however, low-income respondents

**TABLE 1—Percentage of Respondents Who Reported "Often" or "Very Often" on the Reproductive Health Scales (n = 339): Los Angeles County, 2004**

Reproductive Health Scales	Respondents, % (no.)
<b>Restrictive Recommendations Scale<sup>a</sup></b>	
During your pregnancy, did your doctor or other medical professionals talk to you about	
The importance of limiting family size?	13 (44)
Sterilization so you wouldn't have more children?	8 (29)
Vasectomy so your partner couldn't get you pregnant?	7 (23)
<b>Motherhood Discouraged Scale<sup>b</sup></b>	
During your pregnancy, how often did you feel	
Your doctor didn't want you to have a child?	3 (10)
Others were supportive of your pregnancy?	78 (264)
Supported by your doctor in your decision to have a baby?	74 (249)
Doctor tried to persuade you not to have a child?	3 (11)

<sup>a</sup>The Restrictive Recommendations Scale was a 3-item scale that focused on reproductive advice received during pregnancy, specifically recommendations for limiting families. Mean = 1.69, SD = .96,  $\alpha = .79$ .

<sup>b</sup>The Motherhood Discouraged Scale was a 4-item scale that assessed perceived support from doctors and others during pregnancy. Mean = 1.54, SD = .67,  $\alpha = .75$ .

were significantly more likely to have 3 or more children than were middle-class participants ( $\chi^2=19.96, P<.05$ ). The majority of respondents in both samples reported fluency in English. Eleven percent of the low-income sample completed surveys in Spanish; all of the middle-class participants completed surveys in English.

Because educational attainment was one of the operational criteria for inclusion in the study, the middle-class sample had completed significantly more years of formal education than had the low-income group ( $\chi^2=300.05, P<.01$ ). Most of the low-income participants held a high school or equivalency diploma (44%) as their highest degree; 29% had completed some college and 17% had less than a high school diploma. Fifty-one percent of the middle-class respondents had obtained a bachelor's degree, and 49% held a graduate degree. Current annual family income of these groups also differed significantly ( $\chi^2=281.85, P<.01$ ). The majority of low-income participants reported a household income of less than \$20 000 per year (73%), and 25% earned between \$20 001 and \$40 000 per year. Among middle-class respondents, the majority earned between \$40 001 and \$120 000 per year (60%), 23% earned between \$120 001 and \$200 000 per year, and 12% earned more than \$200 000 per year. A summary of the demographic characteristics is shown in Table 2.

**Reproductive Advice and Support**

Logistic regression analyses were conducted to examine how ethnicity and social class were related to the reproductive advice offered to participants. Because the dependent variables had skewed distributions, multiple regression could not be conducted. Instead, the dependent variables were dichotomized and logistic regression was performed. To assess differences between particular ethnic groups, only women who identified as African American, Latina, or White were included in these analyses. The ethnicity and social class variables were dummy coded according to intersections of ethnic (African American, Latina, and White) and social class groupings (low-income vs middle-class). Middle-class White women were the reference group. Table 3 displays the results of these analyses.

**TABLE 2—Demographic Characteristics of Respondents: Los Angeles County, 2004**

Characteristic	Low-income Sample (n = 193)	Middle-class Sample (n = 146)
Age (rounded to nearest whole number)	26	35
Race/ethnicity		
African American	50 (26%)	17 (12%)
Latina	64 (33%)	24 (16%)
Asian American	...	8 (6%)
White	51 (26%)	73 (50%)
Mixed	20 (10%)	21 (14%)
Other	8 (5%)	3 (2%)
Marital Status		
Married	60 (32%)	126 (86%)
Not married	128 (68%)	20 (14%)
Education level		
Less than high school	31 (16%)	...
High school diploma	80 (42%)	...
Some college	54 (28%)	...
Undergraduate degree	7 (4%)	74 (51%)
Graduate degree	1 (.5%)	71 (49%)
Language fluency		
English	157 (81%)	129 (88%)
Spanish	24 (12%)	2 (1%)
Bilingual (Spanish and English)	6 (3%)	8 (6%)
Other	...	4 (3%)

*Note.* Respondents were considered low-income if they received welfare (Temporary Aid to Needy Families), Medi-Cal (California's Medicaid program for low-income patients), or were uninsured. Respondents were designated as middle-class if they held an undergraduate degree, graduate degree or both, and had health insurance (not through Medi-Cal).

To examine the factors that play a role in providers discussing options for limiting childbearing, the first logistic regression was conducted using scores on the Restrictive Recommendations Scale as the dependent variable and intersections of ethnicity and social class as independent variables. To dichotomize the Restrictive Recommendations Scale, we determined that the median of this scale was 1.33. Scores at 1.33 and above were re-coded as "1" and scores below 1.33 were given a value of zero. Control variables included marital status, age, and number of children.

Thirteen percent of the variance was explained by this model. Being a low-income Latina or African American woman were the only significant predictors of providers discussing options to restrict reproduction. Low-income Latinas and African American women had greater odds of being advised by health care providers to restrict their childbearing than did middle-class White women.

To approach the issue of discouragement from another angle, a second logistic regression was conducted with dichotomized scores on the Motherhood Discouraged Scale as the dependent variable. To create the dichotomized scores, all scores at and above the median for this scale (1.25) were re-coded as "1"; scores that fell below 1.25 were re-coded as zero. As in the previous analysis, ethnicity and social class groupings were entered into the model as independent variables, with marital status, age, and number of children as control variables. Only African American women, Latinas, and White women were included, and these variables were dummy coded according to intersections of ethnicity and social class with middle-class White women as the reference group.

Seventeen percent of the variance was accounted for by this model. Compared with middle-class White women, low-income Latinas had greater odds of reporting being discouraged from having children during their pregnancies. Of the control variables, marital status and the number of children the respondents had were significant. Low-income Latinas (relative to middle-class White women) reported greater odds of being discouraged from having children during their pregnancy, as were women who had larger families and women who were not married.

**DISCUSSION**

The goal of this study was to assess how ethnicity and social class influence women's perceptions of the support and advice they received from health care providers during pregnancy. Compared with middle-class White women, low-income women of color reported greater odds of being advised to limit their childbearing. Moreover, low-income Latinas reported greater odds of being discouraged from having children during

**TABLE 3—Results from Logistic Regression Analyses for Reproductive Advice Offered to Study Participants (n = 312): Los Angeles County, 2004**

Variable	Restrictive Recommendations Scale <sup>a</sup>		Motherhood Discouraged Scale <sup>b</sup>	
	OR (95% CI)	$\chi^2$ (Wald)	OR (95% CI)	$\chi^2$ (Wald)
<b>Social class and race/ethnicity</b>				
Low-income African American	3.18 (1.40, 7.22)	7.66*	0.86 (.38, 1.93)	0.13
Low-income Latina	3.44 (1.60, 7.40)	10.01*	2.58 (1.13, 5.91)	5.03*
Low-income White	1.56 (0.67, 3.61)	1.07	1.20 (.52, 2.74)	0.18
Middle-class African American	1.71 (0.61, 4.84)	1.03	1.06 (0.37, 3.03)	0.01
Middle-class Latina	1.11 (0.40, 3.06)	0.04	2.46 (0.97, 6.23)	3.61
Age	1.01 (0.97, 1.06)	0.40	0.97 (0.93, 1.02)	1.63
Number of children	1.10 (0.94, 1.28)	1.39	1.34 (1.10, 1.63)	8.40*
Unmarried	1.76 (0.98, 3.16)	3.57	2.42 (1.33, 4.39)	8.40*

Note. OR = odds ratio; CI = confidence interval. Respondents were considered low-income if they received welfare (Temporary Aid to Needy Families), Medi-Cal (California's Medicaid program for low-income patients), or were uninsured. Respondents were designated as middle-class if they held an undergraduate degree, graduate degree or both, and had health insurance (not through Medi-Cal).

<sup>a</sup>The Restrictive Recommendations Scale was a 3-item scale that focused on reproductive advice received during pregnancy, specifically recommendations for limiting families. Nagelkerke  $R^2 = .131$ .

<sup>b</sup>The Motherhood Discouraged Scale was a 4-item scale that assessed perceived support from doctors and others during pregnancy. Nagelkerke  $R^2 = .169$ .

\* $P < .05$

their pregnancy than did middle-class White women, as did women with more children and women who were not married.

This study provides insight into how low-income women and women of color perceive the care they receive and the role of health care providers in unequal treatment in reproductive health care. Given well-documented gender,<sup>25</sup> race,<sup>26,27</sup> and class bias in health care,<sup>28</sup> it is not surprising that reproductive care would vary according to intersections of ethnicity and social class. Our findings suggest that providers may have attempted to limit the childbearing of low-income women of color. This is not to imply that providers are intentionally or consciously participating in any kind of eugenic practices; however, it is important to acknowledge that their perceived actions could have negative consequences. Some scholars regard recent attempts to limit poor women's childbearing through restrictive "welfare reform" measures as a new form of eugenics, with the aim of ending poverty by reducing the "undesirable" characteristics widely assumed to cause poverty.<sup>4,15,29</sup> Although our study does not provide direct support for this assertion, it does raise questions about the

treatment of low-income patients and how attitudes toward welfare recipients influence reproductive advice. It is possible that health care providers' advice to limit childbearing stems from larger societal attitudes and stereotypes about the effectiveness of low-income parents.<sup>1</sup>

Several limitations of this study restrict the generalizability of the findings. First, a convenience sample was used and information about those who did not wish to participate was not collected. Second, the sample was drawn from women who had given birth in the past 5 years, which may be a time period sufficient to cause recall bias in women's recollections. However, any such bias would exist among both the low-income and middle-class comparison groups, lessening the effect of bias on between-group comparisons. Third, "middle-class" status was operationalized in terms of postsecondary education and nongovernmental health insurance. Although these are meaningful indicators of middle-class status, this relatively limited conceptualization should not be equated with more-comprehensive measures of SES. It is also the case that this was a small, cross-sectional study. A larger sample of longi-

tudinal national data, particularly at various time intervals throughout a pregnancy, would provide a deeper understanding of women's reproductive health care experiences. Fourth, it is possible that other variables such as health status play a role in the reproductive advice and procedures women receive.<sup>30</sup>

Further research is needed to examine what variables influence the types of reproductive advice women are given. Researchers should also directly investigate providers' attitudes toward their low-income patients, particularly their beliefs about single motherhood, low-income women's childbearing, and how such attitudes affect the care low-income women receive. It is also important to study subtle forms of bias (e.g., lack of eye contact, short consultations) against low-income women's reproduction because classist beliefs and behaviors may be taken for standard practice on the part of the providers rather than identified and deconstructed. More also needs to be known about low-income women's specific experiences with reproductive health care and how negative health care experiences affect women's trust in the health care system and their providers, and how such issues affect willingness to seek care. ■

### About the Authors

At the time of this study Roberta A. Downing was with the Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, Md. Thomas A. LaVeist was with the Hopkins Center for Health Disparities Solutions, Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Baltimore. Heather E. Bullock was with the Psychology Department, University of California, Santa Cruz.

Requests for reprints should be sent to Roberta A. Downing (email: robertadowning@yahoo.com).

This article was accepted November 25, 2006.

### Contributors

R. A. Downing originated the study and supervised all aspects of its implementation, data analysis, and writing the article. T. A. LaVeist assisted with conducting the analyses, interpreting findings, and reviewing drafts of the article. H. E. Bullock provided extensive guidance throughout all aspects of the study implementation and contributed significantly to the writing of the article.

### Acknowledgments

R. A. Downing was supported by the W.K. Kellogg Community Health Scholars Program. This research was also supported by the Grants-in-Aid Program of the Society for the Psychological Study of Social Issues



and a Hyde Award from the Society for the Psychology of Women.

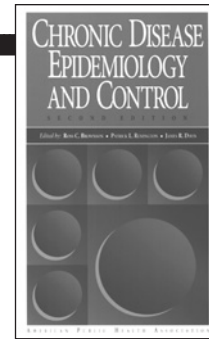
We are very grateful to all the women in Los Angeles County who participated in this study and took time out of their busy lives to complete the questionnaires. We are also very thankful to all the staff at the Special Supplementary Food Program for Women, Infants and Children offices who allowed us to collect data in their waiting rooms, as well as the children's and women's organizations that helped us obtain our data. Thank you to Laura Phillips and Tania Texidor for data entry.

### Human Participant Protection

This study was approved by the institutional review board at the University of California, Santa Cruz.

### References

- Benson-Smith D. Jezebels, matriarchs, and welfare queens: The Moynihan Report of 1965 and the social construction of African-American women in welfare policy. In: Schneider AL, and Ingram HM, eds. *Deserving and Entitled: Social Constructions and Public Policy*. Albany, NY: State University of New York; 2005: 243–260.
- Blank-Libra J. Choosing sources: how the press perpetuated the myth of the single mother on welfare. In: Heider D, ed. *Class and News*. Lanham, Md: Rowman & Littlefield; 2004:25–43.
- King L, Meyer MH. The politics of reproductive benefits: US insurance coverage of contraceptive and infertility treatments. *GenD Soc*. 1997;11:8–30.
- Thomas S. Race, gender, and welfare reform: the antinatalist response. *J Black Stud*. 1998;28:419–446.
- Personal Responsibility and Work Opportunity Reconciliation Act. 1 USC, §103. (1996).
- Henry P, Reyna CE, Weiner B. Hate welfare but help the poor: how the attributional content of stereotypes explains the paradox of reactions to the destitute in America. *J Applied Social Psychol*. 2004;34:34–58.
- Iyengar S. Framing responsibility for political causes: the case of poverty. *Political Behav*. 1990;12: 19–40.
- Appelbaum LD. The influence of perceived deservingness on policy decisions regarding aid to the poor. *Political Psychol*. 2001;22:419–442.
- Fiske ST, Xu J, Cuddy AC, Glick P. (Dis)respecting versus (dis)liking: status and interdependence predict ambivalent stereotypes of competence and warmth. *J Soc Issues*. 1999;55:473–489.
- Sidel R. The enemy within: a commentary on the demonization of difference. *Am J Orthopsychiatry*. 1996;66:490–495.
- Bullock, HE. Class acts: middle class responses to the poor. In: Lott B, Maluso D, eds. *The Social Psychology of Interpersonal Discrimination*. New York, NY: Guilford Press; 1995:118–159.
- Roberts D. *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty*. New York, NY: Vintage; 1997.
- Wilcox BL, Robbenolt JK, O'Keefe JE, Pynchon ME. Teen nonmarital childbearing and welfare: the gap between research and political discourse. *J Soc Issues*. 1996;52:71–90.
- Neubeck KJ, Cazenave NA. *Welfare Racism: Playing the Race Card Against America's Poor*. New York, NY: Routledge; 2001.
- Gilens M. *Why Americans Hate Welfare*. Chicago, Ill: University of Chicago Press; 1999.
- Limbort WM, Bullock, HE. "Playing the fool": US welfare policy from a critical race perspective. *Feminism and Psych*. 2005;15:253–274.
- Secombe K. "So You Think I Drive a Cadillac?" *Welfare Recipients' Perspectives on the System and its Reform*. 2<sup>nd</sup> ed. New York, NY: Allyn & Bacon; 2007.
- Moffitt RA. *The Effect of the Welfare on Marriage and Fertility: What Do We Know and What Do We Need to Know?* Madison: University of Wisconsin; 1997. Institute for Research on Poverty Discussion Paper No. 1153–97.
- Wise PH, Chavkin W, Romero D. Assessing the effects of welfare reform policies on reproductive and infant health. *Am J Public Health*. 1999;89:1514–1521.
- Lott B, Bullock HE. *Psychology and Economic Justice: Personal and Political Intersections*. Washington, DC: American Psychological Association; 2007.
- Lott B. Cognitive and behavioral distancing from the poor. *Am Psychologist*. 2002;57:100–110.
- Reed ME, Collinsworth LL, Fitzgerald LF. There is no place like home: sexual harassment of low income women in housing. *Psychol, Public Policy, Law*. 2005; 11:439–462.
- Secombe K, James D, Walters KM. "They think you ain't much of nothing." The social construction of the welfare mother. *J Marriage Fam*. 1998;60: 849–865.
- Mink G. *The Wages of Motherhood: Inequality in the Welfare State, 1917–1942*. Ithaca, NY: Cornell University Press; 1995.
- Chrisler, JC. Gendered bodies and physical health. In: Unger RK, ed. *The Handbook of the Psychology of Women and Gender*. New York, NY: John Wiley & Sons; 2001:289–302.
- Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: National Academies Press; 2003.
- Schulman KA, Berlin JA, Harless W, et al. The effect of race and sex on physicians' recommendations for cardiac catheterization. *N Eng J of Med*. 1999;340: 618–626.
- Burstin HR, Lipsitz SR, Brennan TA. Socioeconomic status and risk for substandard medical care. *JAMA*. 1992;268:2383–2387.
- Pierson-Balk DA. Race, class, and gender in punitive welfare reform: social eugenics and welfare policy. *Race GenD Class*. 2003;10:11–30.
- Mosher WD, Keppel KG. Social and clinical correlates of postpartum sterilization in the United States, 1972 and 1980. *Pub Health Rep*. 1984;99:128–138.



Second  
Edition

## Chronic Disease Epidemiology and Control

Edited by Ross C. Brownson, PhD,  
Patrick Remington, MD, MPH, and  
James R. Davis

With this book, you'll learn to:

- Locate critical background information for developing appropriate interventions
- Enhance your technical capacity for delivering effective programs
- Improve your knowledge about the methods used in chronic disease epidemiology
- Identify diseases and risk factors
- Examine the underlying biological or physiological processes of disease
- Learn about high risk populations, geographic variations, and trends
- Plan, organize, and address prevention and control methods

ISBN 0-87553-237-3  
1998 ■ 546 pages ■ softcover  
\$32.00 APHA Members  
\$45.00 Non-members  
Plus shipping and handling

ORDER TODAY!

American Public Health Association



Publication Sales  
Web: www.apha.org  
E-mail: APHA@pbd.com  
Tel: 888-320-APHA  
FAX: 888-361-APHA

CHRN04J5