



# Examining the Complexities between Health Disparities and Poverty

APA Office on Socioeconomic Status

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The mission of the APA Committee on Socioeconomic Status (CSES) shall be to further the major purpose of the APA “to advance psychology as a science and a profession and as a means of promoting health, education and human welfare” by ensuring that issues of socioeconomic status receive the full attention of the Association. The committee will identify and act as a catalyst in the Association’s efforts to address issues of SES and promote appropriate attention to SES in psychological research and practice. In this regard, the committee shall:

- (a) collect information and documentation concerning SES;
- (b) promote scientific understanding of the roles of poverty and SES in health, education and human welfare;
- (c) develop approaches to the application of psychology that take into account the effects of SES on psychological development and well-being; and
- (d) advocate for social policy that will alleviate or reduce the disparities between SES groups

2014 Committee on Socioeconomic Status

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## Methodology and Procedure

For the purposes of this project, the term *health disparities* refers to the differences between one population and another in terms of overall rate of disease incidence, prevalence, morbidity, mortality, or survival. Health disparities additionally refers to physical and psychosocial conditions that contribute to differences in 1) environment, 2) access to, utilization of, and quality of care, 3) health status, or 4) a particular health outcome. Furthermore, a social justice lens is used in the development of this bibliography and its exploration of physical and psychosocial factors that shape health to reflect continuing shifting trends among researchers seeking to meet the needs of the changing population.

Mindful of these definitions, the authors chose representative articles published within the last 10 years (2004 – 2014) with a relation to health disparities and poverty. In searching for materials to include in the bibliography, the authors carried out keyword searches. Search terms included *health disparities* and *societal factors, poverty, stress, socioeconomic status, systemic, psychosocial risk factors, behavioral health, mental health, lifespan, and cultural awareness*. The following search engines were included: Annual Review, AMED: Allied and Complementary Medicine, AIDS and Cancer Research Abstracts, Academic Search Complete, Medline, OVID, PILOTS Database, Psychiatry Online, PsychNET, Psych INFO, PubMed, SAGE Journals Online, Science Direct, Wiley Online Library. The bibliography contains listings of relevant books, research and technical reports, and scholarly literature. However, given the size of the literature on this topic, this bibliography provides only a purposeful sampling. An initial review of this literature indicated a structure for the annotated bibliography surrounding the headings around which the annotated bibliography is organized

## Poverty, Health Disparities, and Social Justice

Abrams, S. E. (2008). Disparity and responsibility. *Public Health Nursing*, Vol 25(5), 387-388. doi: 10.1111/j.1525-1446.2008.00721.x

In the United States, one of the wealthiest countries in the world, it is increasingly evident that not all citizens, much less all residents, enjoy the benefits of our gross domestic product or national income. Poverty and hunger are tolerated. Health is one of the aspects in which we lag behind. People of different backgrounds face many of the same health risks, but they also have concerns unique to their racial, ethnic, cultural, or communal roots. An understanding of these differences and formulation of appropriate responses requires a willingness to look more closely. Disparities in access to health care or in the comprehensiveness and the quality of services within existing health care delivery systems require interventions that are social, economic, environmental, or occupational. These investigators have examined concerns related to stigma, social support, lack of home, and deficient cultural understanding by providers. Individually and collectively, they provide readers with further understanding of the persistent challenges of responding to health disparities.

Adler, Nancy E. (2013). Health disparities: Taking on the challenge. *Perspectives on Psychological Science*, Vol 8(6), 679-681. doi: 10.1177/1745691613506909

The existence of significant health disparities beyond those associated with race/ethnicity, poverty, and lack of health care has drawn the attention of researchers to the "challenge of the gradient." Studies progressed from describing cross-sectional associations between disease risk and a single aspect of social disadvantage to identifying mechanisms by which these associations occur, encompassed objective and subjective measures of social status and stress processes, and used multilevel, dynamic models over the life course. The next stage is developing effective interventions targeting both the bases of disadvantage and the mediating pathways to reduce persistent disparities.

Braveman, P.A.; Kumanyika, S.; Fielding, J.; LaVeist, T.; Borrell, L. N.; Manderscheid, R.; Troutman, A. (2011). Health disparities and health equity: The issue is justice. *American Journal of Public Health*, Vol 101(Suppl 1), S149-S155. doi: 10.2105/AJPH.2010.300062

Eliminating health disparities is a *Healthy People* goal. Given the diverse and sometimes broad definitions of health disparities commonly used, a subcommittee convened by the Secretary's Advisory Committee for *Healthy People 2020* proposed an operational definition for use in developing objectives and targets, determining resource allocation priorities, and assessing progress. Based on that subcommittee's work, we propose that health disparities are systematic, plausibly avoidable health differences adversely affecting socially disadvantaged groups; they may reflect social disadvantage, but causality need not be established. This definition, grounded in ethical and human rights principles, focuses on the subset of health differences reflecting social injustice, distinguishing health disparities from other health differences also warranting concerted attention, and from health differences in general. We explain the definition, its underlying concepts, the challenges it addresses, and the rationale for applying it to United States public health policy.

Gordon, J.S., Boylan, M. (Ed), (2008). Poverty, human rights, and just distribution. *International public health policy and ethics. International library of ethics, law, and the new medicine. Vol 42, (pp. 131-141). New York, NY, US: Springer Science + Business Media, vi, 297 pp. doi: 10.1007/978-1-4020-8617-5\_8*

Poverty is a serious threat for human beings and their well-being. People are simply unable to live a good life when they are faced with severe problems, e.g., bad education, poor housing, poor sanitation, poor hygiene, or malnourishment. However, one of the most urgent problems with regard to poverty is bad access to primary health care and the allocation of health care resources for millions of people around the world. These people are deprived of human flourishing, and life is for them, in general, "solitary, poor, nasty, brutish, and short." In this chapter, I present an ethical argument that shows that people have a moral right to primary health care, and that wealthy developed countries are morally obligated to help the needy. Primary health care, and hence access to it is, as I will argue, a global public good that is protected by human dignity and the human right of protection from unwarranted bodily harm.

Jones CP, Jones CY, Perry GS, Barclay G, Jones CA. (2009). Addressing the Social Determinants of Children's Health: A Cliff Analogy. *Journal of Health Care for the Poor and Underserved*. 20(4)Suppl:1-12.

This paper presents a “Cliff Analogy” illustrating three dimensions of health intervention to help people who are falling off of the cliff of good health: providing health services, addressing the social determinants of health, and addressing the social determinants of equity. In the terms of the analogy, health services include an ambulance at the bottom of the cliff, a net or trampoline halfway down, and a fence at the top of the cliff. Addressing the social determinants of health involves the deliberate movement of the population away from the edge of the cliff. Addressing the social determinants of equity acknowledges that the cliff is three-dimensional and involves interventions on the structures, policies, practices, norms, and values that differentially distribute resources and risks along the cliff face. The authors affirm that we need to address both the social determinants of health, including poverty, and the social determinants of equity, including racism, if we are to improve health outcomes and eliminate health disparities.

McLeod, E.; Bywaters, P. ; Davies, M. (Ed), (2008). Ill-health. *The Blackwell companion to social work* (3rd ed.) , (pp. 34-40). Malden: Blackwell Publishing, xiii, 538 pp.

Five key points in this chapter: (1) Ill-health is a site of social injustice: social inequalities create unequal chances and experience of ill-health causing profound, widespread, needless suffering. (2) Relative poverty cross cut by further dimensions to social inequality is centrally implicated in unequal chances and experience of ill-health. (3) Because of the disadvantaged circumstances in which most service users live, they experience high rates of ill-health and often face inferior treatment and care. (4) Social work policy and practice can compound inequalities in health to the detriment of service users' well-being. (5) Across all settings, social work which explicitly targets inequality in ill-health and addresses unequal social conditions, can contribute to tackling service users' unequal chances and experience of ill-health.

Pampel FC, Krueger PM, Denney JT. Socioeconomic Disparities in Health Behaviors. *Annu Rev Sociol.* 2010;11:349–370. doi: 10.1146/annurev.soc.012809.102529.

The inverse relationships between socioeconomic status (SES) and unhealthy behaviors such as tobacco use, physical inactivity, and poor nutrition have been well demonstrated empirically but encompass diverse underlying causal mechanisms. These mechanisms have special theoretical importance because disparities in health behaviors, unlike disparities in many other components of health, involve something more than the ability to use income to purchase good health. Based on a review of broad literatures in sociology, economics, and public health, we classify explanations of higher smoking, lower exercise, poorer diet, and excess weight among low-SES persons into nine broad groups that specify related but conceptually distinct mechanisms. The lack of clear support for any one explanation suggests that the literature on SES disparities in health and health behaviors can do more to design studies that better test for the importance of the varied mechanisms.

Villarruel, A.M. (2007). Poverty and health disparities: More than just a difference. *Western Journal of Nursing Research*, Vol 29(6), 654-656. doi: 10.1177/0193945907304404

This is a special themed issue on health disparities. Health disparities are noted by differences in environment, access to care, or health status. Beyond differences however, a determination should be made whether disparities, or inequalities, are also inequitable or unjust. It is the inequity that should stimulate social action and policy. Racial and ethnic minority groups in the United States, rural populations, and those of low socioeconomic status have been recognized as groups that experience health disparities and have been a priority in U.S. policy efforts. The research articles in this issue focus on racial and ethnic health disparities affecting African American and Latino populations. Studies focus on efforts to promote health, reduce health risks, and understand the context in which health disparities occur.



## Poverty, Health Disparities and Measurement

Alegría, M., Molina, K. M., & Chen, C. N. (2013). Neighborhood characteristics and differential risk for depressive and anxiety disorders across racial/ethnic groups in the United States. *Depression and Anxiety, 31*, 27-37. doi:10.1002/da.22197

Neighborhood context may be representative of more than one factor as it pertains to the etiology of mental health outcomes. Social context, physical (exposure to violence), and economic (work opportunities) are additional factors that can fall within the overarching framework of neighborhood context. Authors of this study identified neighborhood features associated with differential risk for depressive and anxiety disorders (DAD) across racial/ethnic groups. Using a nationally representative data sample from the Collaborative Psychiatric Epidemiology Studies (CPES –Gecode file, N=13,837), authors found evidence that neighborhood features associated with risk for DAD vary across racial/ethnic groups, and possibly sub-ethnicity. Neighborhood features will vary in risk of DAD depending on individual race/ethnicity and, therefore, may affect neighborhood mental health outcomes, indicating a need for future studies examining the mechanisms by which these neighborhood characteristics differ in their impact on mental health outcomes.

Chen, E.; Martin, A. D.; Matthews, K. A. (2006). Understanding Health Disparities: The Role of Race and Socioeconomic Status in Children's Health. *American Journal of Public Health, Vol 96(4)*, 702-708. doi: 10.2105/AJPH.2004.048124

This article sought to determine whether childhood health disparities are best understood as effects of race, socioeconomic status (SES), or synergistic effects of the two. Researchers aggregated data from the National Health Interview Survey 1994 of US children aged 0 to 18 years (n=33911) were used. SES was measured as parental education. Child health measures included overall health, limitations, and chronic and acute childhood conditions. Results: For overall health, activity and school limitations, and chronic circulatory conditions, the likelihood of poor outcomes increased as parental education decreased. The findings suggest that lifestyle characteristics (e.g., cultural norms for health behaviors) of low-SES Hispanic and Asian children may buffer them from health problems. Future interventions that seek to bolster these characteristics among other low-SES children may be important for reducing childhood health disparities.

Krieger, N.; Chen, J. T.; Waterman, P. D.; Rehkopf, D. H.; Subramanian, S. V. (2005). Painting a Truer Picture of US Socioeconomic and Racial/Ethnic Health Inequalities: The Public Health Disparities Geocoding Project. *American Journal of Public Health*, Vol 95(2), 312-323. doi:10.2105/AJPH.2003.032482

This article analyzed geocoded public health surveillance data including events from birth to death (c. 1990) linked to 1990 census tract (CT) poverty data for Massachusetts and Rhode Island. Results: For virtually all outcomes, risk increased with CT poverty, and when we adjusted for CT poverty racial/ethnic disparities were substantially reduced. For half the outcomes, more than 50% of cases would not have occurred if population rates equaled those of persons in the least impoverished CTs. In the early 1990s, persons in the least impoverished CT were the only group meeting Healthy People 2000 objectives a decade ahead. Geocoding and use of the CT poverty measure permit routine monitoring of US socioeconomic inequalities in health, using a common and accessible metric.

Shavers, V.L. (2007). Measurement of socioeconomic status in health disparities research. *Journal of the National Medical Association*, Vol 99(9), 1013-1020.

Socioeconomic status (SES) is frequently implicated as a contributor to the disparate health observed among racial/ethnic minorities, women and elderly populations. Findings from studies that examine the role of SES and health disparities, however, have provided inconsistent results. This is due in part to the: 1) lack of precision and reliability of measures; 2) difficulty with the collection of individual SES data; 3) the dynamic nature of SES over a lifetime; 4) the classification of women, children, retired and unemployed persons; 5) lack of or poor correlation between individual SES measures; and 6) and inaccurate or misleading interpretation of study results. Choosing the best variable or approach for measuring SES is dependent in part on its relevance to the population and outcomes under study. Many of the commonly used compositional and contextual SES measures are limited in terms of their usefulness for examining the effect of SES on outcomes in analyses of data that include population subgroups known to experience health disparities. This article describes SES measures, strengths and limitations of specific approaches and methodological issues related to the analysis and interpretation of studies that examine SES and health disparities.

## Intersections: Across the Lifespan

Adler, N.E. & Stewart, J. (2010). Health disparities across the lifespan: Meaning, methods, and mechanisms. *Annals of the New York Academy of Sciences: The Biology of Disadvantage*, 1186(2010), 5-23. doi:10.1111/j.1749-6632.2009.05337.x

This article examines the need to understand health disparities; how they emerge and how they can be eliminated. The authors reflect on the progression of research on socioeconomic status (SES) and health, examining trends over the span of five distinct eras. They review the methods used throughout each era, providing discussion specific to the approaches and mechanisms used within each era and, subsequently, how those mechanisms provide for a framework of greater complexity in later eras.

Cohen, S., Janicki-Deverts, D., Chen, E., & Mathews, K.A. (2010). Childhood socioeconomic status and adult health. *Annals of the New York Academy of Science: The Biology of Disadvantage*, 1186, 37-55. doi:10.1111/j.1749-6632.2009.05334.x

Little is known about childhood socioeconomic status exposures and when they matter most, specifically how long they last, what behavioral, psychological, or physiological pathways link the childhood socioeconomic experience to adult health, and which specific adult health outcomes are vulnerable to childhood socioeconomic status exposures. This article provides discussion of the evidence supporting the link between childhood and adolescent socioeconomic status and adult health. Various environmental, behavioral, and physiological pathways that might explain how early socioeconomic status would influence adult health are explored.

Daly, M. (2012). Letter to the Editor: The midlife peak in distress amongst the disadvantaged and existing ideas about mental health inequalities over the lifespan. *Psychological Medicine*, 42, 215-216. doi:10.1017/S003329171100224

There are currently two competing hypotheses conceptualizing mental health inequalities over the lifespan: “1) mental health inequalities increase continually over the lifespan (cumulative disadvantage hypothesis), and 2) mental health inequalities converge with age potentially as a result of selective mortality amongst the disadvantaged

(age-as-a-leveler hypothesis)". In this letter to the editor Michael Daly comments on Lang et al., 2011 which examined data from over 100,000 people to provide the first substantive evidence to show that "age-related changes in psychosocial distress differ as a function of income. Specifically, distress, psychiatric diagnosis and the use of psychiatric medicine were found to peak sharply in midlife primarily amongst those in the bottom 20% of the income distribution".

Evans, G. W., Kim, P.. (2013). Childhood poverty, chronic stress, self-regulation, and coping. *Child Development Perspectives*, Vol 7(1), 43-48. doi: 10.1111/cdep.12013

Poverty is a powerful factor that can alter lifetime developmental trajectories in cognitive, socioemotional, and physical health outcomes. Most explanatory work on the underlying psychological processes of how poverty affects development has focused on parental investment and parenting practices, principally responsiveness. Our primary objective in this article was to describe a third, complementary pathway—chronic stress and coping—that may also prove helpful in understanding the developmental impacts of early childhood poverty throughout life. Disadvantaged children are more likely than their wealthier peers to confront a wide array of physical stressors (e.g., substandard housing, chaotic environments) and psychosocial stressors (e.g., family turmoil, separation from adult caregivers). As exposure to stressors accumulates, physiological response systems that are designed to handle relatively infrequent, acute environmental demands are overwhelmed. Chronic cumulative stressors also disrupt the self-regulatory processes that help children cope with external demands.

Halfon, N., Larson, K., Lu, M., Tullis, E., & Russ, S. (2013). Life course health development: Past, present and future. *Maternal and Child Health Journal*, No Pagination Specified. doi:10.1007/s10995-013-1346-2

Authors of this paper discuss the life course health development (LCHD) model; its evolution and influence in research from a developmental perspective across the ages and stages of the life span as well as its impact on decision making for maternal and child health policy and practice. The paper address three distinct sections: the past, present, and future- all with an over-arching lens of life course health development and health outcomes for the next generation. Discussion on multiple risk factors including low socioeconomic status (SES) and longitudinally focused solutions such as the Affordable Care Act are provided.

Johnson, R.C., Schoeni, R.F., & Jeannette, A.R. (2012). Health disparities in mid-to-late life: The role of earlier life family and neighborhood socioeconomic conditions. *Social Science & Medicine*, 74, 625-636. doi:10.1016/j.socscimed.2011.10.021

This study examines the relationship between neighborhoods of residence in young adulthood and health in mid-to-late life in the United States. The study takes place in the United States between 1968-2005 and samples individuals ages 20-30 across a 38 year period of time using The Panel Study of Income Dynamics (PSID). Findings indicate that “disparities in neighborhood conditions in young adulthood account for one-quarter of the variation in mid-to-late life health. Living in poor neighborhoods during young adulthood is strongly associated with negative health outcomes in later-life”. The study also finds racial differences in health status in mid-to-late life associated with family and neighborhood socioeconomic conditions earlier in life.

### **Intersections: Mothers, Children, Youth, and Families**

Braveman, P.; Marchi, K.; Egerter, S.; Kim, S.; Metzler, M.; Stancil, T.; Libet, M. (2010). Poverty, near-poverty, and hardship around the time of pregnancy. *Maternal and Child Health Journal*, Vol 14(1), 20-35. doi: 10.1007/s10995-008-0427-0

To describe income levels and the prevalence of major hardships among women during or just before pregnancy. This study analyzed 2002–2006 population-based postpartum survey data from California’s Maternal and Infant Health Assessment ( $n = 18,332$ ) and 19 states participating in CDC’s Pregnancy Risk Assessment Monitoring System ( $n = 143,452$ ) to examine income and several hardships (divorce/separation, domestic violence, homelessness, financial difficulties, spouse/partner’s or respondent’s involuntary job loss or incarceration, and, in California only, food insecurity and no social support) during/just before pregnancy. These findings paint a disturbing picture of experiences around the time of pregnancy in the United States for many women giving birth and their children, particularly because 60% had previous births. The high prevalence of low income and of serious hardships during pregnancy is of concern, given previous research documenting the adverse health consequences of these experiences and recognition of pregnancy as a critical period for health throughout the life course.

Burns, C.; Jones, S.J.; Frongillo, E. A. Waters, E. (Ed); Swinburn, B. (Ed); Seidell, J. (Ed); Uauy, R. (Ed), (2010).

Poverty, household food insecurity and obesity in children. Preventing childhood obesity: Evidence, policy, and practice. BMJ books., (pp. 129-137). Wiley-Blackwell, xiii, 306 pp. doi: 10.1002/9781444318517.ch16

In this chapter we discuss the: definition of poverty and financial stress; definition of household food insecurity; prevalence of food insecurity in children in countries with developed and developing economies; impact of household food insecurity on well-being in children (health, mental, social well-being); relationship between socio-economic disadvantage, poverty and food insecurity and the prevalence of obesity in children; possible explanations for the overlap between poverty, household food insecurity and obesity in children; social, economic and public health policies to address childhood poverty and household food insecurity—can they have an impact on obesity in children?

Crosnoe, R.; Wu, N.; Bonazzo, C. Maholmes, V. (Ed); King, R. B. (Ed), (2012). Child health and early education. *The Oxford handbook of poverty and child development*. Oxford library of psychology., (pp. 338-353). New York, NY, US: Oxford University Press, xxiii, 725 pp.

Poverty presents risks to children's health and education, and these risks have been targeted by policy and intervention for decades. Increasingly, such action is focusing on early childhood as a critical period in the creation and maintenance of socioeconomic disparities in health and education, reflecting the insights of theoretical models from psychology and sociology as well as econometric cost-benefit analyses of extant programs. This chapter makes the case for other kinds of advances in this area with a review of past research and theory, statistical analysis of nationally representative data on American children, and qualitative analysis of data from parents and teachers in a single public pre-K setting. Such advances include expanding the conception and measurement of poverty to include nonincome aspects of parents' human capital, like maternal education, and recognizing that the potential feedback between health and education requires that efforts to address one should also consider the other.

Cutts, D.B., Meyers, A.F., Black, M.M., Casey, P.H., Chilton, M., Cook, J.T. Frank, D.A. (2011). U.S. housing insecurity and the health of very young children. *Am. J Public Health*, 101(8),1508–1514. doi:10.2105/AJPH.2011.300139

This cross-sectional study examines the relationship between housing insecurity and health in children younger than age 3. Housing insecurity is defined in this study as distinct from homelessness, with the purpose of identifying the less visible children who are vulnerable to multiple health risks and whose growth and development may be at risk due to insecure housing. Authors discuss the associations found between housing insecurity and measures of poor health, growth and

development collected among a sample of 22069 low income caregivers of children younger than age 3 who were seen in 7 US urban medical centers. Findings indicate housing insecurity is associated with multiple risk factors. Discussion on preventative measures and policy planning to alleviate these conditions is provided.

Farah, M. J.; Shera, D. M.; Savage, J. H.; Betancourt, L.; Giannetta, J. M.; Brodsky, N.L.; Malmud, E.K. (2006). Childhood poverty: Specific associations with neurocognitive development. *Hurt, H. Brain Research*, Vol 1110(1), 166-174. doi: 10.1016/j.brainres.2006.06.072

Growing up in poverty is associated with reduced cognitive achievement as measured by standardized intelligence tests, but little is known about the underlying neurocognitive systems responsible for this effect. We administered a battery of tasks designed to tax-specific neurocognitive systems to healthy low and middle SES children screened for medical history and matched for age, gender and ethnicity. Higher SES was associated with better performance on the tasks, as expected, but the SES disparity was significantly nonuniform across neurocognitive systems. Pronounced differences were found in Left perisylvian/Language and Medial temporal/Memory systems, along with significant differences in Lateral/Prefrontal/Working memory and Anterior cingulate/Cognitive control and smaller, nonsignificant differences in Occipitotemporal/Pattern vision and Parietal/Spatial cognition.

Hildebrandt, E.; Stevens, P. (2009). Impoverished women with children and no welfare benefits: The urgency of researching failures of the temporary assistance for needy families program. *American Journal of Public Health*, Vol 99(5), 793-801. doi: 10.2105/AJPH.2006.106211

In the United States, the numbers of impoverished women with children and no cash safety net are increasing and constitute an emerging population. Many have exhausted cash benefits from Temporary Assistance for Needy Families, the work-based welfare program that replaced Aid to Families With Dependent Children in 1996. We examine empirical evidence about poverty and use of welfare programs in the United States, jobs for women on welfare, the consequences of leaving welfare, health disparities disproportionate to those of the general population, and outcomes for children of needy families. It is important that public health researchers investigate the experiences of the families for whom Temporary Assistance for Needy Families has failed.

Lempinen, E. W. (Ed). (2012). Poverty can harm early brain development, researchers say. *Science*, Vol 337(6093), 428.

A host of recent studies show that growing up in poverty can shape the wiring and even the physical dimensions of a young child's brain, with negative effects on language, learning, and attention. Those findings raise important policy questions in areas ranging from education and health to juvenile justice and social welfare, researchers said at a Capitol Hill briefing organized by American Association for the Advancement of Science (AAAS). Recent technological advances, such as functional magnetic resonance imaging, are giving neuroscientists a window into some of the brain's deepest structures and innermost workings. Related studies suggest disparities in brain function between low-income and higher-income children. Developing strategies to address these issues would require broad shifts in public policy. Even without that, the researchers said that parents and caregivers can have a constructive impact just by talking and reading to their children and doing what they can to build a sense of security.

Li, K., Davison, K.K., & Jurkowski, J.M. (2012). Mental health and family functioning as correlates of a sedentary lifestyle among low-income women with young children. *Women & Health*, 52(6), 606-619.

doi:10.1080/03630242.2012.705243

Using self-administered questionnaires among a sample of 131 mothers, this cross-sectional study examines sedentary lifestyle behaviors among low-income mothers of young children and the concurrent relationship with mental health status and family environmental factors (including lack of leisure time physical activity and high rates of television viewing). Results of this study provide important information regarding key factors in promoting an active lifestyle among low-income mothers and their young children, including intervention ideas and discussion on ways to address behaviors of sedentary lifestyle.

Mayer, M.L. (2007). Disparities in geographic access to pediatric subspecialty care. *Maternal Child Health Journal*, 12, 624-632. doi:10.1007/s10995-007-0275-3

Using data from the American Board of Pediatrics and the Claritas' Pop-Facts Database, this study scrutinizes zip code characteristics (geographic access) in correlation with distance to pediatric subspecialty care. Whereas previous literature provides discussion on topics of pediatric primary care and geographic access, little is known regarding the pediatric population and subspecialty care. Authors discuss geographic barriers including rural residence and poverty as risk factors that may compound financial access barriers when seeking pediatric subspecialty care.



Findings indicate that geographic barriers may limit access to financially vulnerable populations, with rural and small metropolitan areas of the US as distant from nearly all pediatric subspecialists. Discussion on the implications of these results is offered.

McLoyd, V. C. (2011). How money matters for children's socio-emotional adjustment: Family processes and parental investment. In C. Gustavo, L.J. Crockett, & M.A. Carranza (Eds.), *Health disparities in youth and families: Research and applications* (pp.33-72). New York, NY: Springer.

This chapter provides discussion on the family stress model as one of the most widely used models in explaining the relationship between child mental health and economic disadvantage. The author subsequently reviews this model within the context of the New Hope Program – an antipoverty, work-based intervention designed to improve the lives of low-income families by increasing employment and income. Hypothesized pathways of influence regarding the family stress model within the setting of the New Hope Program are discussed. Additionally, information collected from the program at two-year, five-year, and eight-year follow-up points are provided. Interpretation of this information and implication for future policy implementation and areas of research are offered.

Miech, R.A., Kumanyika, S.K., Stettler, N., Link, B.G., Phelan, J.C., & Chang, V.W. (2006). Trends in the association of poverty with overweight among US adolescents, 1971-2004. *Journal of the American Medical Association*, 295(20), 2385-2393.

This study examines trends in the prevalence of overweight among adolescents 12-17 years of age in 4 nationally representative, cross-sectional data sets which spanned from 1971-2004 according to family poverty status. The purpose of the study contains two primary goals: 1) to test the hypothesis that the disparity in overweight has widened among US adolescents and 2) to examine the potential role of behaviors related to energy intake and energy expenditure in disparities of adolescent overweight (i.e. sweetened beverage consumption, eating out, snacking between meals). Conclusions indicate an increase in overweight for the age group of 15-17 years in families living below the poverty line.

Results and possible reasons for this trend are discussed. Charts and figures are additionally provided. Furthermore, physical inactivity, high consumption of sweetened beverages, and breakfast skipping may be candidate targets for prevention programs aimed at reducing this recently emerged disparity.

Schreier, H.M.C., & Chen, E. (2013). Socioeconomic status and the health of youth: A multilevel, multidomain approach to conceptualizing pathways. *Psychosocial Bulletin*, 139(3), 606-654. doi:10.1037/a0029416

The influence of socioeconomic status (SES) on health has been documented across the life span, beginning early and showing lasting signs well into later adulthood. For youths, various factors have been suggested to play a role in the association between SES and health (i.e. physical and social environment, family factors, parent psychological characteristics). Previous studies have used a psychosocial approach to explain the relationship between these various factors, SES, and the health of youth. Authors of this study chose to integrate the psychosocial approach of analysis with the additional understanding of the physical environment contributors to SES. Focusing on the two most commonly documented health concerns in the childhood and adolescent age group, asthma and obesity, authors propose a model that includes a) multiple levels of influence (neighborhood, family, person); b) social and physical environment; c) and the dynamic relationship between these factors. Interactions within the model and future directions pertaining to the use of the model in research are discussed.

Stevens, G. D. (2006). Gradients in the Health Status and Developmental Risks of Young Children: The Combined Influences of Multiple Social Risk Factors. *Maternal and Child Health Journal*, Vol 10(2), 187-199. doi: 10.1007/s10995-005-0062-y

The study examines multiple logistic regression models in relation to child health status and developmental risk (based on parent concerns about development). The profiles are also examined in relation to three measures of basic access to health care: telephone contact with a physician, well-child visit in the past year, and missed or delayed needed care. The findings of this study demonstrate a dose-response relationship of higher risk profiles with poorer child health status and higher developmental risk. Because children with higher profiles of risk are also more likely to lack access to care, this suggests that children who most need care have the greatest difficulty obtaining it. Addressing health gradients for vulnerable children will require explicit attention to these multiple, overlapping risk factors.

Taylor, Y.J. & Nies, M.A. (2012). Measuring the impact and outcomes of maternal child health federal programs. *Maternal Child Health Journal*, 17(5), 886-896. doi: 10.1007/s10995-012-1067-y

Authors of this study examine the impact of multiple maternal and child health programs on health outcomes (including health status and health care use). The purpose of this study is to identify gaps and understand outcome measures in federal programs for families with low SES designed to address disparities in maternal and child health. The authors conduct a review of the recent evaluations of federal programs over the last 5 years. Inclusion criteria resulted in 20 peer-reviewed studies published between 2006-2011. There are 4 main categories of outcomes: 1) Birth and Infant outcomes, 2) Breastfeeding, 3) Maternal Health and 4) Unintended Pregnancy. Discussion of findings of the review, opportunities for future improvements, and reflection on initiatives for program implementation are provided.

### **Intersections: Aging**

Herd, P., Robert, S. A., & House, J.S., (2011). Health disparities among older adults: Life course influences and policy solutions. In R.H. Binstock & L.K. George (Eds.), *Handbook of aging and the social sciences* (7th ed.), (pp.121-134). San Diego, CA: Elsevier Academic Press.

With a focus on older adults, this chapter seeks to emphasize how health disparities can add up over the course of a lifetime. Authors discuss the impact that can occur when multiple risk factors and disadvantages combine (e.g., race/gender) to produce large health disparities in older adults. A summary of health disparities in older adults is provided and the suggestion for a fundamental cause perspective as one solution towards policy making to eliminate health disparities is discussed. The chapter concludes with suggestions on new pathways for research designed for both prevention and treatment, thereby improving health and reducing health disparities in older adults.

Osage, P., & McCall, M. (2012). *Connecting with socially isolated seniors: A service provider's guide*. Maryland: Health Professions Press.

Research shows the strong link between isolation and falling into poverty as well as the risk of seniors outliving their savings. In this compelling book, staff members from the satellite housing program share their stories of working with

socially isolated seniors. They discuss 12 factors that lead to social isolation such as physical health and disabilities, behavioral and cognitive health issues, gender disparities, minority sexual orientation, loss of partners, friends and pets, and language barriers. The book provides checks, facts sheets and quizzes to help readers identify seniors at-risk for social isolation. How to sections in each chapter provide practical ideas for actions for individuals and groups.

Pudrovska, T., & Anishkin, A. (2012). Early-life socioeconomic status and physical activity in later life: Evidence from structural equation models. *Journal of Health and Aging, 25*(3), 383-404.

This study examines the relationship between socioeconomic status in early life (age 18) and physical activity in later life (age 65). Data from the Wisconsin Longitudinal Study (WLS) was examined from 1957 to 2004. A multi-group structural equation model was used to estimate mediating pathways across the life course. The analysis incorporated measurement models based on multiple indicators of socioeconomic status, health problems, and physical activity. Results and findings indicated a need for interventions aimed towards optimal physical functioning that begin in midlife, if not earlier.

Siegler, I.C., Bosworth, H.B., Davey, A.E., & Merrill, F. (2013). Disease, health, and aging in the first decade of the 21st century. In R.M. Lerner (Ed.), *Handbook of psychology*, Vol. 6: Developmental psychology (2nd ed.), (pp.437-449). Hoboken, NJ: John Wiley & Sons.

This chapter reflects on the major changes that have taken place in the understanding of disease, health, and aging over the past decade as a result of the increased complexity in the way research decision-making has developed regarding these variables (i.e. the role of the internet in making data and international collaboration commonplace). Previously, most of the work on aging focused on the study of aging health and disease from a perspective of adult development. However, authors argue that unless a treatment for a major aging disease such as Alzheimer's is found, the aforementioned methodological paradigm shift will not yield major changes in the field of aging but rather will be linked to changes resulting from the continual increase of aging baby boomers. Since the variables of the baby boomers population are already known, it is unlikely that health and income disparities will change in this group.

Whitfield, K. E.; Thorpe, R.; Szanton, S. Schaie, K. W. (Ed); Willis, S. L. (Ed), (2011). Health disparities, social class, and aging. *Handbook of the psychology of aging* (7th ed.). The handbooks of aging consisting of three volumes., (pp. 207-218). San Diego, CA, US: Elsevier Academic Press, xiv, 419 pp. doi: 10.1016/B978-0-12-380882-0.00013-9

This chapter discusses previous research that looks at the interrelationship between health disparities, social class, and aging as these areas relate to the psychological dimensions of the human condition. The authors consider studies on these topics in the fields of medical, biomedical, sociology, and public health in order to understand these health disparities in the context of the changing demographics in the US, and the increasing diversity and number of minority populations, so that better delivery of health care practices can be offered to minorities. Areas covered are SES and health, distribution of chronic conditions, acute conditions and disability, bio-behavioral explanations of health disparities, the role of genetics in health disparities research and new challenges.

Yee, B., & Chiriboga, D. A. (2007). Issues of diversity in health psychology and aging. In C.M. Aldwin, C.L. Park, & A. Spiro III (Eds.), *Handbook of health psychological aging* (pp. 286-312). New York, NY: Guilford.

This chapter begins with a discussion on the landmark report titled Unequal Treatment (Smedley, Stith, & Nelson, 2003) and its use by the Institute of Medicine to demonstrate the role of a social and cultural context in defining health disparities beyond the influence of socioeconomic status (SES). Using this discussion as a starting point, authors then highlight key issues and constructs for readers to consider, specifically focusing on race, ethnicity, culture, aging, gender issues, and why these issues are important for health psychologists to consider. Research opportunities in health psychology, diversity, and aging, as well as setting an agenda for the future are discussed at the end of each chapter.

### **Intersections: Race and Culture**

Abdou, C.M., Schetter, C.D., Campos, B., Hilmert, C., Dominguez, T.P., Hobel, C.J.,...Sandman, C. (2010). Communalism predicts prenatal affect, stress, and physiology better than ethnicity and socioeconomic status. *Cultural Diversity and Ethnic Minority Psychology, 16*(3), 395-403. doi:10.1037/90019808

This article discusses the concept of communalism – defined as a culturally independent relational style, often difficult to operationalize – alongside of ethnicity and socioeconomic status (SES) and compares these factors to prenatal mental health and physiology. Authors address the question: How do culture, ethnicity, and SES compare and interact as predictors of maternal prenatal emotional health (perceived stress, anxiety, and depressive symptoms) and physiology (systolic and diastolic Blood Pressure), specifically for ethnic minorities facing SES disadvantage?

The sample included 297 African American and European American women in a study conducted over a 5 year span (1997-2002) in two hospital settings in Southern California. Findings indicate that the effects of communalism suggest a communal cultural orientation. For example, communalism was shown to eliminate ethnic and SES differences in blood pressure. Authors provide discussion on the implications of culture as a determinant of maternal prenatal health and well-being. Suggestions for further research on ethnic and SES inequalities in health are provided.

Barnow, S. & Balkir, N. (2013). *Cultural Variations in Psychopathology: from research to practice*. Cambridge, MA: Hogrefe.

*Cultural Variations in Psychopathology: from research to practice* is a comprehensive book that looks at the importance of culture in mental health from research to diagnosis to treatment. Prevalence rates in psychopathology differ by group as does the meaning that groups assign to symptoms of mental illness. This book, written by leading experts, is a valuable tool for anyone working with minority populations as it gives practical examples involving various ethnic minority groups in the U.S. and Europe.

Budrys, G. (2010). *Unequal health: how inequality contributes to health or illness*. Lanham, MD: Rowman & Littlefield Publishers.

In *Unequal Health*, author Grace Budrys provides a unique perspective on the contribution of inequality towards health or illness by moving beyond factors that are readily identifiable (smoking, diet, exercise) and examining hard to identify factors such as income and social status. Budrys, a professor of sociology at DePaul University, investigates various social categories such as sex, race, poverty, and their effect on health. Drawing on a review of recent articles in the literature, public reports, and a wide range of publications, Budrys places emphasis on an easy to follow discussion surrounding relevant findings that contribute to this important public health issue.

Chatterji, P., Heesoo, J., & Lahiri, K. (2012). Beware of being unaware: Racial/ethnic disparities in chronic illness in the USA. *Health Economics*, 21(2012), 1040-1060. doi:10.1002/hec.2856

The aim of this paper is to reduce disparities in chronic disease outcomes by suggesting a focus in research on health awareness in racial/ethnic minority and other underserved populations. Using biomarker data from the 2006 Health and Retirement Study, authors explore an alternative definition of awareness (in hypertension and diabetes) among a sample of African-Americans and Latinos and non-Latino Whites. Findings based on the alternative definition of awareness indicate higher levels of unawareness among racial/ethnic minorities versus non-Latino Whites. Implications of these findings and suggestions for future research are provided.

Chaufan, C.; Davis, M.; Constantino, S. (2011). The twin epidemics of poverty and diabetes: Understanding diabetes disparities in a low-income Latino and immigrant neighborhood. *Journal of Community Health: The Publication for Health Promotion and Disease Prevention*, Vol 36(6), 1032-1043. doi: 10.1007/s10900-011-9406-2

In the United States, low-income immigrant groups experience greater health disparities and worse health-related outcomes than Whites, including but not limited to higher rates of type 2 diabetes (T2DM). The prevention and adequate management of T2DM are, to a great extent, contingent on access to healthy food environments. This exploratory study examines “upstream” antecedent factors contributing to “downstream” health disparities, with a focus on disparities in the structural sources of T2DM risk, especially food environments. The target group is Latino immigrants receiving services from a non-profit organization (NGO) in Northern California. We find that while participants identify T2DM as the greatest health problem in the community, access to healthy foods is severely restricted, geographically, culturally, and economically, with 100% of participants relying on formal or informal food assistance and local food stores offering limited variety of healthy foods and at unaffordable prices.

Eschbach, K., Ostir, G. V., Patel, K. V., Markides, K. S., & Goodwin, J. S. (2004). Neighborhood context and mortality among older Mexican Americans: is there a barrio advantage? *American Journal of Public Health*, 94(10), 1807-1812.

Research has shown that social support from both kinship and community is an important determinant of health. This study examines one aspect of neighborhood structure among older Mexican Americans reflective of this type of community support known as the Barrio Advantage. Barrio communities have been compared to inner-city communities, possessing communalities such as very high rates of poverty typically paralleled with low levels of formal education. Mexican American neighborhoods (Barrios), however, have been shown to have differentiating aspects from other high-poverty neighborhoods. Using a sample of 3,050 Mexican Americans, 65 years and older and across a 7 year time span, authors investigated older Mexican Americans living in these Barrios to see if they experienced increased morbidity and mortality compared to Mexican Americans living in low density areas. Results indicated that, for older Mexican Americans, morbidity and mortality are lowest in neighborhoods with high proportions of Mexican Americans, suggesting that the negative effects within poverty and disadvantage are contradicted by the positive effects of the Barrio Advantage.

Gracie, B., Moon, S. S., & Basham, R. (2012). Inadequate health literacy among elderly immigrants: Characteristics, contributing, and service utilization factors. *Journal of Human Behavior in the Social Environment*, 22(7), 875-895.

Health literacy has been defined by the National Assessment of Adult Literacy (NAAL, 2003) as encompassing three main types of literacy: 1) prose literacy, knowledge and skills needed to understand and use information gathered from texts (e.g., brochures); 2) document literacy, knowledge and skills needed to search, understand, and use various formats of continuous text (e.g., food and drug labels); and 3) quantitative literacy, knowledge and skills that require basic mathematical skills to perform quantitative tasks (e.g., balancing a checkbook). This article provides an overview of essential background information on elderly immigrant health literacy issues, the barriers and contributing factors to poor health care outcomes or poor health care use for immigrants including income and poverty. Authors identify and define characteristics of this growing population, including factors pertaining to physical health, mental health, substance use, income and poverty, social support, immigration issues and more. Discussion regarding the influence of health literacy and suggestions for health literacy programs and promotion among elderly immigrants and those who care for them is provided.



Hendryx, M. (2008). Mental health professional shortage areas in rural Appalachia. *The Journal of Rural Health*, 24(2), 179-182.

Appalachian culture is characterized by a unique history with environmental and cultural factors that may influence health, and therefore health disparities. This study focuses on the area of rural Appalachia and provides a comparison of rural Appalachia to other rural areas within the same state. While disparities are reflective of general conditions found in disadvantaged socioeconomic areas, some may be unique factors due to the history, geography, and culture of the area. The overarching goal of this study is to identify effects that may be specific to Appalachia, effects that exist beyond the general conditions.

Light, D. (2011). Categorical inequality, institutional ambivalence, and permanently failing institutions: The case of immigrants and barriers to health care in America, *Ethnic and Racial Studies*, 35(1), 23-39.  
doi:10.1080/01419870.2011.594172

This article researches health care organizations in San Diego, Miami-Dade County, and central New Jersey with the purpose of examining the intersection between the needs of immigrants, social service organizations, and the programs provided. In order to better understand the needs - including the fundamental and critical SES needs of immigrants - researchers conducted audio taped, semi-structured interviews with clinicians, managers and executives, leaders of immigrant advocacy groups, and focus groups of immigrant patients using an Investigator Award from the Robert Wood Johnson Foundation. From their findings, three interrelated concepts were observed (categorical inequality, institutional ambivalence, permanent institutional failure), all of which can be used to better understand the dynamics motivating the interactions between immigrants (or other disadvantaged minority groups), social service organizations and their programs.

Liu, W. M.; Hernandez, J.; Mahmood, A.; Stinson, R., Constantine, M. G. (Ed); Sue, D. W. (Ed), (2006). *Linking Poverty, Classism, and Racism in Mental Health: Overcoming Barriers to Multicultural Competency. Addressing racism: Facilitating cultural competence in mental health and educational settings.* , (pp. 65-86). Hoboken, NJ, US: John Wiley & Sons Inc, xiii, 305 pp.

Among multiculturalists, linking poverty, classism, and racism may appear intuitive. Certainly, the cultural and social forces that perpetuate inequality based on skin color and phenotype are similar to those forces inhabiting economic inequities. Although on the surface these "isms" are connected, complex associations between poverty, classism, and racism are difficult to discern.

Therefore, the focus of this chapter is fourfold. First, the authors discuss the historical roots of the Protestant work ethic (PWE), capitalism, and citizenship and their relation to poverty, classism, and racism. Second, the authors focus on psychology's attention to social class and classism, and elements of the social class worldview model are presented. Third, case vignettes illustrate the use of social class and classism in therapy. Finally, recommendations for mental health professionals to further understand their social class worldview are provided. This chapter only focuses on classism and poverty issues in the context of the United States, but the authors recognize that issues of inequality are global and some elements of this discussion may be applicable toward that discourse.

Schulz, A. J., & Mullings, L. (2006). *Gender, race, class, and health: Intersectional approaches*. San Francisco, CA: Jossey-Bass.

*Gender, Race, Class and Health* explores the intersection of the relationship between factors such as race, culture, economic structure, and gender and provides readers with an understanding of how these dimensions combine to influence health and health care in the United States. Through a social and behavioral science lens, this book sheds light on the structural and systemic nature of race, gender, and class disparities in health. Implications for improvement in health policy are discussed on a user friendly level applicable to an audience ranging from student to professional and anyone wanting to know more about the above factors and their influence on health.

Smedley, B. D. (2012). The lived experience of race and its health consequences. *American Journal of Public Health*, 102, 933-935. doi:10.2105/AJPH.2011.300643

This review reacts to the March 2002, Institute of Medicine (IOM) report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* which found that “many minority patients receive a lower quality of health care than Whites, even when access-related factors are controlled”. Smedley argues for a more comprehensive model of the lived experience of race as it pertains to health care in the United States. He argues that much of the focus of the research literature either looks at individually mediated racism or at internalized, institutional or systemic levels of racism. Smedley recommends an intersectional analysis to “better understand the interaction of race with gender, socioeconomic status, geography, and other factors, and should consider the negative consequences of racism for Whites”.

Stephens, N. M., Fryberg, S. A., & Markus, H. R. (2012). Social class disparities in health and education: Reducing inequality by applying a sociocultural self-model of behavior. *Psychological Review*, 119(4), 723-744.  
doi:10.1037/a0029028

This article serves as a review of two traditional models used for explaining inequality in social class disparities throughout the literature on health and education: the individual model and the structural model. Authors define the term model as assumptions pertaining to the sources of human behavior, rarely identified or acknowledged, but which are foundational to research and intervention. Subsequent to the review of these two models, authors build on their findings, providing a foundation for the third sociocultural self-model - a model that is supplemental to both the individual and structural model, allowing for a more complete understanding of the human behaviors that contribute towards generating inequality. This third model is proposed as foundational for reducing social class disparities in health and education.

Swenson, A. K. & Hosokawa, M.C. (2012). Health care in minority and majority populations. In O.J.Z. Sahler, & J.E. Carr (Eds.). *Behavioral Sciences and Health Care* (pp.155-161). Toledo, OH: Hogrefe.

Determinants of health data are changing with the continuous growth in minorities in the U.S. population. Significant variations in mortality and morbidity have been shown to exist based on race, education level, socioeconomic status, and sexual orientation. This chapter examines variations in health care among minority/majority populations by asking the following 4 questions: 1) What are some causes of population differences in health care?; 2) What accounts for differences in infant mortality, life expectancy, and cause of death among minority and majority populations?; 3) Why do minority populations in the US have a higher death rate from cancer than whites?; 4) How does racism affect health outcomes? Authors provide examples of individual case scenarios throughout the chapter with an additional section at the end of each chapter that includes recommended readings, online resources, and review questions pertinent to health care in minority and majority populations.

Williams, D.R., Mohammed, S.A., Leavell, J., & Collins, C. (2010). Race, socioeconomic status, and health: Complexities, ongoing challenges, and research opportunities. *Annals of the New York Academy of Sciences*, 1186(2010), 69-101.

This article provides a review of racial disparities in the United States, specifically addressing the pattern that disparities in health and differences in socioeconomic status (SES) represent larger inequalities in society. Authors argue the need to further understand and address the role of race as it pertains to health disparities using three important factors: 1) Multidimensional social concomitants of race and how they affect health, 2) Pattern of disease distribution that occurs when variables such as migration history, status, SES, and context combine, 3) Re-examine historical social variations in health including medical care and genetics. Important aspects for research within all three categories are additionally discussed and examined.

### **Intersections: Psychosocial and Behavioral Health**

Beydoun, M.A., & Wang, Y. (2010). Pathways linking socioeconomic status to obesity through depression and lifestyle factors among US adults. *Journal of Affective Disorders*, 123, 52-63. doi:10.1016/j.jad.2009.09.021

Using data from the 1999-2004 National Health and Nutrition Surveys (NHANES), this study examines the relationship between depression (Major Depressive Disorder), weight status outcomes, SES, food insecurity, and demographic/lifestyle factors (physical activity and dietary intake). The sample consisted of 2217 young adult ranging in age from 20 – 39 years old. The purpose for studying the relationship between these variables is to focus on the pathway by which depression may affect the risk for obesity through other lifestyle factors, such as a more sedentary lifestyle and poorer dietary quality than in individuals who are non-depressed. The analysis uses both linear regression and structural equation models. Several key findings were observed suggesting major differences in the pathways linking SES, depression (MDD) and lifestyle factors to body weight outcomes. Authors additionally provide implications for these findings and the need for future research in an effort to develop future interventions.

Bussing, R., & Gary, F.A. (2012). Eliminating mental health disparities by 2020: Everyone's actions matter. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(7), 663-665.

This article describes current United States Department of Health and Human Services (HHS) initiatives to eliminate health disparities among the child and adolescent population. The authors provide suggestions specifically for ways child and adolescent psychiatrists can contribute to the Healthy People 2020 goal of achieving "health equity, eliminate disparities and improve the health of all groups." They offer suggestions on how to improve health care access, decrease discrimination, improve patient-provider communication, and improve quality and satisfaction outcomes. The article outlines current government initiatives to eliminate disparities and offers a list of suggestions, informed by existing relevant literature and based on professional experience, on ways to contribute to, and advocate for, the child and adolescent age group.

Danis, M.; Kotwani, N.; Garrett, J.; Rivera, I.; Davies-Cole, J.; Carter-Nolan, P. (2010). Priorities of low-income urban residents for interventions to address the socio-economic determinants of health. *Journal of Health Care for the Poor and Underserved*, Vol 21(4), 1318-1339.

Objectives: To determine the priorities of low-income urban residents for interventions that address the socio-economic determinants of health. Methods: We selected and estimated the cost of 16 interventions related to education, housing, nutrition, employment, health care, healthy behavior, neighborhood improvement, and transportation. Low-income residents of Washington, D.C. (N = 431) participated in decision exercises to prioritize these interventions. Results: Given a budget valued at approximately twice an estimated cost of medical and dental care (\$885), the interventions ultimately prioritized by the greatest percentage of individuals were: health insurance (95%), housing vouchers (82%) dental care (82%), job training (72%), adult education (63%), counseling (68%), healthy behavior incentives (68%), and job placement (67%). The percentages of respondents who received support for housing, adult education, and job training and placement were far less than the percentage who prioritized these interventions. Conclusions: Poor and low-income residents' priorities may usefully inform allocation of social services that affect health.

Freimuth, V. S.; Hovick, S. R. (2012). Cognitive and emotional health risk perceptions among people living in poverty. *Journal of Health Communication*, Vol 17(3), 303-318. doi: 10.1080/10810730.2011.626505

Many theories of risk perception and health behavior examine cognitive dimensions of risk (i.e., perceived susceptibility or severity) but not emotional dimensions. To address this gap, the authors examined the emotional component of risk perception (as worry) and its relation to cognitive assessments of risk, self-efficacy and response efficacy, and health protective action. Although people in poverty are at high risk for many health conditions, little is known about how concerned they are about these conditions or how their risk perceptions influence health actions. African Americans and Whites with incomes  $\leq$ \$35,000 were surveyed ( $N = 431$ ). Participants reported their worry level for 10 health risks. Among their highest worry risks, they identified the risk they took the most action and the risk they took the least action to prevent. Worry was low or moderate for each health risk and chronic conditions were of the most concern. For high- and low-action risks, response efficacy moderated the relation between cognitive risk perception and health protective action. For low-action risks, decisions to act were affected independently by cognitive and emotional responses. The results support the Risk Perception Attitude Framework and indicate the importance of using cognitive and emotional dimensions of risk in behavior change models.

Sapolsky, R. (2006). Stress, Poverty, and Health . *Clinician's Research Digest*; Vol 24(4); 5. doi: 10.1037/e531002012-008

This article highlights a study that explored various explanations of the health gradient that suggests higher socioeconomic status (SES) is related to better health outcomes and low SES is related to poorer health outcomes, and addressed psychological stress as a possible contributor. Sapolsky's findings suggests that to fully understand the gradient among low SES, poverty, and health, it is important to connect the material problems of low SES such as low income or access to health care; however, it is also important to consider the psychosocial factors related to poverty. Implications for clinicians are noted. The study, "Sick of poverty," appears in: *Scientific American*, 293, 6, 92-99, 2005.

Schulz, A. J.; Mentz, G.; Lachance, L.; Johnson, J.; Gaines, C.; Israel, B.A. (2012). Associations between socioeconomic status and allostatic load: Effects of neighborhood poverty and tests of mediating pathways. *American Journal of Public Health*, Vol 102(9), Sep 2012, 1706-1714. doi: 10.2105/AJPH.2011.300412

This study examined relationships between neighborhood poverty and allostatic load in a low- to moderate-income multiracial urban community. The study tested the hypothesis that neighborhood poverty is associated with allostatic load, controlling for household poverty. Additionally, it examined the hypotheses that this association was mediated by psychosocial stress and health-related behaviors. The research findings concluded that neighborhood poverty was positively associated with allostatic load ( $P < .05$ ), independent of household poverty and controlling for potential confounders. Relationships between neighborhood poverty were mediated by self-reported neighborhood environment stress but not by health-related behaviors. Neighborhood poverty is associated with wear and tear on physiological systems, and this relationship is mediated through psychosocial stress. These relationships are evident after accounting for household poverty levels. Efforts to promote health equity should focus on neighborhood poverty, associated stressful environmental conditions, and household poverty.

### **Intersections: Providers and Interventions**

Alegria, M., Lin, J., Chen, C., Duan, N., Cook, B., & Meng, X. (2012). The impact of insurance coverage in diminishing racial and ethnic disparities in behavioral health services. *Health Services Research*, 47(3, pt2), 1322-1344. doi:10.1111/j.1475-6773.2012.01403.x

This study utilizes four factors (poverty; education as a proxy for health literacy; presence of a mental health clinic in the neighborhood; and stigma toward mental health care) to determine if insurance expansion (health care coverage), as expected under the Affordable Care Act, will decrease the racial/ethnic health service disparities in behavioral health care access, with a specific focus on how these four factors affect mental health care use. The study uses data from the NIMH Collaborative Psychiatric Epidemiological Studies (2001-2003) and a reweighing method to estimate disparities in the presence and absence of insurance coverage. Findings indicate differences in disparities across racial/ethnic groups; furthermore results suggest a reduction in service disparities across racial/ethnic groups when combined with improved patient education and availability of community clinics.

Allensworth, D. D. (2011). Addressing the social determinants of health of children and youth: A role for SOPHE members. *Health Education & Behavior*, Vol 38(4), Aug 2011, 331-338. doi: 10.1177/1090198111417709

The determinants of youth health disparities include poverty, unequal access to health care, poor environmental conditions, and educational inequities. Poor and minority children have more health problems and less access to health care than their higher socioeconomic status cohorts. Having more health problems leads to more absenteeism in school, which, in turn, can affect achievement. The educational level that one attains is a significant determinant of one's earning potential and health. Those who learn more earn more money and have a better health status. Those who do not attain a high school diploma on average live 6 to 9 years less than those who do graduate from high school. Furthermore, their children also experience poorer health and the cycle is repeated. Achieving a high school diploma and a college degree is an acknowledged route out of poverty. However, that route is blocked for many poor and minority students. SOPHE is in a prime position to be the organization linking the health care, public health and education sectors in addressing the reduction of both health disparities and educational inequities. This article describes what SOPHE members can do both individually and collectively to reduce the health and educational inequities facing our most vulnerable children.

Bringewatt, E.H.; Gershoff, E.T. (2010). Falling through the cracks: Gaps and barriers in the mental health system for America's disadvantaged children. *Children and Youth Services Review*, Vol 32(10), 1291-1299. doi: 10.1016/j.chilyouth.2010.04.021

The system for providing mental health services to children is fragmented and complex, and children and their families face multiple barriers to accessing care. This is especially true for children in low-income families, who have the greatest rate of mental health disorders but have the highest underutilization of services. The first section of this paper describes the unmet need for children's mental health services, including reasons for the disproportionate need among low-income children. The second section provides a brief overview of the history of children's mental health policies. The third section outlines the types of services available to children, highlighting the problems with this service delivery system. This is followed by a discussion of barriers that families face in accessing care. The paper concludes with recommendations for improving this fragmented system of service delivery.



Burgess, D. J., Warren, J., Phelan, S., Dovidio, J., & van Ryn, M. (2010). Stereotype threat and health disparities: What medical educators and future physicians need to know. *Journal of General Internal Medicine*, 25(Suppl 2), 169-177. doi:10.1007/s11606-009-1221-4

This article provides discussion on stereotype threat and health disparities. Stereotype threat has been shown to lead to lower performance in areas of assessment among others for individuals of low SES, may cause an altering of professional aspirations, lead to anxiety and negative emotions, and affect working memory capacity. The purpose of this review is to gain a better understanding of the factors that cause stereotype threat (potential sources and consequences of) and to identify ways to reduce stereotype threat for minority patients and minority and non-minority medical trainees. In the article, authors provide examples of features within a clinical setting that may contribute to stereotyping as well as the potential consequences of stereotype threat for minority patients. Additionally, authors discuss stereotype threat from the perspective of underrepresented minority trainees. A brief discussion of the effect of patient outcomes due to the diversity of the health care work force is provided along with a table outlining strategies to reduce stereotype threat for minority patients and minority and majority trainees. Example interventions and sample exercises are given.

Fiscella, K. (2010). Breaking the cycle of poverty and poor health: Paediatricians can make a difference. *Acta Paediatrica*, Vol 99(5), 648-650.

The vital role pediatricians and other child clinicians can play in addressing health disparities is supported by evidence that poverty and its correlates limit early brain development and cognitive development, that future socioeconomic status and health influence each other across the life course and generations and that early intervention and schools can shape the life course of children. Socioeconomic status (SES) is strongly related to health across the life course. Children from low SES families are more likely to be born prematurely, experience intrauterine growth restriction and encounter perinatal complications. Exposure to adverse conditions including parental depression, abuse and neglect can have lasting detrimental effects on emotional development and stress responses. Pediatricians should advocate for local and national policies that promote child health. Pediatricians can help blunt the effects of poverty on children's health throughout their life course and potentially on the future generations.

Hall, K., Stipelman, B.A., Eddens, K.S., Kreuter, M.W., Bame, S.I., Meissner, H.I., Fernandez, M.E. (2010) Advancing collaborative research with 2-1-1 to reduce health disparities. *American Journal of Preventative Medicine*, 43(6S5), S518-S528.

This paper discusses the 2-1-1 system, a 3-digit telephone information and referral system designed to connect callers with health and social services in their local communities. The article examines the use of the 2-1-1 system as an opportunity for reducing health disparities across the nation. Authors highlight both the limitations and strengths of this proposal, linking researchers and health systems (including hard-to-reach segments of the population) via the framework of 2-1-1. Recommendations on how to implement the potential opportunities are provided, including those specific to policy makers, service-delivery providers, and 2-1-1 system staff and personnel.

Kaplan, R.M. (2012). Economic decision models: Can they inform child welfare policy? *Child Abuse & Neglect*, 36, 1-3. doi:10.1016/j.chiabu.2011.06.007

This paper addresses the child welfare system in relationship to improving socioeconomic status and reducing health disparities. Through the development of new ways to evaluate, new methodologies with which to explore, and advancements in data analysis, the author argues creative ways of scientifically evaluating the child welfare system. The implications for improved economic status and increased health outcomes among the one million children and families currently served by this system are also highlighted.

Rock, M. J.; McIntyre, L.; Persaud, S. A.; Thomas, K. L. (2011). A media advocacy intervention linking health disparities and food insecurity. *Health Education Research*, Vol 26(6), Dec 2011, 948-960. doi: 10.1093/her/cyr043

Media advocacy is a well-established strategy for transmitting health messages to the public. This paper discusses a media advocacy intervention that raised issues about how the public interprets messages about the negative effects of poverty on population health. In conjunction with the publication of a manuscript illustrating how income-related food insecurity leads to disparities related to the consumption of a popular food product across Canada (namely, Kraft Dinner®), we launched a media intervention intended to appeal to radio, television, print and Internet journalists. All the media coverage conveyed our intended message that food insecurity is a serious population health problem, confirming that message framing, personal narratives and visual imagery are important in persuading media outlets to carry stories about poverty as

a determinant of population health. Among politicians and members of the public (through on-line discussions), the coverage provoked on-message as well as off-message reactions. Population health researchers and health promotion practitioners should anticipate mixed reactions to media advocacy interventions, particularly in light of new Internet technologies. Opposition to media stories regarding the socio-economic determinants of population health can provide new insights into how we might overcome challenges in translating evidence into preventive interventions.

Smith-Campbell, B. (2005). Health Professional Students' Cultural Competence and Attitudes toward the Poor: The Influence of a Clinical Practicum Supported by the National Health Service Corps. *Journal of Allied Health*, Vol 34(1), 56-62.

This article supports the tenant, that in order to provide quality health care today, practitioners must be culturally competent. Funding sources, such as the federal government, recognize the need to prepare culturally competent clinicians. The mission of the National Health Service Corps (NHSC), a federal program, is to increase access to primary care services and reduce health disparities by assisting in the preparation of community-responsive, culturally competent primary care clinicians. This study evaluated an NHSC program that funded, in part, health professional students' educational programs.

### **Intersections: Chronic Disease**

Alegría, M., Molina, K. M., & Chen, C. N. (2013). Neighborhood characteristics and differential risk for depressive and anxiety disorders across racial/ethnic groups in the United States. *Depression and Anxiety*, 31, 27-37. doi:10.1002/da.22197

Neighborhood context may be representative of more than one factor as it pertains to the etiology of mental health outcomes. Social context, physical (exposure to violence), and economic (work opportunities) are additional factors that can fall within the overarching framework of neighborhood context. Authors of this study identified neighborhood features associated with differential risk for depressive and anxiety disorders (DAD) across racial/ethnic groups. Using a nationally representative data sample from the Collaborative Psychiatric Epidemiology Studies (CPES –Gecode file, N=13,837), authors found evidence that neighborhood features associated with risk for DAD vary across racial/ethnic groups, and possibly sub-ethnicity. Neighborhood features will vary in risk of DAD depending on individual race/ethnicity and, therefore, may affect neighborhood mental health outcomes, indicating a need for future studies examining the mechanisms by which these neighborhood characteristics differ in their impact on mental health outcomes.

Pellowski, J.A., Kalichman, S.C., Matthews, K.A., & Adler, N. (2013). A pandemic of the poor: Social disadvantage and the U.S. HIV epidemic. *American Psychologist*, 68(4), 197-209. doi:10.1037/a0032694

This article examines the health disparities associated with the U.S. HIV epidemic. Authors provide a developmental model illustrating a framework for health disparities and HIV/AIDS across the lifespan. Factors such as individual influences, social and behavioral, economic conditions, access to care, and psychosocial influences are discussed in relationship to longer-term HIV disease trajectory and the need for a decrease in the health disparities associated within the context of the HIV epidemic.

Ronit, E. & Landrine, H. (2012). *Cancer disparities: Causes and evidence-based solutions*. New York, NY: Springer Publishing Company.

“Cancer Disparities: Causes and Evidence-Based Solutions” is a 542 page evidence based book that offers concrete solutions in the understanding, prevention, detection, diagnosis and treatment of a variety of cancer. It provides detailed analyses by authorities in the field of the factors resulting in disparities across the cancer continuum for a wide range of populations including ethnic and racial, SES, access to and use of service, insurance status, geographic location, and differences in treatment. Authors include highly respected cancer specialists such as faculty of the American Cancer Society.

Lee, G.; Carrington, M. (2007). Tackling heart disease and poverty. *Nursing & Health Sciences*, Vol 9(4), 290-294. doi: 10.1111/j.1442-2018.2007.00363.x

Cardiovascular disease is the leading cause of death worldwide, with a projected increase in incidence in developed and developing countries. This paper reviews the literature on the role of poverty and socioeconomic deprivation in cardiovascular disease and outline ways to tackle poverty. The literature acknowledges the individual risk factors for cardiovascular disease, but highlights the negative effects of neighborhood deprivation on the incidence of cardiovascular disease and its mortality rates. The studies show that equitable access to health care is not evident and those in less affluent neighborhoods have greater disease incidence and increased mortality and morbidity rates, particularly for angina, myocardial infarction, and heart failure. The approach to reducing disease rates needs to be conducted from an individual

level to the societal level and needs to prevent and treat heart disease (particularly in deprived neighborhoods). Nurses and health professionals must drive health policy so that progress can be achieved in reducing the disease rates.

Wharf Higgins, J.; Young, L.; Cunningham, S.; Naylor, PJ (2006). Out of the Mainstream: Low-income, Lone Mothers' Life Experiences and Perspectives on Heart Health. *Health Promotion Practice*, Vol 7(2), 221-233. doi: 10.1177/1524839905278883

Cardiovascular disease remains a health issue in North America, particularly for marginalized citizens. Although lifestyle issues and behavioral risk reduction continue to dominate prevention initiatives, an emerging literature suggests that contextual factors such as poverty and social exclusion also influence health. Using group and personal interviews (N = 38), this research explored the social and economic contexts shaping heart health-related experiences from the perspectives of low-income, lone mothers. The transcripts were analyzed using McKinlay and Marceau's upstream-midstream-downstream framework. The overriding pattern characterizing lone mothers' discussions was that the women felt out of the mainstream of everyday life. They lacked the resources and power to effect change, particularly regarding heart health behaviors that were not perceived to be a priority compared to more pressing survival issues. Results are discussed in terms of concepts from the population health and social determinants literature, concluding with policy implications for enhancing health while living in poverty.

Yach, D.; Hawkes, C.; Epping-Jordan, J. E.; Steyn, K.; Merson, M. H. (Ed); Black, R. E. (Ed); Mills, A. J. (Ed), (2006). Chronic Diseases and Risks. *International public health: Diseases, programs, systems, and policies* (2nd ed.) , (pp. 273-322). Boston, MA, US: Jones and Bartlett Publishers, xxiv, 730 pp.

Chronic diseases include a heterogeneous group of conditions that usually emerge in middle age after a long exposure to unhealthy consumption patterns. To a large extent, chronic diseases have common underlying characteristics: a few common risk factors that act independently and synergistically, a long latency between cumulative exposure to risk and disease outcomes, a high degree of preventability, a low cure rate necessitating decades of treatment, considerable comorbidity, and strong linkages to poverty and development. They are predominantly caused by noninfectious diseases. The focus of this chapter is on leading chronic disease killers: cardiovascular diseases (mainly coronary heart disease and stroke), common cancers, chronic respiratory diseases (mainly chronic obstructive pulmonary disease and asthma) and diabetes. Other chronic diseases are covered elsewhere.

Emphasis is given to unhealthy consumption and activity patterns--tobacco use, unhealthy diets, and physical inactivity--and the resulting intermediate risks, such as raised blood pressure, obesity, and abnormal glucose and lipid metabolism. The epidemiology, demography, current and future trends, and economic implications of these chronic diseases and their risks are briefly summarized. The policy responses and impediments to progress in addressing chronic diseases are briefly described.

