

*Discussion Paper*

# **Health Literacy: A Necessary Element for Achieving Health Equity**

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# Health Literacy: A Necessary Element for Achieving Health Equity

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A core aim for improving health care is to provide equitable care or “care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status” (IOM, 2001). We believe that an essential ingredient in the effort to increase health equity and reduce health disparities is eliminating health literacy barriers. The challenge of aligning health care system demands and complexities with individual skills and abilities across the spectrum of public health and clinical delivery will be difficult, but critical in the effort to achieve health equity.

In this paper, we intend to demonstrate that the concepts of health literacy, health equity, and health disparities are connected, both in practice and in research. We also explore work that can be done at their intersection through the use of examples and selective review of data. Finally, we intend to convey three important messages:

1. Health literacy is intrinsically linked to both an individual's and a community's socio-economic context, and is a powerful mediator of the social determinants of health.
2. Health literacy interventions are viable options among other evidence-based strategies to address social adversity and environmental health determinants and should be considered when assessing meaningful actions to address health disparities.
3. Health literacy interventions and practices contribute to reducing health disparities, which fosters health equity and social justice.

This paper is divided into two major sections. The first section addresses issues related to research on health equity and health literacy. The second section provides real world examples of the interplay of these concepts. Each section provides selected examples from the literature and is not a comprehensive literature review.

## **RESEARCH: DIFFERENT PERSPECTIVES BUT SIMILAR ISSUES**

Health disparities and health literacy researchers commonly recognize the impact on health of social determinants such as poverty, educational status, and geographic location (Sorensen et al, 2012; Logan, In press). More specifically, both health literacy and health disparities researchers are concerned with the significantly different risks of illness associated with an unequal distribution of wealth, opportunities, and privileges in the United States as well as other nations. For example, health literacy and health equity researchers are mindful of the robust relationship between income and education and how both impact inequities in health services and outcomes in most countries (*Health at a Glance 2013 OECD Indicators*; Devaux, 2015).

Despite these commonalities in orientation and populations served, there seems to be little recognition within the literature that the concepts of health literacy and health equity are

related (Vollandes and Paasche-Orlow, 2007; Paasche-Orlow and Wolf, 2010). Cooper (IOM, 2011), noted that the researchers and practitioners who advance health literacy and health equity, while not necessarily working at cross purposes, may not be seeking opportunities to collaborate. This could stem from different research interventions sites, disparate funding streams, and diverse approaches to public advocacy.

For example, health literacy research and practice have often emphasized clinical interventions whereas health equity and health disparities research and practice often originate within community-based settings. Some of the federal agencies and foundations that fund health disparities research do not always emphasize health literacy funding and vice versa.

The rate of low health literacy in the United States is significantly linked to race, ethnicity, income, educational attainment, and age (Kutner et al, 2006). In addition, low health literacy is independently related to health outcomes. For example, Baker (2006) found that health literacy predicts desirable clinical and health administrative outcomes (e.g., hospitalization use) after controlling for sociodemographic variables such as education and income levels. Sudore and colleagues (2006) found that health literacy was an independent risk factor for all-cause mortality after adjusting for age, race, gender, income, education, health status, and other sociodemographic variables. Similar findings are evident in an array of diseases and health settings ranging from prevention to chronic disease (Peterson et al/, 2011; Wolf et al, 2006).

Further systematic reviews of health literacy research suggest that health literacy interventions are associated with improvements in clinical outcomes and health care utilization (Sheridan et al., 2011; Berkman et al., 2011; Jacobs et al., 2014; Taggart et al., 2012). For example, DeWalt and colleagues (2012) found that a literacy-sensitive self-care intervention for patients with heart failure improved outcomes for people with low literacy. Similarly, Rothman and colleagues (2004) showed that a diabetes disease management program addressing literacy may be particularly beneficial for patients with low literacy, and that increasing access to such a program could help reduce health disparities. Findings from these studies suggest that health literacy interventions should be considered in campaigns to address health disparities.

Mediational analyses that explore how one variable affects a second variable have begun to elaborate examples of how apparent race differences disappear when controlling for health literacy (Osborn et al, 2007; Osborn et al, 2011). Within the health disparities literature, race is sometimes suggested as a demographic characteristic that undergirds population differences, and thus these findings could be seen as providing evidence that health literacy may be a critical mediator reflective of the social determinants that impact health disparities. Functionally speaking, the authors believe that these findings mean that addressing health literacy is an important way to address health disparities (Wollesen and Peifer, 2006; Smith 2009; Smith and Moore, 2011; Smith 2011; Smith and Moore, 2012; Smith et al., 2012; Carroll et al., 2014).

As the research discussed suggests, health literacy is associated both with key social determinants of health and with health outcomes. As a result, the authors believe there is a benefit to explicitly connecting the concepts of health literacy and health equity and exploring the work that can be done at their intersection.

## **PRACTICE: EXAMPLES OF INTEGRATION**

There are many examples of health literacy interventions that address health disparities and achieve, in one or more domains, reduction of disparities, thereby increasing health equity. The following discussion highlights a few of these that have been conducted outside of

traditional health care settings. Ongoing efforts to reduce health literacy barriers in health care settings are crucial; however, we draw these examples from projects conducted in community settings to highlight some of the important health literacy work that can be done to address social determinants of disease in a diversity of settings.

According to Anderson and Whitaker (2010), children who are economically and socially disadvantaged are more likely to be obese. In fact, about one-third<sup>1</sup> of the children in Head Start programs are overweight or obese (Aiken et al., 2010). In order to address obesity prevention, the University of California at Los Angeles/Johnson and Johnson Health Care Institute developed “Eat Healthy, Stay Active!,” a low health literacy training program for Head Start staff, parents, and children. The program’s goal was to increase knowledge and awareness about obesity risks and prevention of chronic disease. Low-literacy materials included information about food groups, portion size, shopping on a budget, and the importance of including physical activity. At the end of six months, there was a significant reduction in the rate of obesity in adult and child participants. The Eat Healthy, Stay Active! health literacy intervention demonstrates the contributions such programs can make to reducing health disparities, thereby promoting health equity.

Another example is an initiative developed by Herman and colleagues (2010) to address patient use of hospital emergency departments by 7,200 families from Head Start and Early Head Start agencies. While previous studies suggested characteristics such as socioeconomic status and the social environment were associated with use of the emergency department for routine care (Halfon et al., 1996), the introduction of a self-help health book, written at a third-grade reading level and used in a one-month training program, was shown to reduce unnecessary emergency department and primary care provider visits by 58 percent and 41 percent, respectively. Training interventions were delivered in English, Spanish, Hmong, and Somali.

In another effort, a Kit for New Parents (a multimedia health and parenting resource intended to help parents improve prenatal and early childhood health), which used health literacy principles and user engagement in its production, was found to significantly improve parental knowledge and child care development practices compared to a peer, control group among medically underserved audiences (Neuhauser et al., 2007).

Another example is the Canyon Ranch Institute Life Enhancement Program (LEP) (Pleasant et al., in press) which was launched with a South Bronx based-federally-qualified health center (FQHC) as a local partner. The South Bronx is among the lowest per capita income congressional districts in the United States and, according to diverse indicators, is also less healthy than the combined average of the boroughs of New York City.<sup>2</sup>

Following the intervention researchers found that depression (measured with the PHQ-9) was cut by 50.1 percent and that stress levels dropped 30.2 percent. The number of self-reported unhealthy days dropped by 46.4 percent, self-reported level of strenuous exercise increased 89.4 percent, and moderate exercise increased 135.4 percent.

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<sup>1</sup> According to the CDC, in 2011-2012, 8.4 percent of children aged 2 to 5 were obese. <http://www.cdc.gov/healthyyouth/obesity/facts.htm> (accessed June 19, 2015).

<sup>2</sup> See The New York City Community Health Survey of 2013, Age-adjusted data available at [https://a816-healthpsi.nyc.gov/SASStoredProcess/guest?\\_PROGRAM=%2FEpiQuery%2FCHS%2Fchsindex&year=2013](https://a816-healthpsi.nyc.gov/SASStoredProcess/guest?_PROGRAM=%2FEpiQuery%2FCHS%2Fchsindex&year=2013) (accessed June 19, 2015).

The examples described here strongly suggest that targeted, culturally appropriate interventions, delivered in a community setting with health literacy tools and reviews, have a positive impact on participant knowledge, attitudes, and behaviors. In addition, the use of an underlying health literacy perspective that examines the challenges in peoples' lives and promotes empowerment for health ensured that the tools and interventions were comprehensively assessed, community based, and culturally appropriate. Moreover, all the health literacy-specific interventions showed success in reducing health disparities in the target populations and achieved, in their own domains, greater health equity.

## CONCLUSION

The trajectories of health literacy and health equity practice and research have intermingled yet autonomous paths. Health literacy barriers have clear associations with both short- and long-term deleterious effects on health. Health equity as a domain to understand and frame the elusive goal of optimizing health for all reminds us that health is linked to larger social issues of inequality and social justice.

Research and the development of operational principles to overcome health literacy barriers hold promise for a tangible set of activities and intentional strategies that can mitigate inequalities in treatment and outcomes. Health literacy interventions offer health care systems, providers, and those working in the community new approaches to use in addressing disparities that extend beyond the conventional view of screening, treatment, and care delivery. Moreover, a growing body of evidence suggests that these practices improve outcomes. We believe that advancing health literacy is a necessary and promising, component of how health equity can be realized.

To date, the majority of health literacy interventions have focused on ameliorating poor practices within the clinical setting rather than addressing social determinants of health at the community level. However, the examples presented here show that interventions using principles of health literacy, applied in community-based settings, can result in improved outcomes at the population level. Interventions in nonclinical settings should increase as health literacy becomes more integral to community-based interventions to promote health equity—such as the efforts described here.

Confronting issues of health literacy in the United States is a critical feature of addressing disparities. Health literacy's application to community-based and population level interventions remains to be defined in the larger issue of fostering health equity. We encourage research funding to develop the empirical basis for the concept that health literacy can be an asset to promote health equity. We also encourage policy development to advance the implementation and evaluation of health literacy interventions to foster health equity.

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Your Health/Managing your health/Health Literacy/Healthcare Professionals/ How can health care facilities be more sensitive to health literacy? How can health care facilities be more sensitive to health literacy? Health care facilities, including clinics, pharmacies, and hospitals, can be challenging for the average patient to navigate. Guides for performing a health literacy environmental audit in hospitals and health centers, as well as in pharmacies, are available. Work on problem areas to make the area more health literacy-friendly. For example, Advancing Health Equity & Social Justice Through Community, Your Health. In Her Words: Jacklyn's Life With Ulcerative Colitis. Health literacy refers, broadly, to the ability of individuals to gain access to, understand and use information in ways which promote and maintain good health for themselves, their families and their communities. While different definitions are used and health literacy is an evolving concept, there is agreement that health literacy means more than simply being able to "read pamphlets", "make appointments", "understand food labels" or "comply with prescribed actions" from a doctor. Health literacy is also not just a personal resource; higher levels of health literacy within populations

Chapter One: Achieving Health Equity p.6 What is health equity? p.6 How do social determinants influence health? p.10 Learning from doing p.11. Chapter Two: Communities Working to Achieve Health Equity p.12 Background: The Social Determinants of Disparities in Health Forum p.12 Small-scale program and policy initiatives p.14 Case Study 1: Project Brotherhood p.14 Case Study 2: Poder Es Salud (Power for Health) p.16 Case Study 3: Project BRAVE: Building and Revitalizing an Anti-Violence Environment p.18 Traditional public. Hispanic/Latino adults had the lowest average health literacy score compared to adults in other racial/ethnic groups. Health literacy interventions and practices contribute to reducing health disparities, which fosters health equity and social justice. This paper is divided into two major sections. The first section addresses issues related to research on health equity and health literacy. The second section provides real-world examples of the interplay of these concepts. Each section provides selected examples from the literature and is not a comprehensive literature review.