

Promoting Cultural Competence in Matters of Health and Environment

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ABSTRACT

The topic of cultural competence has been relevant to health and social science research for decades. Whereas many scholars have tried to parse out the components of cultural competence, the focus has been on cross-cultural interactions and how best for health care providers to bridge the gap between patient and provider as a means of improving health outcomes. As our knowledge of the complexity of health status has evolved, it has become clear that the environment plays an important role in health. This role moves beyond traditional ideas of environmental exposure to the elements or toxins and pollutants and incorporates the built environment as a key factor in an individual's health. With the acknowledged importance of the environment in health it is crucial to incorporate the environment into our understanding of cultural competence.

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Conceptualizing Cultural Competence

Whereas the definition of cultural competence varies by academic discipline, and even possibly by researcher, it is clear that the term encompasses the idea of ensuring that patients are treated as individuals with a certain level of respect to their ethnic identity and their identity in general. Sue (2001) promotes a multidimensional model to conceptualize cultural competence as well as identify leverage points for action. This model is especially useful to break apart the concept of cultural competence into multiple components. In this model there are three dimensions to cultural competence: "racial" and culture-specific attributes, components of cultural competence and foci of cultural competence (Sue, 2001). By breaking down the nebulous concept of cultural competence into finite categories it is possible to apply this concept to a wider variety of topics. Figure 1 is a graphical representation of this model. Note how the intersection of the three dimensions (the darkly shaded areas) represents what cultural competence truly encompasses in a given setting.

The first dimension of Sue's model, the cultural dimension, can be one of the most problematic. The dimension of culture either requires a high level of inclusivity (i.e., combining all "Latinos" into one group) or high levels of exclusivity, parsing groups into smaller and smaller groups based on ethnicity, gender, socio-economic status, and so on. Combining people into groups runs the risk of essentializing and this is one of the strongest critiques

of the application of cultural competence in health care (Eyler et al 2002; Silverstein & Auerbach 2009). Silverstein and Auerbach (2009) describe a process they call "just-add-culture-and-stir" where health professionals rely on general descriptions of a "race" or ethnic group to make assumptions about an individual. Just as doctors in the U.S. note the inherent differences between individuals classified as "Americans," it is critical to recognize that groups such as "Mexicans" are just as ethnically and culturally diverse.

Whereas it is critical not to essentialize, it is just as problematic to subdivide groups of people into hundreds of small categories. For example, if you examine an individual you might find that they are a married, heterosexual, "white" male of British and German ancestry who is a practicing Lutheran. It is possible to continue to deconstruct this person's identity into even smaller components that might be critical to understanding their health status and likelihood of adopting a new health behavior. Whereas you cannot determine that some aspects of identity are unimportant, medical professionals must be able to discern which traits are the most important to an individual's health and health behavior. This dissection can be difficult especially with the limited amount of time health professionals have to interact with patients. Ultimately, healthcare workers need to have a basic understanding about different ethnic and social groups and be able to apply this knowledge at the individual level.

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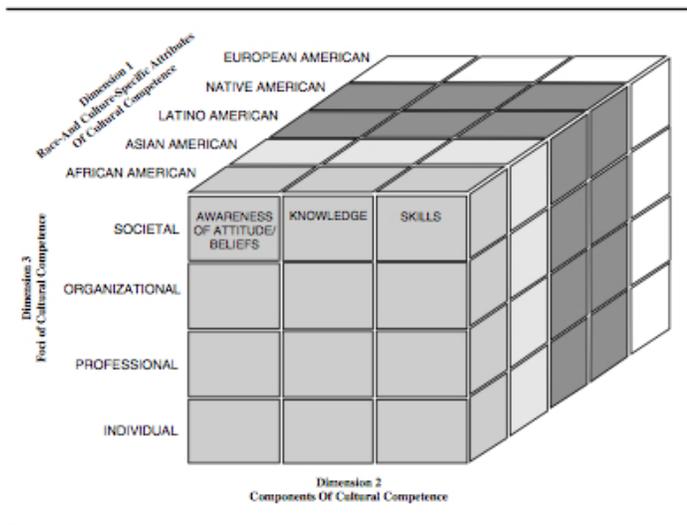


Figure 1. A multidimensional model for developing cultural competence.

Source: Sue, D. (2001).

The second dimension in Sue’s model (2001) includes components of cultural competence which are broken down into beliefs, attitudes, knowledge, and skills. These refer to the practitioner’s ability to be culturally competent (Sue, 2001). Much as researchers have focused on the ability of an individual to adopt a health behavior, this dimension examines the concepts that health professionals need to be culturally competent. Whereas the “just-add-culture-and-stir” method relies solely on the ability of a health profession to be knowledgeable about different groups, doctors also need the skills to apply this knowledge as well as attitudes and beliefs that truly engender cultural competence. If a health care professional has not internalized cultural competence, then the goal of cultural competence has not been achieved. When cultural competence has been internalized health professionals are more able to be sympathetic, sensitive, and are willing to take the necessary steps to bridge the power gap between patient and provider.

The third and final dimension, termed the “foci of cultural competence,” examines different levels in which cultural competence is needed to improve health (Sue, 2001). This dimension is meant to mirror the social ecological model and points to the need for cultural competence at all levels of society. Dimension three in Sue’s model (2001) includes the societal level, the organizational level, the professional level and the individual level. In this model, cultural competence goes beyond recognizing the biases of individuals and examines the inherent biases of different levels of the social world. Sue (2001) notes, for example, that psychology often has been criticized as being culture-bound and

Eurocentric. It is critical to note these biases and address them when possible.

The Environment and Cultural Competence

If we take cultural competence out of a purely clinical context and apply it to health and everyday life, then it is clear that Sue’s model (2001) is missing a critical element, namely, the environment. When examining health it is imperative to understand both the natural and built environments. The built environment encompasses the social and human-made physical elements that create the structure of a given community (Handy, Boarnet, & Ewing 2002; Gordon-Larson, Nelson, Page, & Popkin 2006; Papas et al 2007). Both the natural and built environments can be incorporated into all three dimensions of Sue’s multidimensional model of cultural competence (2001).

Dimension 3- The Foci of Cultural Competence

It is easiest to see how the environment fits Sue’s third dimension of cultural competence (2001). As mentioned above, the third dimension of cultural competence examines how inherent biases at different levels of society affect health; the environment fits in this model upstream near the overarching level of society. Biases in the environment that affect health vary greatly and range from an unequal distribution of resources to a lack of accessibility of resources and everything in between. The role of the environment has long been researched in public health and this section will focus on some ways in which the environment is critical to health.

One well-researched area of how the environment affects health is the study of the relationship between the built environment and obesity. In particular, the built environment has been shown to play a pivotal role in obesity by “creating a climate that promotes increased energy consumption and a reduction in energy expenditure” (Papas et al., 2007, p.1). The distribution of resources in a given environment is likely to be unequal, especially by socio-economic status (Handy et al., 2002; Gordon-Larson et al., 2006; Papas et al., 2007). For example the distribution of recreational facilities is disparately high for higher-income neighborhoods when compared to lower income neighborhoods in the same area (Gordon-Larson et al., 2006). This disparity is important beyond issues of equity and enjoyment or emotional wellbeing; availability of recreational facilities alone - nevertheless affordability, accessibility and adequacy - is associated with increased levels of physical activity and reduced levels of obesity (Gordon-Larson et al., 2006).

The built environment's role in obesity goes beyond the distribution of recreation facilities. The make-up of the built environment is directly related to levels of physical activity (Handy et al., 2002). Zoning laws and urban planning can either engender or discourage physical activity (Handy et al., 2002). How residences, businesses, streets, sidewalks and traffic are organized directly affect an individual's ability to be physically active (Handy et al., 2002; Moudon et al 2006). This level of organization is directly related to how "walkable" a given area is, i.e., an individual's ability to walk as a mode of transportation (Moudon et al., 2006). In addition to how walkable a neighborhood is, these conditions also determine if an individual is able use other modes of transportation such as using a bicycle (Handy et al., 2002). Whereas it is unclear if high levels of walkability and bicycle-friendliness are directly related to obesity, they do allow for increased physical activity and could play an important role in obesity reduction (Handy et al., 2002, Moudon et al., 2006). Additionally the use of these modes of transportation reduces reliance on cars and could theoretically improve the natural environment.

The built environment also contributes to obesity via food availability. The term "food desert" was initially used in the United Kingdom to describe areas that had limited accessibility or availability (density) of places to obtain healthy foods (Cummins & Macintyre, 2002). More recently this has become a "hot button" issue in the U.S. with First Lady Michelle Obama championing the cause of reducing food deserts in the U.S. as a part of her *Let's Move!* initiative to reduce obesity (Croft, 2010). Lower income areas often have fewer grocery stores and more retail outlets (such as convenience stores); this situation is associated with higher food prices and reduced fruit and vegetable availability and consumption (Papas et al., 2007; Pearson, Russell, Campbell, & Barker, 2005; Wrigley, Warm, Margetts, & Whelan 2002). These areas often have a high density of fast food restaurants; this increased density is associated with higher body mass indices (Papas et al., 2007). The accessibility and availability of food is clearly a factor in obesity and further demonstrates the role of environmental level factors in health. Health care professionals must consider these environmental factors as they care for patients and try to address issues such as overweight and obesity.

The role of the environment in health extends beyond obesity. The built environment is critical to the health and wellbeing of individuals with limited mobility and other disabilities (Cook et al 2003; Imrie & Kumar, 1998; Schneider, Hurst, Miller, & Ustun 2003). First and foremost, cultural competence

in the built environment such as the presence of curb cuts, ramps, elevators, seating areas among other elements is essential to maintain the physical health of individuals with limited mobility (Imrie & Kumar 1998; Schneider et al., 2003). If the built environment does not have these features, then individuals with limited mobility are more prone to injuries due to falls, sprains and overexertion (Imrie & Kumar, 1998; Schneider et al., 2003). Beyond the physical concerns related to cultural competence in the environment for those with limited mobility, there are psychosocial social implications as well. Much as a member of an ethnic minority might feel uncomfortable in the presence of someone who harbors racist feelings against that person, people with limited mobility often find that the "built environment is hostile in that it is infused with able-bodied values like steps or restricted access to buildings" (Imrie & Kumar, 1998, p. 358). Often, those with limited mobility are unable to leave their homes due to limited or prohibitively expensive transportation options; when they do leave their homes the hostile environment of the able-bodied world provides a great amount of stress (Imrie & Kumar, 1998). Individuals with limited mobility are often estranged from the built environment and therefore the world around them. This estrangement leads to feelings of anger, resentment, isolation, and humiliation among others, leading to reduced psychological wellbeing (Imrie & Kumar, 1998).

Dimension 2: Components of Cultural Competence

In Sue's model of cultural competence (2001) dimension two lists three overarching competencies that are essential to cultural competence: attitudes and beliefs, knowledge and skills. The environment could be considered a fourth competency, or more usefully, a part of the three other competencies. Knowledge, attitudes, beliefs, and skills about the environment, both natural and built, are essential to culturally competent care.

Knowledge, attitudes, beliefs, and skills must be applied to the issues discussed in dimension three. Much like a health professional needs be aware of the role society or their profession plays in the health of an individual, they must also be aware of the role the environment plays in health. This awareness should encompass the knowledge and skills to address environmental issues in addition to attitudes and beliefs that the environment is an essential element of health. It is not enough for a physician to refer an overweight patient to a nutritionist who then informs the patient to consume healthier foods such as fruits and vegetables. Health professionals must be aware of the role of the environment in diet and have the skills to address these concerns with patients.

This dimension of cultural competence can be evaluated outside of the clinical context. If environment is added as a column in dimension two (Figure 1), the role of the environment becomes clear. How does society interact with the environment? If we think of environment overarching the competencies of attitudes and beliefs, knowledge, and skills then this interaction can be seen more easily. To illustrate this interaction, we can examine recycling in Cologne, Germany. On a societal level it is clear that the environment and recycling are valued from the abundance of recycling options, to high levels of walkability or bicycling, and even the use of garbage to create clean energy for the city and its industry. If there is a societal value to care for the environment and recycling, how does this societal factor interact with cultural competencies?

The multiple components or competencies associated with dimension two can be applied easily to recycling. First, the culturally competent behavior (in Cologne) of recycling will not happen without attitudes and beliefs on an individual's part that recognize the importance of recycling in caring for the environment. Most importantly, individuals must possess the knowledge to engage in proper recycling. Whereas many garbage cans placed by the City of Cologne are marked with the recycling categories, these categories can be confusing. The recycling bins include the following categories: paper, plastic, glass and residual/waste.

At first glance these categories may seem straightforward; however, there are intricacies that may reduce the self-efficacy of individuals to recycle. For example, a paper napkin, if used to wipe one's face, would not go in the paper, but in the residual/waste bin as it could contain biologic contaminants. Also, many paper drink containers are lined with foil. Do these containers go in paper, residual/waste, or should they be brought home to recycle with other metal goods? When this phenomenon is further examined in light of dimension one, it becomes even harder for individuals from a different cultural background who may not be from the area and may not even speak German. The issue of self-efficacy in recycling then leads to the skill of being able to apply this information and choose the correct waste receptacle.

Dimension 1: "Race" and Culture Specific Attributes of Cultural Competence

Applying the environment to the first dimension of cultural competence may be more difficult than applying environment to the other dimensions. It is clear from the example of recycling that there are culture-specific beliefs about the environment. Whereas a native resident of Cologne views the

environment one way, a Native American from the Northwest Coast may view it another way, and a small farmer from rural China will certainly have another view of the environment. As it does with the other two dimensions of cultural competence, the environment overarches the culture-specific dimension.

When examining the culture-specific dimension of cultural competence, the majority-minority dichotomy and power divide of cultural competence become evident (Brown, Garcia, & Winchell 2002; Chin, Walters, Cook, & Huang 2007; Cooper, Hill, & Powe 2002). This divide, when applied to the environment, raises an interesting point. In the traditional cultural competence paradigm in a clinical setting, the goal is to work beyond the divide between majority and minority to achieve positive health outcomes. If we move beyond the confines of Sue's model (2001) and examine cultural competence and the environment in overarching terms, this majority-minority divide is still present.

The overarching tenet of international environmental law is a "common but differentiated responsibility" to the environment (Harris, 1999). This shared but unequal responsibility recognizes that all nations are responsible for environmental degradation, but that some countries are more responsible than others. In many ways this phenomenon mirrors the differential burden of disease and how minority groups often carry the burden of decisions in which they have little say, such as zoning, health insurance laws, etc. (Chin et al., 2007; Imrie & Kumar 1998). This power divide highlights the similarities between environmental policy and health policy/cultural competence. If we are going to create positive environmental change on a global scale cultural competence is critical to that success.

Conclusion

Researchers in health and social science disciplines have studied cultural competence for a long time. Whereas there is a wide variety of literature on this topic, the role of the environment in cultural competence has been ignored to a large extent; this neglect is surprising as the role of the environment in health is well established. By applying the environment to cultural competence, a need for better practitioner knowledge about the role of environment in health and the skill to assist patients in negotiating the environment becomes apparent. Also, as the environment is viewed through the lens of cultural competence, it too, becomes the focus of cultural competence. That is to say the "health" of the environment is called into question

and cultural competence clearly has a role in ensuring international environmental collaboration.

References

Brown, S., Garcia, A., & Winchell, M. (2002). Reaching underserved populations and cultural competence in diabetes education. *Current Diabetes Reports*, 2(2), 166-176.

Chin, M., Walters, A., Cook, S., & Huang, E. (2007). Interventions to reduce racial and ethnic disparities in health care. *Medical Care Research and Review*, 64(5 suppl), 7S.

Cooper, L., Hill, M., & Powe, N. (2002). Designing and evaluating interventions to eliminate racial and ethnic disparities in health care. *Journal of General Internal Medicine*, 17(6), 477-486.

Croft, C. (2010). Taking on "food deserts." Retrieved June 29, 2010 from: <http://www.whitehouse.gov/blog/2010/02/24/taking-food-deserts>.

Cummins, S., & Macintyre, S. (2002). "Food deserts"- evidence and assumption in health policy making. *British Medical Journal*, 325(7361), 436.

Gordon-Larsen, P., Nelson, M., Page, P., & Popkin, B. (2006). Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics*, 117(2), 417.

Handy, S., Boarnet, M., Ewing, R., & Killingsworth, R. (2002). How the built environment affects physical activity. *American Journal of Preventive Medicine*, 23(2S), 64-73.

Harris, P. (1999). Common but differentiated responsibility: The Kyoto protocol and United States policy. *NYU Environmental Law Journal*, 7, 27.

Imrie, R., & Kumar, M. (1998). Focusing on disability and access in the built environment. *Disability & Society*, 13(3), 357-374.

Moudon, A., Lee, C., Cheadle, A., Garvin, C., Johnson, D., Schmid, T., et al. (2006). Operational definitions of walkable neighborhood: theoretical and empirical insights. *Journal of Physical Activity & Health*, 3, 99.

Papas, M., Alberg, A., Ewing, R., Helzlsouer, K., Gary, T., & Klassen, A. (2007). The built environment and obesity. *Epidemiologic Reviews*.

Pearson, T., Russell, J., Campbell, M., & Barker, M. (2005). Do 'food deserts' influence fruit and vegetable consumption?- A cross-sectional study. *Appetite*, 45(2), 195-197.

Schneidert, M., Hurst, R., Miller, J., & Üstün, B. (2003). The role of environment in the International Classification of Functioning, Disability and Health (ICF). *Disability & Rehabilitation*, 25(11), 588-595.

Shumway-Cook, A., Patla, A., Stewart, A., Ferrucci, L., Ciol, M., & Guralnik, J. (2003). Environmental components of mobility disability in

community-living older persons. *Journal of the American Geriatrics Society*, 51(3), 393-398.

Sue, D. (2001). Multidimensional facets of cultural competence. *The Counseling Psychologist*, 29(6), 790.

Wrigley, N., Warm, D., Margetts, B., & Whelan, A. (2002). Assessing the impact of improved retail access on diet in a 'food desert': A preliminary report. *Urban Studies*, 39(11), 2061.

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