



Consortium of Social Science Associations

“Operationalizing Culture” for Health Behavior and Social Sciences Research

June 2, 2014

On May 23, as part of the behavioral and social science lecture series, the National Institutes of Health (NIH) held a panel discussion on “Culture, Research, and Health Outcomes.” Panel presenters included Marjorie Kagawa-Singer, University of California, Los Angeles; Peter Guamaccia, Rutgers University; and Laura Szalacha, The Ohio State University. The event was cosponsored by the NIH Office of Behavioral and Social Sciences Research (OBSSR) and the NIH Basic Behavioral and Social Science Opportunity Network (OppNet).

The distinguished panel discussion centered on measuring specific cultural variables in basic research and translating that into interventions and other clinical research that can improve health outcomes. Much of the NIH’s portfolio of sociobehavioral and clinical research projects use proxy variables for culture. These include demographic categories, race/ethnicity, national origin, language use at home, and geographical and political boundaries. OBSSR observed that the variables, which are gathered at intake, remain static and as a consequence “may obscure, rather than explain, specific processes in which cultural beliefs and practices influence practices related to health and well-being.” To begin to address this issue, OBSSR provided support to create an online, best-practices publication to operationalize culture in health research. Marjorie Kagawa-Singer, a medical anthropologist and oncology nurse, is the project’s principal investigator. She explained that she has wrestled with the “lack of conceptualization of culture in health research” from her perspective for several decades.

Kawagwa-Singer explained that the OBSSR/OppNet-supported project had three goals: (1) define culture for use in health research; (2) provide a roadmap to guide researchers, reviewers, and funders in measurement and application of culture; and (3) illuminate the Eurocentric-basis of health behavior research. The soon-to-be released online publication, *Cultural Framework for Health*, includes recommendations to provide six checkpoints to facilitate a more thorough accounting for cultural processes in research:

1. Is the rationale for the inclusion of culture clearly articulated in the problem statement?
2. Is there a clearly articulated definition of culture for this study?
3. Are there known, salient theoretical cultural domains? Known theoretical domains, unknown cultural domains? Known cultural domains, unknown theoretical domains?
4. Do you articulate a conceptual framework that specifies how salient domains affect specific health/wellbeing issue(s)?

1

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5. Is there correspondence between theoretical and cultural domains?
6. Do cross-culturally equivalent measures exist?

The panel created a consensus definition for health research, as well as a roadmap for researchers to use to inform the role and measure of culture on the outcome of focus. The misperceptions about culture are that it is usually viewed as a deficit and not an asset, said Kagawa-Singer. *Cultural Framework for Health* is the product of an expert panel consisting of 30 people representing eight disciplines. She noted that most, if not all, were currently in a department different from their disciplinary training. The basic premise of the project was to transform the use of culture in health research. The problem is that there is no such thing as human nature independent from culture. Yet, culture is overlooked in the science of human behavior, Kagawa-Singer explained.

According to Kagawa-Singer, culture is a poorly defined and untested variable. At the same time, hundreds of definitions of culture exist in many disciplines, she noted. The measures that accurately operationalize the aspects of culture that most affect the health issues of focus are missing, along with studies that test the hypotheses of culture's impact on health outcomes. It is usually assumed to be one of the control variables in research and not as an issue of research in and of itself, said Kagawa-Singer.

The panel identified the ten most common scientific challenges in the use of culture in health research:

1. It is inadequately theorized and inconsistently applied.
2. Lack of clear definitions, measurable constructs and conceptual models of how cultural processes interact.
3. Cultural groups are defined devoid of their historical, geographic, social and political context, and influence of these contextual factors on their access to resources and social positions in societal power hierarchy. This is often unrecognized in how various populations are identified. It assumes that these groups are homogeneous, despite the knowledge that geographic differences make a difference in who the populations are and how they express cultural variations.
4. The dynamic nature of culture is rarely reflected in most studies. It is usually a static measurement of race, ethnicity, and "little else beyond that or one or two cultural stereotypical measures."
5. Recognition of the role of culture in shaping the nature and conduct of the scientific process and its relationship to research participants is lacking.
6. Everyone has culture. The assumed universality of the dominant culture's constructions of reality and the salient domains, such as selfhood, family, fairness, and well-being is unproven and should not be assumed.
7. The use of simplistic variables of race and/or ethnicity or ancestry to represent culture is simplistic and inadequate.
8. Heterogeneity within the group of focus should be also explicitly demonstrated in the description of the study sample.
9. A contextual focus of the individual without the historical, political, and social environmental circumstances of the individual group will miss the salience of culture within any population of interest.
10. Challenges 1-9 contribute to the inability to effectively address health disparities.

Regarding point 6 above, Kagawa-Singer noted that we are usually studying the culture of the other group, emphasizing that the panel is promoting the idea that the culture of both scientists and science in



and of itself is a culture that intersects with the culture of the population being studied. Self-reflection is needed to prevent the kind of dichotomy set by scientists as the criteria for well-being, because it is monocultural.

The effect of culture on science impacts the unreflective use of theories that have been developed and validated primarily in European-American populations, usually educated populations. The use of tools and measurements has not been validated for cross-cultural equivalence. This raises ethical questions regarding the imposition of one culture's definition of health and ways of managing illness without eliciting the perspective of the populations of focus.

Kagawa-Singer highlighted coming demographic changes and emphasized that “we are not prepared to address this diversity in our health science.” The issue of health disparities will continue to grow as it has been, she argued. She cited a 2008 paper by Leonard Stein that noted that “not one iota of progress in reducing health disparities” had been made and that they are actually growing. So with the change in demographics, Kagawa-Singer, stressed that if scientists don't begin to relook at the ways research is conducted and the issue of diverse populations, “our health care system will suffer for it and the well-being of our citizens will even more so.”

Kagawa-Singer also pointed to fruit and vegetable intake in the U.S. as an example of an area where culture has not been taken into consideration. Hundreds of millions of dollars have gone into funding the promotion of fruit and vegetable consumption to address many chronic and infectious diseases. While the message is out there, there has not been an increase in consumption, and it is more pronounced in diverse populations, she explained.

Kagawa-Singer argued that the categories of race/ethnicity as set forth in the Office and Management Budget (OMB) directive 15 “eviscerates culture.” She offered her own set of key definitions of race, racism, population group, ethnicity, and culture. Kagawa-Singer emphasized that there is no “scientific biologic evidence” for the OMB categories of race, pointing out that race is an “assumed genotype based on phenotype.” Conversely, she stressed that “racism is real” and “very powerful” and defined it as an “assertion of power, ego fulfillment, and racialization status at expense of others by skin color.” She defined “population group” as a “population which has similar adaptive physiologic responses and cultural practices due to ecologic niche,” which is why “place” makes a difference (see [Update, April 30, 2012](#)). “Ethnicity” is defined as “a subcultural group within a power structure of a multicultural society and self-identified group membership within a socio-historical context.” It is a system of beliefs, values, lifestyles, ecologic and technical resources, and constraints designed to ensure survival and well-being of its members. When defining culture, Kagawa-Singer emphasized the need to differentiate what culture is versus what culture does, further stressing that it is not a thing, or static measure. As a result, it has to be titrated to the situation of the population of interest, she argued.

She defined “culture” as a shared framework or lens that members learn to use to “see” the world and which informs, consciously and unconsciously, how to live life, why they live life, and how to resolve problems in doing so. It is created and modified within a multidimensional, multilevel, dynamic and adapting ecologic system of internal and external resources and restraints. Further, it is socially and legally integrated into the structure of a society's institutions. What culture does, Kagawa-Singer explained, is “define and construct the world around us to derive meaning in and for life. It provides the social structure that defines and coordinates the numerous roles of each of its members in relation to



the group, rules of social interaction and distribution of power. It expresses and sustains the reality of its members codified through the built environment including our institutions.”

Accordingly, the culture of research, with its assumption of the universality of reality and the way it explicitly or implicitly informs thought or behavior, requires researchers to be more discriminating in how they conduct and operationalize these concepts. Research should be multi-level and multi-dimensional, she underscored, highlighting that she found research in epigenetics to be an exciting burgeoning field where we can see the impact of environment on our genetic coding. Culture is actually nested in its measures where the focus is usually on beliefs and values and one or two are selected out to represent culture, she explained. She noted the seven nested layers of culture: environment, economy, technology, religion/worldview and beliefs about healing systems, social structure, language and health literacy, and beliefs and values. Kawaga-Singer stressed the need to begin with the environment of the particular group of focus and understand how it impacts the populations that live within it along with its potential impact on DNA.

Implementing Culture in Interventions

Laura Szalacha discussed how to incorporate the panel’s recommendations into interventions. Learning how to work within a culture and how they say things and what the actual meaning for a particular population is a long process, and researchers must be immersed in that world. Researchers have often taken the easy way out, she noted and cited as an example the use of an insufficient single item for race or ethnicity. There is also a failure to look at the heterogeneity in the population or examine the social, historical, and environmental context of health. The good news, Szalacha noted, is that there “is a real correspondence between the need for more complexity and authenticity” in the research and the development of analytic techniques.

Community-based participatory research, however, is a symbol of progress, Szalacha said and pointed out that probably the greatest progress is the overcoming of the “paradigm wars” between quantitative and qualitative methods and philosophies of two decades ago along with the recognition that their combined use in examining culture and health is imperative. She cited as an additional example of this progress cultural neuroscience which is “studying how cultural and genetic diversity affect psychological and neural processes in the production of human behavior.” Biocultural co-constructivism was mentioned as another example of progress. It has emerged as a “way of explaining how developmental trajectories unfold through interactions between genetic and cultural factors.” There has been work that examines how neural plasticity may later affect and be affected by both developmental trajectories and the end state, Szalacha pointed out.

Cultural Framework for Health’s flow-map, Szalacha noted, will inform researchers how to conceptualize and operationalize culture for a particular hypothesized effect. The questions are about theoretical and cultural constructs. These are different processes, she emphasized. The hope is that the flow-map highlights the need for mixed paradigms and mixed methods research. Two examples given in the report explain or illustrate the ways in which the two methods work together to answer the questions. The first, *cultural domain analysis*, is where you have a linked set of qualitative research and quantitative data analytic techniques for systematically discovering the terms a member of a group uses as well as the various dimensions of meaning that link with those terms. Use of constrained/unconstrained pile sorts can then be analyzed to help extract dimensions of meaning used within the domain. The second, *cultural consensus analysis*, is the development of measurements for



constructs within specific social groups when no measurement exists, or when existing measurements are likely to be too culturally specific to one group, Szalacha noted.

According to Szalacha, the only way to accomplish the recommendations in the report is via interdisciplinary collaboration. It is the only way to do real research and attend to all of these different things, she emphasized. She further noted that researchers need to focus on external as well as internal validity by utilizing both inductive and deductive paradigms and quantitative and qualitative methods. They need to collaborate with members of the community of focus to identify, in partnership with the researchers, the salient issues impacting their health outcomes. Researchers also need to integrate the social, historical, economic, environmental, and geopolitical factors of the community of focus, she emphasized.

Culture is a dynamic, multidimensional construct with measurable properties. More accurate identification and measures of salient factors will truly make a difference in terms of health equity or health disparities, Szalacha pointed out. The hope, she concluded, is that “reviewers will increasingly be asked to assess the cultural and linguistic competence of grant applications and how well cultural issues have been addressed in health behavior and social science articles submitted for publications.” Think back to when it was decided that having females in studies would be a good thing, she noted.

Szalacha pointed out that in the *Cultural Framework for Health* the panel focused on racial and ethnic cultures and health outcomes but cautioned that it is also necessary to attend to many of the socially constructed cultures that exist such as class and sexual identity, among others, noting that we are all combinations of several with different saliency depending on where we are and whom we are. Researchers need to be prepared for that sort of complexity, she concluded.

The Value of Integrating Culture into a Program of Research

Peter Guamaccia’s charge was to provide a model or example of how one might integrate culture into a program of research, what it means to take culture seriously, and the value of doing it. He discussed his research of more than two decades on *Ataque de Nervios*, which is defined as an idiom of distress principally reported among Latinos from the Caribbean. He explained that when he started out in the 1960s there was an interesting set of studies published in *General Psychiatry* around the label of *Puerto Rican Syndrome*. Commonly reported symptoms include screaming/shouting uncontrollably, attacks of crying, trembling, heat in the chest rising to the head, and becoming verbally/physically aggressive. In addition, it includes features prominent in some *ataques*, but absent in others, such as dissociative experiences, seizure-like or fainting episodes, and suicidal gestures. A core feature, explained Guamaccia, is the sense of being out of control and frequently occurring as a direct result of a stressful event relating to family. In addition, the individual may experience amnesia for what occurred during the *ataque de nervios*.

The study of *ataque de nervios* challenged the basic framework and begins to challenge science on the conceptualization of science, Guamaccia stated. He explored the question, why is culture relevant, through a series of brief vignettes as a window into this program of research. Guamaccia also shared his questions for research programs on cultural syndromes, which parallels many of the issues addressed in the *Cultural Framework for Health* report, including the nature of the phenomenon, location in the social context, relation to the psychiatric disorder, and the social/psychiatric history of the syndrome.

A [videocast](#) of the lecture is available.

