

## Improving Health Outcomes in Diverse Populations: Competency in Cross-cultural Research with Indigenous Pacific Islander Populations

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### ABSTRACT

**Objective.** *There is a large disparity in health status between the indigenous peoples of the US Associated Pacific compared to any population in the USA. The research process that has been supported by US academic institutions and federal agencies has been limited in its ability to address the disparate health issues and may be part of the problem. We define culturally competent research and review approaches to developing competency in cross-cultural research with indigenous Pacific Islander populations.*

**Design.** *This is a descriptive review of the investigators' experience in the Hawaii MEDTEP Center experience and of the experience of others conducting research with the indigenous people of the Pacific Islands.*

**Results.** *Culturally competent cross-cultural research with the indigenous peoples of the Pacific requires an understanding and application of indigenous peoples' paradigms of health, knowledge, science, and research. It is not sufficient to train more indigenous Pacific Islanders to do more Western-style research. Unraveling the complex health situation and determining the changes that need to be made is dependent on the dominant culture engaging the indigenous Pacific populations in a way that bridges cultural paradigms.*

**Conclusion.** *Positively affecting the disparity of health in the indigenous populations of the Pacific is, in part, dependent on employing an indigenous-peoples-centered model of research. The model can have application to the study of indigenous peoples in other parts of the world.*

**Keywords:** cross-cultural, health services research. Pacific Islands, ethnic, participatory research

### INTRODUCTION

As researchers working to improve the health status of indigenous US Associated Pacific Island populations (Native Hawaiians, American Samoa, Common Wealth of the Northern Marianas, Republic of Belau, Federated States of Micronesia, Republic of the Marshall Islands), the struggle to perform useful research in a culturally competent

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manner continues to be a personal and academic struggle. Many of the indigenous Pacific Island populations have been adversely affected by Western researchers. Adverse outcomes for indigenous peoples have been linked to specific projects such as the US Nuclear Weapons Pacific testing program.<sup>1-3</sup> Additionally, years of research with indigenous peoples has done little to improve their health status and has fostered distrust towards research.<sup>4,5</sup> Being a highly trained researcher of color, or an indigenous Pacific Islander who has lived with and knows the language, does not automatically confer the ability to carry out a research process which is culturally appropriate, meaningful, or relevant to that Pacific community.<sup>6,7</sup> We believe there are better methods and approaches to research which will increase the acceptability, utility, and accuracy of health services research with indigenous peoples of the Pacific. These ideas will be discussed as a means to develop competency in cross-cultural research with indigenous Pacific Islander populations. These approaches have applications to indigenous peoples elsewhere in the world.

## BACKGROUND

Health services research is one avenue that is being utilized to improve health status. The indigenous peoples of the Pacific have had, and continue to own, the most disparate health status and outcomes in comparison to any population in the USA.<sup>4,8</sup> There has been inadequate attention paid to this disparity, and the research that has been done to improve health status and outcomes has had a negligible impact.<sup>9</sup> The authors have worked with many Pacific Island peoples, but most extensively with the Marshall Islanders. (Dr Riklon is Marshallese.) Over the past 50 years the Republic of the Marshall Island (RMI), a nation of 60,000 people, has been subjected to health researchers from numerous US academic, medical, public health, and federal agencies. There have also been health researchers who represented international health agencies and academic institutions from industrialized countries other than the USA. The dismal health situation in many US Associated Pacific Countries (USAPC) has been well documented, most recently by the US Institute of Medicine in 1998.<sup>4</sup> When compared to any population in the USA, the health indicators in several of these countries are significantly worse. For example, the RMI and Chuuk State have infant mortality rates 3-4 times that of the USA. Longevity is 15-17 years less than the US average in several of these Pacific countries.<sup>4,10</sup> The health indicators in the RMI have remained poor; the research process continues to be regarded with great suspicion, research results are not utilized, many interventions based on the research do not work, and the disease and illness burdens remain high.

The disenchantment and resentment towards the Western research process is not unique to the RMI. These sentiments about research have been made explicitly by Native Hawaiians and the Maori of New Zealand.<sup>11-16</sup> The indigenous American people have also expressed similar sentiments.<sup>17,18</sup>

Appropriate health services research could be a key factor contributing to a better understanding of the health situation and the causative/associated determinants of health in these Pacific jurisdictions. It is the authors' belief that the research is generally not undertaken in a culturally competent manner, which renders it almost useless and even harmful. There must be a fundamental paradigm shift in the process and context through which research is carried out if we truly wish to improve health status and outcomes. Central to this alternative research paradigm is the notion that a culturally competent approach must incorporate an indigenous people-centered approach.

## CULTURALLY COMPETENT RESEARCH

Cultural competency involves first understanding our own culture, biases, and values. Then we try to understand the reference culture and its values. Thirdly, we develop the



skills to manage a task in a constructive manner at the interface of both cultures.<sup>19</sup> This sequence can be applied to research. We examine our personal and institutional research culture/values/biases and develop an understanding of the research values and culture of the respective community. Finally, the research project is developed while maintaining respect for the reference culture and the integrity of the composite research process.<sup>20</sup>

The context and process through which the research takes place are important considerations. The context often determines the agenda and value system from which the researcher operates. It concerns itself with who pays for the research, whose interests the research is protecting, the intent of the research, and the motivation of the researcher or researching institution.<sup>21</sup> The process describes how the research is implemented and operationalized. Although most researchers are socially responsible, history tells us that self-interest, ignorance and non-altruistic motives for doing research with indigenous populations exist. A culturally competent approach addresses both context and process issues. Notably, a culturally competent research process can serve to mitigate and prevent the effects of a negative or ignorant context.

### THE WESTERN RESEARCH CULTURE

What are our personal and institutional research values? Research can be defined as increasing knowledge (facts, relationships, causation, and associations) through systematic inquiry and thereby satisfying curiosity and longing for knowledge.<sup>22</sup> As Tolstoy wrote, 'The impulse to seek causes is innate in the soul of man' (p 1).<sup>23</sup> The research process, with which we are familiar, is a Western construct. Western research takes roots from a reductionist, Cartesian operational framework, whereby an idea or system is understood by disaggregation of the whole into what are thought to be its component parts.<sup>24</sup> This system of scientific inquiry is inherent in the US modern scientific culture, and is maintained by academic, business and government institutions.

We operate from a particular perspective as Western researchers. Many researchers feel that there is a fundamental right to pursue and acquire knowledge. Governmental boundaries of such pursuits are imposed only if certain knowledge may jeopardize national security or may unnecessarily infringe on an individual's right. Secondly, researchers feel that if their research is undertaken with a strict scientific protocol then the process renders a neutral, objective, and acultural product.<sup>5,6</sup>

### THE PACIFIC ISLANDER RESEARCH CULTURE

Many indigenous Pacific peoples do not believe that there is a fundamental right to acquire knowledge.<sup>25-27</sup> Historically, knowledge was a protected entity in many of the indigenous Pacific Islander cultures. In the absence of a written language, knowledge was passed through the oral tradition—recited exactly and repeatedly to maintain its essence within the culture. Those individuals with skills and the responsibility to be the keepers of the oral tradition were given that task.<sup>8</sup> Knowledge was hierarchically divided into knowledge needed for daily functioning and more specialized knowledge. Specialized knowledge, derived from indigenous science (such as navigation, healing, battle tactics, fishing, canoe building), was given only to certain individuals. These individuals were responsible for maintaining its accuracy, protecting its content, and developing that art for the community. This method of passing knowledge conferred a particular power structure in the community, ensured responsible handling of knowledge, defined positions and tasks, conferred specialization of function, and maintained the integrity of the community. In general, knowledge was not freely exchanged and special knowledge was not permitted to be exchanged.



### UNDERSTANDING THE CULTURAL CONTEXT OF RESEARCH

Western scientific inquiry can conflict with non-Western views of cause and effect, and non-Western paradigms of knowledge.<sup>28,29</sup> Application of a monocultural research/scientific methodology may be regarded as insensitive or may be ignored. The information that is produced from such research may not be valued and/or rejected. More significantly, a lack of understanding of differences in cultural paradigms may result in misinformation and inaccurate data.

The research question and output is value laden and may not be regarded as beneficial to that community. Research describing the weaknesses and maladaptive behavior of a Pacific culture in Western systems thereby causing 'poor' health outcomes, assumes that the Western health systems are appropriate. Research directed at uncovering cultural norms that would allow easier business exploitation, such as that used by the US tobacco companies, is unethical.<sup>30</sup> Knowledge without an appropriate and sustainable application may not be helpful to the community.

Research performed in a monocultural context is thought to be neutral, objective and acultural. However, very little research about populations with disparate health indicators is performed in a monocultural context. Research that is undertaken in a cross-cultural manner in indigenous Pacific Islander communities should account for indigenous Pacific cultural/operational paradigms about science, acquisition of knowledge, processing knowledge, time, individual vs group priorities, and how the world works. The frequency and intensity of cultural differences between those of Pacific Island groups and the majority continental US population may be greater than with any other US population because many of the indigenous Pacific peoples are not immersed in the day-to-day living of the dominant culture of the USA. Ultimately, it can be asked: why should reductionism be held as an infallible means of scientific inquiry? Two quotes bring perspective on this issue:

The approach to research is influenced by the view of the world into which one has been raised and nurtured. It is about values, beliefs, customs, philosophies, ideologies and culture. (p 3)<sup>31</sup>

We cannot rid ourselves of the cultural self we bring into this field, any more than we can disown the eyes and ears and skin through which we take our intuitive perceptions about the new and the strange world which we have entered. (p 165)<sup>32</sup>

An examination of the Health Services Research journal's mission statement and key values is instructive about the intolerance to other cultural research paradigms. The mission statement reads: 'To enhance knowledge and understanding of the ... outcomes of health services through publication of thoughtful, timely, rigorously conducted, state-of-the-art research and thinking.'<sup>33</sup>

The timely, rigorously conducted, state-of-the-art research and thinking are filtered through the Western paradigm. Such an application implicitly locks out any possibility of examining health service research from an indigenous-centered viewpoint. The key values of the HSR journal's are listed as: scientific integrity, methodological rigor, policy and practice relevance, timeliness, creativity, clarity of thought and clarity of expression.<sup>33</sup> The key values also speak to the dominant cultural interest and orientation. Regarding policy and practice relevance, one may ask 'Policy and practice relevance for whom?'

As a participant in the initial evaluation of the MEDTEP program, the lead author (N.P.) found that the external MEDTEP evaluating team was not ready to entertain different methods of carrying out research with indigenous Pacific Islander communities. The review team used the original definition of outcomes research, i.e. the study of outcomes of medical care for patients already in the medical care system. The evaluating



team's focus was in understanding what outcomes research projects were underway, the quantity of publications which had been produced, and how each of the projects measured up to Western scientific research rigor. It was difficult to explain the barriers created by Western research in a cross-cultural context, the longer time frame required, as well as the variance on the research paradigm. Conducting outcomes research as initially defined without engaging the community was not possible, and the research paradigm was changed as described below.

## SOLUTIONS

In order to develop more culturally competent cross-cultural researchers and research institutions for the indigenous Pacific peoples, the dominant culture institutions funding, promoting, and undertaking cross-cultural research need to understand the inappropriateness of their ideological research base in certain aspects. Whereas the dominant culture prescribes what research is valid, there must be proactive support of indigenous-centered research by the dominant culture's scientific, government, and research institutions. Meaningful research in Pacific Island communities will be difficult. The scientific, research and government agencies are the gatekeepers for funded research, and the dissemination of publications that result from the research.<sup>34,35</sup>

Who does the research and the process by which the research is done is important. Training and incorporating more indigenous Pacific Islander researchers into their own community research is essential.<sup>36-38</sup> Mandating that all indigenous Pacific community research be done via the participatory research model of research is essential. Training more indigenous Pacific Islanders to be excellent Western researchers is a partial solution, and a double-edged sword. Such training without the recognition, utilization, and integration of indigenous research/knowledge paradigms serves as a means to deceive the indigenous researcher and the community. There should be no doubt that the indigenous researcher's allegiance is to the welfare of the Pacific community. Indigenous researchers without such allegiance and cultural understanding may afford a greater access to the target communities, but probably will not be helpful in arriving at the long-term solutions. Ideally, the indigenous Pacific researchers will be able to effect meaningful change through bridging the differing cultural research paradigms.

The participatory model of research should be employed in every facet of cross-cultural research with indigenous Pacific communities.<sup>39-41</sup> This recommendation has come from several venues, but most recently from the 1998 US Presidential Task Force: Building Community Partnerships in Research. The sponsoring agencies for the Task Force included the Center for Disease Control, National Institutes of Health, Food and Drug Administration, Health Resources and Services Administration, Substance Abuse and Mental Health Services Administration, and the Indian Health Service. Although an extensive discussion of the methodology and usage of a participatory model are beyond the scope of this paper, the essential features of the participatory model include: community participation, accountability of the researchers and the community participants to each other, an equal power base between researchers and community members, and high ethical standards for the research. Such a model promotes trust. Notably, this model of research takes a long period of time to develop and promote. However, the outcome of research performed through this process will be relevant.

## CONCLUSION

The indigenous peoples of the US Associated Pacific have a greater disparity in health status in comparison to any population in the USA. The research process that has been supported by US academic institutions and federal agencies has been limited in its ability to address the disparate health issues and may be part of the problem.



Culturally competent cross-cultural research with the indigenous peoples of the Pacific requires an understanding and application of indigenous peoples' paradigms of health, knowledge, science, and research. This understanding must be turned into proactive support from US researchers, academic, and government institutions which undertake health research, and the financiers of such projects. Dominant-culture researchers following traditional paradigms can block possibilities to perform research with indigenous Pacific peoples in a more culturally competent manner.

Training more indigenous Pacific Island researchers who are well versed in their own cultural paradigms of knowledge and research, who have the skills and knowledge of Western scientific inquiry, and who can bridge the science of both the dominant and the Pacific culture is necessary. Finally, the participatory model of research is essential to every research project undertaken with the indigenous peoples of the Pacific.

Unraveling the complex health situation and determining the changes that are needed depend on the dominant culture engaging the indigenous Pacific populations at their level. The US scientific institutions should question, evaluate, and change their research processes in the Pacific. Positively affecting the disparity of health in the indigenous populations of the Pacific is, in part, dependent on such a proactive stance. An indigenous-peoples-centered model of research is crucial. The lessons learned in this research process can also be used by others conducting research in indigenous peoples in other parts of the world.

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