

# UC Berkeley

## UC Berkeley Previously Published Works

### Title

Racial Disparities in Healthcare: Are We Prepared for the Future? Brief Report on Emergency Medical Services in a County Health Department in California

### Permalink

<https://escholarship.org/uc/item/3vv8x5x5>

### Journal

ISRN Emergency Medicine, 2012

### ISSN

2090-5637

### Authors

Coelho, Ken Russell  
Nguyen, Virginia T

### Publication Date

2012-09-06

### DOI

10.5402/2012/340273

Peer reviewed

## Research Article

# Racial Disparities in Healthcare: Are We Prepared for the Future? Brief Report on Emergency Medical Services in a County Health Department in California

Ken Russell Coelho<sup>1</sup> and Virginia T. Nguyen<sup>2</sup>

<sup>1</sup> Department of Psychology, University of California, Berkeley, CA 94720, USA

<sup>2</sup> School of Public Health, University of California, Berkeley, CA 94720, USA

Correspondence should be addressed to Virginia T. Nguyen, vtbnuyen@mednet.ucla.edu

Received 21 August 2012; Accepted 6 September 2012

Academic Editors: C. C. Chang, W. Kloeck, A. Pazin-Filho, and M. Pocar

Copyright © 2012 K. R. Coelho and V. T. Nguyen. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Demographic trends indicate that ethnic minority populations constitute 25 percent of the current population and will be the majority of the United States population in 2050. Forty percent of the demographic in California are ethnic minorities making encounters between healthcare workers and patients from different cultural backgrounds commonplace. Research also indicates that ethnic minority patients are more likely to utilize emergency medical services as an entry point into the health system due to lack of medical insurance and access to primary care. Our qualitative study attempts to understand health disparities through focus groups with 76 patients and their feedback on the use of emergency medical services. Patients revealed challenges in both service provision and delivery of emergency medical services. Implications include the development of cultural competence training programs and the selection of diverse groups of county emergency medical first responders in California.

## 1. Introduction

Ethnic minority groups are moving towards being a majority of the population in the United States. Recent demographic trends indicate that ethnic minorities constitute 25 percent of the current population and in fact will be the majority of the US population in 2050 [1]. Particularly, 40.5 percent of California's population embodies people of nonwhite descent and 12.4 million of the state's 31.4 million people speak a language other than English as their primary language [1]. As a result, encounters between healthcare workers and patients from different cultural backgrounds are rapidly becoming commonplace.

Although US ethnic minority demographics are changing, disparities in the healthcare system still exist. Firstly, research reveals that a large majority of American physicians lack the information to understand how culture influences the clinical encounter and the skills to effectively bridge potential differences in communication [2]. Secondly, ethnic minority Americans represent the unemployed, the under-educated, the poor, and those from lower socioeconomic

status groups which have been correlated with poor access to health care services and disproportionate health outcomes [3–5]. Thirdly, empirical findings document that ethnic minority patients receive substandard healthcare services even when income and insurance are the same as their white counterparts [6]. Furthermore, linguistic and cultural barriers, stereotyping, biases and uncertainty exhibited by healthcare providers within the clinical encounter compounded by time pressure adversely effect access to care [7].

In an effort to address disparities, the US healthcare system has improved efforts to enhance physician cultural competence; cultural competence modules have been incorporated into physician training programs and medical student curriculum. However, evidence suggests that ethnic minority patients are more likely to utilize emergency medical services in the first instance, hence first entry point into the healthcare system for reasons. Firstly, such patients are more likely to not have access to health insurance coverage and secondly are more likely to access emergency medical services due to ease of accessibility and common knowledge on the use of 9-1-1 emergency medical services [8–10].

Ethnic minority patients are thus more likely to use emergency medical services than other traditional forms of services. However, evidence also suggests that the quality of services rendered by emergency medical services may lack quality and adequacy for ethnic minority patients as documented in a research study, Hispanic patients reported inadequate analgesia in an emergency department after long bone fractures, in comparison to white patients [11]. African American patients also reported being offered thirty-seven percent fewer cardiac catheterizations after myocardial infarctions than their white counterparts [12].

The aim of this brief study is to understand the patient's perception on the use of local emergency medical services and to document the extent to which emergency medical first respondents meet the increasingly diverse needs of ethnic minority groups in a local county, and the degree to which cultural competence is incorporated into service delivery.

## 2. Methods

**2.1. Participants.** 76 patients participated in the study. Demographics comprised 11.7% African American, 55.2% Asian (36.1% Vietnamese, 31.9% Laotian, 17.1% Mien, and 14.9% Khmu), 14.1% Hispanic, 7% Middle Eastern, and 11.7% Russian.

**2.2. Measures.** Interview guide employed assessed patient perception of emergency medical service in a focus group.

**Local Emergency Medical Services.** Questions on the interview guide ranged from language usage and length of residence to medical and cultural practices used by emergency medical respondents to emergency situations. Example of questions can be found in the appendix and were adapted from sources of literature to ensure face validity. Medical interpreters were utilized to enhance comprehension.

**2.3. Procedure.** Ethnic minority patients' perceptions of emergency medical services in the county were assessed through conducting a series of seven focus groups, each group session was conducted in different languages. Each group interview lasted for 60 minutes and included participants from varied ethnic groups, namely, African American, Asian (Vietnamese, Laotian, Khmu, and Mien), Hispanic, and Russian. In addition to 76 patient participants, each group also included a facilitator and a note-taker. The facilitator ensured the participation of all the patients in the group's interview process and facilitated the group's discussion on the use of local emergency medical services. All participants' responses were recorded by the note-taker. The focus groups were conducted in the language of the specific focus group and interpreter services were provided when necessary. This format served a purpose to have each patient express their perception and evaluation of the service provided by emergency medical services in their local area. The questions utilized for the group interviews were reviewed by public health opinion leaders and were screened for accuracy, reliability and validity (see appendix).

## 3. Results

**3.1. Patients' Perceptions of Emergency Medical Services.** Patient participants outlined specific challenges with their use of emergency services. Marked cultural differences in religion and beliefs, language barriers, varying definitions of emergency, or crises and cultural medical practices were all areas of concern for participants. Patients were also asked to provide feedback to be shared with emergency medical service workers. Responses have been summarized in Table 1.

Patient participants engaged in a critical discussion especially when they were asked whether emergency medical respondents were aware of their cultural practices. For example, a large majority of African American patients expressed that emergency medical service workers needed to spend more time to speak to them on an individual basis and to treat them with more respect and dignity. Vietnamese patients expressed that emergency medical service workers should also be aware that there were cultural variations in the manner in which they expressed their need for emergency services in verbal and nonverbal communication. For example, in emergency situations, high volume vocal tones or a choking voice and trembling or shaking would indicate an emergency. Cultural practice included approaching the male authority figure at home and should be approached for medical decision making. Laotian, Khmu, and Mien patients also felt that workers were not attuned to their cultural communication styles in emergency situations; they indicated the use of pictures, nonverbal gestures and body movements to communicate an emergency in a situation. Authority figures also sought out help in an emergency situation and only men and Buddhist monks could touch bruises or wounds on the body. Differences in communication styles, languages, and religious practices were also areas for improvement for first responders in emergency medical situations. While most participants expressed communication, language, and traditional practices as challenge areas for first responders, the Russian community expressed fear of the police and authority figures in general, which may perhaps reflect the former Soviet Union's sociopolitical system of punishment for communicating and speaking up, unconditional authoritative power, and lack of civil rights.

When participants were asked about specific feedback for emergency medical workers, Russian participants indicated that they would favor being asked by workers whether they required more time or assistance more often than not. Vietnamese participants expressed the need for workers to make more efforts to identify and inform the perceived head of the family or household about the medical condition in the first instance, that is, the male authoritarian figure, the husband, or the oldest son in the household, before informing the patient. Patients expressed that this helped alleviate trauma or psychological shock to the patient. Laotian patients expressed a preference for workers which looked like them. The preference came out of a discussion indicating ease of language interpretation to reduce communication barriers. Hispanic patients also indicated a preference for bilingual workers for ease of understanding family and religious views in relation to the health context. African American patients

TABLE 1: Patient perception, language, and definitions of emergency in ethnic minority groups with the emergency medical service challenge areas.

Ethnic minority groups	Patient perception	Language	Some examples of patient definitions of emergency	Some examples of emergency medical service challenge areas
African American	“Religion is an important part of the community”	English, monolingual	“Injury or situation that needs immediate professional help”	“EMS workers should listen to each of us to learn more about our culture”
Lao, Khmu, Mien	“Religion is a community of culture”	Laotian, monolingual	“Bleeding, fainting, broken bones, body aches, heart attack and stroke”	“1st generations use herbs when sick instead of drugs” “2nd/3rd generations use traditional practices only after attempting western medical practices”
Hispanic	“Important to community”	Spanish, monolingual	“Heart attack, breathing difficulties, loss of consciousness, bleeding, intense pain, self-care incompetence”	“Cultural healers treat ailments with teas and herbs for different ailments, praying to virgin Mary and saints for healing”
Russian	“Food, tradition, funeral arrangements are important parts of culture”	Russian, monolingual	“Falls, stroke, heart attack, breathing difficulties, kidney stones, high blood pressure, migraine headaches”	“The use of warm pads and heating ointments instead of ice.” “When sick, we prefer room temperature water and no ice/cold water”
Vietnamese	“Religion & Ancestor worship is important”	Vietnamese, monolingual	“Life or death, health issues, breathing difficulties, sudden sickness”	“ <i>Scratch of wind</i> practice, skin slicing, poking to release blood, herbal alcohol, steaming and <i>Praying to the Spirit</i> .”

also indicated that emergency workers should treat them with more respect and dignity and to make efforts to reduce prejudice during their interaction with them. A major fear amongst them was that workers treated them differentially, based on their respective neighborhoods or communities.

#### 4. Discussion

While it is recognized that ethnic minority patient populations are more likely to utilize emergency medical services than the traditional healthcare encounters, limited research on this healthcare context has been attempted. While cultural competency as a core area of competence for healthcare clinicians and providers can be complex to understand, the problem of health inequities and disparities in the quality of care for ethnic minority patients’ continues to persist. This study focused on ethnic minority patients’ perceptions of local emergency medical services demonstrated knowledge gaps and disparities in healthcare. Emergency medical services worker’s cultural assumptions, verbal and nonverbal barriers, and varying views and definitions of emergency situations further influence quality of care and wide range of health disparities. Although a majority of patients demonstrated basic working knowledge of the US healthcare delivery system and recognized social, and cultural differences between groups, they also expressed that cultural dimensions of healthcare should be incorporated into service delivery. All patients expressed higher likelihood of compliance with the healthcare system, if religious, social and cultural attributes

were incorporated into service delivery during emergency situations.

#### 5. Limitations

Our study does not come without limitations. Firstly, sample size for the study was relatively small and, by definition, a convenience sample. Secondly, sample was not representative of the US ethnic minority composition. Thus, care must be taken when generalizing the results to the entire population. Future work should focus on exploring the dimensions of cultural competence in emergency medical services and innovative recruitment methodologies for enhancing workforce diversity. Development of a pipeline for professional training of healthcare workers should be targeted through mentorship of students in the health professions.

#### Appendix

##### A. Focus Group Interview Guide

- (1) What is the predominant language in your community?
- (2) How long have most people been living in Contra Costa County?
- (3) How long have you (or your family) lived in the area?
- (4) How long have you been in America? Are you bilingual or monolingual?

- (5) Is religion an important part of your community?
- (6) In a medical crisis, where do you go? Who do you call?
- (7) How do you define a medical crisis?
- (8) Have you ever called 911 previously, do you know about and feel comfortable using 911 to call an ambulance in case of an emergency?
- (9) What about the Contra Costa Crisis Center?
- (10) Are there specific things you would like ambulance workers to know about your community in general?
- (11) Do you or your community have medical practices that are not known about or not understood by ambulance workers? Please tell me about those practices.
- (12) Are there important cultural practices, which the ambulance workers do not understand? Such as:
  - (a) methods of communicating,
  - (b) nonverbal gestures,
  - (c) authority figures,
  - (d) language use,
  - (e) religious practices,
  - (f) medical practices.
- (13) Is there anything else you would like us to know before developing training for ambulance workers on increasing cultural competency?

- [5] E. Z. Oddone, R. D. Horner, T. Diers et al., "Understanding racial variation in the use of carotid endarterectomy: the role of aversion to surgery," *Journal of the National Medical Association*, vol. 90, no. 1, pp. 25–33, 1998.
- [6] S. G. Stolberg, "Race gap seen in health care of equally insured patients," *The New York Times*, A1, A34 pages, 2002.
- [7] B. D. Smedley, A. Y. Stith, and A. R. Nelson, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, National Academics Press, Washington, DC, USA, 2003.
- [8] M. Tervalon and J. Murray-García, "Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education," *Journal of Health Care for the Poor and Underserved*, vol. 9, no. 2, pp. 117–125, 1998.
- [9] I. SenGupta, "Increasing cultural competency and developing standards: plenary panel," in *Proceedings of the National Managed Care Congress Inaugural Forum on Reducing racial and Ethnic Disparities in Health Care*, Washington, DC, USA, 2004.
- [10] J. L. Hargraves, "The insurance gap and minority health care, 1997–2001," *Tracking Report*, no. 2, pp. 1–4, 2002.
- [11] K. H. Todd, N. Samaroo, and J. R. Hoffman, "Ethnicity as a risk factor for inadequate emergency department analgesia," *The Journal of the American Medical Association*, vol. 269, no. 12, pp. 1537–1539, 1993.
- [12] J. Chen, S. S. Rathore, M. J. Radford, Y. Wang, and H. M. Krumholz, "Racial differences in the use of cardiac catheterization after acute myocardial infarction," *The New England Journal of Medicine*, vol. 344, no. 19, pp. 1443–1449, 2001.

## Acknowledgments

Authors would like to acknowledge mentorship and financial support from the Contra Costa County Health Department and Health Careers Connection (<http://www.healthcareers.org/>), a nonprofit organization in Northern California providing opportunities in public health. There is no potential conflict of interest, including financial interests, relationships, and affiliation, relevant to the subject of paper in any way. No other funding was sought in the creation of this work.

## References

- [1] U.S. Census of Population and Housing, *2001: Summary Population and Housing Characteristics: Indiana*, Government Printing Office, Washington, DC, USA, 2002.
- [2] M. Kagawa-Singer and S. Kassim-Lakha, "A strategy to reduce cross-cultural miscommunication and increase the likelihood of improving health outcomes," *Academic Medicine*, vol. 78, no. 6, pp. 577–587, 2003.
- [3] M. Lillie-Blanton and T. Laveist, "Race/ethnicity, the social environment, and health," *Social Science and Medicine*, vol. 43, no. 1, pp. 83–91, 1996.
- [4] S. Saha, J. J. Arbelaez, and L. A. Cooper, "Patient-physician relationships and racial disparities in the quality of health care," *American Journal of Public Health*, vol. 93, no. 10, pp. 1713–1719, 2003.





**Hindawi**  
Submit your manuscripts at  
<http://www.hindawi.com>

