Appendix B-4

Communication, Healthcare Disparities and Quality Healthcare (Gibbons)

QUALITY, COMMUNICATION AND HEALTH DISPARITIES: AN ANALYTICAL BRIEF

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INTRODUCTION

In 1984, the US Department of Health and Human Services released a report on the health of the nation, entitled *Health, United States, 1983*.(1) The report documented that while the overall health of the nation showed significant progress, major disparities existed in "the burden of death and illness experienced by Blacks and other minority Americans as compared with the nation's population as a whole.

In response to the disparities identified in the report, the Secretary of DHHS established a Task Force on Black and Minority Health--the first time that the U.S. government formed a group of experts to conduct a comprehensive study of minority health problems. In 1985 release of the Secretary's Task Force Report on Black and Minority Health significantly raised awareness of the disparate health of the country's minority groups as compared to the majority white population(2).

Fifteen years later Friscella published a paper entitled "Inequality in Quality"(3) While by no means the first person to call attention to the issues of healthcare quality and healthcare disparities, he did for the first time in a high profile forum, call attention to these, as issues of *organizational* quality improvement.(3) Fiscella further posited that national efforts to eliminate racial and ethnic disparities in healthcare and national healthcare quality improvement initiatives represented two inseparable components of high-quality healthcare.(3)

Roughly during this time period the Institute of Medicine released the first of several reports highlighting and summarizing the scientific evidence surrounding issues of disparities and various dimensions of health care quality(4-8). In addition,

philanthropic and advocacy organizations including the Commonwealth Fund, The Kaiser Family Commission, the Kellogg Foundation, the Robert Wood Johnson foundation and the California Endowment all either began or further increased their commitment to major initiatives designed to address issues of disparities and health care quality(9).

Although efforts to understand and eliminate disparities have emerged, the magnitude of the problem, complexity of the causal pathways and the intransigence of intervention efforts, are far more significant than most people ever expected(4). Indeed a complete and comprehensive understanding may require, at a minimum, a sophisticated level of insight in the areas of culture, communication, theories of health behaviorism, health services organization and management, healthcare access, population dynamics, medicine, standards of clinical care, bias/prejudice, epidemiology, biology, pathophysiology, molecular genetics, US history and national politics!

The purpose of this paper is not to outline these disciplines as they relate to disparities, but rather to present a brief analytic overview of the scientific evidence linking the areas of healthcare quality, communication and disparities. In so doing it is imperative that the discussion begin with a few points of clarification, to help ensure a common frame of reference among all readers.

It is imperative at the outset of this document to define key terms used herein. Despite the lack of a concise standard definition, cultural competence in healthcare has generally come to be defined as the ability of systems to provide care to patients with diverse values, beliefs and behaviors, … to meet patients' social, cultural, and linguistic needs(10). To be sure, language barriers are related to cultural competency, and poor

communication is a critical barrier to achieving cultural competency(10). Still proficient communication and functioning within the context of an alternate culture involves far more than language proficiency.

For similar reasons, conceptual and operational distinction must be maintained between healthcare access and healthcare quality. Healthcare quality is the broader construct in which appropriate access to needed healthcare is a critical element. In the literature, both language profieciency and literacy have been used synonymously with acces. These terms will be discussed in further detail below. In brief however, like cultural competancy, healthcare access is the broader term encompassing several important domains including insurance status, language preference, literacy and geographic proximity to healthcare services. The duration of this paper will outline the relationships between healthcare quality, language barriers and healthcare disparities.

HEALTHCARE QUALITY AND LANGUAGE

Extent of scientific investigation: An extensive literature base exists examining many facets of the complex relationship between healthcare quality and language. Published recognition of a relationship between communication and a good physician dates at least to the time of the Greeks.(11) Thomas Gale credits Hippocrates as outlining the following essential qualities of a good surgeon;

> …They must be bold and without fear in such cases as are without peril and whereas necessity requires. Also in cures that be doubtful, not to be rash and hasty, to be gentle and courteous toward the sick patient, to be friendly and loving toward those of his profession. Also wise and circumspect in prognostications. Last of all he must be chaste and temperate of body, merciful toward the poor and not greedy of money.(12)

The scientific awakening of the late 19th and 20th centuries, with its focus on bacteriology and scientific investigation cause a shift away from a emphasis on

communication with a patient, to that of understanding the pathophysiology of the patient.(11) It was largely not until the 1970's that substantial research interest in communication between doctors and patients began to redevelop.(13) This renewed interest is in part due to the increasing realization that despite many sophisticated technologies for diagnosis and treatment, communication still remains the primary tool through which physicians and patients exchange information(13) feelings, expectations and intentions(14).

Much of the "early", pre 1990, research came from European (British, Dutch and American) studies(13) with relatively little work conducted in other populations. The medical and communication models originating with these traditions considered the ideal doctor-patient relationship as paternalistic with the patient passively receiving and obeying medical instructions(13;15) Investigators studied the technical or medical competency aspects of the doctor-patient visit, the degree to which the physician responded to nonsomatic or psychosomatic issues and the degree to which an open, secure and workable relationship was established. The studies revealed that a high degree of variability regarding the provision of quality care exists among providers, and that approximately 70% of the variability could be related to communication factors during the visit.(15) Interestingly, the *relationship* of practice variability to quality care has been questioned in a minority of publications (16), however the *fact* that significant variability does indeed exist, is not contested.

Diagnostic testing and drug prescribing habits of physicians have also been evaluated in relation to quality of care and language. Similar to the technical quality

studies, these studies reveal great variations in testing habits of physicians even in the same medical setting.(15;17)

Other researchers have studied the motives of doctor-patient communication in relation to quality. Provider communication motives have been defined as instrumental or socio-emotional. Instrumental communication is communication that is focused on so called "cure" aspects of treatment (i.e. signs, symptoms, tests, treatments, side effects). Socioemotional communication is that communication that is focused on the so called "care" oriented behaviors (i.e. fellings, emotions, daily functioning, coping).(13) Most of the communications and health quality literature has focused on instrumental communication and particularly the information giving and seeking behaviors of doctors. These studies suggest that the amount of information given during the medical visit appears to increase as patient expressions of questioning and concern increase.(13) Also, increased physician affective behaviors, including listening without interruption and use of first names, are associated with improved communication.

Both verbal and nonverbal communication have been investigated. Nonverbal communication is operationalized as tone of voice, eye contact, facial expressions, touch and physical distance. Unfortunately, no single systematic approach has been used to codify these interactions and thus conclusions derived from this literature are difficult.(13)

The study of the physician's vocabulary in the medical encounter is an area of active research. One study by Hadlow and Pitts demonstrated that common medical terms used by physicians and medical professionals are often misunderstood by

patients(18). The use of other forms of terminology including slang or cultural dialects etc. have not been evaluated in relation to healthcare quality.

The use of interpreters for individuals with alternate language dominance or preference has been evaluated. Studies have investigated the efficacy of professional vs. untrained interpreters, patient interpreter preferences, patient satisfaction and the ethical implications of various types of language interpreters (19-21). These studies recommend using indigenous workers as interpreters to improve the quality of healthcare delivered to both limited English proficient individuals and alternate language dominate individuals. However, given their limited availability, professional interpreters are an alternative, that is preferable to family members or other untrained individuals due to significant ethical problems and increased risk of interpretational errors with non-professional interpreters(19-21).

Another area of study related to vocabulary is that of health literacy. Health literacy is defined as the ability to read and comprehend health-related materials(22). The results of the National Adult Literacy Survey reveal that approximately 40 million Americans, fully 25% of the US population, suffers from inadequate literacy.(23) Williams et al found that eighty percent of English and Spanish speaking patients over the age of 60 were low literate(24), while still other studies document a disproportionate prevalence of low literacy among low-income, urban populations. (25)

Studies of low literate patients suggest that they are less likely to understand hospital discharge instructions or know essential information about diseases including, hypertension, diabetes and asthma(22). Low literate asthmatic patients are also less likely to know how to use their metered dose inhalers(22)

Many health literacy studies rely on the number of school years completed as the sole measure of literacy(22). However, many factors including English language proficiency and age are associated with health literacy. Measuring the number of years of school, measures education completed. Health literacy on the other hand reflects what was learned during those years and an individuals ability to comprehend new material(22).

Approximately 200 papers were published in the 1990's on the topic of health literacy. Most however focused on the gap between patient literacy levels and the required literacy levels needed to read most health materials.(26) Thus most interventions discussed in the literature suggest development and utilization of simplified health materials and visual aids or employing provider strategies to improve patient recall and understanding(26). Despite the plethora of studies in this area, an explication of possible mechanisms, other than adherence/compliance pathways, that detail how health literacy impacts health behavior and outcomes has been elusive(26).

HEALTHCARE QUALITY, LANGUAGE AND PATIENT OUTCOMES

Studies investigating the influence of language and communication on patient outcomes have largely been focused in three major areas- satisfaction, compliance, and physiologic outcomes. While the vast majority of the work has been in the satisfaction and compliance areas, each category will be briefly discussed below.

Patient Satisfaction: Patient satisfaction is by far the most studied of the outcome variables.(13;15) Many researchers and physicians have historically disparaged this literature largely on the presumed notions of a supposed patient ignorance of proper

medicine, a hypothetical tendency to be duped by medical charlatans with good bedside manners and a largely imaginary viewpoint that patients have a distorted view of what is important in medical care.(15) These unfounded and erroneous notions largely derive from the Eurocentric and paternalistic roots from which our current healthcare system is derived.

As alluded to above, studies of instrumental behaviors(27) and affective behaviors,(28;29) reveal positive associations between physician information giving, longer time spent with patients, physician use of patient first names and not interrupting, with greater patient satisfaction. On the other hand, persistent chart review during a visit, dominant or controlling language by the physician and physician touch, were all associated with lower levels of patient satisfaction.(30;31). These findings are of particular importance because most patients are very sensitive to these non-verbal messages and to inconsistencies between physicians verbal and nonverbal communication. These inconsistencies are often regarded as indicating a physicians "lack of genuineness" a critical characteristic of good communication.(13)

Patient compliance: The notion of compliance carries with it connotations of the same Eurocentric medical paternalism that has been demonstrated thought this paper. The term has been arduously rejected by some social psychologist because of its intimations that the "good" patient is supposed to do what the doctor says and that if for any reason, he or she does not, the patient is now labeled non-compliant or "bad", thereby ignoring the multitude of perfectly legitimate reasons or problems in the patients life that may have interfered or prohibited complete execution of medical instructions.(32) Patient compliance is, nonetheless, a widely used outcome often associated with quality of care.

The data relating to this outcome have been conflicting indicating both a positive and negative association between communication or language and compliance. A metanalysis by Roter demonstrated a weak association between enhanced communication and compliance. (33) A more recent study of follow-up after ER visits, suggested that patients with language barriers may be *less* likely to receive a follow-up appointment, but if given one, patients with language barriers are equally compliant as those without language barriers(34).

The term "adherence" is increasingly used to reflect the patient perspective. Adherence is defined as a collaborative effect of healthcare providers and consumers to achieve mutually agreed health goals(35). It is estimated that only 50% of patients in the general population are adherent to long-term medical regimens(36).

Although studies directly investigating adherence across racial and ethnic groups are few, some studies suggest that African-Americans and other special populations may have lower rates of adherence (36) as compared to Whites. Additionally, increased adherence is associated with patient satisfaction and increased physician affective behaviors(35;37).

Physiologic Outcomes and health services utilization: The literature detailing associations between communication and physiologic outcomes is limited. Similar to compliance, less physician controlling behavior during the visit, more expressions of affect and more information giving by the physician have been associated with improvement in blood pressure, glucose control and functional status (38;39). Additionally, a few studies have linked enhanced physician communication with health

services utilization parameters such as improvements in recovery from surgery, decreased utilization of analgesics and decreased hospital length of stay.(14;40)

Hampers et. al. published a study of language barriers and resource utilization that also included financial data. This study was conducted in a large urban Hispanic population with available interpreters. Language barriers were defined as a family English language proficiency level that posed a barrier to the treating physician. This study revealed that when doctor-family language barriers exist, patients experience higher charges ($38 per patient) due to more diagnostic testing and approximately 20 minute longer ER stays compared to similarly acute patients without family-doctor language barriers(41). Several other studies have documented similar results of poorer health, higher rates of hospitalization and higher healthcare costs among patients with literacy related language barriers.(23;26;42;43).

Among HIV patients, patients who report nonadherance to HAART and have lower health literacy rates also are more likely to have significantly lower CD4 cell counts and significantly less likely to have an undetectable viral load when compared with higher literate and adherent patients(44). Higher hospitalization rates have also been linked to low patient literacy(22).

The biologic mechanisms responsible for these observations have not been definitively characterized. Psychoneuroimmunological mechanisms and pathways generally described by social network theory have been hypothesized(14;38).

LANGUAGE, COMMUNICATION AND DISPARITIES

The scientific evidence documenting the existence of racial and ethnic disparities in health and healthcare is voluminous and largely unquestioned. Several excellent reviews are available providing a detailed discussion of this literature(2;45-49). To date the bulk of this literature has been descriptive in nature with much less experimental emphasis on elucidating causative mechanism and etiologies.(50) As etiological investigation has increased, healthcare quality is coming under increased scrutiny as a likely contributor to healthcare disparities(45;50). As consequence of this inquiry the impact of doctor-patient communication as a contributor healthcare disparities is being investigated.

In her book doctors talking with patients, patients talking with doctors, Roter hypothesizes three ways in which doctor-patient communication might be related to healthcare disparities. 1) disparate care may occur in the context of total ignorance. 2) Disparate care might be appropriate given the medical nature of populations of patients. 3) Doctors might be affected by the same biases and stereotypes that affect others in the population(14). The relative importance of these factors is hotly debated in the scientific and popular press and consensus does not appear near. With regard to the quality of the scientific evidence, a significant amount of observation and survey based evidence does exist suggesting a basis for each these hypotheses(13;14), however direct experimental evidence is minimal(45).

Fiscella conducted one of the few studies designed to specifically examine the effect of English fluency on health services utilization across racial and ethnic minority groups. This study revealed that healthcare utilization patterns for English-speaking

Hispanic patients did not differ from patters of non-Hispanic Whites. However Spanish-speaking Hispanics were significantly less likely than English-speaking Hispanics to have had a physician visit, mental health visit, or influenza vaccination. African-American patients exhibited significantly lower rates of influenza vaccination and a mental health visit after adjustment for predisposing, enabling and need factors(51).

A study by Cooper-Patrick et. al suggests that African-American patients experience shorter, more physician dominated, less patient centered visits than white patients(45). Other studies investigating the role of race/ethnicity and communication have largely been done in Eurocentric groups(45). While these studies do not include minorities of African, Caribbean or North American descent, they still generally demonstrate health related differences between European sub-groups and social classes(14;45). In our society, given the correlation between social class and ethnicity it is not surprising that doctor's treatment of patients in differing ethnic groups tends to parallel that for social classes. Negative stereotypes, bias and prejudices of disadvantaged populations likely affect the way doctors interact with these populations(45).

It is imperative at this juncture to emphasize that the relative lack of experimental evidence causally linking healthcare quality to disparities specifically, should not be construed as evidence of a lack of causal association. As in any new area of investigation, the appropriate studies simply have not been done. Thus while informed opinions may be developed, it would be premature to conclude that enhancing doctor patient communication is not associated with healthcare disparity reductions or health outcome improvements, particularly for minority populations.

CONCLUSION

As can be seen from this brief overview, an extensive literature exists examining several aspects of communication and health disparities. Despite this reality, this field of study is relatively young. Much of the work employs observational and non-experimental study designs and small sample sizes. The theoretic bases for possible interactions are largely unknown and investigations of many important questions within the field simply have not been done. Having said that, the preponderance of the evidence combined with an enhanced awareness of the existence of racial and ethnic disparities and the reality that the US population is becoming increasingly less homogenous is fueling considerable new interest and research in this and several related fields.

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