





## Abstract

Carmona, Josué., Simplifying Medical Terminology In Interpreted Medical Encounters among Hispanics: A Key to Better Self Care. Master in Public Health (Health Interpreting and Health Applied Linguistics), May 2009, 30 pp., bibliography, 10 titles.

This article suggests that a study is needed to analyze the level of register in speech or text used by physicians and other health care providers in their communication with patients. The author also questions whether the interpretation of such speech in the patient's language at the same register that is uttered by physicians is understood by the patient. While proposing such a study, the author also questions interpreters' professional preparation and the strict conduit model where the interpreter is to repeat everything is said as it is said. The study is proposed because of a gap in the literature have been found in these areas.

SIMPLIFYING MEDICAL TERMINOLOGY IN INTERPRETED MEDICAL  
ENCOUNTERS AMONG HISPANICS: A KEY TO BETTER SELF CARE

Josué Carmona B.A.

APPROVED:

---

Major Professor

---

Committee Member

---

Committee Member

---

Department Chair

---

Dean School; of Public Health

SIMPLIFYING MEDICAL TERMINOLOGY IN INTERPRETED MEDICAL  
ENCOUNTERS AMONG HISPANICS: A KEY TO BETTER SELF CARE

PROFESSIONAL PAPER

Presented to the School of Public Health

University of North Texas

Health Science Center at Fort Worth

In fulfillment of the Requirements

for the Degree of

Master of Public Health

by

Josué Carmona, B.A.

Fort Worth, Texas

May 2009

## TABLE OF CONTENTS

	Page
Chapter	
1. INTRODUCTION .....	1
2. STATUS .....	3
3. THE MEDICAL ENCOUNTER PER SE AND THE BALANCE OF POWER .....	8
4. THE ROLE OF THE MEDICAL INTERPRETER: TRADITIONAL AND ACADEMIC VIEWS vs. THE REALITIES OF THE PRACTICE.....	10
5. THE PREPARATION AND PERFORMANCE OF THE MEDICAL INTERPRETER.....	13
6. PHYSICIANS AND INTERPRETERS WITH THE SAME PURPOSE.....	16
7. CONCLUSION.....	18
REFERENCES.....	20

## CHAPTER 1

### Introduction

The 2000 United States Government Census shows that the linguistic diversity in our nation has been increasing (Dysart-Gale, 2005). The number of Americans who speak a language other than English has increased from 31 million to 47 million and the number who report speaking English “less than very well” grew from 14 million to over 21 million (Dysart-Gale, 2005). This language shift within the U.S. population directly influences hospitals and professional health provider organizations, which experience a large influx of non-English speaking patients, most of whom are Spanish speakers (Kuo & Fagan, 1999). Nationally, increasing numbers of physicians are encountering Latino patients with limited English proficiency (LEP) and limited knowledge of how to communicate with the physicians (Burbano, Stevens, & Hampers, 2003). Interpreters are called on to bridge the gap in communication.

Many hospitals rely on in-house language lists that might include Spanish-speaking housekeepers or cafeteria workers (Hurtado, 2006; Pochhacker & Kadrack, 1999). This dynamic, forced by the population growth of Hispanic and other minorities, as well as a gap in the review of literature compels the suggestion of a study as to whether or not the communication between doctors and patients when mediated by an interpreter is effective considering the level of language and terminology used. Such a study would grant a look into the interpreter’s professional preparation in terms of ethical rules and knowledge of the profession so to see if the interpreter is able to carry out the task with an acceptable level of proficiency and provide a meaning understandable by the patient (Bower, 2004).

The study could investigate whether or not the interaction between physicians and interpreters can be considered collaboration on behalf of the patient, a concept that challenges the traditional notion of the interpreter as purely a conduit of communication. Medical interpreters are not judiciary interpreters whose environment are adversarial and are not cooperative at all. Judiciary interpreters by the nature of the environment where they work cannot and should not take sides. Defendants, respondents, accusers, plaintiffs, witnesses, etc., have advocates in court; these advocates are attorneys and prosecutors who are there to further their client's cause and purpose. In court, interpreters are truly conduits. If they play any other roles, these are inherent and inseparable to the interpretative action, but they do not and should never play the role of advocates. The medical interpreter's natural goal is to get the patient well. The role of advocate in medical interpretation comes as a natural one.



## CHAPTER 2

### Status

In the United States the language barrier poses a severe obstacle in the communication between physicians and patients in the monolingual Latino community (Hudson, 2004). The same can be said in regards to other ethnic minorities (Hudson, 2004). This language barrier may be aggravated by the use of medical terminology or text. The arcane language physicians, hospitals and others use to communicate both verbally and in writing cause problems for many patients and not just recent immigrants (Hudson, 2004). The literature review in some aspects is very comprehensive. However, there is a gap and this gap is the analysis of a very specific aspect of the interpreted medical encounter, namely the level (register) of language (text) used by physicians while talking to their patients, and how interpreters manage the reception and transmission of such language to the patient. Looking at this issue from a different angle, patients are facing a double discordance in the language, first the language itself, and second the medical terminology. An estimated 90 million Americans, nearly half of all adults in this country, can not understand the complex language used in the health care delivery (Hudson, 2004).

Practical data collected in a study such as the one being proposed could shed light as to the degree to which physicians use medical terminology while attending their limited English proficient patients. Monroe asserts the lack of understanding between doctors and patients makes it impossible to achieve good health (Cole, 2006). Much confusion exists about the role an interpreter plays in the medical encounter and regarding what are

acceptable qualifications for an interpreter. Evidence exists of misunderstandings in the interpreter's role and the actual functions and linguist actions interpreters perform. Interpreters are seen as conduits and not as active participants in patient care (Davidson 2000; A. Clifford, 2004). Such misunderstandings can influence the quality of the interpretation and how interpreting is viewed as a profession. Flores states that optimal communication, patient satisfaction and outcomes, and the fewest interpreter errors occur when LEP patients have accesses to trained interpreters or bilingual providers (Flores, 2005).

Further investigation is required into the current state of research regarding the preparation and professionalism of interpreters and how such preparation and professionalism directly relates to the quality of the interpretation of complex medical language for the benefit of the patient.

The benefit and welfare of the patient is the medical team's common goal. Health care providers interact with patients mostly verbally. Speech in the medical environment plays a paramount role in the patient's health outcome and thus, within the medical encounter, the effectiveness of speech through interpreters should be studied. The results of such a study could enhance awareness of the usefulness or the lack thereof of the conduit model (A. Clifford, 2004), the importance of the selection of words used in the physician-patient communication, and whether greater emphasis should be placed in the continuing professional preparation and training of interpreters.

The limited number of Spanish speaking doctors in United States hospitals poses serious questions regarding the quality of health care received by the fast growing Spanish-speaking population due to the language barrier (Baker, Parker, Williams, Coates, & Pitkin, 1996; Putsch, 1985; Woloshin, Bickell, Schwartz, Gany, & Welch, 1995). The terms Hispanic and Latino refer to the ethnicity of monolingual individuals who originate from Spanish speaking countries in North America and Latino America and those born in the United States from Latino parents (Administration, 2003).

Research shows the involvement of patients in their own care improves health outcomes (Walsh, 2004). Such involvement is limited when patients can not communicate with their physicians. Many studies have been done in reference to doctor-patient communications. These studies cover a wide range of topics such as the clinical implications of social research (Waitzkins, 1984), the effectiveness of communication using animated cartoons (Leiner, Handal, & Williams, 2004), the relationship of communication with malpractice claims (Levison, Roter, Mullooly, Dull, & Frankel, 1997), the physicians' psychological beliefs (Levison & Roter, 1995), the satisfaction of patients due to the physicians' practice style (Flocke, Miller, & Crabtree, 2002), the rating of care in patient-centered communication (Cooper, Roter, Johnson, Ford, Steinwachs, Powe, 2003), race, gender and partnership [race concordance](Cooper-Patrick, Gallo, Gonzalez, Vu, Powe, Nelson, et al., 1999; Jackson & George, 1998), communication between patients and physicians during outpatient palliative treatment (Detmar, Muller, Wever, D. V. Liowina, Schornagel, & Aronson, 2001), and the medical encounter as experienced by older persons (Beisecker, 1996) among many others.

For the proposed study it is important to focus exclusively in communicative medical encounters mediated by an interpreter between physicians and Hispanic or Latino patients. However, the word communication as a noun is a simple one. But as an activity, communication is a complex endeavor, which involves complicated nuances and factors that include, but are not limited to, verbal and nonverbal communication as a dichotomous activity between two parties.

Furthermore, if the proposed study focuses on the level of register/speech uttered by the physician, how such speech is encoded and decoded by the interpreter, and the physician-patient communication not only as a dichotomous activity, but rather as interpreter mediated communication, the study could shed light on the dynamics of the interpretative act, the physician-patient communication and the patient's understanding. Encoding by the interpreter refers to how the interpreter perceives the utterance originated by the parties, in this case, by the physicians. Decoding refers to the transmission of such utterance after the encoding of it. Interpreters do not merely convey messages. They shape, and in some very real sense, create those messages in the name of those for whom they speak (Davidson 2000).

In addition to the physician-patient communication-focus, many studies have analyzed interpreters and their role under different lights. Perhaps two of the most prominent and relevant researchers are Claudia Angelelli, who argues that the role of the interpreter in its nature can not be invisible (Angelelli, 2004), and Brad Davison, whose focus has been mainly on the role, nature, and quality of the medical encounter by English-Spanish interpreters (David & Rhee, 1998; Davidson 2001; Davidson 2000). In

addition, Glenn Flores et al., (2003) conducted a comprehensive systematic review of 2640 citations yielding finally 76 relevant papers, which are reviewed in “The Impact of Medical Interpreters Services on Quality of Health Care” (Flores et al., 2003). Credit also is given to the contributions of Wandesjo (1998) and Bakthin (1981, 1984) to the field of linguist and discourse analysis. Wandesjo and Bathkin’s work laid the foundation to be followed by this proposed study regarding the discourse analysis of the medical encounters.

Wendi M. Norris et al (2005) in the article “Communications about End-of-Life Care between Language-Discordant Patients and Clinicians: Insights from Medical Interpreters” recommended doctors utilize lay language and stated that language and cultural discordant clinical encounters have an increased risk for miscommunication and decreased quality of communication. These problems can directly affect quality of care (Norris et al., 2005). The literature review presents a noticeable lack of information regarding the subject of lay vocabulary in terms of interpreted medical encounters.

As far as this investigator can discover, no one has done a study addressing such specific aspects of medical speech and the interpreter’s function. Perhaps Davison summed it best when he wrote in “Interpreter as Institutional Gatekeeper” :

It was typical for patients, especially patients waiting for an interpreter to arrive, to tell me that they thought it was an excellent idea for some one to study how physicians talked to patients, largely because they thought it wasn’t [done] very well at all (Davidson, 2000, p.# 385).

## CHAPTER 3

### The Medical Encounter Per Se and the Balance of Power

By the pure nature of the social context in the physician-patient encounter, physicians hold the lead and authority in such encounters. Physicians and patients have different views of what is meant by good and effective communication (Meryn, 1998). The physician is the one who ask the questions and decides when to end the encounter. Patients generally do not ask direct questions of their physicians because such questions threaten the power roles defined by the institutional setting of the hospital or clinic (Ainsworth, 1994). There is literature that shows how little patients retain of what doctors explain or say (Justin, 2004). Research has shown the style of the interaction in the medical encounter has an impact on the patient's outcome (Flocke et al., 2002). The recognition of such results has caused the medical field to teach patient communication skills and not necessarily just "bedside manners" (Rowland-Morin, 1990). Most complaints by patients and the public about doctors are about communication and not clinical competence (Meryn, 1998). One can not help but to ask how much more difficult communication is between physicians and patients when there is not the common ground of language. Although efforts have been made to correct communication problems in the field of medical communication, little attention has been paid to a recommendation to use language patients can understand which was issued in the Kalamazoo and Toronto Consensus Statements (1991 & 1999) by a group of

physicians and other professionals who were concerned with doctor-patient communication (Brunett et al., 2001; Meryn, 1998).

The analysis of the word language holds the key to understanding this concept. It is not uncommon in hospital settings to hear doctors address patients in purely medical terminology. Can patients understand such language and terminology? That exposes another challenge in the communication, named health literacy. Many doctors and nurses do not understand that health literacy is not just the ability to read. It includes speaking, listening, writing, arithmetic, and basic health knowledge (Hudson, 2004). Spanish is the most prevalent non-English language in the U.S. and will remain so for the near future (Davidson 2000). A study done by Leyva et al. (2005), showed that only 29% of Hispanic participants were able to read a prescription in Spanish and 22% could correctly give or take doses of medicine after reading an English prescription label (Leyva, Sahrif, & Ozuah, 2005). The imbalance in the literacy and social hierarchy in favor of the physician during the physician/patient interaction results in the physician being the most powerful individual in the medical encounter. Such position is strengthened by a system which gives physicians an aura of omnipotence and in which the physician's time is valued as a priceless commodity (Moran, 2001).

## CHAPTER 4

### The Role of the Medical Interpreter: Traditional and Academic Views vs. The Realities of the Practice

According to Kelly Taylor (2006), the role of the interpreter is to deliver as faithfully as possible the messages transmitted between clients/patients/family members and the service providers who do not share common language (Taylor, 2006). Like the definition by Taylor, there are other similar views (Utah, 2003) which can be considered rigid and perhaps orthodox in defining what the role of the medical interpreter should be. Other views define the role of the interpreter as a “bridge” between languages (Bower, 2004), a mere conduit of discourse between individuals (Roy, 1999), or as an invisible none person (Angelleli, 2003) in the dichotomy of a verbal exchange between two individuals. These views are mainly based on the conduit model which can be seen as rather inflexible (A. Clifford, 2004). However, multiple studies prove the interpreter role is active and dynamic. Angelleli (2003) established the role of the interpreter is multifaceted and complex and the way they play their role may vary significantly according to the setting (i.e. in the courts, at conferences, in the community, at the hospital, etc.). The affirmation of the multiple roles played by the interpreter comes because of Angelleli’s (2003) observations and discourse analyses of actual medical interpreted encounters. Perhaps Davison (2001) described best the actual act of interpretation as not a simple matter of linguistics, but rather linguistic mediation of social interaction. Wandesjo (1998) stated the interpreter must be



engaged in the reconstruction of contextually relevant meaning. In other words, interpreters ought to make sense out of their utterances. Whether the interpreter's function is a rigid and very limited one or a flexible more broad and inclusive one, in the actual medical field and in the author's experience, the role of the interpreter is a metamorphic one with the interpreter becoming what the situation is calling for. This metamorphosis is governed by many linguistic and paralinguistic factors including, but not limited to, policies and procedures dictated by the hospital as an institution, time constraints due to work load, and patient status. Interpretation is not to be done in the same way for patients who are in the trauma department, or who are in labor and delivery, or are in the psychiatric department (Bordieu, 1977; Roy, 1999; Waitzkins, 1985). The same could be said concerning a patient who is about to learn she or he is terminally ill or a woman who has been raped. Research shows the role of interpreters by its own nature is flexible and complex.

Barbara Mocer-Mercer in her research of the complexity of the interpretative simultaneous action created a model where it is shown that an interpreter uses 22 cognitive functions (functional components) while interpreting (Moser, 1978).

Due to the nature of the task of medical interpretation, interpreters can be known as conduit, a gate keeper, an advocate, a parrot, traffic cop, discourse constructor, over-hearer, participant, provider of service, agent of control, co-diagnostician, message converter, etc., (Angelelli, 2004; Davidson 1998; Roy, 1999; Wandensjo, 1999; Beeman & Peterson, 2001; CHIA, 2002). What is for sure is

interpreters are human and the human factor is what makes this activity complicated and possible. It is impossible for interpreters not to feel emotions in one degree or another for those whom they are interpreting.

## CHAPTER 5

### The Preparation and Performance of the Medical Interpreter

In the U.S., the medical field has been slow in recognizing medical interpretation as a profession. However, there are organizations that have been working not only to organize the interpreters formally, but also to establish ethical guidelines for the profession (Dysart-Gale, 2005). The once prevalent view of using family members and bilingual hospital employees as interpreters is being accepted less and less and is seen as inappropriate and unreliable. The lack of time by doctors and residents seems to condone the use of ad hoc interpreters in order to expedite their interviews without regard for ethical considerations (Burbano et al., 2003; Clifford, 2004; Dysart-Gale, 2005; Pochhacker, 1999). Interpreters acquire their skills and the fact that an individual is bilingual does not qualify him or her as an interpreter. Too often, the challenge inherent in interpreting is overlooked or underestimated when considering language service policy, and a corresponding lack of concern with ensuring the proficiency of potential interpreters. The predictable result is the provision of language services by unqualified individuals whose only qualification is possession of an indeterminate level of bilingual proficiency which, is not equivalent to interpreting proficiency (Gonzalez, 2008). It has been well documented that the risks of using relatives and family members as interpreters are many. Such risks are greater in pediatric settings where medical history sometimes is taken from children, which enhances the possibility of medical error (Burbano et al., 2003;

Flores et al., 2003; Flores, 2005). A review of the literature suggests that fewer errors, optimal communication, patient satisfaction, and positive outcomes are closely related to the use of professional interpreters (Flores et al., 2003). Studies also indicate ad hoc interpreters are more likely to commit errors of clinical significance than are professional interpreters (Bonacruz & Cooper, 2003; Burbano et al., 2003; Davidson 2001; Dysart-Gale, 2005; Flores, 2005). Other studies show professional interpreters are given that title based on their employment as interpreters and not necessarily because of their formal training or experience (Davidson 2001; Davidson 1998; Davidson 2000; Dysart-Gale, 2005; Flores et al., 2003). The author would further argue that the majority of medical interpreters in the United States do not have more than 12 years of education and that most receive on-the-job-training from hospitals which evaluate the proficiency of the interpreter not through scientific testing, but rather if the person has a sufficient level of language proficiency as opposed to skill as interpreter (Davidson 2001; Flores, 2005).

Some questions this author believes should be considered by medical interpreters while interpreting are:

- How well do they interpret medical terminology?
- Do they consider the health literacy of the patient for whom the physician information is needed?
- Do they carry out the interpreting activity following rigid standards of interpretation?

- Are they able to interpret complex language in a simplified and easier to understand manner for the benefit of the patient? (Brunett et al., 2001; Meryn, 1998).
- Or do they adhere themselves to the conduit model?
- There exists a communication problem between physicians and patients that more often reflects the lack of understanding of the social construction of illness from the patient's perspective (O'Neil, Kollage, & Kaufert, 1988). Is the interpreter bridging this problem or is he or she compounding it?

Although many studies are addressing a wide range of topics involving interpreters and the interpreting activity, when researching this article no studies were found that focus specifically on how interpreters actually interpret medical terminology so the patient can understand it with clarity.

## CHAPTER 6

### Physician and Interpreters with the Same Purpose

With growing numbers of Hispanic and Latino patients seeking medical attention, the interaction between physicians, other professional health providers and interpreters is unavoidable. Many professional health providers hold the view that interpreters are there just to be a conduit, to bridge the language barrier or to repeat whatever is being said in the source language (English) into the target language (Spanish) without any deviation or interjection (Clifford, 2004). Numerous studies indicate the role of the interpreter should not be confined or limited, but rather it should be deemed as a complement and very dynamic participant in the medical encounter (Angelelli, 2004; Norris et al., 2005; Wandensjo, 1998). Davison stated that the great majority of medical encounters in the United States take place in hospitals where the elicitation of medical facts by doctors is achieved not only by means of questioning the patient, but also by the recognition of the important place that doctors have in the hospital social hierarchy (2000). What happens with the elicitation of information when it is obtained through an interpreter because the patient and the doctor do not have a common language? More frequently than not, doctors are in need of the assistance of interpreters to provide medical care to their non English speaking patients (Karlner, Pérez-Stable, & Gildegoin, 2004). The practice of medicine as well as the practice of interpretation has a social component that can not be ignored (Davidson 2000). Evidence shows that doctors and interpreters do not see each

other in an even field. The social hierarchy of the hospital gives doctors a very high and prominent place, while interpreters still are struggling to obtain recognition as professionals and their value, order, place and position in the context of the medical environment is not recognized as part of the medical team. Due to these factors, the interpreted medical encounter is considered exclusively a linguistic conduit, sanctioned by the code of ethics and institutions (Dysart-Gale, 2005). However, according to Norris et al. (2005), this encounter should be considered a triadic situation where the interpreter is semi-autonomous. Just as doctors do, interpreters should bring expertise to the mediated medical encounter. Such experience and knowledge when used wisely by physicians becomes an asset and a tool in the task of diagnosing LEP patients. The interaction and intervention of the interpreter in this encounter makes him or her a part of the healthcare team. The author will further argue that unlike the judiciary interpretation which is by its nature an adversarial system, medical interpretation should be considered a collaborative system due to the close alliance between interpreters and professional healthcare providers on behalf of patients. In this collaboration, members of the healthcare team including the interpreter all bring their skills in order to accomplish a common goal - the best care for the patient.

## CHAPTER 7

### Conclusion

The author, while working as a medical interpreter in a large county hospital in Texas, has been able to observe and participate in many interpreted mediated medical encounters. The idea of the proposed study came because of direct experience as an interpreter and observer. It is important to point out that the conduit model is very much entrenched in the minds of interpreters by the efforts of the administrative staff.

The proposed study should include an instrument to obtain the physician's opinion as to how the interpreter is perceived as a health provider. The literature review shows a gap in this area. Very little has been researched and written about the interpreter's collaborative efforts in the mediated medical encounter.

It will not be until the interpretive act in the medical environment is accepted as a collaborative effort that the medical interpreter will have recognition as part of the medical team. Medical interpreters need to be recognized as professionals. At the same time, they need to be educated regarding the roles and complexities of the interpretation act. Better training always makes better professionals and interpreters are no exception.

Change in the manner of communication could affect hospitals in that important line, the financial line. By improving verbal communication in general, patients could better understand their condition and their treatments and then be better able to care for themselves after their hospital stay. This could result in fewer unnecessary patient returns to the hospital. In the United States every year large amounts of funds are spent due to patients returning to the hospital unnecessarily shortly after their release. Better



communication could be a factor in reducing such visits. That can be achieved by using trained, skilled medical interpreters and by acknowledging how important their role is in the provision of health care, and by the recognition of the use of simpler language in communication with patients.

## References

- Ainsworth, V., Nancy. (1994). Is that rhetorical question? ambiguity and power in medical discourse. *Journal of Linguistic Anthropology*, 4, 192-214.
- Angelelli, C., V. (2004). *Medical interpreting and cross cultural communication*. Cambridge, MA: Cambridge University Press.
- Baker, D. W., Parker, R. M., Williams, M. V., Coates, C. W., & and Pitkin, K. (1996). Use and effectiveness of interpreters in an emergency department. *Journal of the American Medical Association*, 275(10), 783-788.
- Bakhtin, M.M. (1981) *The dialogic imagination: Four essays by M.M. Bakhtin*, M. Holquist (ed.), (transl. by C. Emerson and M. Holquist). Austin: University of Texas Press.
- Bakhtin, M.M. (1984) *Problems of Dostoevsky's poeticsn*, C. Emerson (ed.), (introd. by W.C. Booth, transl. by C Emerson). Minneapolis/London: Minnesota University Press.
- Beeman, W., & Peterson, M., Allen. (2001). Situations and interpretations: Explorations in interpretative practice. *Anthropological Quarterly*, 74(4), 159-162.
- Beisecker, E. A. (1996). Older persons' medical encounters and their outcome. *Research on Aging*, 18(1), 9-31.

- Bonacruz, K., C. & Cooper, C. (2003). Barriers to the use of interpreters in emergency room pediatric consultations. *Journal of Pediatrics Child health*, 39, 259-263.
- Bordieu, P. (1977). The economics of linguistic exchanges. *Social Science and Information*, (16), 645-668.
- Bower, B., C. (2004). *Hospital interpreters bridge language gaps, lower risks*. Retrieved September 9, 2006, from [http://www.usatoday.com/news/health/2004-11-2-hospital-translators\\_x.htm](http://www.usatoday.com/news/health/2004-11-2-hospital-translators_x.htm)
- Brunett, P., H., Campbell, T., L., Cole-Kelly, K., Danoff, D., Frymaier, R., Goldstein, M., G., et al. (2001). Essential elements of communication in medical encounters: The Kalamazoo consensus statement. *Academic Medicine*, 76(4), 390-393.
- Burbano, O., Sonja, Stevens, F., & Hampers, C. L. (2003). The truth about language barriers: One residency program's experience. *Pediatrics*, 111, 569-573.
- California Health Care Interpreters Association (2002). *California standards for healthcare interpreters: Ethical principles, protocols, and guidance on roles and intervention*. Sacramento: CHIA.
- Clifford, A. (2004) "Is fidelity ethical?: The social role of the health care interpreter. *Traduction, Terminologie Rédaction* 17(2) 89-114

Cole, K. (2006). *Bilingual brown students act as medical interpreters at R.I. hospital.*

Retrieved September 9, 2006, from

[http://www.brown.edu/Administrador/George\\_Street\\_Journal/vol28/28GSJ16c.html](http://www.brown.edu/Administrador/George_Street_Journal/vol28/28GSJ16c.html)

Cooper, L. A., Roter, D., Johnson, R., Ford, D. E., Steinwachs, D. M., & Powe, N. R.

(2003). Patient-centered communication, rating of care, and concordance of patient and physician race. *Annual Internal Medicine*, 139(11), 905-907.

Cooper-Patrick, L., Gallo, J. J., Gonzales, J. J., Vu, H. T., Powe, N. R., Nelson, C., et al.

(1999). Race, gender and partnership in the patient-physician relationship. *Journal of the American Medical Association*, 282(6), 583-589.

David, R., A., & Rhee, M. (1998). The impact of language as a barrier to effective health

care in an underserved urban Hispanic community. *The Mount Sinai Journal of Medicine*, (65), 393-397.

Davidson, B. (1998). *A study of cross-linguistic communication in the hospital clinic.*

Unpublished PhD, Department of Linguistics, Stanford University.

Davidson, B. (2000). The interpreter as institutional gatekeeper; the social-linguistic role

of interpreters in spanish-english medical discourse. *Journal of Sociolinguistics*, 4(3), 379-405.

Davidson, B. (2001). Questions in cross-linguistics medical encounters: The role of the

hospital interpreter. *Anthropological Quaterly*, 74(44), 170-178.

- Detmar, B. S., Muller, J. M., Wever, D. V. Liowina, Schornagel, H. J., & Aronson, K. N. (2001). Patient-physician communication during outpatient palliative treatment visits. *The Journal of the American Medical Association*, 285(10), 1361-1357.
- Dysart-Gale, D. (2005). Communications models, professionalization, and the work of medical interpreters. *Health Communications*, 17(1), 91-103.
- Flocke, S., A., Miller, L. W., & Crabtree, B., F. (2002). Relationships between physicians practice style, patient satisfaction, and attributes of primary care. *The Journal of Family Practice*, 51(10), 835-840.
- Flores, G. (2005). The impact of medical interpreter services on quality of health care: A systematic review. *Medical Care Research and Review*, 62(3), 255-299.
- Flores, G., Laws, M. B., Mayo, S. J., Zuckerman, B., Abreu, M., Medina, L., et al. (2003). Errors in medical interpretation and their potential clinical consequences in pediatrics encounters. 2003, (111), 6-14.
- Gonzalez, R. (2008) . Personal communication November 24, 2008.
- Hudson, T., Terese. (2004). Dump the mumbo-jumbo. *Health and Hospitals*, 74 (October), 70-74.
- Hurtado, C. (2006). *More Hispanic patients means high demand for hospital interpreters*. Retrieved September 9, 2006, from <http://www.linguisticsolutions.com/blog/?p=255>

- Jackson, B., Pamela, & George, K. L. (1998). Racial differences in satisfaction with physicians. *Research on Aging, 20*(3), 298-316.
- Justin, R., G. (2004). Do it! *British Medical Journal, 4*(March 2001), 106.
- Karliner, S. L., Pérez-Stable, J. E., & Gildegorn, G. (2004). The language divide. the importance of training in the use of interpreters for outpatient practice. *Journal General Internal Medicine, 19*, 175-183.
- Kuo, D., & Fagan, J. M. (1999). Satisfaction with methods of spanish interpretation in ambulatory care clinic. *Journal of Internal Medicine, 14*, 547-550.
- Leiner, M., Handal, G., & Williams, D. (2004). Patient communication: A multidisciplinary approach using animated cartoons. *Health Education Research Theory & Practice, 19*(5), 591-595.
- Levison, W., & Roter, D. (1995). Physician's psychosocial belief correlate with their patient communications skills. *Journal General Internal Medicine, 10*(7), 375-379.
- Levison, W., Roter, D. L., Mullooly, J. P., Dull, V. T., & Frankel, R. M. (1997). Physician-patient communication. the relationship with malpractice claims among primary care physicians and surgeons. *The Journal of the American Medical Association, 19*, 1681-1682.
- Leyva, M., Sahrif, I., & Ozuah, O. P. (2005). Health literacy among spanish-speaking Latino parents with limited English proficiency. *Ambulatory Pediatrics, 5*(5), 56-59.

- Moser-Mercer, B. (1978) Simultaneous interpretation: A hypothetical model and its practical application, in Pöchhacker, F. et shlesinger, M. *The Interpreting Studies Reader*, 152-153. London and New York, Routledge.
- Meryn, S. (1998). Improving doctor-patient communication. *British Medical Journal*, 316, 1922-1930.
- Moran, M. (2001). *Are shorter doctors' visit just a myth?* Retrieved January, 28, 2007, from <http://www.medicinet.com/script/main/art?asp?articlekey=51395>
- Norris, M. W., Wenrich, D. M., Nielsen, L. e., Treece, D. P., Jackson, C., J., & Curtis, R., J. (2005). Communication about end-of-life care between language discordant patients and clinicians: Insight from medical interpreters. *Journal of Palliative Medicine*, 8(5), 1016-1024.
- O'Neil, J. D., Kollage, W. W., & Kaufert, J. M. (1988). Health communication problems in Canada inuit communities. *Artic Medical Research*, 47((supplement 1)), 374-378.
- Pochhacker, Franz, Kadric Mira (1999). The hospital cleaner as health care interpreter. *The translator* (5), 161-178
- Putsch, R. W., III. (1985). Cross cultural communication: The case of interpreters in health care. *Journal of the American Medical Association*, (254), 3344-3348.
- Rowland-Morin, P., A. (1990). Verbal communication skills and patient satisfaction. *Evaluation & the Health Professions*, 13(2), 168-185.

Roy, C. (1999). *Interpreting as a discourse process. oxford studies in socio-linguistics.*

New York: Oxford University Press.

Taylor, K. (2006). *Role and responsibilities of the hospital/healthcare interpreter.*

Retrieved September 6, 2006, from

[http://72.14.203.104/search?q=cache:xJ\\_9FV9SMjMJ:www.multi-](http://72.14.203.104/search?q=cache:xJ_9FV9SMjMJ:www.multi-)

[languages.com/newsletters/Newsletter1.pdf+Kelly+Taylor,+Bloorview+MacMillan](http://72.14.203.104/search?q=cache:xJ_9FV9SMjMJ:www.multi-languages.com/newsletters/Newsletter1.pdf+Kelly+Taylor,+Bloorview+MacMillan)

[&hl=en&gl=us&ct=clnk&cd=5](http://72.14.203.104/search?q=cache:xJ_9FV9SMjMJ:www.multi-languages.com/newsletters/Newsletter1.pdf+Kelly+Taylor,+Bloorview+MacMillan&hl=en&gl=us&ct=clnk&cd=5)

Utah, S., Government. (2003). *Frequently asked questions about court interpreting.*

Retrieved September 9, 2006, from <http://www.utcourts.gov/resources/interp/faq.htm>

Waitzkins, H. (1984). Doctor-patient communication: Clinical implications of social

scientific research. *Journal of the American Medical Association*, (252), 2442-2446.

Waitzkins, H. (1985). Information giving in medical care. *Journal of Social Behavior*,

(26), 81-101.

Walsh, K. (2004). Commentary: The gap between doctors' and patients' perceptions.

*British Medical Journal*, 329(august 2004), 502.

Wandensjo, C. (1998). *Interpreting as interaction.* London; New York.: Longman.

Wandensjo, C. (1999). Telephone interpreting & the synchronization of talk in social

interaction. *The Translator: Studies in Intercultural Communication*, 5(2), 247-264.



Woloshin, S., Bickell, N., A., Schwartz, L., M., Gany, F., & Welch, G. (1995). Language barriers in medicine in the United States. *Journal of the American Medical Association*, 273(9), 724-728.



