Patient Education and Counseling 99 (2016) 542–548

Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pateducou

The challenge of tetradic relationships in medically interpreted pediatric primary care visits: A descriptive study of communication practices

C.A. Pope[a,b,*], M. Escobar-Gomez[f], B.H. Davis[c], J.R. Roberts[d], E.S. O'Brien[d], E. Hinton[d], P.M. Darden[e]

[a] College of Nursing, Medical University of South Carolina, 99 Jonathan Lucas Street SN511, MSC 160, Charleston, SC 29425-1600, USA
[b] Ralph H. Johnson Veterans Affairs (VA) Medical Center, 109 Bee Street, Charleston, SC 29401, USA
[c] Department of English, University of North Carolina at Charlotte, 9201 University City Boulevard, Fretwell 255A, Charlotte, NC 28223, USA
[d] Department of Pediatrics, Medical University of South Carolina College of Medicine, 135 Rutledge Avenue, MSC 561, Charleston, SC 29425, USA
[e] General & Community Pediatrics, Oklahoma University Health Sciences Center, 1200 Children's Avenue, Suite 12400, Oklahoma City, OK 73104-4637, USA
[f] Bilingo LLC, Goose Creek, SC

ARTICLE INFO

Article history:
Received 2 March 2015
Received in revised form 17 October 2015
Accepted 31 October 2015

Keywords:
Adolescent
Primary care
Healthcare disparities
Communication barriers
Linguistics
Hispanic Americans

ABSTRACT

Objective: To examine spoken interactions between pediatricians and community-based interpreters speaking with adolescents and parents with Limited English proficiency (LEP) in primary care to identify the challenges of interpreting in a four-person or tetradic visit, its sources of co-constructed errors, and specific practices for educational intervention.
Methods: As part of a larger study of vaccine decision-making at six clinical sites in two states, this descriptive study used discourse analysis to examine 20 routine primary care visits in a Latino Clinic in interactions between adolescents, parents, community-based interpreters, and pediatricians. Specific patterns of communication practices were identified that contributed to inaccuracies in medical interpretation
Results: Practices needing improvement were tallied for simple frequencies and included: omissions; false fluency; substitutions; editorializing; added clarification, information, or questions; medical terminology; extra explanation to mother; and, cultural additions. Of these speaking practices, omissions were the most common (123 out of 292 total) and the most affected by pediatricians.
Conclusion: The dynamics of both pediatricians and interpreters contributed to identification of areas for improvement, with more adolescent participation in bilingual than monolingual visits.
Practice implications: These observations provide opportunities for mapping a communication skills training intervention based on observations for future testing of an evidence-based curriculum.
Published by Elsevier Ireland Ltd.

1. Introduction

This study examines communication practices contributing to inaccuracies in medical interpretation during routine primary care visits between community-based interpreters and pediatricians, to see how these practices can be modified to improve interpreted visits. For this analysis, the interdisciplinary investigative team (sociolinguist, interpreter, discourse analyst, pediatricians, nurse, research assistant) uses the concept of inaccuracy to move beyond the idea of simple error or mistaken words to reflect the complexity of the interpreted encounter and the intention of fidelity as the primary goal for correspondence between the source of the message and the final receiver, as reflected in interpreting research [1]. This approach recognizes a spectrum of deviations from a primary speaker's intended message as text, from apparent errors such as omissions, substitutions, mistakes and unintended additions to shifts in style, equivalent terms to reflect cultural inference, or hedging to change the pragmatic force of a statement. In a study of 21 Spanish/English dyads involved in interpretation of informed consents for cancer patients [2], the concept of accuracy was affected by over-reliance on technical terms, jargon and long,

* Corresponding author at: College of Nursing, Medical University of South Carolina, 99 Jonathan Lucas Street SN515, MSC 160, Charleston, SC 29425-1600, USA. Fax: +1 843 792 3388.
E-mail addresses: popec@musc.edu, Charlene.Pope@va.gov (C.A. Pope), eskobarm@gmail.com (M. Escobar-Gomez), bdavis@uncc.edu (B.H. Davis), robertsj@musc.edu (J.R. Roberts), obriene@musc.edu (E.S. O'Brien), HintonE@musc.edu (E. Hinton), paul-darden@ouhsc.edu (P.M. Darden).

http://dx.doi.org/10.1016/j.pec.2015.10.032
0738-3991/Published by Elsevier Ireland Ltd.

Table 1
Inaccuracies in medical interpretation.

Type	Number
Omission	123
False fluency	18
Substitution	12
Editorialization	58
Adding clarification	17
Adding question	6
Adding information	0
Medical terminology	29
Explanation	24
Cultural interpreting	1
Conversation overlap	4
Total	292

uninterrupted sentences from providers. Though this primary analysis will quantify semantic errors by the interpreter, the approach recognizes that the contribution of all participants shapes the inaccuracies, reflecting not only a need for continuing education for interpreters but also for physicians and nurses, who are often not trained to work with interpreters [3] and who may alter their communication quality in bilingual encounters [4].

1.1. The challenge: interpreter preparation and provider training

Past systematic reviews of studies of medical interpretation have found that trained professional interpreters improved quality of care, satisfaction for patients with Limited English proficiency (LEP), and outcomes [5,6], yet standards for preparation of interpreters in health care were neither uniform or accompanied by any certification or licensure [7]. In 2011, funded by the California Endowment, the National Council on Interpreting in Health Care (NCIHC) published the National Standards for Healthcare Interpreter Training Programs, pointing out that formal preparation of interpreters varied widely across the country, with instruction ranging from 2 to 200 h [8].

As contrasted with professional interpreters who increasingly have extended training and commitment to the National Standards, community interpreters are defined as lay people who interpret in face-to-face encounters for a particular purpose in a public institution [9], in this case, a community health center. Community interpreters with heritage Spanish fill vital roles both in noticing language and cultural nuances often less accessible to other second language speakers, and in interpreting patient-provider discussions. The many challenges and contradictions they face are sometimes not apparent to providers who may not be adapting their discussions to interpreted Spanish. In linguistic analysis of interpreted medical visits, a solo focus on interpreter performance would be insufficient, since specific speaking behaviors from both the interpreter and the physician contribute to the quality of care in the encounter and depend upon negotiated understanding, common goals, shared control and management of the encounter [10].

This study lays the groundwork for the opportunity to upgrade both the skills of community interpreters and the ability of providers to work more productively with community interpreters. Beyond issues of previous training, studies have shown that providers and interpreters collaborate more effectively when roles and boundaries are clearly coordinated and interpreters are not seen as passive tools [11,12]. Though less is known about how pediatricians use interpreters than about other specialties, a national survey showed that most pediatricians use interpreters who are either untrained or not certified by a national organization to communicate with LEP patients and their families [13]. Additionally, the same survey found that pediatricians in regions with high numbers of LEP persons are less likely to provide more formally trained language services. In considering consequences, the use of professionally trained and certified interpreters who often have up to 100 h of training by a professional interpreter organization, is associated with fewer errors and higher patient satisfaction [6].

1.2. Study objectives

Although a variety of training and certification programs are available, there is no national required licensure, certification or training for medical interpreters, so their preparation may vary [14]. Past studies of medical interpretation in pediatrics have relied on large databases and surveys [13,15], rather than on actual discourse as reflected in interpreter research with adults [6,16],

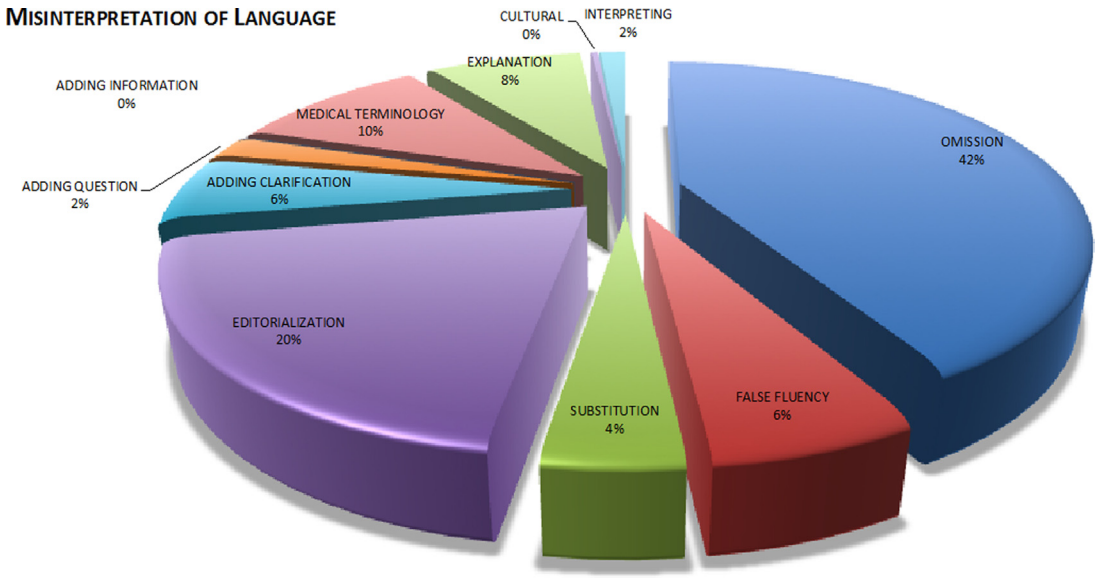

Fig. 1. Misinterpretation of language.