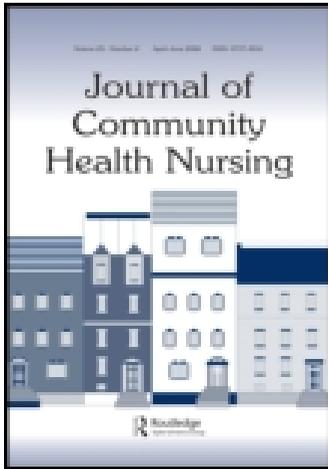


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The Role of the Health Care Interpreter in a Clinical Setting—A Narrative Review

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The Role of the Health Care Interpreter in a Clinical Setting—A Narrative Review

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Objective: To examine published models of health care interpretation and associated roles, expectations, and outcomes. **Methods:** A literature search was conducted using the key words *interpreter/translator, communication, and role* and their combinations in PubMed, CINAHL, PsycINFO, and PSYDEXplus. References mentioned in articles identified with these search terms were then checked by hand in corresponding publications and books. We excluded articles if they were dealing with concepts of interpretation, role definitions, etc., without presenting any empirical evidence to support their recommendations. Thirty-four of 1,121 references that investigated the role of professional interpreters in health care were found to meet inclusion criteria. **Results:** Out of 34 articles, only 2 recommend strict adherence to the conduit model in which interpreters are faithfully and exclusively transmitting information; the interpreter's role is in 32 studies defined in broader terms as the role of a cultural broker ($n = 18$), a manager or clarifier ($n = 22$), a patient advocate ($n = 13$), or a mediator ($n = 6$). **Conclusion:** There are no commonly accepted understandings of the interpreters' role; empirical data are lacking. **Practice Implications:** The interpreter's function must be explicitly clarified before a health care encounter is conducted. There should be an agreement of some basic rules.

The use of interpreting services is increasingly advocated in health care systems. Noncongruent language and different cultural background have been identified as significant barriers to mutual understanding (Bischoff et al., 2003; Kale & Syed, 2010; Ngo-Metzger et al., 2003; Woloshin,

Schwartz, Katz, & Welch, 1997). Language barriers have been associated with worse interpersonal care, lower patient satisfaction, and longer length of hospital stay (Lindhölm, Hargraves, Ferguson, & Reed, 2012; Ngo-Metzger et al., 2007). Patients, in general, consider the availability and the quality of interpreting services as very important; the use of the interpreter and the perceived quality of the interpreter's translation are strongly associated with the quality of care overall (Baker, Hayes, & Fortier, 1998; Dang et al., 2010; Green et al., 2005; Kline, Acosta, Austin, & Johnson, 1980; Kuo & Fagan, 1999; Lee, Batal, Maselli, & Kutner, 2002; Moreno & Morales, 2010; Ngo-Metzger et al., 2007).

However, there is no consensus among health care providers, patients, and interpreters about the role interpreters have in health care settings (Fatahi, Hellstrom, Skott, & Mattsson, 2008; Fatahi, Mattsson, Hasanpoor, & Skott, 2005; Ngo-Metzger et al., 2007; Shannon, 1997). Recently, a Swiss organization active in the training and distribution of interpreting services issued a brochure on professional behavior of interpreters in health care settings (INTERPRET Schweizerische Interessengemeinschaft für interkulturelles Uebersetzen und Vermitteln, 2011). This brochure holds that professional interpreters should function as brokers of patients' interest, as mediators between health care professionals and patients, and in helping professionals and patients understand cultural differences. This definition of the interpreter's role goes far beyond the first role definition: The interpreter is a conduit transmitting information without distortion between sender and receiver (Shannon, 1997). Many interpreters, and most health care providers, recognized merit in the conduit model: Within this model the interpreter serves as a neutral and almost invisible *language vehicle* (Fatahi et al., 2008; Fatahi et al., 2005; Hale, 2007; Rowland, 2008).

However, almost at the same time as the conduit model was being propagated, other authors noted that a broader understanding of an interpreter's function was mandatory: Bloom, Hanson, Frires, and South (1966); Brislin (1976); and Ingram (1978) held that interpreting is not simply a transfer of a linguistic code from one language into another; communication includes the exchange—and transfer—of multiple, interwoven layers of information.

Many recent publications reiterate the early critique against the conduit model as focusing on the linguistic message only, and as disregarding its social and cultural construction (Hsieh, 2006, 2007; Watermeyer, 2011). Interpreters, themselves, frequently reported significant professional and ethical difficulties in their practice attributable to their ambiguous role understanding (Fatahi et al., 2005). The latter, in turn, determines which communication strategies they use (Hsieh, 2008). From this perspective, the definition of interpreting errors, so often reported in numerous studies (Aranguri, Davidson, & Ramirez, 2006; Butow et al., 2011; Flores et al., 2003; Laws, Heckscher, Mayo, Li, & Wilson, 2004; Pham, Thornton, Engelberg, Jackson, & Curtis, 2008; Vasquez & Javier, 1991), might also be seen as a consequence of a lack of coherent understanding of the interpreters' role.

Given the aforementioned conceptual inconsistencies, this article gives a narrative review of the literature, focusing on the different role definitions of an interpreter, taking into account articles that analyze these questions from the perspective of expert interpreters, patients, and health care providers. Furthermore, we explore to what extent a preference for one of these models is based upon empirical evidence, namely comparing different role understandings within a given setting.

METHODS

The results are presented in a narrative format (Moore, Rivera Mercado, Grez Artigues, & Lawrie, 2013; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013). We used online databases (PubMed, CINAHL, PsychINDEX, Cochrane Library), and searched for further eligible literature through references in scientific articles and books. In total, we generated 1,121 references from all data sources.

Inclusion/Exclusion Criteria

We included all articles that met the following inclusion criteria: (a) articles in English and German (b) that contained empirical data about the role of professional health care interpreters in typical clinical situations. The key words *interpreter/translator*, *communication*, and *role* were used in different combinations (see Figure 1).

We excluded, without further review, articles in which the title and/or abstract showed that the focus was not on health care interpreters. Studies examining the role of only ad hoc or family interpreters were also excluded. For the 211 articles for which it was unclear from the title and abstract whether the article contained data regarding the role of professional health care interpreters, we reviewed the full text of the article and had to exclude an additional 177 articles, because they did not present empirical data that supported a definition or preference for a certain role of health care interpreters.

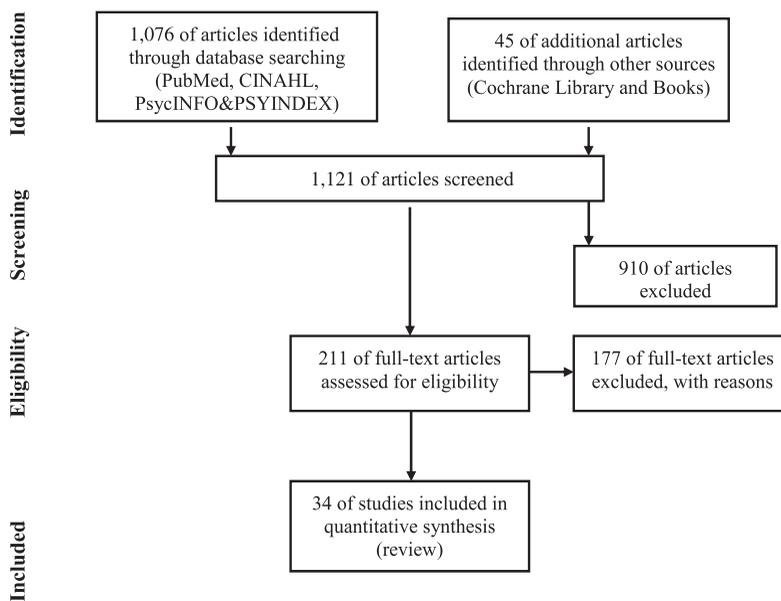


FIGURE 1 Flow Diagram of Narrative Review Strategy and Outcomes.

Abstraction of Included Articles

The remaining 34 articles were independently assessed by two investigators. Information was collected on number and characteristics of participants, geographic location of the research, study design, methods, statistical analyses, and main study findings about interpreters' role in a health care setting. Any disagreement was resolved by discussion and consensus between the review authors.

Because health care interpreting is not yet a universally licensed and referred field, the definition of a *health care interpreter* and his/her training varies widely in the published literature. We defined a professional health care interpreter as any individual paid and provided by the hospital or health care system whose task it is to facilitate interpretation between a health care provider and a patient. In our review, we kept the term *formal versus informal* professional interpreter, if this differentiation was made in the original article. It usually referred to the difference between interpreters with an official certificate versus interpreters trained otherwise.

For the presentation of the results, we decided to organize the data according to the population under study; thus, articles categorized under the heading of *interpreters* contain data about the interpreters' perception of their role in the health care setting, and likewise with *health care providers* and *patients*. Studies investigating the perception of different groups of participants are categorized as *combined* articles.

RESULTS

Of the 34 articles included in the study, 12 focused on the interpreters' perception of their own role in the health care encounter (see Table 1), 2 studies investigated the clinicians' perception of the interpreters' role (see Table 2), 1 studied the patients' perception of the interpreters' role (see Table 2), and 19 compared perceptions of different speakers (see Table 3). The most often investigated combination was that of health care provider and interpreter ($n = 10$), followed by the combination of all three participants ($n = 6$). Two studies compared interpreters' and patients' perceptions of the interpreters' role, and one study compared health care provider and patient.

Geographical Origin of Articles

The majority of studies ($n = 14$) were conducted in the United States, followed by five studies from Canada. Three studies each came from Australia, South Africa, Sweden, and Switzerland. One study each reported data from Austria, Spain, and the United Kingdom.

Setting of the Investigation

Half of the data ($n = 18$) were collected from in-hospital settings, three from psychiatric institutions, and five from primary care. Three studies gathered their data from an interpreter service and another three combined a primary care setting or a hospital setting with interpreter services. Two studies did not report on the setting of their investigation.

TABLE 1
Interpreters' Perception of Their Role in a Health Care Setting

<i>Study/Data Source</i>	<i>Country/Discipline</i>	<i>Practice/Setting</i>	<i>Sample</i>	<i>Design/Test</i>	<i>Results</i>
PubMed (Butow et al., 2010)	Australia/Psychology	Hospital oncology	Thirty interpreters with formal training in interpretation. Three languages.	Qualitative/Audiotapes	Conduit role is clear, but broad dilemmas.
CINAHL (Messias, McDowell, & Estrada, 2009) Book (Ortega Herráez, Abril-Marfí, & Martín, 2009)	USA/Nursing Spain/Research group of the university	Health departments, hospitals Public, private, and third sector institutions	Twenty-seven interpreters: 13 formal, 14 informal. Two languages. Twenty-five health care and social interpreters: 8 formal, 17 informal. Nine languages.	Qualitative/Audiotapes Quantitative/Self-administered questionnaire	Conduit role is impractical and sometimes impossible. Interpreters in 'helpers' role: edit more speakers utterances explain procedures/cultural differences don't inform about their intervention Transmission model is not enough. Semiotic model with expanded roles facilitate mutual understanding. Obligation to provide a precise, word-for-word translation of every comment. No advocacy role with patients Interpreters are visible as: – detectives – multi-purpose bridges – diamond connoisseurs miners
PubMed (Dysart-Gale, 2007)	Canada/Concordia University	Hospitals, an urgent care facility and gynecological clinic	Thirty-two formal interpreters. Ten languages.	Qualitative/Field notes and audiotapes	Transmission model is not enough. Semiotic model with expanded roles facilitate mutual understanding.
PubMed (Rowland, 2008)	USA/Ohio State University	Student dental clinic	Three formal interpreters. Two languages.	Qualitative/Field observation and audiotapes	Obligation to provide a precise, word-for-word translation of every comment. No advocacy role with patients Interpreters are visible as: – detectives – multi-purpose bridges – diamond connoisseurs miners
Book (Angelilli, 2004)	USA/Ethnography	Public hospital California Hope	Fourteen interpreters, 1 interpreting services manager Spanish	Qualitative, quantitative/field notes and audiotapes	Interpreters are visible as: – detectives – multi-purpose bridges – diamond connoisseurs miners
Book (Slatyer, 2005)	USA, Canada, Mexico/Linguistic	Health care centers	Ninety-seven health care interpreters Compared with 107 conference interpreters and 89 court interpreters Spanish and other languages	Quantitative/Questionnaire IPRI	Health care/community interpreters perceived themselves significantly more visible than the other 2 groups.

(Continued)

TABLE 1
(Continued)

<i>Study/Data Source</i>	<i>Country/Discipline</i>	<i>Practice/Setting</i>	<i>Sample</i>	<i>Design/Test</i>	<i>Results</i>
PubMed (Fatahi, Mattsson, Hasanpoor, & Skott, 2005)	Sweden/Göteborg University	Primary health care	Eight formal interpreters: 4 languages.	Qualitative/Focus-group interviews with interpreters	Interpreters should pass information as correctly as possible. Information shortage because of lack of time. Interpreters as conduit and manager of the cross-cultural mediated clinical encounter Interpreters are active: pursue issues they believe to be diagnostically relevant.
PubMed (Avery, 2001)	USA/Human services	Refugee and immigrant services	Interpreters No information about languages	Qualitative/Focus-group meetings	Interpreters as language translator, cultural broker and advocate Interpreters are active as codiagnosticians
Reference (Bolden, 2000)	USA/Linguistic	Urban hospital	One formal interpreter in Russian	Qualitative/Audio- and videotapes	
Reference (J. M. Kaufert & Koolage, 1984)	Canada/Medicine and anthropology	Two urban hospitals	Eight interpreters No information about languages	Qualitative/Audio- and videotapes	
CINAHL (Hsieh, 2007)	USA/Social science and medicine	Interpreting agencies and local hospitals	Twenty-six formal interpreters. Eighteen languages.	Qualitative/Audiotapes	

TABLE 2
Health Care Providers' and Patients' Perception About the Interpreter's Role in the Health Care Setting

<i>Study/Data Source</i>	<i>Country/Discipline</i>	<i>Practice/Setting</i>	<i>Sample</i>	<i>Design/Test</i>	<i>Results</i>
PubMed, CINHAI, PsynIndex (Fatahi, Hellstrom, Skott, & Mattsson, 2008)	Sweden/Health care and social science	Primary care	Eight general practitioners. Four languages.	Qualitative/Audiotapes	Interpreters are neutral acting literally as a pure <i>interpreting machine</i>
PubMed, CINHAI (Rosenberg, Leanza, & Seller, 2007)	Canada/Medicine	Primary care	Nineteen physicians and 24 patients. Eight languages.	Qualitative/Videotapes	Physicians expect from interpreters cultural brokerage
PubMed (Hadziabdic, Heikkila, Albin, & Hjeltn, 2009)	Sweden/Health science and social work	Health care centers	Seventeen patients from former Yugoslavia: Serbo-Croatian	Qualitative/Audiotapes	Patients expect literal translation and professional and neutral attitude.

TABLE 3
 Combined Studies About the Interpreter's Role in the Health Care Setting

<i>Study/Data Source</i>	<i>Country/Discipline</i>	<i>Practice/Setting</i>	<i>Sample</i>	<i>Design/Test</i>	<i>Results</i>
PubMed (Watermeyer, 2011)	South Africa/Human and community development	HIV pharmacy clinic	Two pharmacists and patients of the clinic Setswana	Qualitative/Field notes and videotapes	Conduit role is inappropriate, but flexible approach based on patients preferences and communicative needs Roles played by interpreters: – conduit – advocate – manager – professional Caregivers see interpreters as cultural brokers. Interpreters see their role as <i>counselor, friend, or patient advocate</i> . Cross-cultural skills and sensitivity as a <i>core business</i>
CINAHL PubMed (Hsieh, 2008)	USA/Ethnography	Interpreting agencies	Twenty-six interpreters, 11 health care providers, 5 patients. Eighteen languages.	Qualitative/Shadowing and audiotapes	
CINAHL (Penn et al., 2010)	South Africa/Communication	Community rehabilitation clinic	One audiologist, 6 formal interpreters, and 6 care givers IsiXhosa	Qualitative/Audio- und videotapes	
Book (Blignault, Stephanou, & Barrett, 2009)	Australia/Medicine	Health care interpreter service	Eighteen interpreter service personnel, 18 interpreters. Twelve languages.	Qualitative/Audiotapes	
Unpublished paper for Swiss Federal Office of Public Health (Hagenow-Caprez, 2008) PubMed CINAHL (White & Laws, 2009)	Switzerland/Educational assistance Boston, USA Latin American health institute	Hospitals Pediatric outpatient clinics	Nine administration officers, 31 interpreters, 11 educational institutions, 10 experts Health care providers Patients (mothers of the children) Interpreters: 2 formal, 4 informal Spanish	Qualitative, quantitative/survey, interviews, focus group meeting. Qualitative/Audiotapes Analytic method by Laws et al. (2004)	Interpreters have an active role. Not verbatim translation, Intercultural mediation Assuming the provider's role, taking the patient's role, engaging in other non-interpretive roles. Interpreters' behaviour not transparent.

<p>Book (Hale, 2007)</p>	<p>Australia</p>	<p>NR</p>	<p>Twenty health care practitioners Twenty-three interpreters</p>	<p>Quantitative survey</p>	<p>Health care practitioners: – expect interpreting everything directly and accurately; – indicate a mistrust of interpreters when they openly take on the „mediator“ role. Interpreters facilitate communication, cultural understanding Agents of social justice. Health care providers expect: – discretion and neutrality – indicating misunderstandings – helping patients to complete formulars – clarifying patients’ information through direct check – explaining medical terms – reducing and summarizing. Interpreters: – clarify patients’ information through direct check – indicate misunderstandings – summarize – cultural broker.</p>
<p>Book (Pöchhacker, 2007)</p>	<p>Austria interpreting sciences</p>	<p>Health care and social institutions of Vienna</p>	<p>Six-hundred and thirty health care providers Sixteen interpreters</p>	<p>Quantitative survey</p>	

(Continued)

TABLE 3
(Continued)

<i>Study/Data Source</i>	<i>Country/Discipline</i>	<i>Practice/Setting</i>	<i>Sample</i>	<i>Design/Test</i>	<i>Results</i>
PubMed (Rosenberg, Sellar, & Leanza, 2008)	Canada medicine	2 primary care clinics of Montreal	Nineteen physicians Twenty-four patients Fifteen interpreters: – 7 female – 8 male – 6 formal – 9 informal Eleven languages. Eight psychotherapists Five interpreters	Qualitative/Audio- and videotapes	Formal interpreters are active participants and facilitate patients' diagnosis, treatment and recovery.
PsyIndex PubMed (Gogukian Radcliffe & Suardi, 2006)	Switzerland psychology	Etnopsychiatric consultation		Quantitative Comparison of means from both groups A self-developed enquiry for the evaluation of the interpreters' role	Psychotherapists expect cultural brokerage and mediation. Interpreters remain neutral, but also provide a cultural brokerage.
PubMed (Greenhalgh, Robb, & Scambler, 2006)	UK social science and medicine	Consultations in primary care	Eighty-three participants: – 18 service users – 26 interpreters (17 formal, 9 informal) – 13 GP's – 15 primary care nurses – 8 receptionist – 3 practice managers 12 languages.	Qualitative/Audiotapes Narrative analysis by Muller (1999)	Clinicians expect from interpreters conveying their agenda to the patient and working toward their expected outcome. Interpreters: – interpersonal mediator – system mediator – educator – advocate – link worker Conduit role is not adequate.
PsyIndex PubMed (Dysart-Gale, 2005)	USA communication	Urban hospital settings	Seventeen interpreters Two physicians Seven languages	Qualitative/Audiotapes, field notes	

PubMed (Leanza, 2005)	Switzerland/Canada psychology	Pediatric outpatient clinic in Switzerland	Eight pediatric residents Four formal interpreters Two languages	Qualitative/Audiotapes Content analysis using N ^o Vivo software	Residents' comments: – Invisible role or allied with the clinician is the strongest one. – Teaching professional and serving as a two-way cultural informant. Interpreters: System, integration, community and linguistic agent Professional translators as active participants improving communication by bridging the gap (linguistic and cultural). Most physicians and patients do not share the view of translators.
Reference (Singy & Guex, 2005)	Switzerland	5 medical institutions, Department of Adult Psychiatry, Lausanne	Six-hundred and seventy-three somatic physicians, nurses and psychiatrists Thirty-five immigrant patients	Quantitative/Qualitative Questionnaires addressed to health care provider (HCP); focus groups with interpreters and HCP; individual interviews with patients.	Interpreters not as neutral agents nor as <i>advocates</i> but as additional gatekeepers.
Reference (Davidson, 2001)	USA ethnography	Riverview General's General Outpatient Clinic	Participants of 100 interpreted patient visits Two languages	Qualitative Observation of 100 patient visits during 6 months; audiotapes of 20 patient visits	Interpreters not only as <i>advocates</i> or <i>ambassadors</i> , but rather as informational gatekeepers.
Reference (Davidson, 2000)	USA sociolinguistic	Riverview General Hospital's General Medicine Clinic, outpatient unit	Participants of 100 interpreted patient visits Two languages	Qualitative/Quantitative Observation of 100 patient visits during 6 months; audiotapes of 20 patient visits	

(Continued)

TABLE 3
(Continued)

<i>Study/Data Source</i>	<i>Country/Discipline</i>	<i>Practice/Setting</i>	<i>Sample</i>	<i>Design/Test</i>	<i>Results</i>
PsyIndex (Drenman & Swartz, 1999)	South Africa ethnography	Western Cape psychiatric Valkenberg Hospital	Twenty-eight clinicians nursing staff administration staff interpreters and their coordinator One language	Qualitative/Quantitative Semistructured interviews and questionnaires; weekly recordings of the total number of patients in each ward; archival data from the hospital records of patients admitted during the period of the questionnaire study.	Contradictory expectations: – language specialist' in psychiatry – culture specialist – patient advocate – institutional therapist
PubMed (J. Kaufert, 1998)	Canada/USA medicine	Individual encounters with terminally ill patients at Winnipeg hospital	Participants of 12 patient encounters, involving a professional interpreter, number of participants not indicated.	Qualitative analysis Audiotapes of 12 cases; follow-up interviews conducted with participants; single case study.	Interpreters as mediators
PubMed (Hatton & Webb, 1993)	USA nursing sciences	County health department	Twenty-two nurses: – 6 bilingual – 15 interpreters	Qualitative research method of grounded theory and dimensional analysis Audiotapes of semistructured interviews with nurses and interpreters	The interpreter as: – a voice box: translation word for word – an excluder: the interpreter; took over' – a collaborator: nurse and interpreter were colleagues.

Study Design and Methods

The majority of studies ($n = 24$) were designed as a qualitative study applying different methods like open interviews with interlocutors; analyzing transcripts from focus group meetings; qualitative analyses of video or audiotaped encounters; and field notes recorded during observation of clinical communication and interpretation. Five studies used a mixed-methods approach, combining qualitative data and questionnaires. Further five studies were designed as quantitative studies, applying questionnaires developed by the authors; of these only one used a validated questionnaire (Angelelli, 2004).

Number of Participants

Across 26 studies, a total of 516 interpreters, 1,537 health care providers, and 322 patients were involved. The number of participants in eight further studies was not indicated. From 516 interpreters, 174 (33%) are described as having formal training, 74 (14%) had no such training, and information about training of the remaining 268 interpreters was not provided.

Numbers of participants ranged from 1 (Bolden, 2000) to 673 participants (Singy & Guex, 2005) per study for one group. Eleven studies (32%) examined a sample ranging from 1 to 19 participants, another 11 (32%) a sample from 20 to 59 participants and 4 (12%) a sample of 60 or more participants.

Models of Health Care Interpretation

The conduit model was in 16 out of 34 studies defined as the main role that interpreters have to follow, two of them claimed that the conduit is the only acceptable role (Fatahi et al., 2008; Rowland, 2008), the remaining 14 also included other roles. Thus, a total of 32 studies ascertained the importance of extending the interpreters' role to further functions including that of a cultural broker ($n = 18$), a manager/clarifier ($n = 22$), patient advocate ($n = 13$), or mediator ($n = 6$). In eight studies, interpreters actively 'edited' information provided by patient or health care provider, often haphazardly e.g. to save time and without informing the health care provider.

The conduit role in the interpreter's practice was explicitly described in eight studies (Bolden, 2000; Davidson, 2001; Dysart-Gale, 2005, 2007; Hagenow-Caprez, 2008; Messias, McDowell, & Estrada, 2009; Rosenberg, Seller, & Leanza, 2008; Watermeyer, 2011) as impractical, inappropriate, or even impossible. Dysart-Gale suggested, for instance, that rather than attempting to subsume the conduit role and the more interactive advocate, clarifier, and cultural broker roles all together under the idealizations of the transmission model, interpreter theorists could articulate the various interactive roles in accordance with more suitable communication models. Interpreters would then have the choice between a number of theoretically sound, clearly articulated roles, each with its own notions of ideal practice that provide ethical guidance. However, she states that these other interpreter roles have not yet been based on standards robust enough to provide ethical guidance in interpreter practice.

Perceptions of Interpreters, Patients, and Health Care Providers

An examination of the findings from the perspective of the different agents demonstrates differences in the perception of roles especially between health care provider and interpreter.

Contrary to interpreters themselves, health care providers expect from the interpreter first of all impartiality and invisibility. If health care providers wanted an extension of the interpreters' role, they were primarily interested in them serving as a cultural broker or as a person actively indicating overt misunderstandings.

In the only study (Hadziabdic, Heikkila, Albin, & Hjelm, 2009) that exclusively investigated patients' expectations of the interpreter, patients were reported to expect "a literal translation" (p. 462) without any value judgment, strict confidentiality, and a neutral attitude toward them. However, patients also perceived that the interpreter had an important role in helping them to find the right way to gain access to the resources of the health care system.

DISCUSSION AND CONCLUSION

Discussion

The findings of this review suggest that a uniform and consistent model for the health care interpreter is lacking. Health care interpreters follow many different roles beyond the conduit model. Furthermore, it becomes clear that each party in an interaction has different expectations concerning the interpreters' role.

The sample sizes of studies are appropriate for their mainly qualitative research design. No article reported on a procedure that prevented a sampling bias, e.g., using a random inclusion or assignment of participants.

Most studies under review hold that the transmission model of interpreting (conduit) is insufficient and needs to be complemented by other functions.

It is interesting to note that the more extensive models of interpreting come from studies that focus on the interpreters' perspective.

Different roles of interpreters sometimes can be traced back to explicit requests brought forward by health care professionals. On the one hand, interpreters are requested to interpret everything and only what has been said; on the other hand and in practice, they are encouraged to keep the interview short and to keep patients 'on track' (Davidson, 2000). In one study from the United States, professionals were frankly mentioning material they would not dare say in front of a native English speaker, acting as though the patient was invisible (Messias et al., 2009). In this case, the interpreter apparently was not supposed to translate every word literally. Another source of role conflict for interpreters can be attributed to providers who expect interpreters to disclose personal opinions ("Do you think he's mentally ill? . . . What do you think he has?"; Messias et al., 2009). There is no empirical evidence comparing the outcome of different interpreting models in a given clinical setting.

This review has some limitations: In general, some studies include a very small number of participants. From the papers reported herein, it remains unclear to which professional characteristics

the term *interpreter* is referring: The amount of formal training was either not stated (20/34 studies), formally defined (9/34 studies), or both (5/34 studies). Furthermore, any information with regard to training of health care professionals is missing completely.

Future research should, first of all, support with empirical data any recommendation of a certain model of interpretation in the health care setting. Such research must include the perspectives of all three interaction partners. As far as patient care is concerned, nurses and physicians never know to what extent an interpreter will translate the content of a consultation, whether information is added or omitted. Therefore, before a consultation they must stress the importance of a precise and complete translation of what is said. As there is apparently no agreement on the role of interpreters in health care that is shared by professional organizations of interpreters and health care providers, let alone of patient representatives, we recommend that, first of all, a consensus must be reached. In order to advance the level of concept development and go beyond the mere exchange of theoretical concepts, we need reliable and valid data. Only then could professional organisations of interpreters re-define the goals of formal training and then start evaluating empirically whether their members actually practise what they were told.

Conclusion

Even though the importance of language problems in health care is widely acknowledged, there are no commonly accepted understandings of the interpreters' role; empirical data are lacking

Practice Implications

As long as there is no commonly accepted understanding of an interpreter's function, health care providers and interpreters must explicitly clarify their mutual expectations before they start conducting a health care encounter. Furthermore, some basic rules should be agreed upon. Professionals cannot assume that interpreters share their understanding of interpretation; they should be aware of the fact that they will be held responsible for the content of the consultation. Both doctors and nurses will find it difficult to take on the role of someone who is responsible for the very process of communication and not just for the content of what is being said. However, given the unpredictability of the interpreter's role understanding, we strongly recommend that they address any problems with interpretation directly, e.g., when they have the impression that much less or much more is interpreted than had been said during the consultation.

REFERENCES

- Angelelli, C. (2004). *Medical interpreting and cross-cultural communication*. Cambridge, UK: Cambridge University Press.
- Aranguri, C., Davidson, B., & Ramirez, R. (2006). Patterns of communication through interpreters: A detailed sociolinguistic analysis. *General Internal Medicine*, 21, 623–629. doi:10.1111/j.1525-1497.2006.00451.x
- Avery, M. P. (2001). *The role of the health care interpreter: An evolving dialogue (Working Papers Series)*. Washington DC: National Council on Interpreting in Health Care.
- Baker, D. W., Hayes, R., & Fortier, J. P. (1998). Interpreter use and satisfaction with interpersonal aspects of care for Spanish-speaking patients. *Medical Care*, 36, 1461–1470.
- Bischoff, A., Bovier, P. A., Isah, R., Francoise, G., Ariel, E., & Louis, L. (2003). Language barriers between nurses and asylum seekers: their impact on symptom reporting and referral. *Social Science & Medicine*, 57, 503–512.

- Blignault, I., Stephanou, M., & Barrett, C. (2009). Achieving quality in health care interpreting: Insights from interpreters. *Benjamins Translation Library*, 87, 221–234.
- Bloom, M., Hanson, H., Frires, G., & South, V. (1966). The use of interpreters in interviewing. *Mental Hygiene*, 50, 214–217.
- Bolden, G. B. (2000). Toward understanding of medical interpreting: interpreters' involvement in history taking. *Discourse Studies*, 2, 387–419.
- Brislin, R. W. (Ed.). (1976). *Translation. Applications and research*. New York, NY: Gardner Press.
- Butow, P. N., Goldstein, D., Bell, M. L., Sze, M., Aldridge, L. J., Abdo, S., . . . Eisenbruch, M. (2011). Interpretation in consultations with immigrant patients with cancer: how accurate is it? *Journal of Clinical Oncology*, 29, 2801–2807. doi: JCO.2010.34.3335 [pii]10.1200/JCO.2010.34.3335
- Butow, P. N., Lobb, E., Jefford, M., Goldstein, D., Eisenbruch, M., Girgis, A., . . . Schofield, P. (2010). A bridge between cultures: interpreters' perspectives of consultations with migrant oncology patients. *Support Care Cancer*. doi:10.1007/s00520-010-1046-z
- Dang, J., Lee, J., Tran, J. H., Kagawa-Singer, M., Foo, M. A., Nguyen, T. U., . . . Tanjasiri, S. P. (2010). The role of medical interpretation on breast and cervical cancer screening among Asian American and Pacific Islander women. *Journal of Cancer Education*, 25, 253–262. doi:10.1007/s13187-010-0074-1
- Davidson, B. (2000). The interpreter as institutional gatekeeper: The social-linguistic role of interpreters in Spanish–English medical discourse. *Journal of Sociolinguistics*, 4, 379–405.
- Davidson, B. (2001). Questions in cross-linguistic medical encounters: The role of the hospital interpreter. *Anthropological Quarterly*, 74, 170–178.
- Drennan, G., & Swartz, L. (1999). A concept over-burdened: Institutional roles for psychiatric interpreters in post-apartheid South Africa. *Interpreting*, 4, 169–198.
- Dysart-Gale, D. (2005). Communication models, professionalization, and the work of medical interpreters. *Journal of Health Communication*, 17, 91–103. doi:10.1207/s15327027hc1701_6
- Dysart-Gale, D. (2007). Clinicians and medical interpreters: Negotiating culturally appropriate care for patients with limited English ability. *Family and Community Health*, 30(3), 237–246. doi:10.1097/01.FCH.0000277766.62408.9600003727-200707000-00009 [pii]
- Fatahi, N., Hellstrom, M., Skott, C., & Mattsson, B. (2008). General practitioners' views on consultations with interpreters: a triad situation with complex issues. *Scandinavian Journal of Primary Health Care*, 26, 40–45. doi: 789193987 [pii]10.1080/02813430701877633
- Fatahi, N., Mattsson, B., Hasanpoor, J., & Skott, C. (2005). Interpreters' experiences of general practitioner–patient encounters. *Scandinavian Journal of Primary Health Care*, 23, 159–163. doi: T5182R55K31K24R8 [pii]10.1080/02813430510018509
- Flores, G., Laws, M. B., Mayo, S. J., Zuckerman, B., Abreu, M., Medina, L., & Hardt, E. J. (2003). Errors in medical interpretation and their potential clinical consequences in pediatric encounters. *Pediatrics*, 111, 6–14.
- Goguikian Radcliffe, B., & Suardi, F. (2006). L'interprete dans une role consultation thérapeutique: Conceptions de son role et difficultés éprouvées [The interpreter in a therapeutic role: Role conceptions and known difficulties]. *CAIRN INFO*, 26, 37–49.
- Green, A. R., Ngo-Metzger, Q., Legedza, A. T., Massagli, M. P., Phillips, R. S., & Iezzoni, L. I. (2005). Interpreter services, language concordance, and health care quality. Experiences of Asian Americans with limited English proficiency. *Journal of General Internal Medicine*, 20, 1050–1056. doi: JGI223 [pii]10.1111/j.1525-1497.2005.0223.x
- Greenhalgh, T., Robb, N., & Scambler, G. (2006). Communicative and strategic action in interpreted consultations in primary health care: A Habermasian perspective. *Social Science & Medicine*, 63, 1170–1187. doi:10.1016/j.socscimed.2006.03.033
- Hadziabdic, E., Heikkilä, K., Albin, B., & Hjelm, K. (2009). Migrants' perceptions of using interpreters in health care. *International Nursing Review*, 56, 461–469.
- Hagenow-Caprez, M. (2008). *Wie viel Sprache soll es sein? Definition der sprachlichen Qualifikationen der interkulturellen Übersetzer/innen für die Zulassung zur Ausbildung und für die Zertifizierung. Bericht zuhanden des Bundesamts für Gesundheit [How much language? Definition of the linguistic qualifications for intercultural interpreters for admission to education and certification. For the attention of the federal health agency]*. Contone, Switzerland: IDEA.
- Hale, S. B. (2007). *Community interpreting*. Basingstoke, England: Palgrave Macmillan.

- Hatton, D. C., & Webb, T. (1993). Information transmission in bilingual, bicultural contexts: a field study of community health nurses and interpreters. *Journal of Community Health Nursing, 10*, 137–147. doi:10.1207/s15327655jchn1003_2
- Hsieh, E. (2006). Understanding medical interpreters: Reconceptualizing bilingual health communication. *Health Communication, 20*, 177–186.
- Hsieh, E. (2007). Interpreters as co-diagnosticians: Overlapping roles and services between providers and interpreters. *Social Science & Medicine, 64*, 924–937. doi:10.1016/j.socscimed.2006.10.015
- Hsieh, E. (2008). “I am not a robot!” Interpreters’ views of their roles in health care settings. *Qualitative Health Research, 18*, 1367–1383. doi: 18/10/1367 [pii]10.1177/1049732308323840
- Ingram, R. (1978). Sign language interpretation and general theories of language, interpretation and communication. In D. Gerver & H. W. Sinaiko (Eds.), *Language interpretation and communication* (pp. 109–118). New York, NY: Plenum Press.
- “INTERPRET Schweizerische Interessengemeinschaft für interkulturelles Uebersetzen und Vermitteln.” (2011). *Gesundheitstrilog* (pamphlet). Bern, Switzerland.
- Kale, E., & Syed, H. R. (2010). Language barriers and the use of interpreters in the public health services. A questionnaire-based survey. *Patient Education and Counseling, 81*, 187–191. doi:10.1016/j.pec.2010.05.002
- Kaufert, J. (1998). Experience of Aboriginal health interpreters in mediation of conflicting values in end-of-life decision making. *International Journal of Circumpolar Health, 96*, 43–47.
- Kaufert, J. M., & Koolage, W. W. (1984). Role-conflict among culture brokers—The experience of native Canadian medical interpreters. *Social Science & Medicine, 18*, 283–286.
- Kline, F., Acosta, F. X., Austin, W., & Johnson, R. G. (1980). The misunderstood Spanish-speaking patient. *American Journal of Psychiatry, 137*, 1530–1533.
- Kuo, D., & Fagan, M. (1999). Satisfaction with methods of Spanish interpretation in an ambulatory care clinic. *Journal of General Internal Medicine, 14*, 547–550.
- Laws, M. B., Heckscher, R., Mayo, S. J., Li, W., & Wilson, I. B. (2004). A new method for evaluating the quality of medical interpretation. *Medical Care, 42*, 71–80. doi:10.1097/01.mlr.0000102366.85182.47
- Leanza, Y. (2005). Roles of community interpreters in pediatrics as seen by interpreters, physicians and researchers. *Interpreting, 7*, 167–192.
- Lee, L. J., Batal, H. A., Maselli, J. H., & Kutner, J. S. (2002). Effect of Spanish interpretation method on patient satisfaction in an urban walk-in clinic. *Journal of General Internal Medicine, 17*, 640–645.
- Lindholm, M., Hargraves, J. L., Ferguson, W. J., & Reed, G. (2012). Professional language interpretation and inpatient length of stay and readmission rates. *Journal of General Internal Medicine, 27*, 1294–1299. doi:10.1007/s11606-012-2041-5
- Messias, D. K. H., McDowell, L., & Estrada, R. D. (2009). Language interpreting as social justice work perspectives of formal and informal healthcare interpreters. *Advances in Nursing Science, 32*, 128–143.
- Moore, P. M., Rivera Mercado, S., Grez Artigues, M., & Lawrie, T. A. (2013). Communication skills training for healthcare professionals working with people who have cancer. *Cochrane Database Systematic Review, 3*, 1–81. doi:10.1002/14651858.CD003751.pub3
- Moreno, G., & Morales, L. S. (2010). Hablamos juntos (Together we speak): Interpreters, provider communication, and satisfaction with care. *Journal of General Internal Medicine, 25*, 1282–1288. doi:10.1007/s11606-010-1467-x
- Ngo-Metzger, Q., Massagli, M. P., Clarridge, B. R., Manocchia, M., Davis, R. B., Iezzoni, L. I., & Phillips, R. S. (2003). Linguistic and cultural barriers to care. *Journal of General Internal Medicine, 18*, 44–52. doi: jgi20205 [pii]
- Ngo-Metzger, Q., Sorkin, D. H., Phillips, R. S., Greenfield, S., Massagli, M. P., Clarridge, B., & Kaplan, S. H. (2007). Providing high-quality care for limited English proficient patients: the importance of language concordance and interpreter use. *Journal of General Internal Medicine, 22*, 324–330. doi:10.1007/s11606-007-0340-z
- Ortega Herráez, J. M., Abril-Martí, M. I., & Martín, A. (2009). Community interpreting in Spain: A comparative study of interpreters’ self perception of role in different settings. In S. B. Hale, U. Ozolins, & L. Stern (Eds.), *The critical link 5: Quality in interpreting – a shared responsibility* (pp. 149–167). Amsterdam, The Netherlands: John Benjamins.
- Penn, C., Watermeyer, J., Koole, T., De Picciotto, J., Ogilvy, D., & Fisch, M. (2010). Cultural brokerage in mediated health consultations: An analysis of interactional features and participant perceptions in an audiology context. *JIRCD Journal of Interactional Research in Communication Disorders, 1*, 135–156.

- Pham, K., Thornton, J. D., Engelberg, R. A., Jackson, J. C., & Curtis, J. R. (2008). Alterations during medical interpretation of ICU family conferences that interfere with or enhance communication. *Chest*, *134*, 109–116. doi: chest.07-2852 [pii]10.1378/chest.07-2852
- Pöchhacker, F. (2007). *Dolmetschen: Konzeptuelle Grundlagen und deskriptive Untersuchungen*. Tübingen, Germany: Stauffenburg.
- Reeves, S., Perrier, L., Goldman, J., Freeth, D., & Zwarenstein, M. (2013). Interprofessional education: effects on professional practice and healthcare outcomes (update). [Research Support, Non-U.S. Gov't Review]. *Cochrane Database Systematic Review*, *3*. doi:10.1002/14651858.CD002213.pub3
- Rosenberg, E., Leanza, Y., & Seller, R. (2007). Doctor–patient communication in primary care with an interpreter: Physician perceptions of professional and family interpreters. *Patient Educational Counseling*, *67*, 286–292. doi:10.1016/j.pec.2007.03.011
- Rosenberg, E., Seller, R., & Leanza, Y. (2008). Through interpreters' eyes: Comparing roles of professional and family interpreters. *Patient Educational Counseling*, *70*, 87–93. doi:10.1016/j.pec.2007.09.015
- Rowland, M. L. (2008). Enhancing communication in dental clinics with linguistically different patients. *Journal of Dental Education*, *72*, 72–80.
- Shannon, C. E. (1997). The mathematical theory of communication. 1963. *MD Computing*, *14*, 306–317.
- Singy, P., & Guex, P. (2005). The interpreter's role with immigrant patients: contrasted points of view. *Communication and Medicine*, *2*(1), 45–51. doi:10.1515/come.2005.2.1.45
- Slatyer, H. (2005). Claudia V. Angelelli. Revisiting the interpreters role. A study of conference, court, and medical interpreters in Canada, Mexico, and the United States. *Interpreting*, *7*, 313–321.
- Vasquez, C., & Javier, R. A. (1991). The problem with interpreters: communicating with Spanish-speaking patients. *Hospital & Community Psychiatry*, *42*, 163–165.
- Watermeyer, J. (2011). “She will hear me”: how a flexible interpreting style enables patients to manage the inclusion of interpreters in mediated pharmacy interactions. *Journal of Health Communication*, *26*, 71–81. doi: 931967312 [pii]10.1080/10410236.2011.527623
- White, K., & Laws, M. B. (2009). Role exchange in medical interpretation. *Journal of Immigrant & Minority Health*, *11*, 482–493. doi:10.1007/s10903-008-9202-y
- Woloshin, S., Schwartz, L. M., Katz, S. J., & Welch, H. G. (1997). Is language a barrier to the use of preventive services? *Journal of General Internal Medicine*, *12*(8), 472–477.