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### Title

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### Permalink

<https://escholarship.org/uc/item/96w4d9qr>

### Journal

Communication & Medicine, 9(3)

### ISSN

1612-1783

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### Publication Date

2012

### DOI

10.1558/cam.v9i3.203

Peer reviewed

Published in final edited form as:

*Commun Med.* 2012 ; 9(3): 203–213.

## Preserving the child as a respondent: Initiating patient-centered interviews in a US outpatient tertiary care pediatric pain clinic

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### Abstract

This article identifies some of the challenges of implementing patient-centeredness in multiparty clinical visits. Specifically, it describes four interview practices with which clinicians address these challenges in a US outpatient tertiary care pediatric pain clinic. Using the qualitative method of conversation analysis, we analyze clinicians' child-directed (ages 10–18) interviewing during the initial stage of 51 intake visits. In particular, we analyze the challenges involved in open-ended questioning, a form of interviewing associated with patient-centeredness. Open-ended questioning presents participants with competing demands: although it gives children an opportunity to talk about their illness in their own terms, it also asks them to be responsible for a larger part of the communication work. Moreover, the presence of a parent as an alternative informant can lead to the loss of the child as an informant if clinicians fail to give the child, particularly younger ones, enough guidance in answering. We argue that a flexible range of interviewing practices may be a step towards offsetting children's and parents' past negative experiences with clinicians, improving patient outcomes and implementing child/patient-centeredness.

### Keywords

chronic condition; clinician-child-parent triadic communication; medical interview questions; medically unexplained symptoms; patient participation; patient presenting concerns

### 1. Introduction

This article identifies some of the challenges of implementing patient-centeredness in multiparty medical visits, and the practices with which clinicians address these challenges in a US outpatient tertiary care pediatric pain clinic. Specifically, we analyze the challenges of situating the patient-child at the center of care right from the start of the visit, with an understanding that 'the process of healing depends on knowing the patient as a person, in addition to accurately diagnosing their disease' (Epstein 2000: 806). One way to accomplish this is to begin the interaction with open-ended questions about symptoms directed to the

child. However, such child-centered implementation presents clinicians with two dilemmas. First, because initial open-ended questions such as ‘Tell me your story’ impose cognitive and interactional demands on the respondent, the child-patient may fail to answer and withdraw from active participation. Second, because they have at least two respondents in a pediatric encounter, clinicians struggle with the choice between prioritizing the patient as symptom informant, or obtaining relevant information from the parent, but losing the child as an informant. We illustrate how clinicians manage the above dilemmas through four interrelated interview practices: keeping the presentation open, renewing open-ended solicitations, shifting to closed-ended questioning, and asking the child’s permission to solicit parental assistance. In doing so, this article highlights the flexibility required to implement patient-centeredness in multiparty visits, and specifically, when the patient is a child.

Patient-centeredness is a popular but controversial term, receiving as much praise as critique. Patient-centeredness is praised because it is preferred by patients (Little *et al.* 2001) and is associated with higher patient satisfaction, better patient adherence and improved patient health (Blasi *et al.* 2001; Stewart 1995, 2005; Stewart *et al.* 2000). However, patient-centeredness is critiqued because of inconclusive results linking it to positive health outcomes (Griffin *et al.* 2004; Lewin *et al.* 2001; Michie *et al.* 2003), and because of failing to eliminate doctor-patient asymmetries (Pilnick and Dingwall 2011). Although definitions of patient-centeredness abound, Stewart *et al.* (1995) identify six components: (1) exploring the disease and the patient’s illness experience; (2) understanding the whole person; (3) finding common ground regarding management; (4) incorporating prevention and health promotion; (5) enhancing the doctor-patient relationship; (6) ‘being realistic’ about personal limitations and issues such as the availability of time and resources.

Of particular relevance to the implementation of patient-centeredness is Stewart *et al.*’s (2000) finding that physician patient-centered behaviors are not directly related to health outcomes, but mediated by patients’ perceptions of patient-centeredness. The goal of patient-centeredness is not ‘the politically correct interview that contains a requisite of open-ended questions and empathic-sounding responses’ (Epstein 2000: 806), but a level of connection with the patient based on shared common ground, one in which the physician understands ‘what it means to be a truly attentive and responsive listener’ (Stewart *et al.* 2000: 800). Furthermore, rather than adherence to any rigid patient-centered style that may lead to interactional difficulties (Peräkylä and Vehviläinen 2003), a flexible range of interviewing strategies that increase patients’ positive perception of the consultation may be conducive to improved patient outcomes and to patient-centeredness. This approach is critical in the long-term treatment of children with chronic pain, since patient-centered care may be a step to offset children’s and parents’ past negative experiences with clinicians, including miscommunications, misdiagnoses and failed treatments (Kenny 2004; Nutkiewicz 2008).

Patient-centeredness in pediatric care may be challenging. A first challenge to patient-centeredness is the type of clinician question. The use of initial broad questions (e.g. ‘What’s going on?’ or ‘Tell me what bothers you’) is one amongst several behavioral components of patient-centeredness (Platt *et al.* 2001; Smith *et al.* 2000). Broad, open-ended

or non-focused questions (Clemente *et al.* 2008; Roter and Hall 1992: 82–83) ask patients to produce coherent accounts (e.g. a symptom list or a chronological narrative), but leave it up to them to decide what to say and how to do it. The breadth of open-ended questions is an opportunity and a challenge. Patients are asked to (1) determine ‘on the spot’ the relationship between their experience, symptoms and problems; (2) select events of their past that may be diagnostically relevant; (3) appraise what pieces of information the clinician already knows; and (4) assess whether the information they present matches what they believe the clinician expects to hear (Heritage and Robinson 2006a and b; Terasaki 2004).

On the other hand, in closed-ended or focused questions (e.g. ‘How long have you been having headaches?’ or ‘You had a whooping cough when you were nine?’) clinicians propose the topic to talk about and inquire about a specific aspect of that topic. Consequently, closed-ended questions are less burdensome for patients who can answer with a few words (e.g. ‘two months’) or simply with a ‘yes’ or ‘no’. Because of the cognitive and interactional demands of open-ended questions, children may be more likely to answer a closed-ended question. In a primary care study of younger children (2.6–10 years) in the US, Stivers (2012) found that children answered yes/no questions more often than wh-questions (such as ‘what’, ‘where’, ‘who’, ‘when’, ‘which’), holding constant the question content and the child’s age. In a US tertiary care setting, Clemente *et al.* (2008) found that older children (10–18 years) answered questions more often than younger ones, but answered focused questions (92%) more frequently than non-focused ones (76%).

A second challenge to patient-centeredness in pediatric care is the fact that clinicians have at least two respondents. Child patients must contend with an alternative speaker – parent or surrogate – who can also provide relevant information. If children encounter difficulties and delay their answers, parents are likely to answer on their behalfs (Stivers 2001; Stivers and Robinson 2006). Although children’s participation has increased over the years (Meeuwesen and Kaptein 1996), the presence of an adult respondent still limits it (Cahill and Papageorgiou 2007; Tates and Meeuwesen 2001). Children’s limited participation is documented across pediatric settings, including emergency and outpatient care (Tates and Meeuwesen 2001; Tates *et al.* 2002b; van Dulmen 1998; Wissow *et al.* 1998), and chronic illness (Scott *et al.* 2003; Young *et al.* 2003). Strong (1979) reports that parents may take over the interactional floor and reduce children to non-persons, whereas other authors report higher levels of involvement (Pantell *et al.* 1982; Silverman 1987; Stivers 2001). Furthermore, children’s participation is not evenly distributed: they are more involved in medical information gathering, such as history taking, than in information giving, such as the diagnosis delivery (Pantell *et al.* 1982). In an emergency care study, Wissow and collaborators (1998) concluded that despite the association of patient-centered clinician style and increased child participation, children may still remain passive participants. In light of children’s limited participation in their medical care (van Dulmen 1998), clinicians may feel torn between two priorities: persisting with open-ended questioning, even at the risk of losing the child as an informant, or eliciting symptoms from the child, even if it involves abandoning open-ended questions in favor of closed-ended questions that a child will be more likely to answer.

In a qualitative-quantitative study that compared the pain clinic under discussion with two non-pain clinics, Clemente *et al.* (2008) found that, when taking the three clinics together, the initial (96%) and four subsequent (91%) opening medical questions (i.e. the first substantive question/s with which clinicians attempt to elicit or confirm the reason of the visit, and/or begin with the actual history taking (Heritage and Robinson 2006b)) were directed over-whelmingly to the children. Broad questioning was only used consistently in the pain clinic, with the majority of initial opening medical questions being open-ended (73%), and only half of the subsequent 2–5 question series containing one or more open-ended questions (49%). Furthermore, the frequency of open-ended questions decreased with each subsequent question in the series 2–5, and 51% of the pain clinic visits did not contain any subsequent open-ended questions. Based on Clemente *et al.*'s findings (2008), we set out to examine qualitatively the organization of clinicians' initial medical questions in order to analyze the contrast between clinicians' persistent commitment to child-directed interviewing but their diminishing use of broad questions as the clinical interview progressed.

## 2. Methods

The present qualitative analysis is based on 51 outpatient initial visits between 2003 and 2006 at a US tertiary care clinic specializing in pediatric pain which were video-recorded as part of a large mixed-method research project on anxiety and pain in children (Bursch *et al.* 2006; Meldrum *et al.* 2009). Video-recording was used to capture children's non-verbal courses of action and responses (Clemente 2009). The use of video-recording has been the subject of debate (Clemente 2008). Participants may modify their conduct because of the presence of the video-camera, but all forms of observation, including the presence of the audio-recorder or the researcher, have an effect on the behaviors observed. Despite such modifications, Duranti (1997: 118) underscores that 'people usually do not invent social behavior, language included, out of the blue'.

Parents completed IRB-approved written informed consent forms and children provided written assent. Participants comprised children presenting with pain symptoms lasting three months or more, their caregivers and clinicians. Patients (35 girls and 16 boys, mostly Caucasian; age range 10–18 years, mean = 14.6 years, median = 14 years) had long and complex medical histories of multiple pain symptoms for extended periods of time (an average of 49 months prior to their tertiary care visit, with 41% of patients presenting multiple pain diagnoses), and involving numerous visits (patients averaged 19 visits within the last 12 months and 51% of all patients had been seen by at least six different doctors). The most common diagnoses included headaches (migraines; myofascial, vascular, tension, stress-related or other types), functional neurovisceral pain disorder (bowel, uterine or bladder disorder), and myofascial pain (excluding headaches). Mothers solely accompanied patients in the majority of initial visits (85%). Finally, the three participating clinicians in the pain clinic were all female Caucasians: two were physicians and the third was a clinical psychologist who worked in tandem with a physician and was present in 23 initial visits (45%).

The analysis of clinicians' questioning strategies was based on an examination of the video-recorded opening medical questions. Clinicians' questioning strategies were analyzed using conversation analysis (CA) (Heritage 1997), a method that has been used to study pediatric communication (Silverman 1987; Stivers 2007; Strong 1979). CA employs inductive reasoning to identify practices in social interaction that evidence systematic communication design. To be identified as a practice, particular elements of communication conduct must be recurrent, situated and attract responses that distinguish them from related or similar practices. Rather than relying on respondent validation alone (Barbour 2001) or analyzing participants and their actions individually, CA relies on the interactive organization of talk, turn by turn. CA analyses are internally validated through the sequential examination of others' responses, since a subsequent action contains the next speaker's interpretation of the prior speaker's action (Heritage 2006). CA's goal is to identify and explicate the range of systematic practices within a specific context, and to describe how these practices are accomplished. The present analysis is based on inductive qualitative observations of clinicians' questioning practices at the beginning of initial visits, with selected extracts to illustrate them.

### 3. Results

#### 3.1. Keeping the problem presentation open

The first interview practice is to ask children open-ended questions and to wait. This practice imposes the fewest constraints on children: they are encouraged to talk, but without further instructions on what to say. This practice has three aspects: clinicians withhold their talk when a child experiences difficulties with his/her talk or produces elaborated answers; refrain from seeking parental expansion by not looking at the parent; and offer continuers, such as 'mm hm', that are typical displays of alignment in extended tellings. In Extract 1, a fourteen-year-old girl produces an extended description of her headaches (lines 4–13). The clinicians allow her time to talk, as observable in the patient's frequent pauses and non-lexical perturbations such as 'uhm'. The patient displays that she is completing her problem presentation by a return to current symptoms (Robinson and Heritage 2005), a summative 'pretty much', and the use of final intonation (lines 12–13). In the following extracts, the patient is identified as PAT, the parents as MOM/DAD, and the clinicians as DOC, or DR1/DR2 if two are present. Transcription conventions are described in Ochs *et al.* (1996) and can be found online (Schegloff 2012).

#### **Extract 1 (Case 6)—**

- 1 DR2: Y'- I see you've two  
 2 pro:blems. So le:t's start  
 3 with the headaches.  
 4 PAT: Okay, well I've had headaches  
 5 since I was think fo:ur years  
 6 o:ld, (1.1) and (1.0) uhb (.)  
 7 the:y (0.4) they're pretty  
 8 co:nsta:nt? (0.7) and (1.0)  
 9 uhm when I get headaches I  
 10 usually have light pai:n,  
 11 behind my e::yes, (0.7) and  
 12 (.) it just pretty much my  
 13 entire head.  
 14 (0.8)  
 15 DR2: > [mm hm:,  
 16 PAT: => [On one area.  
 17 (2.5)  
 18 DR2: Okay.  
 19 DR2: .hh and what is i:t, (0.4)  
 20 f::ee:l like. Does it fee:l  
 21 like (.) pounding pressure:::,

At this juncture, the clinician waits to see if the patient continues talking, and eventually produces a continuer (line 15) to signal that they are not moving to a next activity and that the patient still has the interactional floor. The patient acquiesces by producing a brief addition to her previous extended telling (line 16). The clinician waits again before she indicates with 'okay' that she is moving to a next activity (line 18), one in which she takes the lead by asking closed-ended questions. Clinicians withheld their own talk in order not to close the problem presentation (see Extracts 2, 3 and 4). Continuers were also used to avoid closing the problem presentation and to encourage extension of children's accounts (see Extract 2, lines 24–46).

### 3.2. Renewing open-ended solicitations

The second practice is to ask additional open-ended questions. Instead of covertly indicating that the child's account giving is not finished, clinicians use additional questions that apply action pressure (by asking the child to talk), but little topical pressure (by minimally recalibrating the scope of the answer) (Boyd and Heritage 2006). In Extract 2, the clinician begins with a broad directive (lines 1–2). The patient, a fifteen-year-old girl, repeats the question in a musing tone of voice (line 3). The clinician follows with a second broad solicitation (line 4), and the patient displays again difficulties in answering (line 5).

#### Extract 2 (Case 65)—

1 DOC: -> So .h (.) start £with your  
2 story£. hhh  
3 PAT: Start with my story,=  
4 DOC: -> =£Tell me your st(h)or(h)y£.  
5 PAT: U::hm: (0.8)  
6 DOC: (uh) tell me what th-  
7 PAT: ghhhh  
8 DOC: -> But tell me what bothers  
9 you[:;, what the:  
10 PAT: [u:::h  
11 (0.6)  
12 DOC: -> What (.) the [pain problem is.  
13 PAT: [My hip bo::thers  
14 me[:.hhh .hh hh  
15 DOC: [£Okay£. So that's  
16 the[: : :=  
17 PAT: [that's  
18 DOC: =left hip [( )?,  
19 MOM: [.hhhhh ((cough))  
20 PAT: The my left hip and, (0.6) I  
21 can't really remember, like  
22 (0.5) one thing?, (0.5) that  
23 (0.7) made it hurt?,  
24 DOC: mm hm,  
25 PAT: I just figured probably 'bout  
26 t::wo years ago[:?.,  
27 DOC: [m:m h[m.  
28 PAT: [while I



29 was (0.8) da:nci:ng o:r doing  
 30 something,  
 31 DOC: mh mm,  
 32 PAT: something just ha:ppened,  
 33 a[::d 's:  
 34 DOC: [mm hm,  
 35 PAT: I can notice it o:r, (0.3)  
 36 DOC: mm hm.  
 37 (1.0)  
 38 PAT: Wasn't that serious a::nd,  
 39 DOC: mm hm,  
 40 (0.8)  
 41 PAT: and got worse over ti[:me, or=  
 42 DOC: [m:m hm,  
 43 PAT: =(it's), so I don't really  
 44 kno:w what happene:d, (.) but  
 45 it just started to hurt.  
 46 DOC: mm hm,

The clinician tries for a third time to solicit a problem presentation, but recalibrates the demands imposed on the patient (lines 8–9 and 12). The clinician breaks down the previous solicitations into narrower topical domains (e.g. tell me what bothers you, what the pain problem is), and gives the patient some directive instructions. Although this third solicitation is still broad in its focus, it can be answered with a symptom list. This third attempt is successful. The patient answers the question, and after confirming that her left hip is the problem, she launches into an extended telling during which the clinician withholds her talk and limits herself to producing continuers (lines 24–46).

### 3.3. Shifting to closed-ended questioning

The third interview practice is to shift to closed-ended questioning with the child. This represents a compromise between the need to retain the child as an informant and the need to obtain relevant information. If we consider the distribution of labor between children and clinicians in the activity of questioning, the more work clinicians do when asking (e.g. establishing the topic and type of action of the sequence, constraining what the child may answer, and giving instructions on how to answer), the less work is required of children, who no longer have to make a decision as to what and how to answer. The mere delay of a child answer makes it more likely that parents intervene (Stivers 2001; Stivers and Robinson 2006), so clinicians avoid parental interception by reducing children's burden. Shifting to closed-ended questioning represents a gradual progression from broad to directed questioning, with the advantage of retaining the child as an informant, and the disadvantage of imposing limitations on form and content of the child's answer. Extract 2 exemplifies a first step towards questions for which the child has to do less work. Although the clinician remains open by not proposing any single topic, she focuses on the patient's problems by asking, "Tell me what bothers you what the pain problem is?" (lines 8–9 and 12).

Extract 3 below illustrates the clinician's shift to more structured questions that the patient answers. In Extract 3, the clinician fails to elicit the reason for the visit with open-ended questions (lines 1–8). After considerable delay (line 9), the patient, a ten-year-old girl, produces non-lexical perturbations displaying that she is trying to answer, but has difficulties (line 10). The clinician waits again (line 11), and then delimits the topic by instructing the patient that she is referring to the last couple of weeks (lines 12–13).

**Extract 3 (Case 62)—**

1 DOC: Why don't you tell me (.)  
 2 what's going on,=while I'm  
 3 looking down here. °If you  
 4 don't #mi::nd#°.  
 5 MOM: hh hh ((clearing throat))  
 6 DOC: Why: don't you tell me what's  
 7 going o:n, (.) symptom  
 8 wise.=°#Lately#°.  
 9 (0.9)  
 10 PAT: nm::  
 11 (0.3)  
 12 DOC: Jus' the (.) past couple of  
 13 wee:ks. (.)  
 14 PAT: Uhm: I haven't been fee:ling  
 15 very good:.  
 16 DOC: In which way.  
 17 (0.4)  
 18 PAT: U:hm feeling sick.  
 19 (0.4)  
 20 PAT: Like I can throw up.  
 21 (0.5)  
 22 DOC: -> .hh Like nauseous?  
 23 PAT: Yeah.  
 24 (0.5)  
 25 DOC: -> Have you yomited?  
 26 (0.6)  
 27 PAT: No.

The child provides a non-specific assessment of how she feels after some more delays and non-lexical perturbations (lines 14–15). Then the clinician, combining a request for clarification (line 16) and the withholding of her talk (lines 17, 19, and 21), elicits a new piece of information: nausea is a symptom. At this point the clinician uses a confirmation request (line 22) to move to closed-ended yes/no questioning, which the child answers, though with substantial delays and without expansions (lines 23 and 27). With continued yes/no questions, the clinician succeeds in obtaining symptom information from the child for the following five minutes of history taking (not reproduced here).

### 3.4. Asking the child's permission to solicit parental assistance

The fourth practice is soliciting parental assistance after having obtained the child's permission. Shifting to the parent was rare in this pediatric pain clinic (Clemente *et al.* 2008). As illustrated by Extract 4 below, parental shifts were used when other forms of questioning, particularly the strategies of keeping the problem presentation open (lines 14–27) and renewing open-ended solicitations (lines 28–33), had already failed. In Extract 4 the clinician begins the symptom elicitation by prompting the child, a twelve-year-old boy, into the role of informant with three questions (lines 1–3, 5 and 8–9) that, although grammatically yes/no questions, are often used as prompts to elicit accounts. The question 'And that's when everything started?' could be taken as an invitation to expand on what 'everything' is. However, the child answers but does not expand, despite the frequent silences (lines 4, 7, 10 and 13).

#### Extract 4 (Case 61)—

- 1 DOC1: and what (.).hh tell me a  
 2 little bit about the pain.  
 3 You had whooping cough.  
 4 (0.3)  
 5 DOC: when you were nine?=  
 6 PAT: =Yeah.  
 7 (0.5)  
 8 DOC1: And that's when everything  
 9 started?,  
 10 (0.3)  
 11 PAT: Yeah.  
 12 MOM: Yeah.  
 13 (0.6)  
 14 DOC1: So what do you remember.  
 15 (0.3)  
 16 DOC1: back when you were nine.  
 17 (0.5)  
 18 PAT: uh ug uhm (1.0) .hhhhh hhhhh  
 19 (1.2) u::h (5.0) I remember  
 20 for (0.4) uhm (0.7) uh (1.1)  
 21 feel like I started to feel  
 22 this pain in my back. (0.3)  
 23 and (1.1) I don't really  
 24 remember it that well,  
 25 DOC1: Uh huh.  
 26 PAT: Til I went to hospital, (0.4)  
 27 hhhh

28 DOC1: And then what d'you remember,  
 29 (1.0)  
 30 PAT: Wuhh (0.5) uh (2.5) when I  
 31 was (0.8) nine, (0.3) hhh  
 32 hhhhh (2.4) hhhh ·hhh it  
 33 jus- (3.7)  
 34 DOC1: -> Should we let mom fill this  
 35 out?  
 36 PAT: Yeah.  
 37 DR1: oka:y.  
 38 (.)  
 39 PAT: Sorry,  
 40 DR1: O::h N↑o::

In line 14 the clinician makes a transition (marked with 'so' (Bolden 2006)) and tries a first open question inviting the child to say anything that he remembers. The child does not answer (line 15), so the clinician limits the answer by adding the temporal specification to talk about what he remembers when he was nine. With such temporal specification, resembling what she has done in line 5, the clinician renews the relevance of an answer, narrows somewhat the topical domain of her question and provides some additional instructions on how to answer.

After a number of silences, pauses and displays of difficulty (lines 18–27), the clinician renews her solicitation with a question that acknowledges the child's prior attempt to produce an extended telling (e.g. 'And then') and renews the original open invitation to provide a self-recollecting account (e.g. 'What do you remember?') (line 28). The child attempts to answer, but his pauses and silences grow in length (lines 29–33). After a long wait, the clinician requests permission from the child to shift to his mother (lines 34–35).

The child consents and the two adults begin a recollection of events starting with the child's asthma onset in infancy and concluding with a return to his current symptoms (not reproduced here). Although the mother is the primary respondent as she recounts his history of symptoms, the child is an active participant: he overlaps with his mother's answers, corrects her depiction of past events and provides information about how he experiences his symptoms.

The clinician seems to pursue the delicate balance of opening the task of answering to be shared by parent and child, and of avoiding the child being relegated to a minimal participant role or excluded altogether. On the one hand, the clinician has shifted to the parent, relieving the child from the sole responsibility of responding, which may have been a too burdensome task. On the other hand, by asking the child's permission to solicit parental assistance, the clinician has *de facto* endowed the child with authority, an authority that entitles him to grant or decline permission. The clinician displays deference to the child as the symptom experiencer, as the one with the authority and epistemic rights to talk about symptoms of his/her body (Clemente *et al.* 2008), to delegate and enlist others' support, and to sanction and modify the accuracy of what the parent may say about his/her symptoms (Clemente 2009). Furthermore, the clinician orchestrates the parameters to govern parental

participation during the interview (Dingwall 1980): notice how despite the child's numerous difficulties, the parent does not self-select and start *helping* the child by talking for him. On the contrary, the parent talks when she is invited to do so, and limits herself to the clinician's instruction of 'filling this out'. Although the problem presentation is open to parental assistance, the clinician and parent agree to the terms that such assistance is temporary, solicited and subordinated to the child's account. The fact that the child continues to talk and corrects his mother supports the conclusion that the interview remains centered on the child.

#### 4. Discussion and conclusion

We have examined four interrelated child/patient-centered practices to initiate clinical interviewing: keeping the presentation open, renewing open-ended solicitations, shifting to closed-ended questioning, and asking for the child's permission to solicit parental assistance. With these practices, clinicians attempt to reconcile two competing goals: first, to retain the child as a symptom informant even where it necessitates the use of closed-ended questions that s/he may answer more readily; and second, to give children more control to shape the answers through the use of open-ended questions, even where this entails the risk of losing the child as an informant altogether. We argue that the *frequency* and *order* of these practices display an organization in which clinicians prioritize children as symptom respondents over parents, and open-ended over closed-ended questions.

Regarding frequency, clinicians ask children questions more often than parents during the initial stages of the clinical interview. Despite children's difficulties (e.g. lines 9–11, 14–15, 17, 19, 21, 23 and 27 in Extract 3; and lines 4, 7, 10, 13, 15, 17, 18–24, 26–27, 30–33 in Extract 4), clinicians rarely shift to parents. Clemente *et al.*'s (2008) quantitative finding that the overwhelming majority of the initial and four subsequent opening medical questions are directed to the child is illustrated by all four extracts, but particularly by Extract 4: the parental shift occurs only under dire circumstances (i.e. prolonged repeated silences of up to 5 seconds and after requesting the child's permission).

Regarding order, clinicians prioritize open-ended over closed-ended questions by using them earlier. Clemente *et al.*'s (2008) quantitative finding that the majority of initial opening medical questions are open-ended (73%), but that only half of those following contain one or more open-ended questions (49%), is illustrated by all four extracts. Clinicians relied on open-ended questions consistently during the initial opening medical question, but not necessarily for subsequent questions. Extracts 1 and 3 contain one or more closed-ended questions. Extract 2 contains open-ended questions, since the patient produces her own extended telling; and Extract 4 contains open-ended questions which are redirected to the parent after the child is unable to answer.

As exemplified by Extract 4, the child may be unable to fulfill the role of primary respondent. The child him/herself may invite specific types of parental assistance and exclude others (Clemente 2009), or clinicians may invite it after obtaining the child's permission. Obtaining the child's permission is a compromise in that the clinician's shift to the parent is framed as temporary and subordinated to the child's authority. The child grants permission and delegates the action of speaking to the parent, but without abdicating the

epistemic rights to sanction and modify what the parent may say. This practice succeeds in constructing a child patient-centered interview, one in which the child does as much of the work of answering as s/he can or wants. These instances, where the child participates in the temporary shift to the parent, are different from ‘non-supportive adult behavior’ (Tates *et al.* 2002a), in which the parent preemptively volunteers information, or in which the clinician and parent elect to talk without the child’s input.

As illustrated in Extract 2, initiating the clinical interview with open-ended questions directed to the child has the benefits of (1) allowing clinicians to conduct a multidimensional assessment of pain; (2) eliciting the patient’s and his/her family’s behaviors, beliefs and attitudes toward the pain problems (Zeltzer *et al.* 1997); and (3) recognizing that children with chronic pain have a story to tell, a story to which clinicians have often been unwilling to listen (Carter 2002; Kenny 2004; Nutkiewicz 2008). This type of interviewing, moreover, has great potential for contributing to several patient-centeredness components (Stewart *et al.* 1995).

However, starting the interview with an open-ended question imposes its own trade-offs. For the clinician, it may cost the loss of the child as respondent if s/he delays his/her answer at this crucial point of the visit. For the chronic pain patient, whether adult or child, framing an initial account of the pain is no easy task. First, the patient needs to organize his/her different experiences of pain symptoms according to their perceived diagnostic relevance (Extract 1), as well as gauge what the clinician knows already and still needs to know (Extract 3). Second, the patient must organize the information in a coherent format, choosing the starting point and including or excluding events to explain his/her theory of how the pain came to be a problem (Extracts 1 and 2).

The challenges that open-ended questions present to pediatric patients are illustrated in Extract 2, in which the fifteen-year-old patient produces an extended account after the clinician shifts from an elicitation of a chronological account with ‘Start with your story’, to a question more focused on the patient’s primary pain problem. The patient first answers the more focused question, and prefaces her account by underscoring that she does not know the cause or origin of her pain problem. The patient concludes her account with a similar disclaimer of insufficient knowledge (lines 43–45). If older patients, as illustrated by a fourteen-year-old girl (Extract 1) and a fifteen-year-old girl (Extract 2), manage to produce an extended account in response to a non-focused question, younger patients, like a ten-year-old girl (Extract 3) and a twelve-year-old boy (Extract 4), require more help in the form of closed-ended questioning to continue to perform the role of primary respondent. Clinicians’ closed-ended questions may narrow the range of children’s answers, but may effectively ‘scaffold’ and facilitate children’s responses (Clemente *et al.* 2008), as well as increase the chances that the child will answer the clinician’s next question (Stivers 2012).

In light of these findings, we argue that pediatric patient-centeredness is neither straightforward nor easily implemented: open-ended questioning creates opportunities (i.e. co-participation and co-responsibility) and risks (i.e. parent usurpation of the respondent role if the child delays his/her answer). These findings illustrate Epstein’s remark (2000: 806) that clinicians’ flexibility is probably fundamental to implementing patient-centeredness,

and that rigid quasi-normative ‘professional stocks of interactional knowledge’ must be adjusted to the realities of medical interactions (Peräkylä and Vehviläinen 2003). Even when clinicians may seem less patient-centered *sensu stricto* (i.e. by asking children closed-ended questions or not retaining them as primary respondents), patient-centeredness may be communicated, since (1) initiating the visit with open-ended questions is one patient-centered technique (Platt *et al.* 2001; Smith *et al.* 2000); and (2) both children and parents may recognize clinicians’ commitment to listening to them and to achieving a shared common ground. At the end of the day, patients (and their parents) are ‘the ultimate arbiter of patient-centeredness’ (Epstein 2000: 806); their perceptions, not physicians’ specific behaviors, will relate directly to their health outcomes (Stewart *et al.* 2000).

The present study extends Wissow *et al.*’s examination (1998) of pediatric patient-centered communication in an emergency care setting, with an analysis of the challenges and opportunities of patient-centered communication in a tertiary care pediatric clinic. In doing so, this study sheds light on the challenges of adapting a patient-centered care model that has been theorized and studied among adult patients (Mead and Bower 2000; Michie *et al.* 2003; Stewart *et al.* 2000) to the different communicative dynamics of clinician-child-parent triadic encounters (Gabe *et al.* 2004; Tates and Meeuwesen 2001). This study also points to the dilemma that patient-centered physicians, whether in pediatric or adult care, face when open-ended questions fail to be effective in eliciting symptom information.

Future studies should continue to examine the challenges and opportunities of preserving the child as a primary respondent during the beginning of the clinical interview. In particular, work should identify specific ways to facilitate clinicians’ engagement with children in pediatric settings, such as the four identified in the present paper, and those identified by Stivers (2012) and Clemente *et al.* (2008). Furthermore, research is needed to examine the effectiveness of pediatric patient-centered interviewing practices in light of children’s developmental trajectories. Although research in clinician-child-parent communication incorporates the concept of age-related competence, the selection of specific forms of questioning to correspond better with different age groups and children’s varying communicative competences remains unexamined, except for Stivers’ (2012) study on younger children (2.6–10 years). Examining in detail the relationship between clinicians’ questioning practices and children’s developmental trajectories from childhood to adolescence and young adulthood is one key to developing effective pediatric patient-centered methods of eliciting information from the child patient him/herself.

## Acknowledgments

Research for this article was supported by the National Institute of Mental Health: Grant No. NIMH/R01 MH63 779, P.I: M. Jacob. We are also grateful to Andrea Maestrejuan, Marian Katz, and Eugene Danyo for their careful reading and comments.

## References

- Barbour RS. Checklists for improving rigour in qualitative research: A case of the tail wagging the dog? *British Medical Journal*. 2001; 322 (7294):1115–1117. <http://dx.doi.org/10.1136/bmj.322.7294.1115>. [PubMed: 11337448]

- Blasi ZD, Harkness E, Ernst E, Georgiou A, Kleijnen J. Influence of context effects on health outcomes: A systematic review. *The Lancet*. 2001; 357 (9258):757–762. [http://dx.doi.org/10.1016/S0140-6736\(00\)04169-6](http://dx.doi.org/10.1016/S0140-6736(00)04169-6).
- Bolden GB. Little words that matter: Discourse markers ‘so’ and ‘oh’ and the doing of other-attentiveness in social interaction. *Journal of Communication*. 2006; 56 (4):661–688. <http://dx.doi.org/10.1111/j.1460-2466.2006.00314.x>.
- Boyd, E.; Heritage, J. Taking the history: Questioning during comprehensive history taking. In: Heritage, J.; Maynard, DW., editors. *Communication in Medical Care. Interaction between Primary Care Physicians and Patients*. Cambridge: Cambridge University Press; 2006. p. 151-184.
- Bursch B, Tsao JCI, Meldrum M, Zeltzer LK. Preliminary validation of a self-efficacy scale for child functioning despite chronic pain (child and parent versions). *Pain*. 2006; 125 (1–2):35–42. <http://dx.doi.org/10.1016/j.pain.2006.04.026>. [PubMed: 16740360]
- Cahill P, Papageorgiou A. Triadic communication in the primary care paediatric consultation: A review of the literature. *British Journal of General Practice*. 2007; 57 (544):904–911. <http://dx.doi.org/10.3399/096016407782317892>. [PubMed: 17976292]
- Carter B. Chronic pain in childhood and the medical encounter: Professional ventriloquism and hidden voices. *Qualitative Health Research*. 2002; 12 (1):28–41. [PubMed: 11797923]
- Clemente, I. Recording audio and video. In: Wei, L.; Moyer, M., editors. *The Blackwell Guide to Research Methods in Bilingualism*. Malden, MA: Blackwell; 2008. p. 177-191.
- Clemente I. Progressivity and participation: Children’s management of parental assistance in paediatric chronic pain encounters. *Sociology of Health and Illness*. 2009; 31 (6):872–888. <http://dx.doi.org/10.1111/j.1467-9566.2009.01156.x>. [PubMed: 19856490]
- Clemente I, Lee SH, Heritage J. Children in chronic pain: Promoting pediatric patients’ symptom accounts in tertiary care. *Social Science and Medicine*. 2008; 66 (6):1418–1428. <http://dx.doi.org/10.1016/j.socscimed.2007.11.015>. [PubMed: 18272275]
- Dingwall R. Orchestrated encounters: An essay in the comparative analysis of speech-exchange systems. *Sociology of Health and Illness*. 1980; 2 (2):151–173. <http://dx.doi.org/10.1111/1467-9566.ep10487779>.
- Duranti, A. *Linguistic Anthropology*. Cambridge: Cambridge University Press; 1997. <http://dx.doi.org/10.1017/CBO9780511810190>
- Epstein RM. The science of patient-centered care. *Journal of Family Practice*. 2000; 49 (9):805–807. [PubMed: 11032204]
- Gabe J, Olumide G, Bury M. ‘It takes three to tango’: A framework for understanding patient partnership in paediatric clinics. *Social Science and Medicine*. 2004; 59 (5):1071–1079. <http://dx.doi.org/10.1016/j.socscimed.2003.09.035>. [PubMed: 15186906]
- Griffin SJ, Kinmonth AL, Veltmn MWM, Gillard S, Grant J, Steward M. Effect on health-related outcomes of interventions to alter the interaction between patients and practitioners: A systematic review of trials. *Annals of Family Medicine*. 2004; 2 (6):595–608. <http://dx.doi.org/10.1370/afm.142>. [PubMed: 15576546]
- Heritage, J. Conversation analysis and institutional talk: Analyzing data. In: Silverman, D., editor. *Qualitative Analysis: Issues of Theory and Method*. London: Sage; 1997. p. 161-182.
- Heritage, J. Conversation Analysis. In: Turner, BS., editor. *The Cambridge Dictionary of Sociology*. Cambridge: Cambridge University Press; 2006. p. 91-92.
- Heritage, J.; Robinson, JD. Accounting for the visit: Giving reasons for seeking medical care. In: Heritage, J.; Maynard, DW., editors. *Communication in Medical Care. Interaction between Primary Care Physicians and Patients*. Cambridge: Cambridge University Press; 2006a. p. 48-85.
- Heritage J, Robinson JD. The structure of patients’ presenting concerns: Physicians’ opening questions. *Health Communication*. 2006b; 19 (2):89–102. [http://dx.doi.org/10.1207/s15327027hc1902\\_1](http://dx.doi.org/10.1207/s15327027hc1902_1). [PubMed: 16548700]
- Kenny DT. Constructions of chronic pain in doctor-patient relationships: Bridging the communication chasm. *Patient Education and Counseling*. 2004; 52 (3):297–305. [http://dx.doi.org/10.1016/S0738-3991\(03\)00105-8](http://dx.doi.org/10.1016/S0738-3991(03)00105-8). [PubMed: 14998600]



- Lewin, S.; Skea, Z.; Entwistle, VA.; Zwarenstein, M.; Dick, J. The Cochrane Database of Systematic Reviews. Chichester, UK: John Wiley & Sons; 2001. Interventions for providers to promote a patient-centred approach in clinical consultations.
- Little P, Everitt H, Williamson I, Warner G, Moore M, Gould C, Ferrier K, Payne S. Preferences of patients for patient centred approach to consultation in primary care: Observational study. *British Medical Journal*. 2001; 322 (7284):468–472. <http://dx.doi.org/10.1136/bmj.322.7284.468>. [PubMed: 11222423]
- Mead N, Bower P. Patient-centredness: A conceptual framework and review of the empirical literature. *Social Science and Medicine*. 2000; 51 (7):1087–1110. [http://dx.doi.org/10.1016/S0277-9536\(00\)00098-8](http://dx.doi.org/10.1016/S0277-9536(00)00098-8). [PubMed: 11005395]
- Meeuwesen L, Kaptein M. Changing interactions in doctor-parent-child communication. *Psychology and Health*. 1996; 11 (6):787–795. <http://dx.doi.org/10.1080/08870449608400275>.
- Meldrum ML, Tsao JCI, Zeltzer LK. ‘I can’t be what I want to be’: Children’s narratives of chronic pain experiences and treatment outcomes. *Pain Medicine*. 2009; 10 (6):1018–1034. <http://dx.doi.org/10.1111/j.1526-4637.2009.00650.x>. [PubMed: 19594848]
- Michie S, Miles J, Weinman J. Patient-centredness in chronic illness: What is it and does it matter? *Patient Education and Counseling*. 2003; 51 (3):197–206. [http://dx.doi.org/10.1016/S0738-3991\(02\)00194-5](http://dx.doi.org/10.1016/S0738-3991(02)00194-5). [PubMed: 14630376]
- Nutkiewicz M. Diagnosis versus dialogue: Oral testimony and the study of pediatric pain. *Oral History Review*. 2008; 35 (1):11–21. <http://dx.doi.org/10.1093/ohr/ohm002>. [PubMed: 19122885]
- Ochs, E.; Schegloff, EA.; Thompson, SA., editors. *Interaction and Grammar*. Cambridge: Cambridge University Press; 1996. <http://dx.doi.org/10.1017/CBO9780511620874>
- Pantell RH, Stewart TJ, Dias JK, Wells P, Ross AW. Physician communication with children and parents. *Pediatrics*. 1982; 70 (3):396–402. [PubMed: 7110814]
- Peräkylä A, Vehviläinen S. Conversation analysis and the professional stocks of interactional knowledge. *Discourse and Society*. 2003; 14 (6):727–750. <http://dx.doi.org/10.1177/09579265030146003>.
- Pilnick A, Dingwall R. On the remarkable persistence of asymmetry in doctor/patient interaction: A critical review. *Social Science and Medicine*. 2011; 72 (8):1374–1382. <http://dx.doi.org/10.1016/j.socscimed.2011.02.033>. [PubMed: 21454003]
- Platt FW, Gaspar DL, Coulehan JL, Fox L, Adler AJ, Weston WW, Smith RC, Stewart M. ‘Tell me about yourself’: The patient-centered interview. *Annals of Internal Medicine*. 2001; 134 (11): 1079–1085. <http://dx.doi.org/10.7326/0003-4819-134-11-200106050-00020>. [PubMed: 11388827]
- Robinson JD, Heritage J. The structure of patients’ presenting concerns: The completion relevance of current symptoms. *Social Science and Medicine*. 2005; 61 (2):481–493. <http://dx.doi.org/10.1016/j.socscimed.2004.12.004>. [PubMed: 15893061]
- Roter, D.; Hall, J. *Doctors Talking with Patients: Patients Talking with Doctors*. Westport, CT: Auburn House; 1992.
- Schegloff, EA. *Transcription Symbols*. 2012. Retrieved on September 18, 2012, from <http://www.sscnet.ucla.edu/soc/faculty/schegloff/TranscriptionProject/index.html>
- Scott, JT.; Harmsen, M.; Pictor, MJ.; Sowden, AJ.; Watt, I. Interventions for improving communication with children and adolescents about their cancer; The Cochrane Database of Systematic Reviews. 2003. p. Art. No.: CD002969 <http://dx.doi.org/10.1002/14651858.CD002969>
- Silverman, D. *Communication and Medical Practice: Social Relations in the Clinic*. London: Sage; 1987.
- Smith RC, Marshall–Dorsey AA, Osborn GG, Shebroe V, Lyles JS, Stoffelmayr BE, Van Egeren LF, Mettler J, Maduschke K, Stanley JM, Gardiner JC. Evidence-based guidelines for teaching patient-centered interviewing. *Patient Education and Counseling*. 2000; 39 (1):27–36. [http://dx.doi.org/10.1016/S0738-3991\(99\)00088-9](http://dx.doi.org/10.1016/S0738-3991(99)00088-9). [PubMed: 11013545]
- Stewart MA. Effective physician-patient communication and health outcomes: A review. *Canadian Medical Association Journal*. 1995; 152 (9):1423–1433. [PubMed: 7728691]
- Stewart MA. Reflections on the doctor-patient relationship: From evidence and experience. *British Journal of General Practice*. 2005; 55 (519):793–801. [PubMed: 16212856]

- Stewart MA, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, Jordan J. The impact of patient-centered care on outcomes. *Journal of Family Practice*. 2000; 49 (9):796–804. [PubMed: 11032203]
- Stewart, MA.; Brown, J.; Weston, W.; Donner, A.; McWhinney, I.; McWilliam, C.; Freeman, T. *Patient-centred Medicine: Transforming the Clinical Method*. London: Sage; 1995.
- Stivers T. Negotiating who presents the problem: Next speaker selection in pediatric encounters. *Journal of Communication*. 2001; 51 (2):1–31. <http://dx.doi.org/10.1111/j.1460-2466.2001.tb02880.x>.
- Stivers, T. *Prescribing Under Pressure: Parent-Physician Conversations and Antibiotics*. Oxford: Oxford University Press; 2007. <http://dx.doi.org/10.1093/acprof:oso/9780195311150.001.0001>
- Stivers T. Physician-child interaction: When children answer physicians' questions in routine medical encounters. *Patient Education and Counseling*. 2012; 87 (1):3–9. <http://dx.doi.org/10.1016/j.pec.2011.07.007>. [PubMed: 21816557]
- Stivers T, Robinson JD. A preference for progressivity in interaction. *Language in Society*. 2006; 35 (3):367–392. <http://dx.doi.org/10.1017/S0047404506060179>.
- Strong, PM. *The Ceremonial Order of the Clinic: Parents, Doctors, and Medical Bureaucracies*. London & Boston: Routledge & Kegan Paul; 1979.
- Tates K, Elbers E, Meeuwesen L, Bensing J. Doctor-parent-child relationships: A 'pas de trois'. *Patient Education and Counseling*. 2002a; 48 (1):5–14. [http://dx.doi.org/10.1016/S0738-3991\(02\)00093-9](http://dx.doi.org/10.1016/S0738-3991(02)00093-9). [PubMed: 12220745]
- Tates K, Meeuwesen L, Elbers E, Bensing J. 'I've come for his throat': Roles and identities in doctor-parent-child communication. *Child Care Health and Development*. 2002b; 28 (1):109–116. <http://dx.doi.org/10.1046/j.1365-2214.2002.00248.x>.
- Tates K, Meeuwesen L. Doctor-parent-child communication. A (re)view of the literature. *Social Science and Medicine*. 2001; 52 (6):839–851. [http://dx.doi.org/10.1016/S0277-9536\(00\)00193-3](http://dx.doi.org/10.1016/S0277-9536(00)00193-3). [PubMed: 11234859]
- Terasaki, AK. Pre-announcement sequences in conversation. In: Lerner, G., editor. *Conversation Analysis: Studies from the First Generation*. Philadelphia: John Benjamins; 2004. p. 171–223.
- van Dulmen AM. Children's contributions to pediatric outpatient encounters. *Pediatrics*. 1998; 102 (3): 563–568. <http://dx.doi.org/10.1542/peds.102.3.563>. [PubMed: 9738177]
- Wissow LS, Roter D, Bauman LJ, Crain E, Kerckmar C, Weiss K, Mitchell H, Mohr B. Patient-provider communication during the emergency department care of children with asthma. *Medical Care*. 1998; 36 (10):1439–1450. <http://dx.doi.org/10.1097/00005650-199810000-00002>. [PubMed: 9794338]
- Young B, Dixon-Woods M, Windridge KC, Heney D. Managing communication with young people who have a potentially life-threatening chronic illness: Qualitative study of patients and parents. *British Medical Journal*. 2003; 326 (7384):305–310. <http://dx.doi.org/10.1136/bmj.326.7384.305>. [PubMed: 12574042]
- Zeltzer LK, Bush JP, Chen E, Rivala A. A psychobiologic approach to pediatric pain: Part I. History, physiology, and assessment strategies. *Current Problems in Pediatrics*. 1997; 27 (6):225–253. [http://dx.doi.org/10.1016/S0045-9380\(97\)80025-4](http://dx.doi.org/10.1016/S0045-9380(97)80025-4). [PubMed: 9377897]

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