

Published in final edited form as:

Soc Sci Med. 2008 March ; 66(6): 1418–1428. doi:10.1016/j.socscimed.2007.11.015.

Children in Chronic Pain: Promoting Pediatric Patients' Symptom Accounts in Tertiary Care

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Abstract

This paper examines how clinicians promote pediatric patients' symptom accounts at the beginning of visits in three pediatric tertiary care clinics at a university hospital in the US: pain, gastroenterology and neurology. Quantitative and qualitative data were collected for 69 patient-parent pairs, including videotaped intake visits. Two forms of child account promotion, together with their corresponding distribution across clinics, were identified: (1) Epistemic prefaces were used to upgrade the patient's epistemic status and to establish the child as primary informant; and, (2) non-focused questioning was used to permit children latitude in the formulation of symptoms and experiences. In general, epistemic prefaces were characteristic of the gastroenterology and neurology visits, while non-focused questioning was found overwhelmingly in the pain encounters.

Keywords

USA; Children; Chronic condition; Pain; Communication; Biopsychosocial; Patient Participation

1. Introduction

Obtaining patients' pain accounts is a key aspect of the medical visit, since soliciting a complete presentation of patients' symptoms and concerns is a significant basis for effective diagnosis and treatment (Arborelius, Bremberg & Timpka, 1991; Peppiatt, 1992). It also serves to reduce the incidence of missing patient information, unmet concerns, and the emergence of new and unexpected issues towards the visit's end (Marvel, Epstein, Flowers & Beckman, 1999; White, Levinson & Roter, 1994), while increasing patients' affective satisfaction (Carter, Inui, Kukull & Haigh, 1982; Putnam, Stiles, Jacob & James, 1985; Robinson & Heritage, 2006). This article examines two sets of practices that clinicians use to promote pediatric patients' own accounts of their symptoms during initial tertiary care medical visits. Our analysis focuses on clinician behavior from three outpatient subspecialty

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pediatric clinics (pain, gastroenterology, and neurology) where patients are presenting with recurrent pain symptoms.

In pediatric care, obtaining children's own symptom accounts is a unique challenge since health professionals have at least two interlocutors: a patient and an accompanying parent. Triadic communication may place additional (and sometimes competing) demands on the health professional (Stivers, 2001; Tannen & Wallat, 1986) that impact visit dynamics in multiple ways (Gabe, Olumide & Bury, 2004; Bates, Elbers, Meeuwesen & Bensing, 2002; Bates & Meeuwesen, 2000; van Dulmen, 1998). In a study of Dutch children's participation (ages 4–12) in primary care visits, Bates et al. found that whereas children and parents had about equal opportunities to formulate the global problem presentation, "the specific problem definition, as well as the information exchange of diagnosis and treatment, were accomplished exclusively between the doctor and parent" (Bates, Meeuwesen, Elbers & Bensing, 2002: 112). Moreover, the authors found children's participation decreased significantly unless the physician directly invited the children to present the problem, for instance, using the child's first name (see also Stivers (2001) on the use of preliminary 'social' questions). Physicians' invitations directed to both child and parent resulted overwhelmingly in parental talk. In an observational study of outpatient visits between Finnish children with diabetes (ages 7–9 and 13–15), their parents and clinical dieticians, Pyörälä (2004) found that despite the fact that children were active and competent participants when parents were not present, they easily adopted the role of a bystander when a parent was actively talking. Pyörälä also identified a range of clinician practices to promote child participation: (1) addressing questions to the child, (2) using chains of questions, (3) repeating the child's own expressions, (4) being concrete, (5) using opposites, such as good-bad.

The impact of recurrent non-malignant pain on children's lives has only been recognized recently, despite the fact it is a significant health problem in children (Carter, 2002; McGrath & Finley, 1999). Epidemiological studies across several countries have reported that between 25–30% of children suffer from recurrent pain for over three months, and with significant enough symptoms to impact daily functioning (Perquin, Hazebroek-Kampschreur, Hunfeld, Bohnen, van Suijlekom-Smit, Passchier et al., 2000; Roth-Isigkeit, Thyen, Stoven, Schwarzenberger & Schmucker, 2005; Zeltzer, Tsao, Bursch & Myers, 2006). Assessment and treatment of recurrent pain is complex, because separating physiological from psychological factors may neither be easy nor ultimately useful for treatment (Bursch, Walco & Zeltzer, 1998). As a consequence, there can be relatively high rates of diagnostic and treatment disagreements between clinicians, placing children with unexplained chronic pain at risk for suboptimal care (Konijnenberg, De Graeff-Meeder, Kimpfen, van der Hoeven, Buitelaar, Uiterwaal et al., 2004).

In this context, communication difficulties have been well documented among adult chronic pain patients. In a series of studies of adult British patients with medically unexplained symptoms, Salmon et al. have argued that (1) few physicians empathized with patients, despite the fact they sought more emotional support than patients without unexplained symptoms (Ring, Dowrick, Humphris, Davies & Salmon, 2005; Salmon, Ring, Dowrick & Humphris, 2005); (2) specific types of physician responses to patient presentations, such as rudimentary reassurances, the authority of a negative result, or normalization unrelated to the patients' expressed concerns, were not only ineffective but also tended to lead to exacerbated patient presentations (Dowrick, Ring, Humphris & Salmon, 2004); and (3) most of the primary care physicians' explanations were not particularly well received by patients, and were experienced as a rejection of their suffering (Peters, Stanley, Rose & Salmon, 1998; Salmon, Peters & Stanley, 1999).

In the specific context of recurrent pain in children, clinicians' promotion of child participation may be particularly difficult for a number of reasons. The diagnostic difficulties that children with chronic pain experience when seeking a diagnosis and treatment often turn communication in clinical settings into a negative experience (Kenny, 2004; Nutkiewicz, forthcoming). In a qualitative report of the experience of children with chronic pain and their families, Carter (2002) observes that they often engaged in a "quest for diagnosis" from one clinician to the next, and experienced "referral fatigue", feeling tired of being referred to so many experts who could not explain why the child had pain, what was causing it, or how to treat it. In addition, children and families often felt clinicians did not believe them and/or judged them as dysfunctional or difficult. Their prolonged negative experiences with clinicians was yet another source of stress, and caused children to be cautious about "explaining issues related to their pain to some professionals in case they were accused of exaggerating or trying to opt out of school" (Carter 2002, p. 37).

In sum, there are multiple barriers that may prevent children with recurrent pain from giving full accounts of their symptoms and concerns. These include parental behaviors and lack of previous successful diagnosis and treatment. But they also include children's dilemmas when presenting a pain account, arising from mixed feelings about further repetitions of symptom accounts when earlier recitations have proved unavailing (Carter, 2002; Nutkiewicz, forthcoming), difficulties in assessing how much the clinician already knows (Heritage & Robinson, 2006; Terasaki, 2004), and difficulties figuring out what the latest (and also unknown) clinician wants to hear from them (Beresford & Sloper, 2003).

This study examines ways in which clinicians attempt to promote pediatric patients' accounts of their pain symptoms across three different outpatient clinics: one specializing in pain, and two others specializing in neurology and gastroenterology, respectively. The clinic specializing in pediatric pain differed from the two others in its explicit adoption of a biopsychosocial model of pain and a patient-centered approach to care. In the clinic's pain model a biomedical tissue damage view is replaced by a multifactorial model in which the experience of pain cannot be accounted for by exclusive reference to either physiological or psychological factors (Bursch, Walco & Zeltzer, 1998; Zeltzer, Bush, Chen & Rival, 1997a, 1997b). The pain clinicians advocated an approach to care that was broadly patient-centered, involving a number of shifts from a narrow to a broad focus: from symptom- or condition-centered (i.e. "Where does it hurt?") to patient-centered interviewing (i.e. "Tell me about yourself"), from disease description to illness experience, from generic template of care to one that considers the unique needs of each patient, and from doctor control (i.e. of the medical visit, decision-making, treatment options and illness management) to shared control (Platt, Gaspar, Coulehan, Fox, Adler, Weston et al., 2001; Stewart, Brown, Donner, McWhinney, Oates, Weston et al., 2000; van Dulmen, 2003).

In this paper we examine two sorts of practices they deployed to encourage and support the contributions of children. One set of practices, which we term 'epistemic prefaces', involved framing the encounter in ways that invited child participation as the primary knower and experiencer of symptoms. The second set of practices involved the use of non-focused questions that permitted the child patients latitude in defining the agenda of their responses (Boyd & Heritage, 2006; Mishler, 1984).

2. Data and Methods

The analysis presented here is based on video-recorded data drawn from a study of anxiety and pain in children conducted in the US. The data also include child and parent self-reported measures, and semi-structured parent and child interviews, which were collected

both at the time of recruitment (baseline) and six months later. IRB-approved written informed consent forms were completed by parents and children provided written assent.

Clinician behavior was video-recorded during intake outpatient visits to three pediatric tertiary care clinics: pain, gastroenterology and neurology. Since the conduct of clinicians in the gastroenterology and neurology clinics could not be meaningfully distinguished, in what follows we treat them as a single non-pain group, which we contrast with the pain clinic.

Based on a set of inductive qualitative observations on how clinicians initiated the solicitation of patient symptom information, we operationalized some of these communicative practices for quantitative analysis. One communicative practice involved what we are terming “epistemic prefaces,” which were remarks designed to privilege the child’s knowledge as experienter of the illness relative to all other participants. The second communicative practice involved the design of opening medical questions -initial and four subsequent questions- and centered on (i) whether the child was the addressee, and (ii) whether they were focused or non-focused. An initial opening medical question was operationalized as the first substantial question that attempts to elicit or confirm the reason of the visit, and/or begins with the actual history taking (Heritage & Robinson, 2006). Non-focused questions invite the addressee to talk about a topic while giving latitude as to how that talk would be framed: for instance “What’s going on?” Or “Tell me about your headaches.” In a focused question, the clinician already proposes the topic to talk about and inquires about a specific aspect of that topic. For instance, a clinician may request a confirmation for reason of the visit (e.g. “So headaches?”), or may move directly to the history taking (e.g. “How long have you been having headaches?”). A 30% random sample of the data was coded by a second coder, and inter rater reliability was nearly perfect for both types of communicative practices: a 95.5% agreement level (Cohen’s kappa= .85) for epistemic prefaces and 98% agreement level (Cohen’s kappa= .93) for the medical opening questions. Although the second coder was blinded as to any kind of clinician and patient information, clinic information could be inferred from the type of condition (e.g. back pain complaints were only mentioned in the pain clinic) and from the presence of second clinician, which only occurred in the pain clinic.

3. Results

Sixty nine pairs of child and parent participated in the study. Patients averaged 19.4 medical visits within the last 12 months and presented pain symptoms for an average of 48 months prior to their tertiary care visit. Our study was primarily focused on the pain clinic patients, who represented nearly three quarters of our sample (74%). Of the total patient sample, 45% had been seen previously by more than six different doctors, and 41% presented multiple pain diagnoses. The main patient and parent characteristics, as well as patient distribution by pain and non-pain clinics, patients’ past medical history information and characteristics of the first medical visit are summarized in table 1.

In order to examine differences in patient characteristics between the pain and non-pain clinics, independent t-tests and chi-square tests for continuous and categorical data respectively, were conducted. Results indicated that the pain and non-pain clinics did not differ statistically with regard to patient age, number of medical visits, number of doctors previously seen (6 or more doctors vs. fewer than 6 doctors), and duration of pain symptoms. For pain diagnoses, the pain and non-pain clinics did not differ statistically, except with respect to myofascial pain which was significantly more common in the pain clinic ($\chi^2 = 9.98$, $p < .01$). A majority of pain patients had multiple diagnoses (54%), while only a small minority of non-pain patients did (6%): this difference between the two clinics was statistically significant ($\chi^2 = 12.80$, $p < .001$).

Eight clinicians participated in the study: four from the pain clinic (three women) and four from the non-pain clinics (two women). All the clinicians were physicians, except for a clinical psychologist who worked in tandem with a physician in the pain clinic and was present in twenty-three intakes (45% pain intakes). Clinicians' age range was 34–64; they were predominantly Caucasian except for one Asian American and one Mexican American clinician.

Methods of Promoting Children's Symptom Accounts

In order to foster opportunities for the child to present a pain account, clinicians used a variety of communicative strategies. These comprised local interactional practices for (i) selecting the child as next speaker explicitly (i.e. using address terms or gaze (Sacks, Schegloff & Jefferson, 1974), (ii) excluding speakers via the pronominal use of “she/he” (Stivers, 2001), and (iii) tacitly selecting the child by limiting eligible respondents to a single participant (Lerner, 2003) (e.g. asking about “your pain,” and “your headache”). Additionally more global strategies of *orchestrating* the production of talk during the visit (Dingwall, 1980) included explicitly instructing how the medical visit would proceed, identifying the child as primary informant, justifying that, and discouraging parental interdiction of children's accounts. These practices for promoting child participation in the presentation of symptoms were not mutually exclusive, and clinicians resorted to multiple strategies to ensure that children had opportunities to present their accounts.

In this paper, we focus on two methods of child account promotion that utilize implicit and explicit interactional practices to unequivocally constitute the child as primary informant about symptoms. In the first method – epistemic prefaces – clinicians promote any type of child account via prefatory statements. In the second method, non-focused questioning, clinicians permit children to set the agenda of their symptom presentation via broad questioning in the first substantial question directed to the child, and/or in several subsequent questions. Unlike the generalized promotion of any form of child participation with epistemic prefaces, non-focused questioning specifically invites a broad range of possible accounts of the patient's own choosing. To the extent that they persist in non-focused questioning, clinicians multiply the opportunities (as well as obligations) that a child has to format a pain account of his/her symptoms and concerns in his/her own words. Thus, epistemic prefaces and non-focused questioning constitute two distinctive ways of working towards ensuring that the child has an opportunity to present an account.

3.1 Child Symptom Account Promotion via Epistemic Prefaces

Clinicians implemented epistemic promotion by prefacing their questions with justifications for why the patient should present the pain account to the clinician. Two types of epistemic prefaces were identified: in the first one, the child's epistemic status was upgraded vis-à-vis that of the accompanying adults. In the second one, the child's epistemic status is upgraded by downgrading the status of the records that the clinician has in her possession as incomplete or absent, thus downgrading the clinician's own pre-existing knowledge of the child's case. These prefaces did not promote a specific type of child account, but generally promoted the child's participation in the presentation of symptoms.

In the first type of preface, clinicians portrayed the child as the “experiencer” of the pain, thus singling the child out as a respondent vis-à-vis the accompanying adults. Characteristically these prefaces upgraded the epistemic status of the child, and often unambiguously proposed the exclusion of other potential speakers. Clinicians justified their selection of the child on the basis that the child was the one suffering from the painful condition, that it was the child's body, or that the clinician wanted to hear why the patient thought s/he was at the clinic. Some prefaces also included explicit instructions to reduce

parental intervention during the child's presentation, in line with Dingwall's description of orchestrating practices (1980) which project a general framework for participation that reaches beyond the immediately next turn (Sacks, Schegloff & Jefferson, 1974). In extract 1, the clinician prefaces her opening medical question, "How long have you been having headaches?" (line 12) with remarks at lines 4–5/7 that privilege the patient's first hand knowledge to justify selecting him as the primary respondent, while simultaneously orchestrating his participation in the history relative to his parents.

Extract 1 (Case 64 Non-pain)¹

1	DOC:	O:kay, what I wanna do:: is get u:h real, clear his↑t'ry,
2		becau:se most of it's in thuh hist'ry.
3	MOM:	((nods))/(0.5)
4	DOC: ->	Uh:m en I think you're the guy who's been sufferin' with th'
5	->	headaches so I [think you'll give m _{ost} of the his↑t'ry en=
6	MOM:	[(nodding)]
7	DOC: ->	=let your [parents: uh add anything that [they: (.) that they=
8	MOM:	[(nods)] [(nodding)]
9	DOC:	=need to? (.) 'kay?=-
10	PAT:	=Okay.
11		(0.5)
12	DOC: =>	Okay. How long have you been having headaches?
13		(0.8)
14	PAT:	Uh:m:: (0.4) two years.
15	DOC:	Two years.
16	PAT:	((speaking to Mom)) (right?)
17	MOM:	((nods to son))
18	DOC:	An how old are you now?

¹ The transcription conventions used in this article are described in Ochs, Schegloff, and Thompson (1996). Online instructional resources for the use of transcription symbols can be found at: <http://www.sscnet.ucla.edu/soc/faculty/schegloff/TranscriptionProject/page4.html>. Clinicians are identified in the transcript as DOC if only one clinician is present, and DR1 and DR2 if two are present. The patient is identified as PAT, and the parent as MOM or DAD.

Here the patient's participation is quite transparently promoted over the adults' in terms of the patient's experience of the symptoms.

In the second type of preface, clinicians preemptively addressed a second obstacle that may prevent the child from presenting the pain account: information redundancy arising from the clinician's possession of medical records. Here the clinician upgrades the epistemic status of the child as "the knower" relative to putatively incomplete records: the clinician presents herself as having incomplete or absent records and therefore as lacking information that children could expect to be already present in the chart. Such orientation to informational redundancy has been well documented in everyday forms of communication (Terasaki, 2004), as well as in primary care visits (Heritage & Robinson, 2006). In the following extract, the pediatric neurologist begins the visit by requesting confirmation that headaches are the reason for the visit (lines 1–2). She then points out that she has limited information (line 7), combines giving explicit instructions on who the primary informant is going to be (lines 7–8). Notably she selects Antonio as the addressee of her question after she abandons

a form - “he’s” – that would have selected the mother, and uses “you’ve” instead (line 10–11).

Extract 2 (Case 27 Non-pain)

1	DOC:	Okay, I guess the purpose of our visit is to address the
2		headaches. Is that- is that correct?,
3	MOM:	Yes.
4		(0.5)
5	DOC:	Okay.
6		(0.6)
7	DOC:	-> And I [↑] don’t have very much specific information so I’ll get a
8		-> history from (.) you Antonio mostly: and from Mom, (0.5)
9		uh as to uh (.) the duration of the headaches, and the nature of
10		the headaches currently, (0.4) (-h) he’s- You’ve [↑] had them for a
11		number of years, haven’t you?,
12	PAT:	Yeah, but uhm (I- did-) my uh my other doctor put me on a new
13		medication and they haven’t been as uh mild.

Similarly in extract 3, the two clinicians display the limitations of their chart information (line 1–4), including a downgrade of their own epistemic status with “that’s all I know about you” (line 3). In this manner, clinicians prospectively justify an extensive description from the patient.

Extract 3 (Case 28 Pain)

1	DR2:	-> What I have in the cha::rt is fro::m (0.5) Ma::rch? (0.3)
2		-> a::nd when you were admitted to ((city name)) (.) Hospital,
3		-> for migraines. That’s all I k _{now} about you.
4	DR1:	-> Other than the questionnaires [(too).
5	DR2:	[(Yes.)
6		(0.3)
7	DR?:	-hhh
8		(0.2)
9	DR2:	Can I have a stickie please?,
10	DR2:	(mmh,)
11		(0.5)
12	DR1:	So: you’re still having <u>h</u> eadache problems.
13	PAT:	((nods)) mm hm,
14	DR1:	Can you tell us in your words (about) (.) your headache?
15	PAT:	(Not like bothering.)

Extract 3 is different from extracts 1 and 2 in that it does not contain explicit instructions that *orchestrate* the visit in terms of child participation (Dingwall, 1980). However, the positioning of the child as the clinician’s primary interlocutor is made clear implicitly by the clinician’s selection of the child via references such as “you’re still having headache problems” and “your headaches” (lines 12 & 14) in both the preface and the questions. This

unequivocal selection of the child as the primary addressee of the clinicians' talk is found in all three extracts, particularly in the clinician's shift from "he's" to "you've" (line 10) in extract 2. Together with the explicit use of gaze, these combined practices make it clear to the child and parent that the child is to be the primary presenter, and clearly disambiguate any remaining confusion associated with second person pronouns, which may refer to either the child or the parent, or both simultaneously.

In categorizing epistemic prefaces, we adopted a comparatively strict approach. In order to be so categorized, the child's knowledge had to be explicitly and unambiguously upgraded in respect to parents', or the clinicians' knowledge and medical records had to be minimized explicitly. Prefatory statements in which clinicians made references to the child's point of view, to having read the medical records, and/or to the child as being one among multiple sources of knowledge, as in extracts 4 and 5 below, were not categorized in these terms because these statements did not single out the child as the most important source of information. Instead, an epistemic preface must contain an explicit justification as why the child's knowledge was more important than the other sources of knowledge, or an explicit statement of the clinician's lack of knowledge, with accounts such as "I don't have much information" or "that's all I know about you".

3.2 Child Symptom Account Promotion via Non-Focused Questioning

Clinicians promoted children's own accounts of their symptoms and concerns by using non-focused questions, such as "Can you tell me in your own words about your headache?" (line 14) in extract 3 above. These non-focused questions emerged as either the first substantial question directed to the child or as a means of pursuing an answer or expansion of a previous answer.

In a study of adult acute care openings, Heritage and Robinson (2006) distinguished between non-focused questions (such as "Can you tell me in your own words about your headache?") and focused questions, such as requests for confirmation (such as "You're here about the headaches?"). While the first type allows the patient to present the problem in his/her own terms, the second creates a context in which any elaborated description will take place at the initiative of the patient, without the sanction of the clinician's question. The non-focused questioning of the first question type effectively promotes patient's own accounts: patients' responses to it were on average nearly four times as long as their responses to the second type (Heritage & Robinson, 2006).

In extract 4, the clinician uses an imperative to request that the patient tell her what is going on (line 7–8). With no additional questions, the clinician adopts the role of an attentive listener, displayed with her use of a continuer ("mm hm" in line 12), and does not offer the patient any further directions on what or how to describe her pain symptoms and concerns.

Extract 4 (Case 54 Pain)

1	DOC:	So- (0.4) tell me a little bit-
2	SOUND:	[((door closing))
3		[(1.7)
4	DOC:	Ah- eh- read through the questionna:ire[s,
5	PAT:	[mmhm
6		(0.4)
7	DOC:	-> but tell me a little bit from you:r point of view (.) what's

8 -> going on.
9 (0.7)
10 PAT: Well, (0.3) uhm (0.5) since I was twelve years old I- (0.2)
11 produced- (.) uhm (0.2) ovarian cysts so I have (0.2)
12 DOC: mm hm
13 PAT: pain from that. .hhh And then (.) it kinda just got outta hand
14 and they did a laparoscopy and- (0.2) cuz I was having really
15 really bad pain and then- ...

In additional and subsequent non-focused questioning, clinicians may pursue an answer or attempt to expand an answer that the child had produced, giving minimal instructions on how to proceed, and avoiding a topical narrowing of the scope of the child's potential answers. In extract 5, the clinician uses multiple non-focused questions to pursue an expansion after the clinician's initial opening medical question "What brings you here?" (line 11) and the child's unpacked assessment of her own health "I don't feel good" (line 13).

Extract 5 (Case 67 Pain)

1 DOC: Nice to meet you too.
2 (0.5)
3 DOC: allo Madame?,
4 (0.3)
5 DOC: nice to meet you, (1.1) so I read through your medical records,
6 and reviewed your questionnaires,
7 MOM: O:h okay.
8 DOC: I wanted to know a little about what's been going on from
9 your point of view.
10 (0.6)
11 DOC: -> what brings you here.
12 (1.8)
13 PAT: Um (that I don't feel good)?
14 DOC: -> Okay, keep going.
15 (0.5)
16 PAT: U::m (2.1) um (0.5) you're gonna try to help me?
17 DOC: ·hhh yea that's t[rue:..
18 MOM: [h
19 DOC: -> Tell me about not feeling good.
20 (0.7)
21 PAT: ·h um (0.5) I don't feel good a lotta times?,
22 (1.5)
23 PAT: uh:: (1.3) what else.
24 DOC: -> Okay whaddya mean by not feeling good.
25 (0.6)

26 PAT: Uh my stomach hurts?,
 27 (0.3)
 28 DOC: -> Oka:y, (0.6) tell me about your stomach hurting.
 29 (1.2)
 30 DOC: => -hh you have Crohn's. Correct,
 31 PAT: Yeah.
 32 (0.6)
 33 DOC: => And you were diagnosed (1.0) you had stomach aches when you
 34 were three. Right?
 35 PAT: Yeah.

The clinician pursues expansions by directing the child to continue talking with “Keep going” (line 14), by requesting an unpacking of the child’s answers with “Tell me about not feeling good” (line 19) and “Tell me about your stomach hurting” (line 28), and by displaying the clinician’s own difficulties of understanding with “What do you mean by not feeling good?” (line 24). Unlike pursuits found in ordinary conversation (Pomerantz, 1984), in extract 5 the clinician’s questions invite the elaboration of relatively minimal answers and persist in an attempt to have the child describe her problems in her own terms. When this strategy fails, however, the clinician shifts to focused questioning with her yes/no questions ([=>] “You have Crohn’s correct?” (line 30) and “You had stomach aches when you were three right?” (line 33)).

In sum, two different ways of promoting pediatric patients’ symptom accounts emerge from this analysis. Epistemic promotion validates children as account producers vis-à-vis adults and the medical record, without inviting any specific type of child account. Promotion via non-focused questioning on the other hand, invites the patient to set the agenda for response and to produce more extensive descriptions of symptoms and concerns.

4. Patterns of Child Symptom Account Promotion and Clinic Style

We examined the distribution of these patterns of promotion across the three clinics. Across clinics, clinicians were committed to having the child as their primary informant in the presentation of symptoms during the initial stages of the medical visit. Overall, 96% of initial medical questions and 91% of the next four questions were directed to the child patient. In general, epistemic prefaces were more commonly deployed in the non-pain clinics (44%, 8/18) than in the pain clinic (10%, 5/51) ($p < .001$). Promoting the child as the experiencer of pain (via a vis accompanying adults) was strongly associated with younger (<14) children (6/28) than older (>14) children (1/41) ($p = .01$), but not with child gender. There was no instance of clinicians using both types of epistemic promotion in the same interaction.

Promotion by non-focused questioning, by contrast, was more strongly associated with the pain clinic. The first substantive question of the visit was a non-focused question in 73% of the pain cases (37/51), compared to 22% of the non-pain clinics (4/18) ($p = .001$). In subsequent questions (i.e., questions 2–5) we found that in 49% of the pain clinic visits (25/51) at least one of these subsequent four questions was non-focused, whereas no instances of subsequent non-focused questions were found in the non-pain clinic visits ($p < .001$). In the pain clinic, the frequency of non-focused questions decreased with each subsequent question in the series 2–5. Child age, child gender and individual clinician

identities were not associated with the use of non-focused questions, suggesting that their use was primarily a matter of clinic practice.

5. Discussion

Two different ways of promoting child symptom accounts have been identified in this study: epistemic prefaces and non-focused questioning. In epistemic promotion clinicians upgraded the epistemic status of the child as the experiencer of the condition while downgrading their own epistemic status, or that of accompanying adults. These clinicians preemptively addressed two obstacles that may prevent children from presenting their symptoms. By portraying the child as “the experiencer,” clinicians sought to address the multiplicity of expertise and authority present in the visit by privileging the first hand knowledge of the child. By portraying the child as “the knower” relative to putatively incomplete records, clinicians sought to address the potential redundancy of asking for, and receiving, symptom descriptions that children could expect to be already present in the chart. These epistemic prefaces often included statements that putatively orchestrated the clinical encounter in ways that also promoted the child as the primary respondent.

Whereas epistemic prefaces did not promote a specific type of child account, non-focused questions were designed to promote elaborated child responses. Questions such as “Can you tell me in your own words about your headache?” (Ex. 3), created both opportunities (and obligations) for the patient to choose how to frame and describe her symptoms. By contrast, more focused questions such as “How long have you been having headaches?” (Ex. 5) clearly limited the range of child response, while simultaneously burdening the child with less cognitive and interactional demands.

Although epistemic prefaces and non-focused questioning were not mutually exclusive, as exemplified in extract 3 above, in practice they were rarely combined. Moreover, significant differences in the patterns of distribution across clinics were identified. Epistemic prefaces were more common in the non-pain clinics, and non-focused questioning was more likely to be found for both initial medical opening and subsequent positions in the pain clinic. Thus, although all the participating clinicians in this study were strongly committed to the child’s role as a symptom informant, they implemented this commitment in distinctive ways.

While the non-pain clinics’ approach to their patients is relatively typical of standard biomedical practice in adult primary care (Roter, Stewart, Putnam, Lipkin, Stiles & Inui, 1997), the pain clinic, by contrast, implemented a distinctive set of communication practices. These were consonant with the biopsychosocial philosophy that informed the clinic’s everyday practice of medicine. According to the biopsychosocial model of pain,

pain is not a singular entity: it is always multifactorial. Perception and response to something as seemingly simple as pain associated with a medical procedure are influenced by the children’s developmental level, past experiences, cultural and family background, level of anticipatory anxiety, coping abilities, and abilities to regulate focus on attention, the level of fatigue, and general state of well-being. (Zeltzer, Bush, Chen et al., 1997a, pp. 225–226)

Non-focused questioning is a key part of comprehensive clinical assessment:

By a combination of psychometric and interview techniques, the clinician seeks to learn what the pain means to the child, how she or he expects to cope with it, and how much control he or she feels in the situation” (Zeltzer, Bush, Chen et al., 1997a, p. 245).

Thus, biopsychosocial assessment expands the elements of the traditional history taking associated with biomedical differential diagnosis, (i.e. intensity, duration, frequency, location and type of pain), in order to incorporate the child's own subjective experience of such pain symptoms.

However, as we have noted, non-focused questioning presents the child with both opportunities and obligations, which the child may be unwilling or unable to take up. We suggest that both focused and non-focused questions pose dilemmas for clinicians. Focused questions set straightforward parameters that 'scaffold' and facilitate children's responses. Non-focused questions, by contrast, neither restrict nor 'scaffold' the child's responses. However they impose a burden on the child. This burden is both cognitive and interactional. The child must frame the terms of a response, its conceptual dimensions, the symptomatic language in which it is expressed, whether it should involve a narrative, or a list of symptoms, and with only a partial grasp of what is already known to the clinicians. Moreover the child must envisage what kind of response is socially and medically appropriate in this venue, at this juncture in the interaction, and with these relatively unknown participants and their medical relevancies. This can be a heavy set of obligations for a child patient. Thus questions like "You had them for a number of years, haven't you?" are generally less burdensome than "How long have you been having headaches?" which, in turn, is less burdensome than "Can you tell me in your own words about your headaches?" At the same time, focused questions, by their very nature, tend to restrict the scope of children's accounts of their symptoms within the terms of the question's agenda (Boyd & Heritage, 2006; Mishler, 1984; Raymond, 2003). Stivers (2007) has shown that both adults and children in an acute primary care setting were significantly more successful in answering yes/no questions relative to wh-questions, and indeed in our data set, the child respondents tended to be more successful in answering focused rather than non-focused questions (92% vs. 76% of the responses).

We believe that such a dilemma is a practical concern for clinicians, as made evident by the fact that they did not normally persist in non-focused questioning beyond a single follow-up. It is also a practical dilemma for both children and parents, who may find themselves not knowing exactly what they are expected to say and may request further instructions on how to articulate an account. For instance, in response to the request that she "Start with the thing that bugs you the most- now.", a patient produced an extensive list of pain problems only after her mother asked how far back the patient should go and the patient asked whether the clinicians were asking for a list of symptoms. These requests for further instructions resulted in the clinicians abandoning their initial non-focused question and launching a new question with a narrower focus on the patient's current status. Once a narrower question allowed the patient to know with precision what clinicians expected, the patient produced her list of current pain symptoms.

6. Conclusion

In this article we have presented two different ways in which clinicians promote children's accounts of their pain symptoms at the beginning of tertiary care medical visits. In our data, the neurology and gastroenterology clinicians promoted the production of child symptom accounts via prefaces that upgraded the epistemic status of the child and then went on to conduct narrowly focused history-taking questioning with the child as primary informant. The pain clinicians, on the other hand, promoted child accounts via non-focused questions that invited their child patients to structure the presentations of their symptoms in their own terms.

However, non-focused questioning not only presents opportunities for children to format a pain account of their symptoms and concerns in their own words, but also invokes obligations that children may be unwilling or unable to take up. Our examination of how clinicians establish children as respondents in tertiary care is a first step in a more complex analysis of the effectiveness of clinicians' commitment to having the child as the primary informant during the initial stages of the medical visit. The effectiveness of different practices through which clinician child-centeredness is manifested in tertiary care deserves further attention. In particular, work is needed to evaluate the extent to which clinician child-centeredness is an effective way to gather information; the different types of information that are gathered depending on the child account promotion method; the effectiveness of specific types of child account promotion vis-à-vis the child's problem and clinic context, particularly with children presenting with multiple diagnoses and complaints; and the relationship between communicative practices and medical approaches, whether narrowly or expanded biomedical, biopsychosocial, psychosocial or consumerist (Roter, Stewart, Putnam et al., 1997).

Finally, research among chronic pain patients has revealed patients' dissatisfaction with clinicians' narrow symptom focus (Carter, 2002; Kenny, 2004; Nutkiewicz, forthcoming; Peters, Stanley, Rose et al., 1998; Salmon, Peters & Stanley, 1999), which frequently results in patients leaving the clinic with a sense that physicians are reluctant to engage with their problems and suffering (Ring, Dowrick, Humphris et al., 2005; Salmon, Ring, Dowrick et al., 2005). Future research may elucidate whether, despite its practical dilemmas and difficulties, non-focused questioning is a valuable means by which clinicians can convey their willingness to talk about the psychosocial aspects of the patients' pain experience and not only about their symptoms.

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 would like to express our gratitude to all the members at the UCLA Center for the Study and Treatment of Pain for their support, and particularly to Dr. M. Meldrum.

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Table 1

Patient, Parent, and Visit Characteristics (patient n = 69 and parent n = 69)

	Pain Clinic 73.9% (n = 51)	Non-Pain (Gastroenterology and Neurology) Clinics 26.1% (n = 18)	Total 100 % (n = 69)
Female patients	68.6%	61.1%	66.7%
Patient age (years)	14.6	13.4	14.3
Caucasian patients	77.6%	27.8%	64.2%
Parent Education is college degree and/or plus	54.2%	36.4%	50.8%
Average number of medical visits (last 12 months)	19.0	21.0	19.4
Average number of months with pain symptoms	48.7	46.0	48.0
Percentage of patients who had been seen by 6 or more doctors (ever)	51%	29.4%	45.5%
6–10 doctors	15.6%	20%	12.7%
11–15 doctors	4.4%	None	3.6%
20+ doctors	2.2%	None	1.8%
Mother alone is the accompanying person at tertiary care visit during study	85.4%	61.1%	88.1%
Patients with multiple pain diagnoses	96.3 %	3.7%	40.9%
List of diagnoses ²			
Headaches	39.2%	55.6%	51.5%
FNVPD	50%	44.4%	42.4%
Myofascial	14.6%	5.6%	37.9%
CRPS	14.6%	None	10.6%
Fibromyalgia	8.3%	None	6.1%
Arthritis	2.1%	None	1.5%

² Note that percentages sum to more than 100%, since 40.9 % of the children presented with multiple diagnoses. FNVPD stands for functional neurovisceral pain disorder and CRPS stands for complex regional pain syndrome.

Table 2

Distribution of epistemic prefaces and non-focused questioning across clinics

		Pain clinic (n = 51)	Non-Pain Clinics (n = 18)
Epistemic preface (Significance $p < .001$)	Count	5	8
	Percentage	10%	44%
Non-focused questioning 1 st Substantive question (Significance $p = .001$)	Count	37	4
	Percentage	73%	22%
Non-focused questioning 2–5 th Substantive questions (Significance $p < .001$)	Count	25	None
	Percentage	49%	None