



A method for deconstructing the health encounter in CAM: The social context

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ABSTRACT

Background: A critique of complementary and alternative medicine (CAM) is that its effectiveness is all placebo. In trying to deconstruct the placebo, scholars have looked at the context in the health encounter, identifying specific and non-specific effects in the doctor–patient relationship, including communication; cognitive, psychological, and emotional element of the encounter; the meaning response during the encounter; the impact of the context on outcomes; and how the encounter is manipulated through such things as ritual.

Methods: This study used the chiropractic and osteopathic health encounter as socially constructed space exemplars and used focus groups and a rapid ethnographic observation method in clinics to study the context of the encounter. The objective was to develop a systematic, valid, and rigorous methodology for collecting data about the contexts of health encounters.

Results: The study showed that the clinicians and clinical staff consciously construct social settings and the types of interactions that occur within them. This is done consciously and deliberately.

Conclusion: The method, we describe, provided a rich data base on the context of the health encounter and it shows that these are not non-specific effects. The method could be applied to other health encounters in CAM and health care.

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Introduction

As a part of the movement to understand the placebo effect [1–4] in complementary alternative medicine (CAM) and in health care more generally, increasing attention is being paid to “deconstructing” the health encounter (deconstructing in this context means to analyze, break down, and to critique the assumptions about something). In the case of CAM, the definitional part of placebo that has been attributed to CAM is not that of an inert substance but of deceit. As Jonas [1] notes, the placebo label is used often for political rather than scientific reasons and this is prevalent in commentaries about CAM.

A standard assertion of those opposed to CAM is that positive outcomes from CAM are due entirely to the placebo [5]. The assertion has been given evidential grounding by studies showing that homeopathy [6] and acupuncture [7,8], while getting better results than usual care do not do significantly

better than placebo. Other authors, however, have pointed out that the *sham* acupuncture used in such studies does not constitute a true sham [9]. As Walach [3] notes in his discussion of the history of blinded trials, “we learn one important lesson: the attempt to isolate the ‘true’ component of therapy comes at the cost of tearing a therapeutic system apart and partitioning a whole into allegedly separable entities.”

The placebo disagreement has fueled efforts to delineate the non-specific and specific elements of the health encounter. There is broad consensus that the health encounter is a social encounter that occurs within cultural, social, and individual history [3]. Recent studies have explored the content of the doctor–patient communication in the encounter [10–12], focusing on the interpersonal elements of the encounter, such as affective communication and instrumental communication [13]. Attention has

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also been paid to the belief and expectations of the patients and the impact on outcomes [14] and on the meaning and context response [1,3,5,15].

In the process of deconstructing the placebo, scholars have elevated the importance of the context in which the health encounter occurs. Increasingly, there is recognition that it may not be simply termed a non-specific effect. For example, a systematic review by Di Blasi et al. [13] concluded that the doctor–patient relationship significantly affected health outcomes. Others concluded that the patient-centered communication in the encounters also results in improved health status [16], and attributed related physician–patient communication to empowering patients and improved clinical outcomes [17].

The studies on communication and ritual would suggest that the encounter might be highly specific and can be manipulated [18–20]. There is also increasing recognition that the health encounter is a socially and culturally created space [11], should not be “equated with non-specific effects” [5]. Despite this recognition, few studies treat the health encounter as a socially-constructed system—that is a system deliberately created to structure the activities and interactions of various actors with each other. Most studies have focused on the doctor–patient relationship, including the communications and psychological effects, or the doctor–patient dyad. But, health encounters are seldom just a dyad because they involve numerous actors working together within a specifically constructed clinic or site.

The health encounter includes everything that happens from the time patients enter the clinic until the time they leave. The social context is a functioning social system surrounded by cultural meanings, symbols, and a communication system with its own unique language. For the most part, recording communications or self-reported narratives cannot capture this level of complexity. For instance, Coulter [21] compared ethnographic observation studies of the chiropractic health encounter with the picture derived from health services research on the same encounter and concluded that they presented two completely different encounters. As he noted, if this were wildlife observation you would conclude the writers were observing two different species. What is needed is a new way to study the health encounter in rigorous and comprehensive manner [13].

How can we measure patients’ health encounter experiences? The encounter can be divided

into two parts: (a) the experience of the main treatment intervention (the therapy) and (b) all other experiences before, during, and after the intervention itself (the context). Contextual effects play two critical roles in assessing the efficacy and effectiveness of interventions. First, contextual effects may mediate how well a treatment works (context-as-mediator). Second, context effects may contribute to outcomes directly (context-as-intervention). In a classic random clinical trial, investigators typically want to control for context-as-mediator effects and measure context-as-intervention effects to disentangle what portion of the results are due to the intervention and what are due to the context. But, in comparative effectiveness research [22], investigators are less concerned about controlling for context-as-mediator effects, but they would like to understand what part of the encounter accounts for any positive results. In either case, investigators need to know how to measure the context. Without such measures, it is impossible to assess either type of context effect.

The health encounter is a social event occurring within a constructed social encounter as a social space. There has been a focus on the doctor–patient relationship, the communications, the meanings, and psychological effects. Studies, to date, have often focused mainly on the doctor–patient dyad. But, the health encounter is seldom just a dyad. It is an encounter that can involve numerous actors, that occurs within a clinic that can be specifically constructed with an effect in mind, that includes everything that happens from the time the patient enters the clinic until the time they leave, that may occur in several spaces in the clinic, that occurs over a span of time, and that has a history. It is a functioning *social system* surrounded by cultural meanings, symbols, and a communication system with its own unique language. For the most part, recording communications or self-reported narratives cannot capture this level of complexity. In this study, we set out to observe this social system in all its complexity. The objective was to develop a systematic, valid, and rigorous methodology for collecting data about the contexts of health encounters.

Objective

The objective of the study was to determine if using a structured rapid ethnographic observation methodology would allow us to collect data and identify

the elements of the total health encounter that occur from the time a patient enters a clinic until they leave. Ultimately, future studies might then be able to determine the impact of the context of the health encounter on health outcomes.

Research Questions

This study addresses three research questions: (1) what kinds of contextual factors are patients exposed to during CAM encounters? (2) what measure of contextual factors can be developed systematically via observation and/or patient and provider recall?, and (3) which contextual factors might vary within and across: (a) CAM modalities (i.e., chiropractic vs. osteopath); (b) practice sites; (c) providers; and (d) individual patient encounters? To address these questions, we developed a rapid ethnographic observation method to study the context of the chiropractic encounter, and then applied the method to osteopathic encounters as a way to validate the methodological approach. The objective was to develop a systematic, valid, and rigorous methodology for collecting data about the contexts of health encounters.

Methods

We used a multi-staged research design to develop and test a battery of instruments to systematically measure health encounters. These instruments captured five key dimensions of the health encounter, including: (1) *where* patients are (space); (2) *with whom* they interact (social); (3) *what is communicated* between them (communication); (4) *what patients do or what is done to them* (behavior); and (5) *for how long* and in what order 1–4 occur (time). Our work occurred in three phases. In Phase 1, we conducted focus groups with chiropractic and osteopathic patients to identify what features of the health encounter they felt were most important to them. We used the results to draft a set of systematic observational techniques and structured elicitation instruments to measure each of the key elements above. In Phase 2, we piloted the instruments as a part of a rapid ethnographic observation study [23–25] of chiropractic and osteopathic clinics. We used the results of this study to further modify the instruments. In Phase 3, we validated the finalized tools on 124 health encounters in 15 chiropractic clinics from three states in the United States (five clinics per state). We briefly describe each of the methodological phases below and the kinds of

instruments that were ultimately developed and tested. This study was approved by RAND's IRB (Human Subjects Protection Committee).

Phase 1—Focus Groups

We conducted three focus groups with 27 participants, who were selected because they had visited a chiropractor or osteopath within the last 3 months. Focus group questions included open-ended discussion items probing patients' experiences with their providers and more broadly investigating health encounters with these providers and the clinic staff. We audiotaped the discussion and took detailed field notes that were used to pile sort the notes into domains to inform field instruments. Key themes and issues emerged that informed the initial data collection instruments and procedures in Phase 2.

Phase 2—Pilot Study

To further develop the health encounter instruments, we conducted 3-day site visits in a diverse sample of nine chiropractic practices and nine osteopathic practices throughout Los Angeles County. Site visits included detailed observations of the clinic, while in operation, interviews with chiropractors/osteopaths, staff and patients; and shadowing patients through their visit. We used these data and the literature to identify key contextual factors and develop appropriate and low-burden measures to be used in the national sample.

During the site visit 2, investigators mapped and photographed the entire facility, conducted general semi-structured interviews with providers and staff about what aspects of the clinic they think most affect patients' encounters (positively and negatively), shadowed patients from the time they arrived (and gave consent to participate in the study) to the time they left, and observed and took detailed notes on the clinic's operation over the course of 3 days.

For each patient that agreed to participate, we were conducting a *pre-encounter interview* to capture a patient's reason for and expectation about the visit. We then shadowed the patient through the rest of the encounter and recorded our observations using a standardized *observation form*. The form allowed us to follow the patient's progression through time and space. We initially divided the form into a series of 5-minute blocks and used it to record with whom the patients interacted, the

Table 1. Patient themes and their measurement in the health encounter.

Trust the patient does not wince or guard at being touched by the practitioner. The patient puts herself in the doctor’s hands—e.g., lays down on the table, moves into the position requested—without argument or question other than for clarification.
Validation Doctor is able to reproduce the patient’s pain and/or verbally validates the patient’s symptoms. For example, “So you are feeling pain here.” “I know how that feels and it can be terrible,” “So you have limited motion turning your neck to the right.”
Listening Doctor demonstrates active listening. Does not talk over or interrupt the patient and demonstrates that he/she heard what the patient said either through acknowledging it and/or responding consistently to the questions asked by the patient.
Comfort The patient remains visibly relaxed, and/or expresses comfort—e.g., that feels good, that feels better. This should NOT be checked if the patient looks like they are stressed, fearful, or experiencing pain during the encounter.
Empathy The practitioner mirrors or demonstrates an understanding of the patient’s emotional state and concerns. [According to the Four Habits, empathy is demonstrated by the practitioner encouraging emotional expression, accepting the patient’s feelings, identifying the patient’s feelings, and displaying good (appropriate—e.g., not laughing at a painful story) nonverbal behavior.]
Knows me In conversations with the patient, the doctor demonstrates prior (remembered) information about the patient’s family, vacation, job, or some other aspect of the patient’s life not directly symptom related.
Routine Patient goes to a particular area of the room, takes off shoes, or moves into position without verbal indication by the chiropractor.

kinds of interactions they had, what they did, and what was done to them. Researcher also used the form to note evidence of (or lack of) *trust*, *validation*, *listening*, *comfort*, *empathy*, *knows them*, and *routine* using agreed definitions developed from patient focus group data (Table 1).

After the encounter, before the patient left the clinic, we conducted a *patient post-encounter interview* and asked them to describe their experience. We were particularly interested in understanding what the patient thought of the clinic space and ambience, how they felt about their interactions and communications with clinic personnel, and their experience outside of the manual therapy. We also used a *patient post-encounter survey* to learn whether the experience met their expectations and how satisfied they were with various aspects of the encounter. We also developed a *provider post-assessment of the patient* where we asked the provider to provide a prognosis and assessment for recovery for patients whose condition was similar to this patient’s condition.

We refined our data collection instruments in an iterative manner modifying them as we moved from one clinic to the next. For example, we reduced the observation time from 5-minute increments to 2-minute increments or if the action changed. We concluded that 2-minute increments better captured the segments of each encounter and provided a more detailed account of the actions, topics, and personnel changes or consistency within an encounter. We also improved the *patient pre- and post-encounter surveys* by adding or modifying questions and response categories. The finalized tools were integrated in the data capture system for each researcher.

Phase 3—Multi-State Study

We used the national phase of our research to examine the feasibility and reliability of the finalized tool. We conducted this phase of the research in Minnesota, Oregon, and Texas. Within each state, we identified a county that had a high density of licensed chiropractors and a purposefully recruited diverse range of 15 clinics (five from each state). We spent 2 days in each clinic and recruited as many patients as we could during that time. In total, recruited 124 patients were: 41 from Minnesota, 38 from Oregon, and 45 from Texas.

During each of the site visits, we captured pictures of the clinic; sketched the clinic and labeled the offices and treatment rooms that were used by the provider and patient; conducted pre- and post-encounter interviews and surveys with each patient; completed a provider post-assessment of the patient; and conducted a provider post-visit interview and survey. Overall, we found that the instruments were quite useful in assessing variation within and across practice sites, providers, and individual patient encounters. In the results below, we demonstrate how the instruments developed can be used to describe the variation in health encounters within and between the 15 clinics, we observed.

Results

A health encounter is influenced by a clinics physical space and its social environment. The physical space includes the size and layout of the clinic, its décor, lighting, and overall atmosphere. The social space includes the personnel with whom the patient engages; the level of engagement

that is encouraged; and the way in which these components commingle, based on each clinic's operational style that can range from formal and professional to relaxed and homey.

The movement of patients through their encounter had a clinic-specific rhythm. Most clinics had minimal wait time and the patients were in tune with the clinic flow. Most varied in length from 15 minutes to an hour. A short observation typically involved the patient checking in with the front desk with minimal wait time, going back to the treatment room to get vitals taken by an assistant, a less than 10-minute diagnosis and treatment, and then a few minutes to pay the bill and check out. A long observation might entail checking in with a minimal wait time, sitting in a therapy chair for 30 minutes, while the assistant takes their vitals, getting traction for 15 minutes, then going in for diagnosis and treatment with the chiropractor, followed with 15 minutes of heat therapy.

In addition, to tracking a patient's movement through the clinic and often and how long patients interacted with the different clinic personnel, the *observation form* allowed investigators to check for evidence of *trust, validation, listening, comfort, empathy, knowing them, and routine* (Table 1). Figures 1 and 2 show how patients' encounters may vary within and between clinics.

The data in Figure 1 portrays a provider who displays high levels of *trust, validation, and knowing them* during the encounter. The findings are not surprising given that most of the patients in this clinic had been coming to this clinic for over 12 months. In a trusting interaction, the patient does not wince or guard at being touched by the practitioner and puts themselves in the doctor's hands. In a validating interaction, the chiropractor frequently checks on the patient's current condition, testing the range of motion, palpating known sore spots for tenderness, and acknowledges the pain and confirms the patient's

feelings. The provider at this clinic demonstrated they knew their patients well by asking about members of a patient's family or friends and even in the cases where the chiropractor did not seem to know much about the patient's social network, would ask about the patient's work or social life. The provider also demonstrated a consistent pattern of

Positive Interactions by Duration

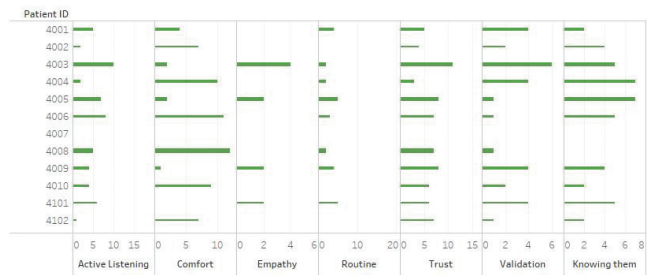


Figure 2. Positive interactions by duration.

Patient Internal Feelings About DC

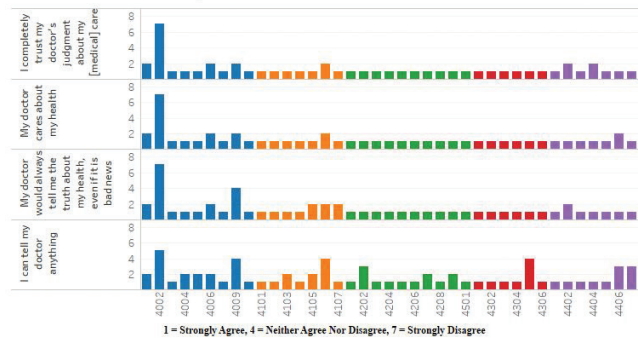


Figure 3. Patient internal feelings about DC.

Well-Being Score

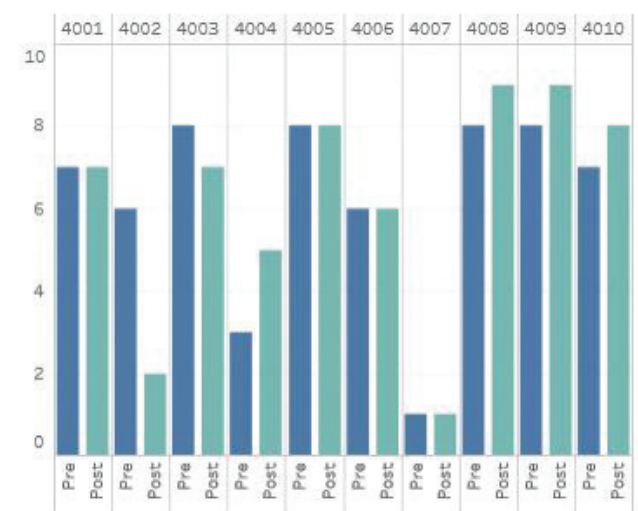


Figure 4. Well-being score.

Positive Interactions by Duration

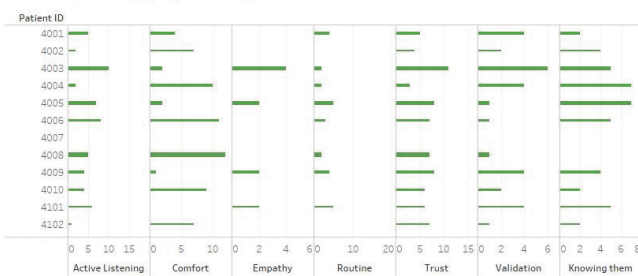


Figure 1. Positive interactions by duration.

Symptom Changes



Figure 5. Symptom changes.

Pain Score

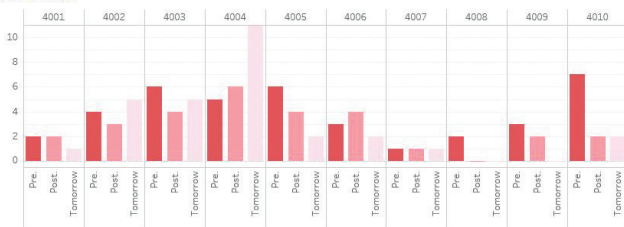


Figure 6. Pain score.

of Visits Needed to Recover

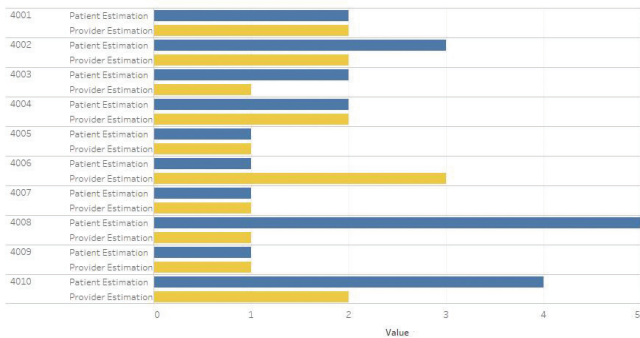


Figure 7. # of visits needed to recover.

active listening acknowledging that they had heard what the patient or responding consistently to the questions asked by the patient.

In contrast, Figure 2 depicts a clinic where encounters were mainly *routine and trusting* and had fewer interactions demonstrating *active listening, validation, and knowing the patient* than was observed in the previous clinic. A *routine*

encounter is one in which there were no surprises and the patient and provider understood and already knew what was going to occur without a lot of instructions. Patients counted on having the same interaction or experience every time they entered the treatment room or office.

In most encounters, we observed that patients demonstrated some level of *comfort*. Patients appeared to be relaxed (often with their eyes closed) and showed no signs of tension or flinching was noted. Although *comfort* was ubiquitous across encounters, the number of times in which *comfort* was noted varied directly with the length of the encounter.

Unlike some types of interactions that seemed to vary significantly across clinics, *empathy* appeared to vary more by patient than clinic. An empathetic response was demonstrated when the chiropractor recognized and shared in a patient’s situation. For example, when patients spoke about their conditions, and the provider would respond with phrases like, “I understand that must be difficult,” or “awws” and “mmm” noises, or might share a similar story of their own. Non-verbal indications like pats on the back and hugs were also seen as signs of *empathy*. Internal space was captured through the patient pre-and post-encounter survey and physician assessment of patient. Patients were asked how they felt about their provider. The majority of patients felt positively about the provider and strongly agreed with the statements in Figure 3 (lower is better). There were positive changes in self-reported well-being (Fig. 4), symptom changes (Fig. 5), and pain (Fig. 6). Well-being improved or stayed the same most of the time, symptoms were better (didn’t get worse), and pain decreased in most encounters. Patients’ estimates of how many visits they would need to recover typically aligned with the number of visits that the provider believed a patient with the similar condition would need to recover (Fig. 7).

Conclusion and Discussion

The goal of this study was to develop instruments to systematically measure the health encounter. Although we applied these measures to chiropractic and osteopathic encounters, we believe that similar instruments could be adapted for type of health encounter. We used a multi-staged and multi-method approach to create tools for mapping and documenting the physical layout of the clinic, shadowing and observing patients, and

conducting structured interviews and surveys with patients, providers, and clinic staff. As a result, we could systematically describe a health encounter, including the physical space of the clinic, the social interactions between patients and providers and staff, time, and duration of patient behaviors, patient and providers beliefs, and expectations.

As noted in the Introduction, the placebo disagreement has fueled efforts to delineate the non-specific and specific elements of the health encounter [1,3,5,10–15]. In the process of deconstructing the placebo, scholars have elevated the importance of the context in which the health encounter occurs. Increasingly, there is recognition that it may not be simply termed a non-specific effect [13]. Others concluded that patient-centered communication in the encounters also results in improved health status [16] and attributed related physician–patient communication to empowering patients and improved clinical outcomes [17].

The previous studies, therefore, suggest that the encounter might be highly specific and can be manipulated. There is also increasing recognition that the health encounter is a socially and culturally created space [11], should not be “equated with non-specific effects” [5]. But despite this recognition, few studies treat the health encounter as a socially-constructed system—that is a system deliberately created to structure the activities and interactions of various actors with each other. This study, therefore, adds to our understanding of the encounter as a functioning social system that is consciously constructed.

When the instruments developed in this study are applied, we show that the encounters are highly structured. The physical and social spaces of a clinic are planned and deliberately constructed. While we observe variation across individual patients, patient encounters are more similar within a single clinic than they are dissimilar. In other words, clinics develop unique styles and standardized routines that affect patient experiences and care. Furthermore, the context of the health encounter is important to patients. Patients are conscious of the context and can articulate what aspects of the encounter they view as positive or negative. It seems inappropriate to consider such elements of the health encounter non-specific if the encounter is deliberately and consciously created and providers and staff and patients are aware of this.

The larger question arising from this study is how context affects health outcomes. This question was beyond the scope of the current study, which was

designed to see if the context could be delineated and to see what kinds of data can be collected about the social space. Our data do suggest, however, that from the patient’s point of view the context may be highly significant in their choice of CAM for their health problem and possibly plays a significant role in the outcomes from the patient’s perspective.

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