KATHRYN OTHS

# COMMUNICATION IN A CHIROPRACTIC CLINIC: HOW A D.C. TREATS HIS PATIENTS

ABSTRACT. This study of a chiropractor and his patients represents the first interaction analysis of an alternative practitioner. Relationships between the types and quantities of communications in clinical exchanges and patient satisfaction with treatment are examined using both quantitative and qualitative analysis of verbal dialogue and clinical observations. Findings suggest that patient satisfaction is enhanced by a practitioner-patient relationship characterized by initial transmission of large amounts of comprehensible information successively supplanted by personal affective dialogue. New patients are usually unfamiliar with the chiropractic belief system and may have special communication needs due to the psychoemotional component to their, often chronic, problems. The chiropractor provides the patient with a structured, supportive environment and theoretical explanations designed to take the mystery out of process and problems. In essence, the chiropractor first manipulates a patient's belief structure before manipulating his or her physical structure, providing an analogous structural realignment in both the mind and body. Contrasts between biomedical and chiropractic clinical encounters are noted.

As the utility and efficacy of health care delivery systems are increasingly called into question, renewed interest is being shown in the non-technological aspects of care, such as the provider-patient relationship. Social science research on the provider-patient relationship has largely focused on the dominant biomedical practices to the exclusion of other, less mainstream therapies. The most popular alternative therapy, chiropractic (National Analysts 1972), is the focus of inquiry in this research.[1]

Chiropractic is a drugless, non-invasive, manual form of outpatient treatment for musculoskeletal, functional and other chronic disorders. While acknowledging the existence of infectious disease agents, chiropractic relies on a monocausal disease etiology known as the "subluxation theory" as the basis of diagnosis and treatment. This theory holds that the primary cause of illness is a misalignment or malfunctioning of the vertebrae which blocks nerve and blood flow. The main aim of treatment is to restore the mechanical structure and thereby the functional integrity of the body by means of spinal adjustment, which allows the body's natural healing powers to take effect (White & Skipper 1971).

Chiropractors have often been credited by both their proponents and their detractors as exhibiting an exceptional practitioner-patient relationship, characterized by personal involvement, concern, and supportive communication (Coulehan 1985; Dryburgh 1984; Sirott & Waitzkin 1984; Barrett & Knight 1976; Cobb 1976; White & Skipper 1971). Until now, these claims have been neither carefully nor quantitatively documented (Cobb 1977), the work of Coulehan being an exception (1985). The research presented here follows up on

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Coulehan's ethnographic analysis of the chiropractic clinical art, in which he hypothesizes that the dynamics of clinical interaction are a large part of the healing process.

I undertook this ethnographic fieldwork to explore the structural and expressive elements of chiropractic care and to assess how these might relate to patient satisfaction with care. I wished to observe the process by which the chiropractor engages chronically ill patients in a practice based on a belief system that stands in stark contrast to that of modern biomedicine. My investigation of chiropractic clinical communication has three aims: first, to illuminate patterns of chiropractic clinical interaction, contrasting them where appropriate with those of biomedicine; second, to assess to what extent the communicative nature of the practitioner-patient relationship is effective in chiropractic treatment; and third, to expand knowledge about alternative health care paradigms.

## STUDIES OF PRACTITIONER-PATIENT INTERACTION

The quality of the doctor-patient relationship, and the degree of interpersonal communication inherent in it, are thought to be major determinants of patient satisfaction (Kaplan, Greenfield & Ware 1989; Anderson, DeVellis & DeVellis 1987; Tucket & Williams 1984; Bartlett et al. 1984). Adequacy of communication between participants in the clinical encounter is essential, as the quality and efficacy of health care in large part depend on a patient's ability "to communicate symptoms, feelings, beliefs, values and changes in his condition" and on the doctor's ability "to communicate instructions and a sense of understanding as well as to ask pertinent questions" (Plaja, Cohen & Samora 1968:161; also see Francis, Korsch & Morris 1969).

Following the seminal studies of Korsch and Francis in the late '60s (Francis et al. 1969; Korsch, Gozzi & Francis 1968), numerous studies have documented patient dissatisfaction with medical treatment by M.D.s due to communications problems such as a lack of information exchange regarding illness and treatment (Matthews 1983; Carter et al. 1982; Korsch & Francis 1972; Freemon et al. 1971), and poor affective quality in doctor-patient transactions (Carter et al. 1982; Ben-Sira 1982; Weinberger, Greene & Mamlin 1981; Ben-Sira, 1976). Patients tend to be more dissatisfied about the information they receive from their physicians than about any other aspect of medical care (Deyo & Diehl 1986; Waitzkin & Stoeckle 1972; Korsch et al. 1968; Pratt, Seligmann & Reader 1957). Likewise, much research has positively linked the receipt of information and the communication of affect (i.e., empathy, caring, understanding) with patient satisfaction (see Hall et al. 1988 for meta-analysis of 41 studies). Additionally, effective non-verbal communication has also been found essential for successful practitioner-patient interaction (Larsen & Smith 1981; Friedman

1979). Based on these findings I chose as the focus of this study the primary communicative elements of clinical interaction: information exchange and affect.

Most clinical interaction analyses have focused on episodic care for acute complaints in hospitals or clinics where teams of internists provide services. Less research has been carried out on general practitioners. The few studies of doctor-patient communication in primary care and private family practice indicate a generally higher level of patient satisfaction than found in non-family practice settings (Bensing 1991; Hilton, Butler & Nice 1984; Bartlett et al. 1984; Snyder, Lynch & Gruss 1976). However, those patients with *chronic* complaints are more likely to have misunderstandings with the doctor (Snyder et al. 1976) and be less satisfied with care received (Bartlett et al. 1984). In one study this dissatisfaction was specifically due to patients' failure to receive adequate explanation of their chronic lower back problem (Deyo & Diehl 1986).[2] Dissatisfaction with physician affective behavior, the doctor-patient relationship, or the medical process has been shown to ultimately result in a change to an alternative treatment agency (Deyo & Diehl 1986; Marquis, Davies & Ware 1983; Ben-Sira 1982), in particular, to chiropractors (Howard-Ruben & Miller 1984; Elder & Acheson 1970; Koos 1954).

The study reported here fills a gap in the research on clinical interaction analysis in that it focuses on an alternative practitioner – a private practice family practitioner of chiropractic – and his regular patients, most of whom are suffering from chronic conditions. My aim is to determine, using a mixture of quantitative and qualitative methods, if a high satisfaction with care resulting from enhanced communication between chiropractor and patient can be observed.

## THE SETTING

The study was conducted in the private clinic of a male family practice doctor of chiropractic (D.C.) located in an ethnically mixed, middle class city in the greater Cleveland area. The D.C., whom I will call Dr. A, is a life-long resident of the area. He has maintained the same office – rented space in a large commercial building – for the six years since he earned his chiropractic degree. In contrast to the "straight" type of chiropractor who uses spinal manipulation as the only form of treatment, Dr. A can be classified as an "extreme mixer" (see Coulehan 1985). He supplements regular spinal adjustments with modalities such as nutrition therapy, hair analysis, diathermy, ultrasound, X-rays and magnetic diagnosis, among others.

Along with standard office equipment (treatment tables, X-ray viewers), many instructive models and charts of the spinal column, body, and nervous and

muscular systems adorn all of the clinic's seven treatment rooms, including the D.C.'s office. All rooms contain pamphlet racks with nearly 40 different topics represented in all (e.g., "Why Chiropractic X-rays?," "Should You Take Medicine?"). Diplomas of the D.C. and his assistants are displayed prominently throughout the clinic. Several framed plaques bearing chiropractic promotional slogans are hung throughout the clinic, such as: "Chiropractic First, Drugs Second, Surgery Last," and "Sickness and Disease Do Not Just Happen – They Accumulate. Be Regular with Chiropractic Care."

## METHODS

Quantitative research on the doctor-patient relationship has focused almost exclusively on initial visits or emergency room care, where the patient and physician had no previous relationship (cf. Bertakis & Callahan 1992; Kaplan et al. 1989). Compared to this typical static description of clinical interaction, I use a cross-sectional design that includes patients at different stages in their treatment, not solely initial visits, and that takes into consideration the length of treatment. My concern with the stage of treatment as an important factor echoes work by Mishler (1984) on medical discourse, which calls for a focus on the variations in the characteristic structure of office interactions. This approach allows for a dynamic analysis of the ongoing practitioner-patient relationship as the relationship is being built across successive stages, including the initial visit (intake), initial and later examinations, consultations and treatments. Waitzkin and Stoeckle (1972) have advocated a similar analytic rather than descriptive approach, which uses direct recordings of interactions to explore the hypothesis that length of acquaintance between physician and patient predisposes the practitioner to a certain communicative pattern and influences the patterns of information transfer.

The blending of quantitative and qualitative methods in this study of medical discourse is a technique that has been vigorously advocated lately by some of the field's leading researchers (Roter & Frankel 1992; Waitzkin 1990). Data were collected through 1) audiotape of all clinical interaction of the chiropractor for eight days, 2) formal and informal interviews with the D.C., his staff, and patients, 3) patient questionnaires pertaining to satisfaction with care, and 4) review of patient files.

Direct recording of doctor-patient interaction, combined with observer participation, has been judged to provide the most valid means for studying the nature of the communication process (Waitzkin & Stoeckle 1972). Unlike most audiotape research where a stationary tape recorder is set up in one room only, the tape recording technique had to be adapted to the chiropractic clinical routine. Under this chiropractor's care, patients may be seen in different rooms

on each visit, and may often be moved from room to room within the course of one visit. The D.C. sometimes leaves the room to attend to other patients, returning later for further treatment, discussion or check-up. The strategy for observing and recording all practitioner-patient transactions required that I follow the D.C. on his rounds from room to room using a high-quality hand held tape recorder. Relevant non-verbal activity or nearly inaudible remarks were noted and later integrated with the tapes. To minimize bias, the first two days of taping were considered as an adjustment period and eliminated from analysis.

All taped verbal dialogue between the practitioner and his patients was content-analyzed using the modified Bales method of process analysis (Bales 1976). This method divides all utterances (including laughs, sighs, incomplete words or phrases) into communication units (single items of thought or behavior), which are then specifically assigned to one of twelve speech categories (see Table 1). Broadly categorized, all statements are considered either affective or informational exchange. Affective statements are characterized by feeling or emotion, while informational remarks are those which remove or reduce uncertainty. When an informational statement shows a markedly emotional or expressive quality it is assigned to an affective category.

TABLE 1
Mean profile of clinical exchanges for chiropractor and patients

| | | Percentage of Statements Made | |
|---|---|---|---|
| | Bales Categories | D.C. | Patient |
| 1. | Shows Solidarity | 31.5 | 26.7 |
| 2. | Shows Tension Release | 6.2 | 11.0 |
| 3. | Agrees | 5.3 | 24.1 |
| 4. | Gives Suggestion | 14.6 | .5 |
| 5. | Gives Opinion | 16.3 | 19.6 |
| 6. | Gives Orientation | 7.3 | 9.2 |
| 7. | Asks for Orientation | 3.7 | 1.8 |
| 8. | Asks for Opinion | 10.8 | 3.1 |
| 9. | Asks for Suggestion | .3 | .4 |
| 10. | Disagrees | .3 | .6 |
| 11. | Shows Tension | 1.0 | 2.5 |
| 12. | Shows Antagonism | 2.7 | .6 |

Figure 1 shows the informational and affective categories that were selected for analysis. Consistent with the subgroups derived by Bales, these categories are combined to form three mutually exclusive indices: 'Positive Affect' consists of statements characterized by positive feeling or emotion and showing solidarity or tension release.[3] 'Information Exchange' includes giving or asking for opinion, and giving or asking for orientation, consisting respectively of task-oriented interpretive or factual statements.[4] The 'Negative Affect' index subsumes all statements coded as showing disagreement, tension, or antagonism.

| POSITIVE AFFECT: | |
|---|---|
| 1 | SHOWS SOLIDARITY |
| 2 | SHOWS TENSION RELEASE |

| INFORMATION EXCHANGE: | |
|---|---|
| 5 | GIVES OPINION |
| 6 | GIVES ORIENTATION |
| 7 | ASKS FOR ORIENTATION |
| 8 | ASKS FOR OPINION |

| NEGATIVE AFFECT | |
|---|---|
| 10 | DISAGREES |
| 11 | SHOWS TENSION |
| 12 | SHOWS ANTAGONISM |

Fig. 1: Bales Categories Selected for Analysis.

Interactions were coded directly from the tapes in order to preserve the tonal quality of exchanges. This facilitated the identification and clarification of speech units (especially tension, antagonism, agreement, humor) and eliminated the need for literal transcription of all dialogue (Roter 1977). The nonverbal behaviors observed and recorded included facial expressions (smiles, frowns, eye contact), nontherapeutic touching, voice tone, olfaction, body positioning, and expressive or emotional acts or signs. To insure reliability, ratings of interactions were made blind to other patient data.[5]

Mailed questionnaires were used to gather data on patient attitudes about care received. Patient satisfaction was measured with a 16-item Likert type scale with

5 being highly satisfied. The scale was derived from a widely tested 68-item set developed by Ware (see Ware et al. 1983). It covered perceptions of practitioner competence, concern, affect, information transfer, patient understanding, and doctor comprehension of patient problems.

## PATIENT SAMPLE

The study plan was to observe all patients. A new patient entering a D.C.'s office for the first time is typically nervous because of uncertain expectations, and can be rather skeptical and apprehensive. Due to the delicate nature of this initial encounter, Dr. A disallowed observation in 8 of the 11 first visits. However, all but two of these patients were subsequently seen if further visits occurred. (Three did not return during the course of the study.) A total of six patients were not observed at any point due to refusal of consent. Otherwise, I was given unlimited access to virtually all proceedings throughout the clinic.

Only those patients who both consented to observation and responded to the satisfaction questionnaire were included in the analysis. This represented 79% of the patient load, and resulted in a sample of 57 people, who made a total of 104 office visits between them. The high number of visits per patient during an eight-day observation period is due to the nature of chiropractic care. Visits to the chiropractor are generally short, but with frequencies ranging from a maximum of 6 times per week for initial acute care, to an ideal minimum of once a month for maintenance patients (i.e., those with a stabilized chronic condition).

The average patient age is 42 years, in a range from 14 to 80. Forty seven percent (47%) of the sample are males. Regarding occupation, there are 42% white collar, 33% blue collar, and 25% not indicating occupation.[6] Ethnically, the sample is 70% Euro-American, 19% Italian-American, 9% African-American, and 2% Latino.

Patients generally presented with musculoskeletal problems, especially of the back, neck, and legs. Seventy six percent (76%) of patients have a family doctor. At least 46% of patients had previously sought care for their chief complaint from one or more physicians or hospitals.[7] Seventeen percent had resorted to two or more, and 6% had sought three or more biomedical options prior to approaching Dr. A for care. Seventy percent (70%) of those patients previously having sought care for their problems from biomedicine also had a family doctor.

The subject sample was representative of the demographic and clinical characteristics of all patients seen during the study period as well as of a randomly selected comparison sample of 117 cases drawn from the total patient population of active and closed files. Non-respondents to the satisfaction

questionnaire demonstrated no sociodemographic pattern and tended to be established patients with a mean of 49 treatments received over an average of 8.5 months.

## FINDINGS

Before entering into a quantitative discussion of the chiropractic-patient communication style, a brief description of the clinical process of information-giving is necessary to contextualize the findings.

Any therapeutic treatment includes as a distinct element the belief it elicits in both practitioner and patient, in addition to the more observable direct effect of the treatment itself (Weil 1983). In other words, it is not simply the objective effect of therapeutic measures that are of interest, but also the ideas forming the basis of the therapeutic acts as well (Ackerknecht 1946).

Cowie and Roebuck (1975) have noted the importance to patient recovery of "buying into" the chiropractor's approach and world view. Consequently, given the unorthodox nature of the chiropractic system, the chiropractor goes to great lengths to educate new patients to a new way of thinking about their often long-standing problems. Clinical interaction is structured in such a way as to instill in new patients a coherent and comprehensible set of health beliefs, one that maintains a unified monocausal theory of disease etiology with which patients can make sense of their previously ill-defined ailment. Chiropractic explanations are simple and understandable. The mechanistic symbolism of the chiropractic system is appropriate to the mechanistic conceptual system of our industrialized society.

Heavy emphasis is placed on leading patients to realize they can understand and influence their own condition. The D.C. professes that improvement will be more difficult "if patients don't understand what we're trying to achieve". He sees this education process as essential, since patient expectations for cure are unreasonable unless and until they understand the nature of the internal damage, why the healing process will take time, how he "moves" bones, the necessity of frequent office visits, etc. The chiropractor's efforts to educate patients to his unified theory of disease and to transmit to them his own personal conviction about the chiropractic method are begun immediately and are reinforced throughout his professional relationship with the patients.

Through his instruction, the D.C. dogmatically transmits to the patients his own sense of conviction in his method. The chiropractor gives patients new terminology and theory to explain their problems. Their ability to describe and discuss an ailment is important since by identifying and defining an entity, it becomes tangible, thus easier to manage, with a resultant reduction in anxiety about it (Maslow 1963). Explanatory models of their illnesses (see Kleinman

1980) were elicited from seven randomly chosen patients who had already undergone the initial treatment sessions and were at different stages of treatment. The results revealed that patient explanations of their illness regarding etiology, pathophysiology, and the efficacy and expected duration of treatment, among other things, were highly congruent (81%) with those of Dr. A. The congruity between patient and chiropractic beliefs was entirely independent of treatment stage, indicating the extent and rapidity of patients' internalizing the chiropractic model of disease.

In addition to the initial encounters with the patient during which he introduces them to his explanatory model of illness and health, Dr. A utilizes educational films and mails out a bimonthly newsletter to augment the re-education process. Also pamphlets, charts, diagrams, plaques, and models abound in all rooms of the clinic to constantly help reinforce chiropractic teachings. Incidentally, the above are additional forms of information transfer which are not captured by the taping of the clinical encounter.

In essence, the chiropractor first manipulates a patient's belief structure before setting about to manipulate his or her physical structure, providing an analogous realignment in both the mind and body (cf. Levi-Strauss 1967:196). A congruity between patient beliefs and behaviors gives a certain unity to the chiropractic experience, securing patient faith in and adherence to the system of therapy.

## *I. Quantitative Patterns in Communication*

Table 1 gives an aggregate view of clinical interaction patterns by combining the data for all visits by all patients. The percentage of each type of statement made by both the doctor and the patients are shown. Thus, the overall tendencies in interaction patterns are readily apparent. Doctors and patients alike tended most frequently to produce utterances which showed solidarity, and to produce utterances demonstrating disagreement or asking for suggestion least often. Since the average difference between the percentage of doctor and patient statements was never more than 7% for any of the categories used in subsequent analyses, the doctor and patient statements are combined for each category.

### *Synchronic Overview*

The overall interaction patterns are broken down into the various types of treatment session in Table 2 to show the normal interaction experienced during the course of chiropractic care. Clearly, each type of session shows a distinct interaction pattern.

TABLE 2
Patterns of communication by type of session.

| Session Type | Mean No. of Statements | Information Statements | Positive Affect | Negative Affect |
|---|---|---|---|---|
| Intake | 337 | 72% | 5% | 9% |
| Examination | 448 | 49% | 15% | 4% |
| Consultation | 416 | 62% | 6% | 4% |
| Treatment | 97 | 34% | 41% | 4% |
| Re-exam | 302 | 48% | 14% | 3% |

1) *Intake*, or the initial interview, is the first encounter between the doctor and the new patient. It normally lasts about 8 to 20 minutes. This meeting involves extensive history taking that is geared toward determination of etiology and is highly detailed to elicit factors possibly overlooked by previous doctors. This includes inquiries into past accidents, sleep, exercise, vitamin and food intake, and stimulant habits such as caffeine, tobacco, liquor or drug use. Orientation to the chiropractic belief system, mentioned earlier, begins here. The number of exchanges is relatively high with an average of 337 statements. Giving and asking of information is higher than during any subsequent session (72% of total dialogue), with positive affect at its lowest (5%) and negative affect at its peak (9%), due to the typically high anxiety level of a patient's first visit to a chiropractor (Cowie & Roebuck 1975:53, 81). The large amount of initial information seems geared in part to reducing patient skepticism and apprehension.

2) The *initial orthopedic examination* of the patient follows the intake on the same day, and takes approximately 12 to 20 minutes. This procedure consists of an exhaustive battery of range of motion and neurological tests administered by the D.C. The session is very instrumentally oriented with 49% of dialogue characterized as information exchange. An average of 448 statements are made during an examination. As tension begins to subside during this stage, more positive affective interaction between the chiropractor and patient begins to occur (15%). Negative affect levels off to around 4% of the statements made.

3) Within a day or two of the initial visit, the chiropractor has a 15-minute *consultation* with the patient and any attending family members to thoroughly explain his findings. Patient X-rays are shown and explained, and patient problems evaluated. Spinal models and charts are used to demonstrate internal function and dysfunction. Dr. A's expectations of the patient and a preliminary prognosis for recovery are established. Again, during this stage a high number of exchanges are taking place (416), dominated once again by information giving and requests (62%).

4) The first *spinal manipulation treatment* is received only after patient evaluation has been completed. A cursory preliminary chart review and

elicitation of patient progress precede the physical therapy. The therapy session, usually from 2 to 10 minutes in length, provides an opportune time to give opinions, clarify patient questions and concerns, and pursue personal discussion, as the practitioner is engaged physically, but not verbally, in treatment. As Table 2 shows, fewer statements are exchanged (97), related to the fact that treatments are shorter in length, with the highest number of statements being of a positive affective nature (41%). Information exchange has lessened but still accounts for 34% of the interaction. Negative affect remains steady at 4% of exchanges.

5) Periodically, a patient will be *reexamined*, usually when the condition has stabilized. This type of session is similar to the initial examination, though less lengthy, since the patient's problem areas have already been defined. The D.C. clarifies patient progress by comparing prior test results to current results. At 48%, 14%, and 3%, informational and affective indices are almost identical to the initial examination. Overall then, the bulk of the first 3 types of sessions consists of information transfer, although information exchange continues to remain high during subsequent sessions. Positive affect is clearly dominant during therapeutic treatment. However, the tension typical of the first session has all but disappeared and negative affect reaches its lowest level at 3%.

*Diachronic View*

In Table 3, an interesting dynamic is revealed when looking at chiropractic treatment over time, or diachronically. As might be predicted, the patterns of interaction change with the duration of treatment. The degree of information exchange appears to lessen with the increase in number of treatments received, and the proportion of affective statements increases as the doctor-patient relationship matures, that is, as close bonds are formed and the D.C. gains intimate knowledge of a patient's medical and personal history as well as psychosocial problems. Though Dr. A always displays a professional demeanor, as patients' confidence in him increases he tries to "be a human being with them, not just a doctor."

TABLE 3
Changing patterns of interaction with duration of treatment

| Sessions Received | N | Mean No. of Statements | Information Exchange | Positive Affect | Negative Affect |
|---|---|---|---|---|---|
| 1–6 | 3 | 370 | 58% (223) | 9% (30) | 4% (15.3) |
| 7–12 | 7 | 69 | 42% (30) | 30% (18) | 2% (1.7) |
| 13–18 | 11 | 106 | 30% (30) | 46% (51) | 3% (2.9) |
| 19–24 | 8 | 77 | 34% (26) | 40% (29) | 4% (3.3) |
| ≥ 25 | 28 | 117 | 36% (43) | 39% (43) | 5% (5.6) |

* Number in parentheses indicates average number of statements.

The first category in Table 3, "1 to 6 Treatments Received," is marked by over three times the number of statements found in other categories (370), mainly due to the heavy emphasis on information exchange during the initial sessions. The number of statements decreases steadily with length of treatment, best explained by the treatments shortening in length as the therapy becomes routinized and as the patient improves.

Proportions of information exchange and positive affect follow opposing courses. Information drops steadily from an initial high of 58% of statements to remain in the low 30's as length of treatment extends beyond 12 sessions. Positive affect jumps from a low of 9% during initial sessions to a level of 46% of total interaction when about 13 to 18 treatments have been received and settles in at 39-40% when treatment lasts a longer time. The slight increase in information and decrease in affect after 25 treatments appears to be the result of an occasional instrumentally-oriented reexamination (see Table 2) occurring along with regular treatment around this time. As noted, reexaminations, like initial examinations, are characterized by a large number of exchanges, largely of an informational content, and by diminished positive affect. Also, around the twenty-fifth treatment, potentially distressing discussions concerning insurance payments, lawyers, and settling of patient claims tend to take place, which were observed to increase information transfer and to slightly lessen positive affect and increase negative affect.

Initial negative affect appears to stem from new patients' nervousness and apprehension, and was observed especially during negotiation and discussion of the principles of the chiropractic system. Negative affect quickly drops from 4% to 2% by the time 7 to 12 treatments have been received, with steady increases at each successive stage suggesting that the more established the doctor-patient relationship, the more it can accommodate dissent and difference of opinion.

To summarize, it appears that as the doctor's explanatory model of health and illness becomes instilled in the patient and the doctor comes to fully know the patient's history, less information needs to be communicated and conversation moves to a more personal realm, though neither formal nor informal dialogue is absent at any phase of the treatment.

*Patient Satisfaction*

One of the primary goals of clinical practice is patient satisfaction. As earlier cited, ample evidence links the receipt of information and positive affect with patient satisfaction. Self-rated patient satisfaction in this sample was very high, with aggregate satisfaction averaging 4.3 (Table 4). (Internal consistency reliability of the scale was 0.96 (Chronbach's alpha).)

Overall, there was a poor correlation (.12) between satisfaction score and length of treatment. However, it is apparent that new patient scores are much lower than for those in all other categories of treatment length (Table 5).

TABLE 4
Satisfaction scores by component

| Scale Factor | Number of items | $\bar{X}$ | SD |
|---|---|---|---|
| Affect | 1 | 4.5 | .83 |
| Information | 8 | 4.3 | .92 |
| Competency | 5 | 4.4 | .90 |
| General satisfaction | 2 | 4.1 | 1.13 |
| Overall | 16 | 4.3 | .98 |

TABLE 5
Patient satisfaction by length of treatment

| Number of sessions | N | $\bar{X}$ | SD |
|---|---|---|---|
| 1–6 | 3 | 2.7 | .62 |
| 7–12 | 7 | 4.3 | .51 |
| 13–18 | 11 | 4.6 | .39 |
| 19–24 | 8 | 4.0 | 1.09 |
| ≥ 25 | 28 | 4.4 | .51 |

Admittedly, the small sample size for the first category does not assure its representativeness. Not surprisingly, the two most highly dissatisfied patients received relatively few sessions – 8 and 22 respectively – before subsequent termination of care. Of the two moderately dissatisfied patients, one terminated care after two sessions, while the other had made 18 visits at the time of study, and was still in treatment a month later.

Figure 2 graphically depicts the interplay of the various interaction components with each other and with the level of patient satisfaction. The satisfaction level can be seen to follow the degree of affect, demonstrating a moderately strong correlation of .34.

### *Qualitative Findings*

I will now turn my attention from the general quantitative patterns of communication to the actual content of the communication itself. The following ethnographic information helps to reveal just what transpires in all those informational and affective exchanges. Content and character of the informational, positive and negative exchanges will be examined in turn to determine to what extent the chiropractor exhibits the "informative," "warm," "empathetic," "psychotherapeutic" (and so on) manner which is so often attributed to chiropractors. The examples given below are not merely isolated instances of interaction style; rather, they typify the types of exchanges that commonly occurred during the observation period.

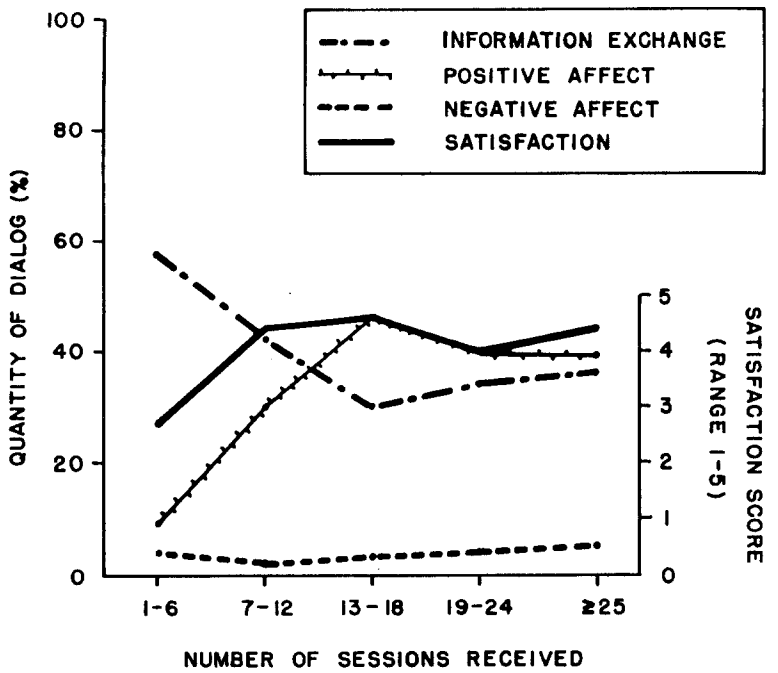


Figure 2. Interaction indices and satisfaction plotted to show relationships.

*Information Exchange*

In general, the content of information exchanges is instrumental and task-oriented, and exemplifies Dr. A's personal philosophy that patients need to understand what is happening to them if they are to improve. The adequacy of the content of information exchanged during initial sessions reduces the need for subsequent explanation, which is reflected in the interaction patterns in Table 3. Woven through Dr. A's ample supply of information are such techniques of communicating as language consciousness, use of analogy, negotiation, and repetition of important points.

Typically, the chiropractor imparts substantial information to a patient during the initial visit in a manner easily understood by the average person. With a new patient during an initial office visit he would explain: "Now (patient's name), there's three different reactions that you may have here. First is, you may feel better, of course. Most people don't feel better 'til after several treatments. Be patient, don't get discouraged. It takes time. You understand? The second is, you

may feel sore. Because we're moving the bones. It's like going to the dentist. They put braces on the teeth, they tighten 'em down, and it hurts like hell for a while..."

During an orthopedic examination of a patient, the doctor is intent upon identifying the problem. A long battery of range of motion and pain tolerance tests are given. Therefore, most statements made are instrumentally oriented, usually consisting of directions, requests, and some information:

Doctor (D): OK, sit up straight please. (guiding the patient with his hands) Turn your head that way as far as you can. Anything?

Patient (P): No.

D: Go the other way. Tell me... right there?

P: Um-hum.

D: Oh, you can't go that far, huh?

P: No, it hurts.

During office consultations with patients, the D.C. details in ordinary language what from X-ray and test analysis he has found to be occurring internally. For example: "Now I'll draw these lines all the way down the center here (draws on X-ray with a pencil and ruler). That's the center of your bones, and this...is a straight line. You can see how you deviate back and forth from this line. Plus this bone up here (points) is moved over to the right and that's putting pressure on the nerve that comes up around the top of the head like this and around the sides, OK? It puts pressure on the nerve like that and that creates headaches. Let me show you the nerve that's doing that (points on wall chart of nervous system).

Information transfer continues throughout the treatment sessions. Following the initial consultation, the D.C. outlines an anticipated treatment regimen and timetable so that the patient knows what to expect: "I will treat you four times this week. You may need daily, but...we'll see as we go along. If you're doing better next Monday, we'll go down to three times. Then we'll go down to twice a week until you're 100% better. Stretch it out to three weeks, four weeks, for as long as you like, to try to keep the subluxations down to a minimum... Usually you'll be in and out of here (the office) in forty minutes. Do you have any questions?"

Also, during his explanations, the D.C. often actively demonstrates the movement or procedure he wants his patients to practice, thus identifying with the role of the patient. For example, in describing to a woman how to lift a laundry basket, he squatted to the floor and rose several times, acting out the

proper position.

The D.C. makes an effort to verify that he has been correctly interpreted. He typically clarifies unclear points before moving on. Also, the doctor frequently asks patients if they agree, understand, or follow him. And he clarifies or repeats patient utterances to assure his own interpretation is correct.

As a strategy by which to help patients conceptualize their conditions, Dr. A makes extensive use of analogical accounts. These etiological explanations draw on examples from other domains, especially mechanical ones from the everyday world, which can be easily understood regardless of one's socioeconomic background. For example, regarding a patient in for nutritional counseling, he compared a functional imbalance in a person to a car needing a tune-up: "We're looking for functional disturbances. Like the difference between a new car and an old car. They'll both get you to work, but one will do it a lot more efficiently." In other cases, when educating patients about spinal misalignments impinging on the disc, he might liken the vertebrae and discs to a brick and mortar wall: "If the brick was sitting like this (demonstrates unparallel brick with his hands) what would happen? Just the pressure alone would eventually wear out that side of the mortar. Well, just imagine, if that building had the ability to move, it would wear out even quicker."

A common complaint of medical patients is being talked down to in esoteric terms by a physician (Koos 1954). Numerous studies have shown that M.D.s often use language which is too technical for patient comprehension (Hadlow & Pitts 1991; Korsch & Francis 1972). Communication is destined to break down if one speaks in terms the other does not understand. This chiropractor purposefully demystifies medical jargon by translating scientific definitions into lay terms the patient can comprehend. He habitually 'unpacks' health and illness definitions in this manner: "You have a cervical dorsal mild faschitis and cervical strain, which means you have strained muscles in the neck, you sprained the ligaments, and you have some muscle inflammation." The act of naming a patient's health condition in itself demystifies it for the patient. The formal medical terms are included along with lay terms to insure the patient's confidence in his own knowledge and because he believes "patients have a right to know."

Another notable aspect of Dr. A's language is that he does not depersonalize a patient by referring to body parts with a definite article (e.g., 'the' neck looks fine today) but rather uses a possessive pronoun (e.g., 'your' knee is swollen). Also, when stating goals or responsibilities for therapy, he often uses the pronoun "we" to indicate the mutual effort involved (e.g., "hopefully we can achieve it..."; "all we can do is try to get it as strong as possible...").

Negotiation and collaboration are features found in the chiropractor's style of care. His doctor-patient relationship is a model of the "mutual participation" type (Szasz & Hollender 1956). Under chiropractic care, treatment is often

negotiated with the patient, respecting the patient's autonomy. Dr. A realizes adherence to prescribed treatments will be low if the patient is unhappy with the treatment. Especially when therapeutic decisions are to be made, the D.C. does not order the patient to do something, but gives him or her the options and his (often emphatic) professional opinion and concerns, then works with a patient to arrive at a final decision. For instance, he will query: "If I gave you a support, would you wear it?" In one case a young teenaged girl with a recurring hip problem had been treated previously by several doctors and hospitals. Her pain had subsided since her initial chiropractic exam with Dr. A, but before he was to begin treatment:

D: (to mother) But if you wanted to wait until she had pain again and do it then, it's up to you. Whatever you want me to do. You could bring her back when she's hurting again.

M: No, I don't want to wait until it starts hurting again, because I want to get the problem solved before she gets older.

D: OK, then what I'll do is start treating her today.

The patient is encouraged to assume responsibility at the office, for example, by participating in discussion and decisions or applying one's own physical therapy. Responsibility extends to home treatment as well, where patients are expected to carry out prescribed regimens of exercise, diet and physical therapy with the aid of family members.

*Positive Affect*

Many of the D.C.'s statements demonstrating positive affect were exchanges of personal remarks and inquiries of a non-medical nature. Comments of praise, encouragement, and reassurance also fell into the broader positive affect category. The chiropractor was open and frank in his attitude towards people, balancing this with a good sense of humor. Dr. A shows respect for patients by addressing elders by Mr. and Mrs., and greeting everyone upon entering and leaving. The interaction observed typically involved a sustained amount of eye contact.

Often statements which were characterized by positive affect demonstrated the D.C.'s genuine concern for and empathy with the patient, as in the case of a patient with a severe recurring headache: "If that headache comes back...you come in tomorrow. As a matter of fact, if that headache really gets as bad as it did last time, you call me up on Sunday and I'll come down here and treat you, OK?" This type of supportive statement was routine for the chiropractor:

P: When I first came in I was actually crying there was so much pain.

D: The first day I wanted to lay down and cry with you.

The D.C. had an intimate knowledge of the patient without making reference to his file. (He kept no notes on personal data.) He always appeared to be aware of and inquire into the psychosocial condition of his patient's life regarding marriage, divorce, work, relatives, school, financial situation, etc. Often they would spontaneously resume conversations from previous sessions:

D: So what's new?

P: Nothing.

D: Everything go alright?

P: Yeah, it was nice.

D: Did you buy the dog anyway?

Throughout all interactions, Dr. A's dialogue is characterized by acute openness, honesty, and frankness. I never witnessed him to be secretive or grant false hopes about the patient's condition, his ability to help, or any other matters ("If you don't follow my instructions, I won't have much chance of helping you at all, so don't waste your time and money, OK?"; "If I give you ten to twelve treatments in a row with no relief, I'll have to send you to see a surgeon"; "Hopefully,... but I don't want to try and tell you I can do something that I may not be able to do, OK?")

The chiropractor is especially forthright in insisting on the distinction between healing and curing a patient (see Kleinman, Eisenberg & Good 1978). That is, given the nature of chronic injuries there is a tendency for patients to feel better or have total relief from pain without an actual complete recovery from the underlying pathophysiological cause of the problem. The link between the therapy and the remission of symptoms becomes less apparent over time and non-adherence results, since patients feel cured. "They think they're fine, quit, and then backslide," says Dr. A. "The damage is still in there."

In the case of irreversible conditions, the goal is to help patients live as normal a life as possible. When the prognosis is poor, the D.C. does not hesitate to be candid:

D: (To a new patient with a wedged disc): If you keep this under control with once a month treatments, you'll have a better chance of fighting this thing off. But I will tell you this, you're going to have to learn to work around your back, to lift properly, not to sit too long, to change your lifestyle. Because once you have this amount of damage you're bound to have back problems for the rest of your life. I can minimize that tremendously. I will never get rid of it totally. I'm not trying to paint a panacea. Realize that you'll probably never be 100% again. You'll probably be somewhere near that because you're young...

P: Sure I will.

D: Well, that's a good attitude and hopefully we can achieve it.

Joking, laughter, and humorous exchanges are standard elements of the established chiropractor-patient relationship. Dr. A seems to believe, as some do, that laughter has the therapeutic effect of healing the sick (see Cousins 1976). It was a rare session in which genuine humor was not shared between chiropractor and patient, as in the following case:

P: (joking) Did you ever think of getting artificial fingers with padding on them? (both laugh loud)

D: I've worked them to the bone!

Patient questions are handled in seriousness, but sometimes with a bit of humor to ease patient tensions:

P: Do you know of any place where you can go where you learn how to breathe correctly?

D: Yeah.

P: Do you?

D: Yeah, Lake Erie. You just jump in. When you can't breathe anymore you come up and you breathe correctly then (laughs).

P: (Amused.) Oh, I hear you! Isn't he funny.

D: What kind of breathing do you want? There's all kinds of different breathing, you know. I mean, I'm a connoisseur on breathing.

P: Are you?

D: I do it all the time!

P: Oh, oh, and I said, "are you?"

(He then proceeds in earnest to teach and practice a yoga breathing exercise with her, even stopping back in later after seeing another patient to check on her progress.)

*Negative Affect*

A rather small number of statements showing negative affect are heard during any phase of clinical sessions, with intake demonstrating the highest occurrence of utterances characterized by negative tone or intention. Disagreements, tension, and passive and active antagonism tend to surface during critical points of the clinical encounter.

Differences of opinion were sometimes voiced between doctor and patient. At times, this attested to the strength of their relationship when either showed s/he was not afraid to question or criticize the other's opinion. For instance,

D: (regarding a prescribed treatment) Remember that stuff, R-1. Did that seem to help?

P: (with conviction) No!

In another instance:

P: Can I criticize your music?

D: It's pleasant, isn't it?

P: (part in jest, part serious) It's giving me a headache.

D: (mock scoff) Giving you a headache! Don't listen to it then. Headache! (laughs) It's mellow.

Mainly, patient negative affect is expressed as passive tension, primarily in the form of nervousness (usually with new patients), insecurity, over-caution, and dependency, while most of the doctor's negativity is expressed as open antagonism, manifested by impatience or interrupting the patient. This often stems from misunderstandings:

P: (somewhat tense) Oh, can you have somebody put my X-rays in an envelope. (withdrawing) I'm meeting with the sawbones at 1:00 today.

D: You're going to see who?

P: (tense) Ah...Dr. Smith.

D: (sharp) He's what?

P: (quietly) My sawbones...my annual physical.

D: He's an orthopedic surgeon?

P: (withdrawn, barely audible) No, just an M.D.

D: And he wants to see your X-rays on your back?

P: (testily) I don't know that he *does*. But I'm going to go in and tell him that...what's going on.

Antagonism toward the patient tended to surface when the patient failed to comply with a treatment regimen:

D: (annoyed) Then you go out there and do things you shouldn't be doing and the whole thing comes back again. You can't do that. So I'm helping

it and you're aggravating it. I'm helping it, you're aggravating it. We're going to go nowhere quick.

Forty percent (40%) of the antagonism of both doctor and patient was directed at unsympathetic outside agencies, such as insurance companies, state laws, lawyers, or the medical profession, especially surgeons. Here, the D.C. and patient are discussing the handling of a Worker's Compensation claim by the patient's attorney: "Sometimes I run across these problems with lawyers. Some lawyers don't understand the ups and downs of chiropractic. They're more traditionally medically oriented. He may be one of those people that are prejudiced, and he'll side with the wrong side and what does that do to you?"

Biomedical practitioners are a common target of D.C. and patient animosity:

D: I wish you would've come to me and let me handle it because I would've sent you to a neurologist that would've done it that I could've worked with. Some of these guys...

P: (interrupts, defensive.) I don't have to go. I don't need to let these guys do anything...

D: (interrupts) Some of these guys I can't work with. They think they walk on water.

At times the D.C. appears to disregard patient comments and accounts, especially during the first part of a session. This non-attentiveness seems to be the root of much of the tension occurring in exchanges. A stylistic pattern became apparent in which during the instrumental part of a visit, particularly if the chiropractor is concentrating intently on his task, he frequently lets patient requests or questions go unheeded. Later when the session is winding down – the point at which he generally encourages questions and conversation – he will sometimes address the points he had ostensibly ignored earlier.

Part of this tendency during treatment to disregard patient symptomatic complaints ("It hurts when I...") or theories of the origin of the problem ("It happened when I...") is explained by the nature of chiropractic theory. According to the theory, regardless of the precipitating cause, there is one primary dysfunction (subluxation) and one ultimate cure (adjustment) for many of the particular problems a chiropractor treats. Therefore, all else tends to be immaterial *during* treatment, though these matters are not considered irrelevant and may be discussed before or after treatment. Thus, whereas M.D.s often ignore the underlying disorder and focus on symptoms, D.C.s tend to do the opposite: they focus on the perceived underlying disorder and ignore the symptoms. Both the chiropractor's occasional assertive demeanor and the non-attentiveness to patient comments are a manifestation of his attempt to structure the clinical encounter to keep it directed toward therapeutic activities.

## DISCUSSION

The foregoing descriptive analysis supports the notion that the chiropractic style of interaction is effective in establishing, then maintaining, a satisfying relationship with the patient – a key to clinical success (see Buller & Buller 1987). The new patient is typically nervous, apprehensive, unfamiliar with the chiropractic method, and has sought care for his or her chronic complaint from one or more physicians already. Knowing this, the chiropractor initially employs a clinical strategy of communicating massive amounts of information to the patient to allay fears, explain, and re-educate. With this communicative approach, the D.C. either succeeds in "converting" or else soon loses altogether the new patient who was doubtful about continuing care. As Coulehan has noted, a practitioner tends to be more successful with a patient if a link between doctor and patient is initially made (Coulehan 1985; also see Oths 1992). This fact is reflected in the satisfaction scores, which are substantially lower for new patients than for those who have received more than six sessions (mean=2.7 vs. 4.4). Though the sample of first-time patients is small (n=3), recall that three of the new patients dropped out during the course of observation, so their satisfaction – presumably minimal – is not recorded.

Once the clinical relationship has been established, with patients coming to share to a large extent the D.C.'s explanatory model, this relationship is effectively "cemented" and maintained by the D.C.'s warm, caring, affable and continually informative manner during encounters. This is demonstrated in the heavily affective tone found in the interaction analysis.

These observations stand in stark contrast to most studies of doctor-patient interaction, where one or another style of care is attributed to a practitioner (e.g. Hall et al. 1987). This study reveals that practitioner style may vary depending on the length of association with the patient: in this case the style is instrumental at first, gradually becoming more affective over time. Bertakis and Callahan (1992) have also recently taken into account the familiarity of the doctor with the patient in assessing communication style and come to similar conclusions.

The high quantity of information supplied by this D.C. can be considered imperative given the lack of familiarity with and apprehension of chiropractic that most new patients have. The chiropractor acknowledges the need for and provides an explanation of symptoms which patients suffering from musculoskeletal disorders have been found to desire. It may be precisely the need for a satisfactory explanation of one's pain that leads a chronic sufferer to seek medical attention (Deyo & Diehl 1986).

For doctor and patient alike, treatment for long-term poorly defined problems is liable to be a discouraging and frustrating experience. As Deyo claims:

> Patients with back pain are often frustrating to physicians, in part because a clear pathoanatomic explanation of the pain is elusive, and in part because many such patients

seem very demanding. On the other hand, patients with back pain may find their medical visits equally frustrating, and are even warned by consumer handbooks to expect a cool reception. [Johnson, G.T. & S.E. Goldfinger, as quoted in Deyo & Diehl 1986:1]

The chiropractor anticipates these difficulties by providing the patient a structured, supportive environment and theoretical explanations designed to take the mystery out of process and problems. This provides the patient with a greater sense of personal control. The resultant effect of the communication characterized by a high degree of information and positive affect is a strong doctor-patient relationship and a satisfied patient who continues treatment.

The high amount of positive affect – at its peak comprising 46% of interaction – stands in marked contrast to Freemon et al.'s (1971) well-known study of doctor-patient communication, where only 10% of the doctor's dialogue with mothers was rated as expressing positive affect (and salutatory remarks are also included in the latter but not former figure.) It must be noted that exchanges are affectively positive even though some patients are the non-communicative type. Typically, this type of patient would enter, exchange a few niceties with Dr. A, then relax during treatment, self-absorbed.

It would be unwarranted to assert the generalizability of these findings to all chiropractors. Nonetheless, qualitative findings here accord with previous descriptions and ethnographies of chiropractic clinics to a remarkable degree of detail (Coulehan 1985; Dryburgh 1984; Cowie & Roebuck 1975; Koos 1954). Apparently, the teleological use of analogy is not unique to this chiropractor, but is a learned strategy by which most D.C.'s help patients conceptualize their problems (Dryburgh 1984; Cowie & Roebuck 1975). Avoidance of medical jargon, use of personalized pronouns in talking about the patient's body, inclusion of family members in treatment, substantial personal discussion, frankness of the D.C., and other traits mentioned herein are described as characteristic in previous accounts of chiropractic (Cowie & Roebuck 1975; Koos 1954).

Very little quantitative information is available on the satisfaction of chronically ill patients. Kane et al. found that patient satisfaction was rated significantly higher for chiropractors than M.D.s in terms of the ability of the practitioner to explain musculoskeletal problems and treatment (Kane et al. 1974). In a study of low back pain patients, 25% of patients in a biomedical walk-in clinic reported "failure to receive an adequate explanation of their problem" as the most common source of dissatisfaction with physician care (Ware, Davies-Avery & Stewart 1978). In contrast to the previous study, only 7% of this chiropractic patient sample was dissatisfied with the information given, with the same 7% dissatisfied in general with the care received. This finding is all the more striking if one considers that at least 46% of the study patients are now visiting Dr. A after receiving no relief from a biomedical doctor for their current complaint and 70% of these patients have a family doctor.

Apparently, patients are going to this chiropractor for something that they were not getting from their regular physicians.

The fact that most of the converts to chiropractic develop a strong relationship with their D.C. coupled with a high degree of satisfaction is consistent with evidence from prior studies on cancer patients. Studies conclude that patients tend to seek unorthodox treatments when they perceive deficiencies in biomedical care (Erwin 1985), especially when they lack supportive therapeutic alliances with their caregivers (Howard-Ruben & Miller 1984) and when they fail to receive simple etiological explanations of their problems (Cassileth et al. 1984). Specifically, Cassileth et al. found that the quality of patients' relationships with their physicians is related inversely to their propensity to seek unorthodox care (1984:112).

The high degree of patient satisfaction in this study is not entirely unexpected, as the patient population will generally be self-selected over time by the chiropractor as well as the patients. Cowie presents findings that a chiropractor consciously influences the quality of his patient population by the selective attitudes he displays (Cowie & Roebuck 1975). Problem patients are weeded out, as they disrupt the systematic pattern of care necessary for successful outcomes, and/or may negatively influence other patients with their uncomplimentary opinions. The extent to which this is the case here cannot be determined. However, the D.C. did engage in patient selection by informing patients when he could be of no help for their condition. Also, he commented to me a few times on the likelihood that a patient would discontinue treatment, thus possibly creating a self-fulfilling prophecy (cf. Cowie & Roebuck 1975:118).

The sociodemographic characteristics of people who resort to the chiropractic alternative deserve some passing comment. In general, most research has postulated that lower socioeconomic classes, and especially males, utilize chiropractic the most (James, Fox & Guity 1983; Cowie & Roebuck 1975; National Analysts 1972; Kadushin 1969; Wardwell 1952). This is explained as due in part to a lack of education which makes them more accepting of the chiropractor's "unscientific" theories (Bellak & Karasu 1976; McCorkle 1961), and in part due to more frequent work injuries among blue-collar people (Schmitt 1978). Findings in this clinic show a greater percentage of white collar workers and nearly equal utilization by the sexes, which agrees with a more recent assessment of alternative provider utilization (Cassileth et al. 1984). Notably, 11% of the sample who are resorting to this alternative unorthodox form of care are biomedically trained health care providers – four nurses, one dentist, and one medical technician.

There were some cultural, personal, and structural aspects of chiropractic care noted during the course of observation which appear to facilitate communication and assist in the formation of the strong practitioner-patient relationship. These four points have been addressed in another work (Oths 1992) and merit closer

scrutiny in future research:

*1) The hoped-for versus the expected results of treatment.* As Young (1976) has cogently pointed out, if certain routine, or expected, results of a medical treatment are fulfilled apart from the hoped-for results, patient commitment to a form of therapy might be increased. In chiropractic, while the veritable relief from pain is hoped for, the clicking noises bones make during an adjustment is an anticipated event of the treatment procedure. This sought after result ("did I get it?", "there it went", "did you feel that?", "I heard it pop") gives cognitive satisfaction to both healer and patient that the treatment is working. As Coulehan (1985:388) put it, he "'do(es) something'...which gives the patient a prolonged experience of something happening to the body." Such non-falsifiable hypotheses tend to reinforce beliefs and practices in a particular method, regardless of whether the successful completion of a procedure actually leads to pain reduction or not (Young 1976). Each aspect of treatment that fulfills expectations adds to the perceived efficacy of a therapeutic technique.

*2) Touch, or the laying on of hands.* The amount of physical contact and close physical proximity between parties during treatment is substantial, with the chiropractor maintaining physical contact with a patient for up to 90% of the treatment time. The effects of hand-to-body contact on healing, satisfaction, and the establishment of a communicative relationship might prove to be quite dramatic (see Baldwin 1986).

*3) Staff role in patient management.* Chiropractic assistants receive certified training as well as constant instruction from the practitioner on how to handle patients. They play an essential supportive role in inculcating the chiropractor's belief system into a patient.

*4) Implicit psychotherapeutic benefit of chiropractic care.* Chronic pain has an emotional-psychological basis in addition to a somatic one. The communicative aspect of the chiropractor's clinical art may also help to relieve the psychosocial problems which compound musculoskeletal pain, thus improving patient outcome (Oths 1992).

## CONCLUSION

This study has attempted to explore the interactive patterns and communicative elements of chiropractic care without ignoring the content or process of clinical interaction. The purposes of this study have been to seek out, identify, and analyze components of the practitioner-patient relationship which may have

therapeutic effect, compare findings from a previously unstudied group to the existing body of research on the dominant medical sector, and contribute to a greater understanding and appreciation of the dynamics of chiropractic, an alternative health care paradigm.

These preliminary findings suggest that for long-term care of chronic complaints with an unfamiliar treatment modality, a practitioner-patient relationship characterized by initially large amounts of high quality information successively supplanted by personal affective dialogue may help to achieve a high degree of patient adherence to and satisfaction with services. The initial large amounts of information are conveyed by first realigning the framework of the patient's belief structure to that of chiropractic, which gives an easily understandable and culturally compatible explanation for heretofore vaguely defined health problems. With the skeleton of the chiropractic worldview in place, further information will make sense and 'stick to the ribs' of the newly acquired belief system.

By comparison with patients with acute medical problems, those with chronic complaints more often misunderstand what a practitioner is trying to communicate (Snyder et al. 1976). Given chiropractic's unified theory of disease etiology, which provides a rational interpretation of a patient's problem and an unambiguous method for treating it, the practitioner and patient can reach a common level of understanding. The end result is most often a patient highly satisfied with the care received. From the observations made in this study, one might be inclined to agree with Kleinman et al. that the chiropractor is "more interested and skilled in handling illness problems" than the M.D. (Kleinman, Eisenberg and Good 1978:255).

Communication, though the focus of this research, is not purported to be the only factor influencing treatment efficacy and patient satisfaction. By the same token, the emphasis on doctor-patient communication in this study should not be construed to minimize the importance of the curing practices employed to provide relief. Although interaction itself may be therapeutically significant (Salmon & Berliner 1980), the mechanical and chemical interventions utilized in and of themselves may be valid and restorative of structure and function (Coulehan 1985). Undeniably, the efficacy of a practitioner's treatment is largely a result of his or her combined healing and curing capabilities.

The observations made in this research have substantial implications for understanding medical service utilization and patterns of resort in this society. Not coincidentally, the rise in chronic diseases has paralleled the rise in utilization of alternative medical therapies for the past 30 years. Given the projected increase in the elderly portion of the population – those persons characteristically most plagued with chronic illness – the resort to chiropractors will undoubtedly continue to rise. Why 'unorthodox' practices such as chiropractic are attractive to patients is a question we must reckon with as social scientists

if a comprehensive understanding of our medical care system is to be gained.

*Department of Anthropology*
*University of Alabama*
*Tuscaloosa, Alabama 35487*

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## NOTES

1. In the Midwest, where the study took place, the ratio of chiropractors to residents is 15:100,000, one of the highest in the country (U.S. DHHS 1986).
2. Back pain, which is the illness chiropractors primarily treat, is one of the most frequent reasons for a visit to a doctor, following physicals, cough and sore throat (McLemore 1981).
3. Category 3, Agrees, consisted predominantly of a large quantity of neutral exclamations of consent or agreement, such as "OK", "I see", and "Mm-hmmm." Thus, category 3 was omitted from the Positive Affect Index as it would have inflated the percentage of positive affect statements considerably and would not have added to a true representation of the quantity or quality of positive affect.
4. For simplicity and greater construct validity, only the categories which consistently demonstrated substantially instrumental and informational statements were designated to represent the Information index. Thus, categories 4 and 9, Gives Suggestion and Asks for Suggestion, were eventually omitted from the construction of the aggregate Information index, since I found that these categories contained statements of a diffuse and less substantive informational nature. This is consistent with Bales' design of the categories to become more expressive as they reach the extremes of the categorical scheme (see Figure 1).
5. Previous studies using the Bales coding method have established its interrater reliability to be quite high (82.4 for Inui et al. 1982; 85.0 for Freemon et al. 1971).
6. The last group was composed almost solely of housekeepers, children, and retirees.
7. I strongly believe that 46% underestimates the true number. Patient medical histories may often be incomplete for this information because new patients are sometimes hesitant to admit that they had sought care elsewhere to avoid implying that the D.C. was a second choice or last-chance strategy.

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