

in the current health care system, or widely on providing input to policymakers and health planners which may eventually influence the structure and function of the health care system? Conversely, should applied anthropologists in health train to become health care professionals or to become theoretical anthropologists? Are applied anthropologists practitioners or researchers, and what about anthropologists who do both? Finally, what constitutes appropriate types of practice for anthropological practitioners of health? The following research articles, and commentaries, attempt to address these questions.

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Greta and Azarcon: A Survey of Episodic Lead Poisoning from a Folk Remedy

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This paper reports on the use of two lead compounds, greta (PbO) and azarcon (Pb₃O₄) currently being used as folk remedies in Mexican-American communities. These compounds have produced cases of acute lead poisoning. The compounds are two of more than 100 treatments for the culture-bound syndrome "empacho." A survey of over 2,000 informants in 35 clinics indicates that at least one person in approximately ten percent of the participating households had been administered this remedy. A subsequent concurrent clinic and household survey demonstrated no significant difference in use by clinic populations as opposed to a community-based sample. Data are also presented on other potentially toxic substances used to treat empacho. The results of this research suggest that analysis of other ethnomedical systems should be undertaken to determine whether or not toxic substances are present in them as well.

Key words: ethnomedicine, empacho, toxicology, Mexican-Americans

In the summer of 1981 two cases of lead poisoning were discovered that had an unusual etiology (Los Angeles County 1981; Center for Disease Control 1982; Pan American Health Organization (P.A.H.O.) 1982). Normally lead poisoning is traced to lead-based paints or to smelter operations; in these cases the poisoning was linked to a folk remedy called azarcon. Azarcon was determined to be a bright orangish-red powder that is a virtually pure industrial compound, lead tetroxide (Pb₃O₄), with an elemental lead content of approximately 93%. It is used to produce chrome yellow paint, to increase the adherency of marine paints, to produce red lead, and as lead glaze on Mexican pottery. Clinics in California and Colorado determined that two Mexican-American children had been poisoned because their family had used oral doses of azarcon to treat a culture-bound syndrome called "empacho."

A subsequent survey in Los Angeles County (Los Angeles County 1982) turned up alternate names for azarcon, including "greta," "liga," "Maria Louisa," "Alarcon," "coral," and "rueda." The Los Angeles County study also indicated that as much as 10% of the local Mexican-American population were familiar with azarcon; the compound was virtually unknown by Blacks or Anglos. Another survey conducted at about the same time in Greeley, Colorado, indicated an extremely high level of use of remedios caseros (home remedies) and sufficient knowledge of azarcon, and an alternate compound "greta," to make these lead compounds a serious concern (Ackerman and Simkovic 1983).

Investigations of the alternate ethnopharmacological terms for lead tetroxide turned up a light yellow powder in Texas, called "greta" (Trotter et al. 1983). Analysis of greta determined it to be a related compound, lead oxide (PbO) with an elemental lead content of approximately 89%. It was being sold commercially by a distributor (along with over 200 other remedios caseros) to as many as 120 retail outlets in Texas. The substance was purchased in bulk in Monterrey, Nuevo Leon, Mexico, packaged in small plastic bags and sold in boticas or yerberias (herb shops) in Mexican-American communities. Since greta, like azarcon, was being used to treat the folk illness empacho, it became the object of a Public Health Department ban on sales and a Federal Drug Administration Class I recall, as well as the focus for a health education campaign.

Background

The use of *greta* and *azarcon* fits within an important cultural context, the use of *remedios caseros* in Mexican-American communities. Therefore, a considerable amount of ethnographic research was either reviewed or conducted before, during, and after the surveys. This built up a picture of the overall cultural environment that surrounds the home treatment of illnesses in the Southwest.

The most persistent focus on ethnomedical research in Mexican-American communities has been on *curanderismo*, Mexican-American folk medicine. This is especially true of the Lower Rio Grande Valley of Texas, where research on folk healing has been conducted on a relatively consistent basis for the past 25 years. Early works on the subject were the result of the Hidalgo County Project and were published primarily by Madsen (1961, 1964a, 1964b, 1966), Romano (1960, 1964, 1965), and Rubel (1960, 1964, 1966). Later contributions to Mexican-American folk medicine were made by Currier (1966), Nall and Speilberg (1967), Edgerton et al. (1970), Uzzell (1974), a series of articles in a monograph edited by Velimirovic (1978), and Arenas et al. (1980). Other works (e.g., Clark 1959a, 1959b; Foster 1953; Jaco 1957; Kay 1972, 1974a, 1974b, 1978; Kiev 1968; Macklin 1962, 1965, 1967, 1974; Martinez and Martin 1966; Paredes 1968; Samora 1961; and Torrey 1969, 1970, 1972) have contributed to the current state of knowledge about Mexican-American belief systems for the United States as a whole.

In addition to these works, the author and colleagues have published on Mexican-American ethnomedicine. Some of these (Trotter and Chavira 1975, 1978, 1980, 1981, and Trotter 1979, 1982b) are primarily descriptive ethnographic re-explorations of Mexican-American folk medicine, bringing the reports on ethnomedicine up to date for the area. Later works deal more specifically with the use of *remedios caseros* and the home treatment of illnesses (Trotter 1981a, 1981b, 1982a; Trotter et al. 1982; Trotter et al. 1983). Recently the importance of *curanderos* or folk practitioners has come under increasing scrutiny (Chavez 1984; Marin et al. 1983). Their conclusions are that the *curandero's* role is limited in most populations, while the use of home remedies is very extensive.

The data indicate that there is virtually ubiquitous use of home remedies in Mexican-American communities and households; approximately 600 remedies are in daily use. The remedies are used to treat physical ailments (e.g., colds, flu, sores, ulcers, diabetes, and cancer), and they are used as a part of physical treatments and magical rituals designed to eliminate culture-bound syndromes, bad luck, witchcraft, and other supernaturally caused problems.

Accompanying the widespread use of home remedies is the persistence of a set of culture-bound syndromes (folk illnesses that do not match accepted medical categories) in Mexican-American communities, such as *empacho*, *mal de ojo*, and *susto*. No community-based survey has been conducted to establish the incidence and prevalence of these illnesses, but the ethnographic literature suggests that they are extremely common (Martinez and Martin 1966; Mull and Mull 1981; Rubel 1960; Trotter 1983). The problem of lead poisoning by *greta* and *azarcon* ingestion derives from

the persisting treatment of *empacho* in all of the communities surveyed.

Empacho is commonly recognized and treated throughout Latin America (cf. Kendall et al. 1983). It is believed to be a bolus of food that sticks to the wall of the intestine, or some other form of blockage of the intestines. The most common treatments are massages which are supposed to dislodge the bolus physically, and herbal teas and other substances that are supposed to break up the blockage and flush it out. Diarrhea following treatment is often taken as a sign of successful treatment.

Empacho is thought to be caused by eating improperly cooked foods (e.g., tortillas), by eating *empacho*-causing foods at the wrong time (bananas late at night), by swallowing chewing gum, by infants swallowing saliva when they are teething (instead of drooling), and by being publicly forced to eat foods that one does not like. The major symptoms of *empacho* are bloating of the stomach or "stuffiness" in the stomach or intestines, constipation, indigestion, diarrhea, vomiting, and lethargy. The latter four symptoms are also symptoms of acute lead poisoning.

Both the ethnographic data and the data from the surveys indicate that the population most at risk from *empacho* is infants, followed by children up to the age of ten or eleven. Another group at risk is teenagers, and, finally, women in the immediate post-partum time period. The latter condition appears to be a separate or special type of *empacho*, caused by the delivery of the child. However, *greta* and *azarcon* are used to treat this type of *empacho* and it may constitute a danger not only to the mother, but also to the infant if blood lead is transferred through breast feeding. *Empacho* also occurs in all other age groups, but to a lesser degree.

A brief entymological investigation supported the conclusion that both *greta* and *azarcon* have been in use for generations. The word "*azarcon*" is Arabic in origin and has no other meaning than lead tetroxide and the bright orange-red color of the powder (Real Academia Española 1970). *Greta* is a *mejicanismo* that first shows up in print in 1729 and means lead oxide (Santamaria 1959:504). Esteyneffer (1978) lists *azarcon* and *greta* as remedies, but only for external conditions (e.g., wounds, ulcerated sores, etc.). There is no indication as to when they began to be taken internally.¹ Ethnographically, it was possible to trace the internal use of both compounds back through four generations in several families.

The normal amount of *greta* or *azarcon* powder given to treat *empacho* is an amount equivalent to the tip of the small finger. Some informants indicated that *greta* and *azarcon* should only be given once, and never again, which would somewhat reduce their risk. However, the cases of lead poisoning reported to date from *greta* or *azarcon* are the product of repeated exposures to the compounds (Pan American Health Organization 1982; Center for Disease Control 1982). Repeated doses may well be the norm, since most home remedies taken internally are given in sets of threes or sevens (e.g., three times a day for three days, one time per day for seven days, etc.); all "magical" numbers used to set treatment boundaries in the ethnomedical system.

Chronic lead poisoning can produce anemia, neuropathy, mental retardation, and death. There is some evidence that

acute or low level chronic exposure may cause learning disabilities and serious changes in behavioral patterns (Needleman et al. 1979). Until studies are specifically carried out on a population that has been exposed to *greta* and *azarcon*, there is no way of knowing the overall effects the compounds have had, beyond the increasing number of poisonings that are being discovered.

The grave public health dangers of the internal use of *greta* and *azarcon* caused officials in the Public Health Region VI Office to request the author to conduct a survey in migrant and public health clinics in the southwestern United States to determine the extent of use of *greta* and *azarcon*. The purpose of the survey was to provide sufficient data on the treatment of *empacho* and on the use of *azarcon* and *greta* to establish policy, protocols, and programs to deal with *greta*, *azarcon*, and any other toxic substances used to treat *empacho*.

Materials and Methods

The data from two related surveys are presented in this report. The first data set comes from a series of concurrent surveys conducted in 35 migrant and public health clinics in Texas, New Mexico, and Arizona in July 1983. The second data set comes from a project undertaken two months later in Hildago County, Texas, where simultaneous surveys were conducted in three migrant health clinics and in the eight communities immediately surrounding those clinics.

A survey instrument was developed based upon available ethnographic data on the treatment of *empacho* (see Nall and Speilberg 1967; Martinez and Martin 1966; Rubel 1960; Madsen 1961, 1964a; Trotter and Chavira 1975a, 1981; Trotter 1981a, 1981b), plus the questionnaires used in the Los Angeles County and the Greeley, Colorado surveys. The final instrument (after pretesting and modification) contained 17 questions on the demographics of the household of the respondent, the treatment of *empacho*, and the use of *greta* and *azarcon* in the household. The final question was on the household treatment of five other common Mexican-American culture-bound syndromes: *mal de ojo* (the evil eye), *susto* (magical fright), *espanto* (similar to *susto*), and *caida de mollera* (fallen fontanelle). Comparable questionnaires were developed in both Spanish and English using the technique of "back translation" to validate their comparability.

The first survey consisted of a series of interviews conducted in 35 migrant and public health clinics in 31 towns spread from Brownsville, Texas, to Yuma, Arizona. The interviews were conducted by bilingual/bicultural interviewers chosen from individuals in each clinic (regardless of occupational status) who were noted for having the confidence of the patients and as being the type of person patients would confide in. The interviews were conducted in the preferred language of the informant.

Training for the interviewers in each clinic was accomplished by a one hour conference call, five clinics at a time. This system was used as an experiment in conducting large-scale ethnopharmacological/epidemiological research. The problem demanded immediate data collection, but no funds were available for travel. Interestingly enough, there were no

more incomplete interviews in this data set than in the second survey where face-to-face training took place, and in at least one case, actually less. In addition, there were proportionally fewer interviews where the open-ended questions were poorly or minimally completed, or where detailed answers were not completely recorded.

The interview population in each clinic was determined by the size of the clinic. Those with fewer than 4,000 patient contacts per year were asked to interview 50 patients, while those over that number were asked to interview 100 patients. Each third patient, regardless of reason for attending the clinic, was interviewed, unless he/she refused to participate. Interviews taken from duplicate households were eliminated at the end of the interview period, prior to stripping the interviews of patient names to protect privacy and confidentiality. A total of 1,900 individuals were interviewed: 1,341 Mexican-Americans, 102 Spanish-Americans (the preferred identifier in northern New Mexico), 455 Mexican Nationals, 2 undifferentiated Hispanics, 6 Blacks, 1 Asian, 98 Anglo-Americans and 4 other. The Black, Asian, Anglo, and other patients were universally ignorant of *empacho* and of *greta* and *azarcon*. A total of 54 individuals (2.69%) refused to be interviewed. The tables below report on the Hispanic population exclusively.

The demographic characteristics of the 1,900 informants in the survey population are as follows: Their ages range 15 to 93 (39.5 mean, 28.0 mode); a total of 92.3% of the informants were female, while 7.7% were male; households ranged in size from one to 18 members (mean = 4.8; mode = 4); 11.7% of the households had eight or more members; 81.4% of the informants were living in Texas, 13.4% in New Mexico, and 5.2% in Arizona; 70.2% of the informants identified themselves as Mexican-American, 23.8 as Mexican Nationals, 5.3% as Spanish-Americans, and 0.1% as undifferentiated Hispanic.

The second survey consisted of 50 interviews conducted simultaneously in each of three migrant health clinics, using the methodology described for the 35 clinic surveys. At the same time, a series of interviews was conducted in the eight towns that act as the primary catchment areas for the clinics. The purpose of sampling in both locations simultaneously was to determine similarities or differences in the use of *greta* and *azarcon* in samples that could provide comparisons between clinic populations and the populations as a whole.

The community sample was drawn by dividing 300 interviews proportionately amongst the population of the census tracts or enumeration districts that comprise the target towns. Each block in the census tract or enumeration district was numbered, beginning in the northwest corner and moving in west-to-east lines until the southeast corner of the census tract was reached. Households were chosen using a block cluster design. The blocks (and alternates) were chosen using a random table of numbers. The target households in the selected blocks were chosen using a second drawing from a random table of numbers. Houses were counted, moving around the block in a clockwise direction until the target house was identified. The position of the house selected to begin the count alternated between the northwest and the southeast corner of the block. Interviews were then conducted in the selected house and in the two houses on either

side, forming the cluster. Alternate blocks were chosen to deal with the problems of non-residential blocks or blocks with missing households.

Interviews were conducted exclusively in Hispanic households, since both Anglos and Blacks had in past surveys demonstrated no knowledge of *empacho*, *greta*, or *azarcon*. Respondents ranged from 17 years of age to 84 years of age; 89.9% of the respondents were female; 10.1% were male. One question included an ethnic self-identifier; 64.3% of the respondents identified themselves as Mexican-American or Mexico-Americano, depending on the language of the interview, as opposed to 35.7% who identified themselves as Mexican National or Mexicano. The refusal rate for all of the surveys was less than 3% of the total individuals contacted.

Results

The data in the tables below summarize the answers to the key questions in the survey. Table 1 indicates the responses to the question of whether or not *empacho* has ever been treated in the informant's household and if *greta* or *azarcon* has been used to treat *empacho* in the household.

Of the total sample of households, 7.3% had at least one member treated with *greta*, and 2.9% had at least one member treated with *azarcon*. This means that approximately 10% of the households surveyed have at least one member who has received an acute overdose of lead (both remedies are rarely used in the same household).

However, *greta* and *azarcon* are not the most common remedies for *empacho*. One of the open-ended questions in the survey (asked prior to the questions on *greta* and *azarcon* use, to reduce bias) allowed the development of the rank ordering of a list of remedies for *empacho*.²

Table 2 contains a rank ordering of only 65 of the total 106 treatments identified. The other 41 treatments were mentioned by a single informant. They are ignored here on the assumption that they may be idiosyncratic, or at least low in saliency, compared with the other treatments, especially in relation to the issue of widespread use of toxic substances.

The most commonly mentioned treatment was a stomach massage, using olive oil or other oils as a lubricant. Some informants also mentioned other parts of the body being massaged in addition to the stomach, especially the back (in Texas) and legs (in Arizona). The second most common treatment is to roll the patient onto the stomach, grab or pinch the skin in the small of the back, and pull on it until it "pops." The popping sound is taken as an indication that the bolus or blockage has been dislodged. The third most common remedy is to roll an egg (or just the yolk) on the person's stomach while a prayer is recited; the "energy" from this ritual opens the intestines. However, most (84.6%) of the remedies are biophysiological: herbs, oils, and compounds taken internally. Two interesting exceptions are the 27th and 28th treatments, which are to take the patient to a doctor or to a *curandero*. Inclusion of these two options is an indicator that *empacho* can be serious, and there is some reliance on authority to deal with it. This tendency is much more pronounced when the *empacho* is identified as particularly severe or persistent.

TABLE PERCENT HOUSEHOLDS TREATING *EMPACHO*, USING *GRETA*, USING *AZARCON*

Location	% Treating <i>empacho</i>	% Using <i>greta</i>	% Using <i>azarcon</i>	N of house- holds
Arizona				
1. Tucson	63.0	5.4	19.4	50
2. Somerton	25.0	2.0	10.4	49
New Mexico				
1. Portales	80.0	14.3	12.9	31
2. Albuquerque	47.6	2.4	2.7	118
3. Anthony	18.2	5.9	12.5	34
4. Sunland Park	32.2	0.0	6.4	37
5. San Miguel	31.2	4.0	4.0	32
Texas				
1. El Paso	37.5	0.0	4.3	96
2. Presidio	64.1	3.1	3.0	39
3. Hereford	83.3	9.1	9.1	13
4. Floydada	89.2	0.0	0.0	37
5. Crosbyton	68.3	10.0	0.0	41
6. Plainview	37.8	5.3	1.1	98
7. Muleshoe	33.3	0.0	2.9	42
8. Dimmitt	48.9	4.5	0.0	45
9. Littlefield	44.4	7.1	0.0	27
10. Olton	33.3	0.0	0.0	45
11. Levelland	72.0	5.2	2.8	100
12. Odessa	68.0	6.3	2.0	50
13. San Angelo	84.0	18.4	0.0	50
14. De Leon	37.5	7.9	5.9	40
15. Goldwaithe	58.3	4.3	0.0	48
16. Sun Saba	96.3	22.7	4.8	27
17. Bracketville	43.9	25.6	5.3	41
18. Eagle Pass	46.8	9.0	2.6	79
19. Crystal City	50.5	10.5	0.0	99
20. Cotulla	40.6	10.3	0.0	101
21. San Antonio	67.3	4.4	3.4	98
22. Gonzales	31.9	0.0	0.0	47
23. Laredo	43.4	8.9	1.0	212
24. Harlingen	43.9	17.3	0.0	57

A companion question asked informants to state what they would do if they were confronted with a really serious case of *empacho*. This question was asked because it had been discovered during the ethnographic research that many informants failed to mention, or even to remember *greta* or *azarcon*, until they were asked for the most powerful remedy they could think of for *empacho*. The rankings of the most powerful remedies are listed in Table 3. Of particular interest is the change in ranking of going to a doctor (1st) and to a *curandero* (7th), and the addition of taking the problem to another authority figure, the mother (17th). There is also an indication of a decrease in knowledge or in confidence for dealing with the problem. In the previous question, 32.5% of the informants indicated they did not know a remedy for *empacho*, while 48.8% of the informants indicated they did not know a really powerful remedy. There were 17 "most powerful" remedies mentioned by only one informant, and thus not included in this table.

TABLE 2. RANKING OF COMMON TREATMENTS FOR *EMPACHO*

Rank	Treatment	(N)	Rank	Treatment	(N)
	massage			<i>ruda</i> (tea)	
	pop skin on back			<i>aqua de pita</i>	
	egg on stomach			<i>yerbaniz</i> (tea)	
	olive oil (internal)			<i>anis</i> (tea)	
	mixed herbs (tea)			rice water (tea)	
	<i>estafiate</i> (tea)			aloe vera (raw)	
	laxative (commercial)			baking soda (internal)	
	lard, baking soda (rub)			orange leaves (tea)	
	camomile (tea)			<i>ipazote</i> (tea)	
	castor oil (internal)			milk of magnesia	
	<i>greta</i> (internal)			<i>palmita</i> (tea)	
	<i>bismuto</i> (internal)			7-up or Sprite with baking soda	
	spearmint (tea)			Vicks (rub)	
	mesquite bark (tea)			<i>linoza</i> seeds (internal)	
	egg poultice on stomach			<i>ojase</i> (tea)	
	cooking oil (internal)			orange juice (drink)	
	<i>anil</i> (internal)			<i>albayarde</i> (tea)	
	<i>asoque</i> (internal)			Ex-Lax	
	Baby Percy (internal)			sugar and water (internal)	
	cumin seeds and sugar (tea)			salt water (internal)	
	Pepto-Bismol (internal)			<i>escorbia de perro</i> (tea)	
	<i>azarcon</i> (internal)			<i>volcanico</i> (rub)	
	rose petals (tea)			purgative (internal)	
	<i>raiz de nopal</i> (tea)			<i>oregano</i> (tea)	
	<i>aceite gen</i>			empty egg shell, bread	
	white grape skin (internal)			<i>toronjil</i> (tea)	
	go to doctor			<i>yerba de San Jose</i>	
	go to <i>curandero</i>			<i>empacho</i> pills	
	olive oil, salt (internal)			marjoram (tea)	
	enema			<i>peonilla</i> (tea)	
	cinnamon (tea)			lemon water, baking soda (internal)	
	<i>teompillo</i> and mesquite (tea)				
	<i>aceite de resin</i> (internal)				

Again, *greta* and *azarcon* are not the most common options, but *greta* moved up in the rankings, possibly due in part to the preponderance of Texas clinics in the sample. There is a geographical differential in knowledge about and use of *greta* and *azarcon*. Knowledge about and use of *greta* are highest on the eastern end of the United States-Mexico border, and *azarcon* is virtually unknown. This condition becomes reversed at the western end, where *azarcon* is common and *greta* virtually unknown. The reason for this distribution is not known at present.

The results of the paired surveys (one set in the clinics and one set in the towns surrounding them) are presented in Table 4. Consistent with the differential geographical distribution of the two oxides of lead, *greta* was found to be in common use and *azarcon* use was relatively low. An unexpected trend in the data is presented in Table 4. The percent of households treating *empacho* was higher in two of the clinic samples than in the communities surrounding them, and considerably lower in the third than in its surrounding communities. A differential is also present in the percent treating with *greta*, lifetime, in one clinic-community grouping, but not in the other two. There is no apparent trend in the data on *azarcon* use.

The other findings from the Hidalgo County survey are

virtually identical with the 35 clinic surveys. The salient remedies used to treat *empacho* are all found in Tables 2 and 3 with no significant difference in their ranking. Two other compounds were discovered during the survey that are potentially toxic. *Asoque* (elemental mercury) is in common use in New Mexico and the bordering areas. It is swallowed to treat *empacho*, and therefore potentially toxic. *Anil* (laundry bluing) is being taken internally, primarily in Arizona. The danger from this practice is that some forms of laundry bluing contain aniline dye, which is highly toxic, while other bluing products are harmless. Table 5 identifies the areas of heaviest concentration for these two potentially toxic substances.

Discussion

One of the interesting phenomena present in the data is the overall consistency of findings. There is considerable variation in the remedies that treat *empacho*, which confirms the more general findings for *remedios caseros* as a whole (Trotter 1981a, 1981b). Within this variation there is considerable consistency in the rankings of the most common remedies used to treat an illness. These common treatments remain

TABLE 3. RANKING OF MOST POWERFUL TREATMENTS FOR EMPACHO

Rank	Treatment	(N)
	go to doctor	
	massage	
	pop skin on back	
	olive oil (internal)	
	mixed herb (tea)	
	<i>estafiate</i> (tea)	
	go to <i>curandero</i>	
	<i>greta</i>	
	egg on stomach	
	laxative	
	caster oil (internal)	
	<i>anil</i> (internal)	
	camomile (tea)	
	lard, baking soda on stomach	
	Baby Percy	
	<i>bismuto</i> (internal)	
	take to mother	
	egg poultice on stomach	
	Pepto-Bismol	
	cumin seeds and sugar (tea)	
	<i>asoque</i> (internal)	
	cooking oil (internal)	
	spearmint (tea)	
	mesquite bark (tea)	
	enema	
	<i>aceite gen</i> (internal)	
	<i>agua de pita</i> (internal)	
	<i>azarcon</i>	
	baking soda (internal)	
	Vicks (rub)	
	burnt <i>estafiate</i> (internal)	
	<i>anis</i> (tea)	
	7-up and Sprite w/baking soda (drink)	
	<i>alvailardo</i> , bacon grease (<i>emplaste</i>)	
	cinnamon (tea)	
	<i>raiz de nopal</i> (tea)	
	rose petals (tea)	
	garlic clove suppository	

stable over wide geographical regions. Each region has less common, but locally prominent, remedies that give the overall configuration a distinctive regional signature. Examples of this include the use of *ruda* (rue: *Ruta graveolens* L.) to treat *empacho* in South Texas, *asoque* (mercury) in New Mexico, and *anil* (laundry bluing) in Arizona.

The population at risk from *greta* and *azarcon* can now be more clearly defined from the data. A total of 50.4% of the survey households had treated *empacho*. Thus nearly half of the households in the population are not at risk from *greta* and *azarcon*, since they have virtually no medicinal uses other than treating *empacho*. Furthermore, only 12.7% of the total households reported treating one or more cases of *empacho* during the past 12 months. Viewed slightly differently, the population at risk from *greta* and *azarcon* use is approximately 20% of the households treating *empacho*. Since the percent of households treating *empacho* fluctuates by

TABLE 4. HIDALGO COUNTY SURVEY BY PERCENT OF HOUSEHOLDS

Survey site	% Treating <i>empacho</i>	% Using <i>greta</i>	% Using <i>azarcon</i>	N of households
	71.1	15.2	2.2	46
	56.1	14.0	1.8	57
	47.8	17.4	8.7	23
	42.8	23.8	0.0	21
	51.4	16.8	3.0	101
	30.9	16.7	0.0	42
	52.0	14.0	2.9	67
	50.7	13.4	0.0	50
	51.3	16.2	1.7	117
	70.8	27.1	2.1	48
	57.9	13.0	0.0	29
	36.7	6.7	0.0	30
	44.4	22.2	0.0	9
	47.0	11.8	0.0	68

geographical location, there will be variations in the percentage using the lead compounds as well.

Greta and *azarcon* are not the most common *remedios caseros* (Trotter 1981a, 1981b), nor are they amongst the ten most common remedies for *empacho*. They are also unusual in that while virtually all other home remedies treat multiple ailments, *greta* and *azarcon* essentially treat only *empacho*. Out of 1,900 Mexican-American households surveyed, only ten reported alternate medicinal uses for *greta* or *azarcon*. All ten were amongst the households in the total sample that used *greta* or *azarcon*. These alternate uses were to treat diarrhea, sores, chicken pox, kidney infections, indigestion, and abdominal distension. Three informants mentioned their use as a glaze for pottery. This lack of prominence of the two compounds, except in special circumstances, may explain why they have not previously come to light as health hazards, even though the survey data indicate they are in relatively common use.

However, the data still indicate a considerable health risk to Mexican-American populations, and, by extension, to populations in northern Mexico, since the point of purchase for both *greta* and *azarcon* has ultimately been a town in one of the northern states of Mexico. Either *greta* or *azarcon* (or both) have been purchased in the following cities in Mex-

TABLE 5. OTHER POTENTIALLY TOXIC REMEDIES BY STATE

State	% Mention of <i>asoque</i>	% Mention of <i>anil</i>	N of households
Arizona	0.1	33.7	95
New Mexico	8.5	1.2	260
Texas	0.6	0.0	1,545

ico: Reynosa, Tamaulipas; Monterrey, Nuevo Leon; Piedras Negras and Ciudad Acuna, Coahuila; Ojinaga, Juarez, and Chihuahua, Chihuahua; Hermosillo and Agua Prieta, Sonora; Tijuana, Baja California; Guadalajara, Jalisco. In addition, George Foster, in a personal communication, sent field notes and samples of *greta* from Tzintzuntzan, Michoacan, that indicated long-term use of *greta* and *azarcon* in the area, both in pottery and as remedies.

One key question that has not been addressed is why the use of *greta* and *azarcon* has persisted for generations, when lead is a toxic compound with extremely deleterious effects. In part, this has to be due to the expectations that people have when they use a remedy to treat *empacho*. It is also probably due to the fact that the symptoms of lead poisoning overlap with the symptoms of *empacho*, and because the consequences of lead poisoning often do not manifest themselves for weeks or months after blood lead levels have reached deleterious levels. Most of the internal remedies for *empacho* have a purgative action, causing diarrhea and occasionally vomiting. While these are symptoms of lead poisoning, they are also the expected indicators that a remedy has successfully broken up the bolus that is thought to be causing *empacho*. Thus, a medically important symptom of poisoning becomes an ethnomedically expected sign of a cure. Coupled to the common delay in the appearance of other symptoms and consequences of lead poisoning, it becomes easy to see how the problem could remain hidden from the population for so long.

These findings, plus the suspected use of other toxic substances within the ethnopharmacological system, tend to confirm at least part of the model proposed by Micozzi (1983: 352), where four levels of effect are proposed for ethnomedicines. In this case, the demonstrable toxic effect is marked by delayed symptomatology and by the production of an expected sign (diarrhea) that the treatment has been successful. This situation most probably exists in all ethnomedical systems, and deserves further research attention.

In many respects *greta* and *azarcon* form an ideal illustration of the importance of many of the concepts embedded in applied anthropology. The first case of lead poisoning was detected in a clinic through the presence of a red powder in stools and from a gastric lavage, but was ultimately traced to a home remedy through persistent inquiry by an individual who had the cultural sensitivity to realize there are alternate treatment systems in multicultural populations. The same was true of the second case, where health officials had already decided the source of the poisoning, even though a parent insisted that the child had absolutely no access to that source. The publicity on the first case led another culturally sensitive individual to query possible use of a folk remedy, and discover a second *azarcon* poisoning in another state. At that point potential widespread use was evident, leading to the survey reported above.

There have been an additional 14 cases of lead poisoning from these sources published during the past two years. At the same time, remedial actions have been undertaken, even prior to the availability of this data. These have relied heavily on the ethnographic data cited above to shape, target, and plan the content of the programs. They include local and regional media (radio and T.V.) public awareness campaigns, and a poster/information campaign in over 2,000 sites around

the country. Protocols were developed for migrant and public health clinics that contain the procedures for dealing with suspected ingestion of *greta* and *azarcon*, in addition to the better known causes of lead poisoning. A special study is now under way in some of the clinics that are identified above as having high rates of *greta* and *azarcon* use. Several more disease prevention/health promotion strategies are being developed. Overall, this is an excellent example of a major contribution of anthropological data and anthropologists to the solution of a previously undetected public health problem. It is quite probable, judging from the experiences encountered in this project, that there are other sources of toxins in the traditional medicines of many cultural groups, just as it has been shown that there are new medicines to be discovered in ethnomedical systems. The *greta/azarcon* findings suggest that anthropologists must now search for both, not just for the medicines.

NOTES

¹ I am indebted to a personal communication from Bernard Ortiz de Montellano for the Esteyneffer data, and a search of the Florentine Codex that produced negative results.

² Scientific identification of the remedies is still underway by a botanist. Those that have been successfully identified are: *estafiate* (*Artemisia mexicana* Willd.); camomile (*manzanilla*; *Matricaria chamomilla* L.); spearmint (*yerba buena*; *Mentha spicata* L.); mesquite (*Prosopis glandulosa* Torr.); cumin (*comino*; *Arracacia atropurpurea* Benth. et. Hook); rose petals (*rosa de castillo*; *Rosa centifolia* L.); *raiz de nopal* (root of prickly pear cactus: *Opuntia* sp.); cinnamon (*canela*; *Pulchea orodata* L.); *ruda* (rue: *Ruta graveolens* L.); *aniz* (anise: *Pimpinella anisum* L.); *Ipazote* (*Chenopodium ambrosioides* L.); *oregano* (oregano: *Monarda menthaefolia* Graham); *Toronjil* (balm: *Melissa officinalis* L.); marjoram (*mejorana*; *Oreganum vulgare* L.); *ojsé* (American tarbush: *Flourensia crenata* DC).

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*Clinical Anthropologist as Therapy
Facilitator: Role Development and
Clinician Evaluation in a Psychiatric
Training Program*

by MARK NICTER, GORDON TROCKMAN, AND JEAN GRIPPEN

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Described in this paper is a clinical anthropology therapy facilitator role developed on an acute care psychiatry ward of a teaching hospital in Hawaii serving a multiethnic population. The role was developed to provide student clinicians an opportunity to enhance their psychosociocultural evaluation and communication skills on the ward by working with a clinical anthropologist on a case-by-case basis. Discussed is the concept of therapy facilitation, role development, student-staff evaluation of the role, and the types of problems and dilemmas faced by an anthropologist assuming this role.

Key words: clinical anthropology, psychiatry, medical education, psychosociocultural assessment

Of late there has been a growing body of literature within both medicine and psychiatry pointing to the limitations of the biomedical model and calling for a more holistic, culturally-sensitive approach to patient evaluation and care (Brody 1980; Eisenberg 1977; Engel 1977, 1980; Kleinman et al. 1978; Lazare 1973, 1979; Sabskin 1977; Taylor 1979). Advocates of a negotiation approach to health care management (Eisenthal et al. 1979, 1983; Katon and Kleinman 1981; Lazare et al. 1978; Ries et al. 1980) have been particularly vocal in pointing out the need for physicians to complement their clinical evaluation skills with social science evaluation skills. The problem facing medical educators is how to effectively introduce these skills to developing clinicians in such a manner as to demonstrate their ongoing clinical relevance.

Medicine has increasingly looked to psychiatry to provide medical students with training in sociocultural dimensions of patient assessment and care during clerkship programs and through interactions with consult liaison psychiatrists (Engel 1982a, 1982b). A point of contention which has been raised is that in order for psychiatry to fulfill this training mandate it will need to move beyond the confines of psychosomatic medicine and cultural psychiatry.¹ While lectures on the latter are commonly described by developing clinicians as fascinating if not exotic, they are not generally attributed to enhance routine patient evaluation skills (Stoeckle and Barsky 1980). Moreover, sporadic lectures on culture and psychiatry not uncommonly convey a sense of cultural determinism (Leighton 1981) which is not the intent of most educators.

Recent literature (Foulks 1980; Gar 1982; National Institute of Mental Health 1976; Tseng and McDermott 1981) has suggested ways of enhancing the sociocultural content of psychiatric training programs. Noteworthy is the fact that interactions with social scientists outside the seminar room have received little attention. In this paper we propose on-the-ward interaction with a clinical social scientist as an alternative approach to "clinic distant" training in social science evaluation. Described is an exploratory project in the development of a clinical social scientist "therapy facilitator" role in an acute care in-patient psychiatry ward of a teaching hospital serving a multiethnic population in Hawaii. A premise of the project was that, regardless of ethnicity, all clinician-patient interactions are cross-cultural (Kleinman 1975) by the very nature of divergent biomedical and lay interpretations of physiology, illness causality, appropriate sick role behavior, the function of medications, the meaning of health

and the criteria of common sense. Such interpretations often require identification, clarification and conceptual translation on the ward. A mandate of the project was that developing a clinician's perspective into the psychosociocultural dimensions of patient care and moving a clinician beyond a vision of culture as "ethnic stereotypes" requires working through a series of psychosociocultural evaluations of seemingly routine as well as more culturally exotic patients.

The major theoretical perspectives and approaches to patient evaluation incorporated within the therapy facilitation project have been discussed in depth elsewhere with illustrative case material (Nichter and Trockman 1985).² Our present focus will be a description of how the therapy facilitator role was developed on the psychiatry ward and how it was received by psychiatry instructors, medical students, psychiatric residents, ward staff and patients. Based on the project experience we identify potential problem areas and dilemmas that a clinical social scientist must be aware of when working as a therapy facilitator.

The Therapy Facilitator Role

Before describing how the therapy facilitator role was developed on the ward, a distinction need be drawn between therapy facilitation and therapy. On the ward, the dictates of clinical social science research, diagnostic evaluation, and therapy often converge. Indeed, it is often necessary for the anthropologist to assume what Russell (1983) has referred to as a "clinical stance." A "clinical stance" constitutes a role which is responsive to the changing needs of the patient and therapy team, the skills and objectives of the anthropologist, and the ongoing assessment of a clinical supervisor.

Two of the prime objectives of a clinical anthropologist as a therapy facilitator are the interpretation of patient behavior within sociocultural and interactional contexts, and concomitantly the enhancement of clinician-patient rapport. The anthropologist seeks to identify a patient's spheres of relevance (Schutz 1970), as well as their operational and representational modes of thought—their models for and of reality (Geertz 1966). It is the therapist's vocation to confront a patient about his behavior or alter his interpretive understanding in accord with a therapeutic mandate. These latter activities unquestionably separate therapy facilitation from the work of therapy. As noted by Russell, it is one thing to assist in the identification of a culturally influenced pattern of distress or to assist in the generation and assessment of behavioral management plans. It is quite another vocation to recognize how and when to implement a strategy of behavioral change. Therapy facilitation is therapeutic to the extent that it provides a patient with the opportunity to ventilate feelings (often about care providers and the hospital) and to become more aware, and better able to discuss psychosociocultural factors impacting on interpersonal relationships, illness experiences and the goals of therapy.

In concept, the therapy facilitator's role in psychiatry is a social science counterpart to the psychiatric consult-liaison role in general medicine and primary care (Ries et al. 1980). Both roles provide a primary care provider with adjunct patient evaluation services by a health professional who maintains a neutral status in relation to patient control. An

initial focus of both roles is on more comprehensive psychosocial evaluation of the patient's illness experience. This evaluation moves from a focus on the patient to an assessment of situational factors impacting on patient-clinician interactions. The activities of both professionals contribute to behavioral assessment, care plan reformulation and patient/staff negotiation. As each adjunct professional disengages from an alliance with the patient, an enriched alliance between the patient and primary care providers is fostered.

Role Development

The therapy facilitation project was initiated by a post-doctoral fellow in a clinical anthropology training program. The project took place in an acute care 40-bed psychiatry inpatient ward of a teaching hospital serving a multiethnic population in Hawaii. The anthropologist and clinical supervisors were faced with the difficult task of at once defining, establishing and evaluating the worth of a new role in a high pressure, multidisciplinary clinical setting. It was deemed prudent for the anthropologist to "earn his stripes"—put in time understanding the roles, constraints, and frustrations of the psychiatric team and ward staff—as opposed to being introduced, as a "commissioned officer or consultant with degree in hand."³

Accordingly, the anthropologist followed two groups of third-year medical students through their six-week psychiatric clerkship on the ward as well as in the classroom. The clerkship experience provided the anthropologist with an opportunity to gain familiarity with psychiatric terminology and nosology, ward protocol, team interviewing dynamics, and care plan formulation. Participant observation on the ward provided insights into student clinicians' general level of appreciation for psychosociocultural aspects of patients' illness experiences before and after routine lectures on transcultural psychiatry and cultural dimensions of patient assessment and care.

During the following three months of role preparation, the anthropologist attended departmental case conferences and was invited to round with psychiatric teams on the inpatient ward and consultation liaison service. During this time, attending psychiatrists referred several patients to the anthropologist for sociocultural evaluation as a learning experience and to assess the response of patients to a social scientist. The legality of the anthropologist's interviewing activities on the ward was facilitated by the anthropologist becoming an allied health professional attached to the attending psychiatrist heading each team.

An additional preliminary task undertaken by the anthropologist was a systems analysis of ward-staff roles, staff-team communication patterns, and ways in which patients played team/staff against each other. This analysis involved accompanying staff members of each profession through their workdays, having staff define the scope of their work in relation to hospital protocol as well as their own professional image, and attending biweekly staff meetings where team-staff communication dynamics could be observed. Sensitivity to staff role boundaries and familiarity with patient management problems such as "splitting"—the playing off of staff against each other as good and bad objects—proved indispensable

to the role development of the therapy facilitator. For example, the anthropologist was treated as a "confidant" by many patients, placing him in the "good object" position. It became important for the anthropologist to foster an understanding among staff and team members that this position resulted from the dynamics of "patient-near" interviewing. It needed to be made clear that the anthropologist was not on the ward to function as a patient advocate.⁴

After six months of preparatory research, the "therapy facilitation" role was formulated and presented to the ward staff and a cohort of seven second/third year psychiatry residents participating in the project. Medical students participating in the project were introduced to the role during clerkship orientation seminars on cultural dimensions of patient evaluation. During the remaining 14 months of the project, the anthropologist was attached to one of three psychiatric teams functioning on the inpatient ward. All of the project cohort residents rotated between the teams so the therapy facilitator had the opportunity to work directly with each resident for at least two months.

On the team, the therapy facilitator's input was continuous during a patient's 1-to-28-day (average 10-day) hospital stay and was structured to accord with clinic protocol and care plan formulation. Initial involvement with patient care occurred in the context of team rounds during which the anthropologist was introduced as a social scientist doctor member of the team. Subsequently the anthropologist would contact the patient for an individual interview, explaining his role in a flexible manner responsive to a patient's level of comprehension. After rapport was individually established with the patient, the anthropologist conducted patient interviews accompanied by a resident, medical student, or interested ward staff member. It was in this manner that social science assessment, interviewing and communication skills were actively modeled and taught. Student clinicians would be asked to participate in structured interviews as well as to partake in phenomenological exploration of a patient's self-image and subjective illness experience. The latter employed both the use of direct and indirect communication approaches. Indirect communication was fostered through metaphoric interviewing techniques (Beck 1981; Nichter and Trockman 1985) which identified and extended patient-near referential frameworks and imagery (e.g., references to sports, business, mechanics, music and agriculture). Working within the metaphor (Aleksandrowicz 1970; Arlow 1979; Caruth and Ekstein 1966) was selectively employed as a step toward enhancing patient rapport when concordant with the dictates of therapy; that is, when not conflicting with attempts to minimize the overuse of indirect communication as a defense behavior.

In addition to being involved in direct patient interviewing, the anthropologist attended daily team-patient rounds, offered observational input on clinician-patient interaction, and participated in team discussions about care planning. Patients identified by clinicians as problematic often became the focus of biweekly case conferences attended by both team and ward staff personnel. These conferences provided the anthropologist a wider forum for discussion of psychosociocultural aspects of patient diagnosis, care and discharge planning.

Gaining acceptance of the therapy facilitation role on the

ward required the anthropologist to establish the role's service as well as training relevance. As the project progressed, service inputs were suggested by team and staff members. Common requests included exploring "compliance" problems in relation to family or clinician-patient power struggles; applying conceptual translation skills in the service of health/medication education; negotiating with patients about felt health and dietary needs; and serving as a broker between staff and patients when disputes arose.

Over the course of the project, the scope of the therapy facilitator's role came to be seen by clinicians as involving eight ward functions having adjunct research, training and service inputs:

Enhancement of rapport. Evaluation of patient's language and rhetorical style; identification of referential frameworks capable of sustaining meaningful metaphorical/analogical communication (Beck 1981; Nichter and Trockman 1985).

History taking. Collecting background information on a patient's sociocultural context, life style, and social networks; mapping of a patient's personal history.

Psychosociocultural evaluation. Exploration of a patient's explanatory models of illness (Kleinman 1980b), health (Herzlich 1973) and medication (Amarasingham 1980); investigation of a patient's felt needs and expectations from clinicians; identification of a patient's prominent idioms of distress (Nichter 1981) considered in respect to culture and interpersonal context.

Symbolic analysis. As a complement to psychodynamic symbolic analysis, a semantic network analysis which is contextual and hermeneutic (Good and Good 1981).

Assumption of a neutral role. Participation on the ward as a non-threatening, clinical specialist whose focus is non-medical; provision of feedback to staff on the patient's perception of clinical interactions and therapeutic efforts.

Liaison. Promoting communication between team and ward staff, fostering participation by all staff in patient evaluation.

Conceptual translation. Clarification of the conceptual meaning of a patient's cultural/interpersonal behavior, beliefs or language to the psychiatric team by reference to more familiar conceptual or experiential frameworks. In a similar manner, the translating of medical language and therapeutic messages/objectives to the patient in lay language and familiar conceptual models.

Health education. Bringing to the team's attention felt health concerns requiring educational input, interactional analysis of adherence problems, conceptual translation of health messages.

Role Evaluation

A therapy facilitator role evaluation was undertaken by the project's clinical supervisors who employed direct observation and a questionnaire. The latter was completed by four attending psychiatrists, seven residents, twenty medical students and twenty ward staff.⁵ The role evaluation generated by the questionnaire is presented first, followed by the impressions of the project's clinical supervisors—a senior attending psychiatrist (Trockman) and nurse clinician specialist (Grippen). Following these impressions a list of problem areas encountered and worked through by the anthro-

TABLE CLINICIAN EVALUATION OF CLINICAL ANTHROPOLOGIST THERAPY FACILITATION ROLE

	Responses	Resi- dents (N = 7)	Medical students (N = 20)	Nursing staff (N = 20)
1. Ability to establish identity as social scientist (among patients who are reality-based)	a. identity established without confusion	57%	60%	80%
	b. initial confusion but becomes clear	29%	20%	15%
	c. continuing confusion	14%	10%	5%
	d. unsure	—	10%	—
2. Patient's general response to anthropologist as team member	a. positive	100%	85%	100%
	b. neutral	—	15%	—
	c. negative	—	—	—
	d. unsure	—	—	—
3. Do patients discuss their life and problems differently with a social scientist than a clinician?	a. rapport is enhanced and data is unique	100%	85%	—
	b. data is redundant	—	5%	—
	c. unsure	—	10%	10%
4. How would you rate the clinical relevance of the social science perspective provided by the anthropologist?	a. a valuable complement	100%	—	—
	b. neutral	—	—	—
	c. no real value	—	—	—
	d. unsure	—	—	—
5. How have patient-team/staff communication and interaction been affected by the anthropologist's presence on the team?	a. enhanced	100%	90%	—
	b. no impact	—	10%	—
	c. disrupted	—	—	—
	d. unknown	—	—	—
6. How would you rate an anthropologist's interaction with patient in relation to team goals?	a. responsive to goals—enhancing	—	—	—
	b. no connection	—	—	—
	c. oversteps bounds/creates problems and confusions	—	—	—
7. As a means of enhancing your psychosociocultural awareness how would you rate the present means of training to didactic lectures?	a. present on-the-ward training is ideal	71%	80%	45%
	b. would welcome more in-service lectures as well as on-the-ward interaction with social scientist	29%	20%	55%
	c. lectures would suffice	—	—	—
8. How would you rate the therapy facilitator role developed in terms of teaching and service functions?	a. valuable service and teaching role	86%	80%	85%
	b. valuable teaching role but not a necessary clinical service	14%	20%	15%

pologist and the project's clinical supervisors are delineated. The following four points may be highlighted from the evaluation (see Table 1).

1. It is possible for an anthropologist to establish an identity as a non-medical clinical specialist with patients without disrupting team care protocol or care plan goals.

2. Patients' discussions with an anthropologist produced a unique set of data deemed clinically relevant and a complement to existing patient profiles.

3. On-the-ward interaction with a clinical anthropologist is an effective means of teaching developing clinicians psychosociocultural evaluation skills. The latter is deemed more

beneficial by students than increased coursework involving didactic teaching.

4. Patient-team/staff communication is enhanced by the presence of an anthropologist on the team.

RESPONSES TO THE ROLE: ATTENDING PSYCHIATRISTS.

Four university faculty psychiatrists spent from two to over twelve months as inpatient attending physicians, working directly with the anthropologist while supervising the team care service. Evaluations ranged from positive to markedly enthusiastic regarding the facilitator role. Faculty noted that the anthropologist became a partner in the teaching process,

demonstrating how to establish rapport with patients, gather relevant psychosociocultural data, and integrate this data into an overall management plan or patient negotiation strategy (Katon and Kleinman 1981; Lazare et al. 1978). The technique of metaphorical interviewing developed by the anthropologist was noted as especially helpful in teaching residents how to keep a meaningful dialogue going. Patient education, especially conveying an understanding of illness and the purpose of medication, was identified as an area where a combination of analogy and direct explanation using lay language and concepts enlarged patient understanding appreciably. An increased understanding of the purpose of medications led patients to ask more practical questions concerning medication and engage in more realistic negotiations regarding the timing, duration, and amount of medication to be taken. This was a clear illustration to the students of the utility of a social science perspective.

RESIDENTS AND MEDICAL STUDENTS. Residents and medical students noted that patients were enthusiastic about talking with a social scientist who was interested in their way of viewing the world. One resident, initially ambivalent about the project, was amazed at how much patients enjoyed talking to an anthropologist. A few comments made by other student clinicians regarding the experience of working with an anthropologist are representative of general impressions:

"Helped us to appreciate patients' cultural ideas about illness and sick role behavior as well as our own."

"Reminded us that patients are complex individuals, not 'cases' of diagnostic categories; that patients having the same diagnosis cannot all be treated the same; that in diagnosis we need to look beyond the individual and immediate family context to the broader social and cultural context."

"Broadened our perspective of psychosocial factors and how they influence notions of health as well as disease."

"Helped us to individually tailor treatment, and make more realistic patient dispositions. Learning to better negotiate with patients helped in shifting some of the responsibility for wellness from M.D. to patient."

Initially there was some concern that student clinicians on a busy inpatient service would be overwhelmed by the additional volume of data generated by a social science evaluation of patients. The experience of the project was that once the anthropologist became familiar with differential diagnosis and care plan organization, he was able to help students sort out relevant social and cultural data generated during interviews. Despite medical students being novices at psychiatric assessment and inpatient treatment—with all of the usual perplexity of rotating through another new clinical setting—there was surprisingly little confusion about the facilitator's role or evaluation of patients. Students responded more favorably to seeing a social scientist actually assess patients than hearing a lecture on the importance of such assessment.

STAFF EVALUATION. The anthropologist's approach to patients as observed by staff was "how does the world look from the patient's point of view," rather than "what do I need to know to make the patient better"; this perspective was described by staff as "frequently guiding them back to reality." In respect to patients' perception of an anthropol-

ogist's role, the following impressions cited by two, more articulate, patients are revealing:

"The other doctors ask the same questions a lot and they ask you questions the meaning of which you can't make out. You wonder why they ask you such questions, what are they getting at? Sometimes you get the feeling they think you are stupid as well as lolo [crazy]. The social scientist doctor makes sense. He tries to figure out what life has taught you, what you think is going on and how things really are outside. You know what he's getting at. He helps the other doctors understand you better and you to understand where they are coming from."

"I came in here because life was confusing, like a puzzle where the pieces were not fitting . . . you lose track of what it's supposed to look like and you feel like throwing it out. Psychiatrists start at the center of the puzzle—your head—and work outward. The social scientist doctor helps you work in from the borders—your situation. When you can see the borders more clearly, it makes it easier to see how a lot of the pieces connect at the center."

Staff looked to the anthropologist for increased sociocultural and interactional understanding of patients. As an accessible member of the psychiatric team attending daily team rounds, the anthropologist became a valuable information resource and staff-team liaison. The latter role was of particular importance to psychiatric aides who felt that their observations went largely unrecognized. Psychiatric aides and nurses developed a reciprocal relationship with the anthropologist, who often requested them to make specific patient observations over the course of the day. In return, they asked about uncharted team views regarding the patient and what kind of observations they could contribute which would be deemed relevant. The anthropologist's presence was noted to have increased team-staff communication appreciably which served to enhance morale.

Thirteen Potential Problem Areas and Dilemmas Facing the Clinical Anthropologist as Therapy Facilitator

As a means of tempering the impressions cast by the role evaluation, it is advantageous to review a number of lessons learned and worked through during the project. These lessons in incorporating a clinical social scientist on a treatment teaching team may be briefly outlined with reference to a series of potential problems and dilemmas. It would be prudent to address the issues raised in future training programs in clinical anthropology. Discussion of the last dilemma, the double bind implicit in clinical anthropology, will serve as a conclusion.

1. **CONFIDENTIALITY.** In the course of "patient-near" interviewing where value judgements are reserved, patients often come to treat an anthropologist as a confidant. As a therapy facilitator, an anthropologist must be aware of patients telling him things in confidence that they do not wish reported to the rest of the team. It must be made clear that the therapy facilitator is a member of the team and that no special confidentiality exists. Experience suggests a high

probability that patients will test the therapy facilitator with regard to confidentiality.

2. ALLIANCE AND SPLITTING. A clinical anthropologist needs to monitor closely how his relationship with a patient is influencing the team's therapeutic alliance. Not uncommonly, a patient will initially develop a stronger alliance with the anthropologist than with the primary therapist, placing him in the position of "good object." A positive feature of a therapy facilitator being placed in this position is that it provides the team with a broader base for observing and evaluating transference relationships, and for team role playing. A negative feature is that countertransference reactions by team members cast in "bad object" roles serve to realize the patient's self-fulfilled prophecy. Clear and constant communication between the therapy facilitator, primary therapist and whole team is essential.

3. TESTING BY PATIENTS. A therapy facilitator need be sensitive to patients' attempts to "test" their emotional response to different presentations of self. Project experience suggests that tests of seduction through admiration and endearment are more common than tests through rage. A therapy facilitator must establish ground rules for patient relationships early and learn to confront patient tests in a subtle but direct and honest manner.

4. COUNTERTRANSFERENCE. Not uncommonly, patients stalemata therapeutic efforts perceived as a "control battle" by engaging in strategies of admiration and endearment. The developing clinical anthropologist occupies a marginal position in the hospital milieu. He is prone to countertransference and unconsciously supporting endearment to fulfill needs for approval and acceptance. This may result in mutual admiration behavior which may transform a patient's fantasies into transference reactions.

5. SUPPORTING MALADAPTIVE DEFENSE BEHAVIOR. By exploring the patient's conceptual system and explanatory models of illness, health and medication, the possibility exists that the therapy facilitator may a) support a delusional system which may be worked through more rapidly if ignored—experience suggests this is rarely the case; b) support intellectualization as maladaptive defense coping behavior contributing to a patient's problems—experience suggests this is not uncommon.

6. METAPHORICAL COMMUNICATION. The dynamics of metaphorical communication and team care plan goals must be well understood if metaphorical reference is to be used as a technique for enhancing rapport. This includes an appreciation of when metaphorical reference is being used as a means of increasing cognitive distance from problems, and when it is being used to enhance interpersonal or cross-cultural communication.

7. SELF-DISCLOSURE. Negotiation of meaning across mutual spheres of reference often requires an exploration of mutual domains of experience and conceptualization. This involves some degree of self-disclosure. Self-disclosure in the psychiatric context presents a special case of reciprocal ex-

change dynamics. If the therapy facilitator is going to engage in self-disclosure, then two issues germane to psychiatry need be kept in mind. First, while decreasing social distance, self-disclosure raises the probability of transference formation on the part of the patient. Second, it increases the chances of countertransference and the acting out of emotional needs by the therapy facilitator. The context, timing, dosage and content of self-disclosure need to be gauged in accord with the individual needs and defense behavior of a patient, their level of self-esteem, and perception of the therapy facilitator. Assessment of a patient's requests for and response to self-disclosure needs to be closely monitored.

8. DOCUMENT THE PROCESS AS WELL AS THE CONTEXT OF AN INTERVIEW. Psychiatric patients' differential responses to structured and open-ended questions provide perspective into their ability to process and structure thoughts, or conversely, to engage in tangential, loose and delusional thought. Equal attention needs to be given to the process, content and affect of a patient's communication. An anthropologist's professional interest in content and interaction needs to be tempered by an appreciation of process variables in patient evaluation.

9. HANDLING PATIENT GRIPES ABOUT TEAM AND STAFF. The therapy facilitator must be willing to listen to patients' gripes about the team/staff, but must be careful not to entertain such discussions to the point of supporting them. Once anger has been ventilated and acknowledged, issues need to be clarified and explored. A service function of the therapy facilitator's role is to help patients better understand the roles, and role constraints, of team/staff members as well as the reasons for ward rules. Toward this end the use of universalism and altruism have been found effective in both individual and patient rap group sessions (Maxmen 1973, 1978). Sensitivity must be accorded to the cultural implications of these modes of reasoning, as well as to differences in moral reasoning concordant with a patient's present state of mind and affective state of being.

10. ADHERENCE TO CARE PLAN GUIDELINES. In order for a care management plan to be effective, continuity of care is essential. This is particularly the case when behavior modification is being attempted. The interviews arranged by a therapy facilitator must carefully accord with care plan stipulations concerning the frequency and duration of staff contact with a patient, "perks" like cigarette smoking, and required ward activities. Non-adherence to guidelines invites game playing and staff splitting.

11. TEAM TIME CONSTRAINTS. The time constraints of the psychiatric team during team rounds are such that, except when general discussion of the patient is entertained, input must be confined to the issues of patient diagnosis, management, and discharge planning. It is prudent to introduce more general sociocultural issues during team care conferences and during individual discussions with student clinicians. A well-formulated brief social status report as a counterpart to a mental status report for each patient is well appreciated during rounds. Such a report should briefly outline a patient's

sociocultural context, felt needs and explanatory models of the problem as well as medication administered.

12. **SELF-ESTEEM OF THE DEVELOPING CLINICIAN AND SOCIAL SCIENTIST.** It is advantageous for the developing clinician and clinical social scientist to be sensitized to the insecurities of each others' positions. The psychiatric resident has a need to instill confidence and take command of clinical situations, but is commonly insecure and anxious given the exigencies of limited experience, complex patient problems, competing time demands, and treatment alternatives. It is an affront to the resident's self-esteem, if not a direct threat, for a clinical social scientist to question a differential diagnosis or care management plan. In defense, residents may elect to devalue or question social science contributions in toto, or retreat from humanistic concerns to the more familiar territory of neurological or medical assessment. Equally disadvantageous, the resident may uncritically accept everything the social scientist says as a means of sabotage, or as a means of devaluing other dimensions of psychiatric training (Gabbard and Smith 1982). The developing clinical social scientist must work through a separate set of anxieties associated with establishing a new role identity, justifying the relevance of professional skills, confronting personal rescue fantasies fed by needful patients, and providing tedious defense against professional stereotypes. Common defense behavior patterns to which the anthropologist is prone include intellectualization, competing with clinicians in the application of diagnostic frameworks, or patent rejection of all diagnostic frameworks in deference to an extreme social labelling perspective.

Conclusion: The Strength of the Double Bind within Clinical Anthropology

In order for the anthropologist to introduce sociocultural variables into the context of clinical dialogue, it is necessary to gain familiarity with both the diagnostic system and the language of psychiatry. The effectiveness of the anthropologist in large measure rests on a sense of timing—knowing when and how to interject observations during a discussion—in sum, knowing how to enter into the culture of psychiatry. Entry places the anthropologist in a paradoxical double bind situation which Weidman (1976:109) has noted is inherent in all anthropological applications:

The process of establishing relevance reveals the nature of the basic double bind inherent in anthropological applications. Relevance is established by determining points of congruence between the values, the concepts, and the goals of two systems. Such determination necessitates a thorough knowledge of both systems, the anthropological one and the counterpart system in which the application is to occur. This methodology of anthropological application engenders a simultaneous commitment to, yet distance from, both systems ... Successful application requires both affective bonding and psychological distance. Most importantly, it requires a trans-system perspective, complex culture brokerage skills, and conceptual synthesizing ability. The latter is crucial for insuring stability and strength in the alienated position.

How may the anthropologist maintain the personal stability that Weidman alludes to in the ordered chaos—in one patient's words “the junkyard lighthouse”—of the psychiatric

ward? Maintaining balance requires keeping a foot in both the applied and theoretical worlds. In the present context, applying anthropology entails furthering psychiatric understanding of illness as a biopsychosociocultural phenomenon. From the applied task of viewing illness as an experience which is socially constituted as well as socially constituting (Young 1981), the anthropologist is led to consider the broader issue of knowledge production in the context of changing relevance. In addition, working within an environment where verbal and non-verbal communication are constantly under scrutiny provides the anthropologist an opportunity to study the dynamics of transference-countertransference and consider the implications of the latter for sociological method. For the anthropologist, the psychiatry ward provides at once an ethnographic setting as well as a hall of mirrors.

NOTES

¹ Kleinman (1980a) has noted that although ethnocentricism is routinely criticized in the cultural psychiatry literature, psychometric scales, clinical interview schedules and psychiatric categories are frequently employed. Medicocentric, psychocentric and practitioner-centered biases are prevalent, as is a simplistic cultural relativism. In this, as a number of other publications, Kleinman suggests that cultural psychiatry need become as informed by the rules of anthropological method as it is by the rules of the psychiatric method.

² Case studies by Gaines (1982), Good and Good (1981), and Humphrey and Nichter (1983) provide additional illustrations of how social science evaluation can facilitate patient diagnosis and care plan management.

³ This was a psychiatric nurse's description of an anthropologist introduced onto a ward where she formerly worked.

⁴ Anthropology has a long-standing tradition of advocacy. Therapy facilitation, as distinguished from patient advocacy, places emphasis on neutrality and non-direct involvement in control battles between patient and team/staff. The extent of the anthropologist's involvement at times of dispute was assisting patients think through and articulate to clinicians their points of contention, felt needs, and feelings. In addition, the anthropologist assisted patients to understand the hospital culture and think through the “whys” of clinic rules and procedures. The anthropologist also explored patients' interpretations of therapeutic advice, offering feedback on the latter to clinicians. In actuality, the anthropologist served as both a patient and clinician advocate by facilitating mutual understanding, the negotiation of care plans (within the bounds of reason and culture) and therapeutic alliance.

⁵ Evaluations were made by medical students after working with the anthropologist for six weeks, residents after a two-to-four-month rotation, and staff after interacting with the anthropologist for a minimum of six months. Evaluations were subjective in nature. Future projects should consider measuring objective outcomes of an anthropologist's role such as average length of patient stay, rate of rehospitalization, or measure of social functioning post discharge.

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