

"I'M NOT DOG, NO!": CRIES OF RESISTANCE AGAINST CHOLERA CONTROL CAMPAIGNS

MARILYN K. NATIONS*1.2 and CRISTINA M.G. MONTE³

¹Department of Social Medicine, Harvard University Medical School, Boston, U.S.A., ²Department of Community Medicine Division of Social Medicine, Federal University of Ceará Medical School, Fortaleza, CE, Brazil and ³Clinical Research Unit, Federal University of Ceará Medical School, Fortaleza, CE, Brazil

Abstract—Popular reactions toward government efforts to control the recent cholera epidemic in Northeast Brazil are evaluated. Intensive ethnographic interviews and participant-observation in two urban slums (*favelas*), reveal a high level of resistance on the part of impoverished residents towards official cholera control interventions and mass media campaigns. "Non-compliance" with recommended regimens is described more as a revolt against accusatory attitudes and actions of the elite than as an outright rejection of care by the poor. "Hidden transcripts" about "The Dog's Disease," as cholera is popularly called, voices a history of social and economic inequity and domination in Northeast Brazil. Here, cholera is encumbered by the trappings of metaphor. Two lurid cultural stereotypes, *pessoa imunda* (filthy, dirty person) and *vira lata* (stray mutt dog) are used, it is believed, to equate the poor with cholera. The morally disgracing and disempowering imagery of cholera is used to blame and punish the poor and to collectively taint and separate their communities from wealthy neighborhoods.

The authors argue that metaphoric trappings have tragic consequences: they deform the experience of having cholera and inhibit the sick and dying from seeking treatment early enough. Controlling cholera requires eliminating "blaming the victim" rhetoric while attacking the social roots of cholera: poverty, low earning power, female illiteracy, sexism, lack of basic sanitation and clean water supplies, medical hegemony, etc. For health interventions to be effective, it is necessary to take into account people's "hidden transcripts" when designing action programs. Copyright © 1996 Elsevier Science Ltd

Key words-cholera, health education messages, non-compliance, stigma, Brazil

CHOLERA'S FOOTHOLD IN LATIN AMERICA

The global epidemic of cholera-an ancient, acute bacterial enteric disease---continues to spread throughout the world, despite scientists' efforts to control its transmission [1]. For the first time in this century, cholera is gaining a foothold in the Western hemisphere. In Latin America, the number of endemic cases now rivals those in Asia and Africa. This seventh cholera pandemic, which started in Asia in 1961, spread to Africa, Europe and Oceanic, but had spared the Western hemisphere. That was, however, before January 1991 when toxigenic Vibrio cholera O1, biotype E1 Tor and serotype Inaba, was reported for the first time in some 100 yr in South America [2]. Appearing almost simultaneously in several coastal Peruvian cities, the epidemic of V. cholera O1 exploded with some 426,000 probable cholera cases and over 3300 deaths reported in Peru alone. It then spread rapidly throughout the continent. Crossing the Andes, the disease swept aggressively eastward to Brazil. By April 1993, 19 (70%) of Brazil's 27 states and territories reported

compared to 5.5/100,000 for the country as a whole ([3], p. 593). For centuries this drought-stricken region has been scourged by misfortune, disease and death. Both diarrheal diseases attack rates [4, 5] and infant mortality rates [6] in Brazil's Northeast are among the highest reported in the world. Here, endemic poverty, faulty sanitation, contaminated water and food supplies, coupled with high rates of illiteracy and less access to effective health services means that in many northeastern communities, cholera will probably persist for many years to come. Unlike other outbreaks, this latest pandemic will not go away. Instead, cholera is expected to become endemic in the Americas, as it has in Africa. V. Cholera O1 causes disease by adhering to the mucosa of the upper small bowel, where it produces a potent enterotoxin which stimulates the secretion of isotonic water and electrolytes. While the majority

(90%) of cholera cases are mild and many infected

persons have no symptoms, they can be carriers and

silently infect others. Far fewer (5-8%) experience

domestically acquired cases of cholera for a total of 27,374 cases, with an incidence of 5.5/100,000 of the

population and case fatality rate of 1.6%. But it

was in the impoverished Northeast that the epidemic

flourished, reporting 87% of Brazil's total cases and

an incidence of 16.9/100,000 of the population as

^{*}Instituto Conceitos Culturais & Medicina, Av. Santos Dumont 1740, sala 1214, Fortaleza, Ceará, Brazil 60.150-160. Fax: 55-085-244-3433; Telephone: 55-085-244-2613.

mild to moderate diarrhea. Cholera's reputation as a killer is restricted to a relatively small proportion of people (2-5%) who develop "cholera gravis" ([2], p. 2). In such classic cholera cases, infected persons experience severe and profuse watery diarrhea and vomiting resulting in the rapid and profound loss of fluid and electrolytes. So severe may be the losses of essential fluids, that the patient may lose the equivalent of his entire body weight over 2-3 days. These high losses of liquid may, in extreme cases, lead to severe dehydration, with shock in 4-12 hr and death. But today, no one need die from cholera.

As with all diarrheal diseases, the successful treatment of cholera depends on rapid replacement of fluid and electrolyte losses through (preferably) oral or intravenous routes [7]. Before the discovery of rehydration therapy, some 30-50% of severely infected persons died from cholera. These numbers have declined drastically to < 2% with the discovery of rehydration therapy ([3], p. 596). The key is oral rehydration therapy (ORT). ORT was first discovered in Britain in the 1830s, although it was not until the 1960s that the importance of sugar in the solution was discovered ([8], p. 44); glucose significantly increases the body's ability to absorb fluid [9]. In the 1970s and especially in the 1971 cholera epidemic in Bangladesh, the utility of ORT for treatment of diarrheal dehydration was conclusively demonstrated. The Lancet has called ORT "potentially the most important medical advance this century" and ranks second only to the discovery of antibiotics in terms of lives saved [9]. The idea is simple; to replace the fluids and electrolytes lost during cholera and other secretory diarrheas; to maintain the patient alive without attempts to cure the diarrhea itself. The treatment is administered in the form of oral rehydration solution (ORS), consisting of water with salts and sugar added. ORS is fed continuously to the patient during the diarrheal episode, obviating the need for intravenous rehydration, which is an effective therapy. The death rate from diarrhea in hospitalized populations has dropped below 1% due to intravenous rehydration ([8], pp. 43-44). But it is expensive and necessarily confined to use in hospitals by qualified personnel, whereas ORT can be prepared and administered at home without the need for hospitalization. The exact optimum combination of electrolytes in ORS is a matter of some debate, but the general composition is agreed upon. The World Health Organization (WHO) promotes use of a packaged powder containing sodium chloride, sodium bicarbonate, potassium chloride and glucose in proper proportion, ready to mix with water and use. This oral rehydration solution (ORS) has been found effective, and can be used by laypersons at home [10-25]. Some planners have argued that it is possible for laypersons to mix an acceptable ORS at home using common table salt and sugar with proper instruction [12],[13],[15],[23] and in some cases it is preferable [18, 20]. Although homemade ORS tends

to omit sodium bicarbonate and potassium chloride, accurate measures are possible in even the most impoverished households using readily available 1 l carbonated beverage bottles (or other containers) to measure the water, and bottle caps to measure the salt (1 level capful) and sugar (7-8 heaping capsful). Homemade ORS has the advantage of being less expensive than WHO ORS and, because of its home preparation, of being more accessible to impoverished mothers. Even locally available crude brown sugar such as lobongur in Bangladesh, has been found effective in such solutions and is, importantly, more accessible to impoverished families [26]. Cereal-based ORT, in which glucose is replaced by cereal flour (rice, maize, sorghum, millet, wheat or potato), not only may be more available and acceptable to families, but has the added advantage of reducing stool output [27, 28]. Despite the debates about fine points in the composition of the formula, ORT is now unanimously accepted by the international health community and actively promoted by WHO for the treatment of diarrheal dehydration, including that associated with cholera. Its scientific basis is well established [8, 29] and its ability to save lives has been convincingly demonstrated. It is low cost and low tech, and, theoretically, this should make it accessible to impoverished families, the bulk of those who die from enteric infections, including cholera.

Antibiotics, while helpful, are not essential in the treatment of cholera. Antimicrobial therapy reduces the total volume of fluid loss and shortens the duration of both illness and carriage of vibrios in the feces [30]. However, antimicrobial resistance has been a growing problem in some parts of the world. Family contacts of patients with cholera may be treated prophylactically with tetracycline or doxycycline to prevent illness, however, antibiotic treatment of an entire community, or mass chemoprophylaxis, has not been shown to limit the spread of cholera ([2], p. 5). Other common, but ineffective, prevention measures include vaccination, quarantine or restricting the movement of people and food imports from affected areas. Effective prevention methods are the same as for other forms of diarrhea: drinking uncontaminated water, handwashing, good home and environmental hygiene and sanitation, and avoidance of potentially contaminated foods (e.g. raw seafood, shellfish, contaminated municipal water, etc.). But the real key to eliminating cholera, as for all diseases linked to underdevelopment, lies in improving the conditions which enable cholera to flourish: poverty, illiteracy, lack of knowledge, economic recession, discrimination against women, lack of safe water and adequate sanitation systems.

ADVERSITY, ACCUSATIONS AND INFECTIOUS AGENTS

Epidemics of particularly dreaded illnesses always provoke a popular outcry. When such adversity as cholera—a virulent, infectious agent which spreads capriciously and kills indiscriminately—strikes, people quickly incriminate: "Shame, shame, who's to blame?" Finger pointing becomes a human passion. It matters not what is pointed but that someone is singled out as responsible for causing the ruthless, mysterious calamity. As Sontag [31] says,

Any disease that is treated as a mystery and acutely enough feared will be felt to be morally, if not literally contagious. [31] (p. 6)

Demands are made to subject people to 'tests,' to isolate the ill and those suspected of being ill or of transmitting illness, and to erect barriers against the real or imaginary contamination of foreigners. [31] (p. 168)

Punitive notions of disease have a long history, dating back to 1882 and the discovery of tuberculosis, and more recently with cancer and AIDS. In such cases of mysterious malevolence, Sontag points out, accusations of culpability are commonplace. "Who cast the evil eye?" "Who threw the roots?" "Who pointed the bones?" "Who sent the trabalho (hex)?" "Who is guilty of transgressing social norms?" There is one burning desire: to identify who caused the suffering. That accusations and folk disease etiologies are interwoven is well documented in the anthropological literature [32-35]. Only recently, however, has the twisted incriminatory nature of illness accusations been interpreted critically. Farmer [36] in AIDS and Accusations: Haiti and The Geography of Blame makes a perturbing observation. Victims are doubly blamed. They suffer twice: first, debilitating illness followed by imagedamaging discrimination.

In Latin America, pinning blame on victims is a pastime [37, 38]. The most glaring, recent example is Harrison's [39] Underdevelopment is a State of the Mind essay. He places blame for lack of progress squarely on poor people's heads, on peasants' supposed fatalistic mentality. Enculturation into a "culture of poverty" [40], maintains Harrison, creates mind sets mired in the muck of helplessness, jealousy and in-fighting. Thus trapped, peasants are seen as unwilling to try to succeed, to take advantage of the many opportunities knocking at their door. Examples of "Blaming the Victim" as an explanatory principle are plentiful: penniless, peasant mothers are branded "neglectful"[41, 42]; suffering HIV-infected Haitians are labeled AIDS "originators" [36]; malaria-infected, malnourished and massacred Ianomani Indians are said to "lack initiative," and the like.

Farmer critiques such accusatory interpretations of illness in rural Haiti by putting poverty first. His objections echo Valentine's [43] and Acheson's [37] which took to task Lewis [40], Foster [44–46] and others who link poverty to cognitive images of the poor (e.g. Image of Limited Good) and who underemphasize political economy and other structural factors (e.g. discrimination, racism, lack of access to health services and money to pay for care). We agree with Farmer that an interpretive anthropology which fails to consider prevailing political and economic forces is shortsighted especially in impoverished countries where "the hard surfaces of life seem to underpin so much of experience" ([36], p. 529), resulting in a socially unjust interpretation. Taking the calculus of economic and symbolic power seriously, Farmer pushes the "Cult of Blame" analysis to its limits. He argues that faced with accusations, the weaker invent counteraccusations, voicing them in seemingly far-fetched conspiracy theories. Actually they are rhetorical defenses against aggressors' discriminatory and demeaning attitudes. According to Farmer, such conspiracy theories pose explanatory challenges:

accusation impute(s) to human agency a significant role in the propagation of a dreaded sickness...conspiracy theories impute to the powerful evil motives, either the desire to weaken the ranks of outcasts, or to defame black (in reference to Haiti) people. In each case, then, one social group attributes unsavory motives to another [36] (p. 234)

Such conspiracy theories are "weapons of the weak," according to James Scott [47]. They are part of a "hidden transcript"[48] expressing popular indignation at political and social domination. Creating convincing conspiracy theories is an art, an art of resistance. This "offstage" discourse is typically produced in response to practices of domination and exploitation, of insults and slights to human dignity, that elites routinely exercise over subordinates [48], (p. 7). Hidden transcripts are low-profile forms of a shared critique of power and resistance that "dare not speak in their own name."

They are implicit protest, dissent and subversive discourse of underdogs against their worldly fate. Recognizing that elites have privileged access to power, wealth, and health because of their dominate social position, subordinate groups have learned tactical prudence when protesting. Rarely do they blurt out their hidden transcripts in public; elaborate forms of disguise are employed. The public expression of insubordination of subordinate groups is "sufficiently indirect and garbled that it is capable of two readings, one of which is innocuous" [48] (p. 157).

Cries of "I'm Not Dog, No!" and the creation of far-out cholera conspiracy theories by poor Brazilians pose no direct threat or opposition to the authorized medical position on cholera. But at a deeper level, it is apparent that the euphemisms, folktales, and play-on-words of popular culture encode and conceal double meanings from medical authorities and contest the inequitable social order in northeastern Brazil. This paper explores the hidden transcripts or discourse—gestures, speech, practices—about cholera that is ordinarily excluded from the public transcript of the dominant, medical professional. We describe a rich folk disease taxonomy of cholera. We probe the underlying accusations that provoke poor residents in Gonçalves Dias and Conjunto Palmeiras to cry out "farce!" and resist well-intended medical advice and medications. We describe hurtful, discriminatory accusations which inflict suffering on infected persons and whose originators, in retribution, become the target of popular cholera conspiracy theories. We describe how a positive cholera diagnosis results in social stigmatization, prejudice and discrimination against the infected poor. We argue that conspiracy theories are rhetorical defenses-a kind of symbolic protestagainst the crippling accusations of elites. Moreover, we argue that so-called patient "non-compliance"mocking cholera prevention messages, lashing out at medical authorities, threatening powerful politicians, shunning doctors' advice, spitting-up medication, and resisting hospital rehydration, etc.-is popular resistance against, not so much cholera care, but the more insidious social diseases of defamation and discrimination.

CHOLERA AND BLAME IN BRAZIL

During the recent cholera epidemic in Northeast Brazil, the damaging dynamics of blame were visible. In Ceará state, 16,325 cases were registered in 119 of 184 counties, resulting in 121 deaths in the first 9 months of 1993 alone; 9336 cases have been reported in the capital of Fortaleza [49]. These statistics represent only a fraction of all cases. Early in the epidemic, official diagnostic criteria for cholera required a positive laboratory confirmation. As numbers of suspected cases out-paced laboratory facilities, clinical and epidemiological evidence was accepted as sufficient to establish a positive diagnosis. Even so, many cases-Dona Lucimar's and Antonio's below---remained hidden from the "public transcript" of biomedicine. They suffered cholera's ravening clinical course at home, alone.

With confirmed cholera cases quickly mounting, Brazilian health authorities sounded an all-out alert to contain the spread of Vibrio cholera. The disease now threatened not only millions of slum-dwellers in the Northeast, but, perhaps more important to politicians, the economic livelihood of the region (e.g. tourism, seafood export). By the spring of 1993, general panic had set in, particularly in the capital, Fortaleza (population 2 million), which reported the highest cholera attack/mortality rates in the country. Prevention messages were continually broadcast over radio and television airwaves; private school children had daily hand washing drills; five-star hotel restaurants washed vegetables in bleach; and luxury, beach front apartment residents treated private wells with chloride. Overnight, the already dual-class society, sharply divided: cholera-infested and cholera-free. There were those living with cholera and those defending themselves. Imaginary walls quickly rose to seal off the wealthy enclave, Aldeota, from cholera-infected poverty zones of the periphery. Upper-class residents quietly dismissed maids, cooks,

laundresses and nannies living in cholera-infested, lower-class neighborhoods. The rich prohibited their children from contacting poorer playmates, using public restrooms and eating in popular restaurants. Northeast bound tourists cancelled trips. Meanwhile, poor residents living in Fortaleza's 300 shantytowns came under intense scrutiny and government-sponsored cholera surveillance. Teams of well-intentioned sanitary workers mapped out high-risk cholera zones, treated community wells and in-home drinking water with chloride, tracked the number and appearance of residents' diarrheal stools and administered prophylactic antibiotics to asymptomatic Vibrio cholera carriers. In short, the stated intention of public health teams was to declare war against the rapidly spreading water-borne cholera bacillus (A Guerra Contra Cólera). But according to favela residents, the sanitary workers' hidden strategy was to contain cholera in slums and prevent its spread to wealthier neighborhoods.

TWO FAVELAS, TOO POOR

During the cholera epidemic of 1993 in Fortaleza, Ceará, Brazil, the authors conducted an ethnographic study of cholera-related beliefs and behaviors among residents of two high-risk urban slums--Gonçalves Dias (population 2000) and Conjunto Palmeiras (population 20,000). Gonçalves Dias is a painfully poor favela located only a few blocks from the Federal University of Ceará's (UFC) medical complex and the state's São José Infectious Diseases Hospital [50]. Some 30 yr ago, Gonçalves Dias was an unpaved avenue on Fortaleza's outskirts, until landless peasants invaded one night and staked it out as home. Boring tenacious roots into the packed dirt of Avenida Gonçalves Dias, they built hovels, raised families, and constructed a community along the narrow street. Over the years, residents have been expelled four times from "The Avenida" and their homes, most recently during this project [51]. Pressured by wealthier neighbors, local politicians have ordered families to disassemble their cardboard, tin, adobe and stick homes, pack-up and resettle in government housing projects on the distant outskirts of the sprawling capital city. The resilient residents of The Avenida grudgingly obey the official mandates, only to return when eviction threats subside and the ruling politicians leave office. Today Goncalves Dias consists of some 440 tightly-packed houses with common walls. No privacy. Life is public. The most common house construction is clay molded over stick frames forming two vãos or rooms, with mostly earthened floors. Pictures and posters of Catholicsaints, deceased relatives, soap opera stars, pop musicians and political candidates adorn the otherwise drab walls. During the rainy season, Dec-March), tropical downpours literally dissolve the protective clay walls. The larger vão, measuring some 2×2 m, doubles as a living room and bedroom, the

second, smaller vão at the rear is the kitchen. As many as 10 people sleep in the front vão by stringing up hammocks, criss-cross on three levels: low, medium and high. Bed-wetting infants and cholera defecating adults sleep on the low rung. More than 80% of the houses have no sanitary facilities; raw sewage flows throughout the *favela* in open gutters. Adults defecate in an empty tin can filled with dirt. At night they fling the contents in a vacant space. The children defecate anywhere convenient. Using old newspapers or banana leaves, mothers scoop up the feces and toss (rebola) them outside. Simple coal-burning fires heat the family's two cooking pots: one larger for simmering beans, and another smaller for preparing the baby's porridge (mingau) and boiling water to prepare coffee. Electricity is often tapped illegally from energy lines servicing wealthier neighbors. Women's income as laundresses or maids in wealthier homes is more stable than their often sporadic male partners'. Older children (5-10 yr old) often care for newborns while mothers work. Child-adults they are. Exclusive breastfeeding is rare. The diarrheal attack rate in children 0-5 yr is extremely high: 11.4 illnesses/year [52]. Sixty-eight percent of children aged 3-5 yr presenting diarrhea have one or more parasitic infections [53]. Of 244 children born to 43 families (5.7 children per family) 60 or 24.6 had died when surveyed in 1983 [54]; 52% died with diarrhea, 10% with pneumonia, and four (7%) with measles. On weekends Gonçalves Dias bustles with life: red-lipped adolescents, in glove-tight short-shorts and sensual, off-the-shoulder mid-rift blouses, jive to the pounding tropical Lambada, forró and Axé rhythms, which drown-out the blasts of shotguns, screams of battered women, cries of hungry infants, bickering of neighbors, bartering of drug dealers and violent arguments between a group of men downing shots of cachaça [55] at the local bar.

The second slum, Conjunto Palmeiras [56], conjures up a romantic, tropical imagine at first. Palmerias refers to the clusters of lush, green palm trees that line Ceará's coastline, their trunks swaying rythmatically and their tattered fonds rustling in the soothing trade winds. But the idealistic image quickly gives way to another sobering reality. Conjunto Palmeiras is a planned resettlement community. It is an endless sea of identical, poorly constructed clay and brick row-houses which are home to some 20,000 people who relocated (often forcibly) from higher-priced city lots or migrated from the drought-stricken interior (sertão) in search of a better life. Conjunto Palmeiras is located on Fortaleza's periphery, just past Jangurursu, the municipal dump, where the garbage of some two million people is deposited, scavenged, saved and sold daily. Like Jangurursu, Conjunto Palmeiras is a dump, only a human one, where it seems society's throw-aways are left to decompose. While potable water was installed in 1988 following requests by community leaders, no sewerage network or public garbage collection service exists. There is only one paved street in town on which old buses run sporadically. A branch of the polluted Coco River borders on the south. Most community activities occur in a small square around which the main school, church, market, community radio, birth center and day-care center are located. Animals roam freely in public places, where rubbish and feces often mix. Socio-economic conditions, while generally poor, vary among residents [57]. Classified as "very poor," are 25.5% of families who live in mud homes with straw roofs, earthen floors, no sanitation and having a radio as the only appliance, if any. The majority (51.4%) are "poor" households of unplastered brick with straw roofs and cemented floors, always possessing a radio, sometimes a television but very rarely a refrigerator. Most have access to piped water outside the house and some have pit latrines. "Less poor" households (23.1%) are brick structures, sometimes plastered with tile roofs and ceramic floors, with access to piped water (sometimes within the house,) pit latrines and having a radio, television and refrigerator. Some 50% of households have six or more members, with 93% having at least 3 children < 5 yr of age. Children suffer frequent diarrhea; 30% of those < 5 yr of age had experienced diarrhea with severe or moderate dehydration in the previous 2 wk [58]. Male unemployment, burglary, drug abuse, mental stress and violence against women (rape, domestic violence, murder) take their toll. But the demoralizing affliction in Conjunto Palmeiras is political abandonment and disenfranchisement. Families live on the periphery of modern life, shut-out from the opportunities and dreams of Fortaleza's better-off families.

These two favelas sadly reflect the conditions of many impoverished and forgotten Brazilian communities. Until very recently, there seemed little hope for change. The first democratically-elected president after some 20 yr of military rule was entangled in scandal and eventually impeached by the Brazilian National Congress. The distribution of wealthalready the world's third most disparate---is widening, leaving the already privileged few (10%) even wealthier and the other 90% more destitute than ever [59]. The number of infants dying from preventable causes persist at disgraceful levels, despite increasing sophistication of modern medicine. Between 1980 and 1986 the infant mortality rate (IMR) was 64.1, 98.8 in the underdeveloped Northeast and 44.6 in the affluent, industrial south; Fortaleza's IMR of 104.6 was far higher than Rio de Janeiro's ([49], p. 2) and São Paulo's ([54], p. 1) in the same year [60]. Violence and police brutality are at all time highs. In 1993-during the cholera epidemic-the world was stunned by Brazil's brutal, police violence; the indiscriminate massacre of 111 prisoners in the Carandiru Prison in São Paulo, assassination of sleeping street children in the Candelária in Rio de Janeiro, and extermination of residents in Vigário

Geral *favela* north of Rio de Janeiro. (Here, on 30th August, some 30 hooded Military Police invaded the *favela* at dawn and unmercifully executed 21 innocent residents—20 workers and 1 student—in streets, bars and homes [61].

GETTING BEHIND THE OFFICIAL CHOLERA STORY

Thus, the research upon which this chapter is based was "reality driven." Medical researchers at the Federal University of Ceará (UFC) sensed "something was wrong" in Gonçalves Dias, where since 1985 they had surveyed households daily to detect diarrheal illnesses. Residents, normally cooperative, were now incredulous and resistant. They challenged—overtly and cryptically—researchers' authority to intervene and control cholera's spread. Behind the health workers' backs, residents dumped chlorinated water from their clay pots, spit out prophylactic antibiotic pills, falsely reported illness episodes, neglected to collect stool samples, refused hospital transfers, sarcastically mimicked and distorted official cholera prevention slogans, etc. It was apparent that some critical social forces were at play whose identification would be vital if cholera transmission was to be controlled in this community or others. University enteric diseases specialists, thus, summoned a team of social scientists with experience in infectious diseases in northeastern Brazil to gather privileged insights and commentaries on cholera from residents.

To begin we took a broad, holistic look at cholera. Our agenda was (deceptively) simple: to identify how social and cultural forces-at myriad levels-interact with Vibrio cholera, infecting families living in urban poverty. We thought it essential to "see" cholera through the eyes of poor Brazilians who suffer most its consequences if our results were to be useful for re-writing the educational messages-gone-wrong. What is it like to be poor, hungry, and sick with cholera? What is it like to depend on inaccessible health professionals for your life? How does it feel to know what causes the suffering, yet be powerless against it? Penetrating local moral worlds of families living in poverty was the only way, we were convinced, to gain these insights into and commentaries on cholera as "lived-experience" [62]. Our search began knowing that such second-hand readings of suffering would never be complete. We aimed to probe the meaning-laden interior worlds of cholera-infected persons, while not losing sight of the political and economic forces that put them at risk in the first place. Given the epidemic nature and immediate need for social input in cholera control efforts, we worked quickly drawing heavily on Rapid Ethnographic Assessment (RAP) methodologies [63].

During two months (March-April 1993) at the epidemic's height, we conducted 80 in-depth, open-ended interviews with key informants living or

working in Gonçalves Dias and Conjunto Palmeiras: poor mothers (n = 33); children (n = 11); persons sick with cholera (n = 9); community health agents (n = 7); community members in strategic positions to observe cholera-related behavior (n = 7); caretakers of cholera patients (n = 6); Afro-Brazilian Umbanda healers (n = 2); community leaders (n = 2); folk-Catholic healers (n = 2); and a traditional midwife (n = 1). Interview data were enriched and validated by observing in-home and community water use and storage practices, defecation, sewerage disposal, food preparation, animal contact, community organization, medical compliance, self-care, healing rituals and contact with hospitals and visiting health agents. Because both authors had conducted extensive ethnographic research in the two communities and maintained affective ties with many of the women and their families, rapport and immediate entry into the communities was facilitated. The researchers' familiarity with the communities and ties of trust, allowed for immediate access to a far more difficult-to-reach arena; the "backstage" [64] and "hidden transcripts" [48] of cholera.

The authors conducted all 80 interviews in Portuguese in either the homes of persons suffering cholera, at health posts, traditional healing centers (i.e. terreiros or Afro-Brazilian Umbanda centers), community wells or washing holes. Each interview lasted from 1 to 3 hr. All interviews were taperecorded and then transcribed completely before translation. A series of techniques were employed to ensure validity and reliability. Questions were checked for adequacy during the pilot study and monitored during data collection. Triangulation [65] between informants, between investigators, within methods and between methods was used to validate the data collected. We analyzed the content in order to identify themes, which were then compared with accumulated anthropological research and knowledge. Three aspects of the interviews impressed us: (1) the frustration, anger and revolt of adult informants when discussing cholera; (2) the severe physical suffering of cholera patients, many presenting classical, fulminating cases of infection; and (3) the resistance of cholera infected persons to seek official medical care. Reluctant patients were often hauledseverely dehydrated or unconscious-to nearby emergency rooms by relatives and neighbors.

RITUAL RESISTANCE OF THE "DOG'S DISEASE"

Dona Zilnar, [66] traditional healer and mother of 22 children [67], eyed suspiciously the printed paper reporting laboratory results of her feces exam collected by University of Ceará field researchers. "So what does it accuse?" [68] she pointedly queried. Unable to read the findings herself, her eldest daughter answered "P-o-s-i-t-i-v-e." "Positive for what devil thing?" Dona Zilnar provoked. "Vibrião cholera" replied the community health worker, surprised with *Dona* Zilnar's unusual reaction. She continued aggressively:

Hear me, this business of cholera doesn't exist. Here in Gonçalves Dias we don't have cholera, no! There doesn't exist anyone with cholera here!... I'm not even going to speak with Our Lady Aparecida [69] about this thing because for her, there doesn't exist cholera.... Somebody invented it! They are inventing it! And they are going to invent much more to come! (*Dona* Zilnar, traditional healer).

"I'm Not Dog, No!" [70] screamed Dona Zilnar uncontrollably as she waded the paper with the printed positive laboratory results into a small ball and flung it at the feet of the now terrified community health worker. "What do you think I am, some low-down vira lata (stray mutt dog)?" [71]. Dona Zilnar's anger and frank denial of cholera alerted our attention: Why the upset? What in the cholera diagnosis sets her off? Why a vira lata of all things? The medical team found curious not only her refusal to hear the community health worker's laboratory results, but the deeper, visceral revolt against her admirable intentions. Probing in greater depth the clinical histories of two individuals with cholera, Dona Lucimar and Antonio, we discovered painful stories of suffering. In severe cases of cholera, the intestine is infected with such rapidity and virulence that there is no time to resort to folk remedies, traditional healers and local pharmacy attendants. Even if there was, poor Brazilians know homemade teas are no weapon against such fulminant diarrhea and vomiting. Pragmatically, they seek intravenous rehydration at hospitals as the "only way out" (o jeito) in severe cases of "The Dog's Disease," (doença de cachorro) as cholera is popularly called.

Case 1: Dona Lucimar, all sucked out from inside by the dog's disease

Oh my God! I woke up with that fine pain ... my guts ringing out dry, totally twisted inside... I prayed to Saint São Sebastião [72] that it wasn't cholera. I ran to the backyard... it was only water... squirt, squirt, squirt... urinating out of my anus... all over my panties and new pants... shit, shit, shit and more shit!... Oh! Doença de cachorro (Dog's Disease)... humiliating, so awful. I was tempted to throw my pants away, but they were new!... When dawn arrived I was very weak... a sour taste in my mouth... looked like I'd been sick for a week... all sucked out from the inside. I made a tea from orange peel, goiabeira [73] and pitanga [74]. My boy had four packets of oral rehydration solution (ORS)... I don't even like the taste of ORS-but, I dissolved one quickly and drank it! I drank tea, drank ORS, drank tea, drank ORS, drank tea, drank ORS... I didn't have anyone to take me to the hospital... I don't like the hospital... I only went by force because of the attack ... the taxi driver didn't take me... afraid I would die. They called an ambulance. My daughter was yelling and crying... when I woke up, I was in the Intensive Care Unit... all broken up and done in!

Case 2: Antonio, cut out the death robe

At about 10 p.m. Antonio threw open the door, ran right for the toilet... shitting and vomiting all night... burning with fever. He would sleep, run to the bathroom, cry, then pray, pray at the feet of the *Padre* Cicero [75] to stop it (diarrhea)... It's a really horrible disease... does away with

one's meat (flesh) ... very strong stomach ache, leg pains so bad you can't stand up, vomiting. I said, Antonio, my son, let's go to the São José Hospital, boy. But he didn't want to go, he wanted a medicine for his headache. I said, 'my son, your medicine is the hospital!' I feed him orange peel tea, but he sickened. There wasn't any way out (não tem jeito). By 9 a.m. he couldn't stand up... white, white, white, and when a morena [76] is white ... cut out the death robe. I hadn't a dime for a taxi, so I dragged him, walking and praying to Our Lady of Perpetual Help. São José Hospital is only two blocks away, but he sat down ten times. He couldn't walk anymore. When we arrived, I cut in front of the long line... He fell into the doctors' arms... his eyes rolled up... his pulse jumped up his arm... I went crazy, out of my mind. I grabbed the doctor and pleaded... For the love of God, don't let my son die. The next day I hunted for a hospital (to admit him)... only a mother would do this! There was nothing, no vacancy, nowhere... 'Give me the medicine,' I said, 'I'm taking him home because its the same God at home as in the hospital!'

THE GREAT CHOLERA INVENTION OR "PILING-ON-THE ILLNESS"

Dona Lucimar's, Antonio's, and others' stories of suffering we collected are personal accounts of "experience-as-lived" and should be taken at face value. Even so, hard data verifying "real disease" exist: both Dona Lucimar and Antonio suffered laboratory-verified infections with Vibrio cholera. Curious, then, are reactions of infected patients and families: they deny cholera and label it an imaginary illness, an "invention."

A closer look at our data shows that poor Brazilians in our study employed four strategies to negate the existence of this life-threatening cholera epidemic. First was flat-out denial, as *Dona* Lucimar's comments show and the following reinforce:

They did an exam.... cholera. But it isn't so! It's really *cachaça*. The poor guy drinks a lot, you see. They invented that it's cholera! (daughter of 68-year-old cholera patient)

The symptoms of cholera? I don't know, I don't even want to know. (mother)

Half the people here don't believe cholera exists, even seeing my son, João, almost under the ground (dead). They think a person is behind it all... putting things in their head... they don't believe it! (mother)

We've had diarrhea all our lives... even before there existed this medicine thing... They invented it (cholera). A mosquito bites and instantly its malaria, yellow fever, dengue, this and that. They invented all this! They just loaded this cholera thing on top of us... pile on that illness, that's it. (cholera patient)

At times during fieldwork we heard comical-sounding comments about cholera, despite its lethal nature. Health workers interrogated residents for detailed information about cholera, while residents responded by playing a curious hide-and-seek game. "Who was the first person you sought when the diarrhea began?" "I don't know what you're talking about." "When did you decide to go to the hospital for rehydration?" "Cholera is make-believe, an invention!" and so on. Below, a short excerpt from one such truncated and frustrating dialogue between a community health agent and a poor mother in *Conjunto* Palmeiras confirms this:

- Q: Mrs Sonia, have you heard any comments from people here about cholera?
- R: Here? No.
- Q: No one passing by here conversing, "So-and-so is feeling this or that, with cholera?" Nobody talking about cholera, Sonia?
- R: No, nobody talking about this, no.
- Q: So many people gather here in front and nobody even comments much about this illness? Nobody says anything? Nobody is afraid?
- R: No, we don't talk about this.
- Q: Nobody feels anything, you know? Nobody comments anything, no?
- R: No, here, no. Thanks to God, no. Thanks to God.

A second strategy was to deny outwardly that cholera exists, while fearing inwardly the illness. As with the virulent *Doença de Criança* (The Child's Disease) [77], the mere mention or faintest vision could "call" the life-threatening illness to healthy bodies. Informants' denial of cholera could be construed as a culturally-constructed protection against the unbearable, against the unspeakable. As seen in the following dialogue between a visiting nurse and a recuperating patient, even dreaming about cholera was forbidden.

- Q: Do you talk about cholera with your friends?
- R: No, converse, no.
- Q: Why not?
- R: Because I could dream, no? And then I will have it... For this reason I don't talk about it.
- Q: If you dream, it can happen, ugh?
- R: Yeah, the cholera.
- Q: You don't talk about cholera, so you won't call it?
- R: Yeah, if you say it, it will run after and grab you!

A third strategy was to render cholera trivial, commonplace and insignificant. Selective popular perceptions transformed virulent cholera into "ordinary diarrhea" or just about anything, so long as the word cholera was not uttered. Below we see how cholera was acknowledged, but assigned an amorphous identity like "the disease," or left nameless.

I thought it was *the illness*, because it gives right away vomiting, fever, diarrhea, pains in the legs. (cholera patient)

Exist, it exists. Only people don't have a name for it yet... lack of interest. (indigenous midwife)

Other informants trivialized cholera's virulence. A death-threatening infection was transformed into "a little annoyance," "a little thing," or "teething diarrhea (*dentição*), a normal part of growing up." Said informants:

My grandmother and my mother already talked about these illnesses. Exist, they exist... the *common diarrhea* that we've always had.... What are you saying, that we can't have a *little diarrhea*? The person has a little diarrhea and the exam shows cholera. Invention! (traditional healer)

When the girl comes with the exam results I'm going to fight with her because I don't believe it exists (cholera)... in the past they said everyone in the world had *diarrhea*, no?... now nobody can have it (diarrhea) and it is already this or that... this business of cholera.(mother)

We never encountered an adult with cholera, more children, and even so the mothers would say, 'My child had diarrhea because of teething,' they would never say it was cholera. This is *teething diarrhea (dentição)*, business of cutting teeth! (community health worker)

Informants also downplayed cholera by equating it with clinically similar, yet far less virulent, dehydrating, and lethal, intestinal infections. Said one informant:

There doesn't exist cholera, my daughter, no. There exists the name that they are calling it only. When you have diarrhea you loose a lot of liquid from your body, no?... you die in 24 hours... your intestine is eating your entire body... it's really only a profound intestinal infection, with fever and headache that we feel. It isn't cholera, its only an intestinal infection!" (Umbanda healer)

Cholera's demotion by informants to a less virulent intestinal infection status was true even with confirmed laboratory results, as seen in the case of *Dona* Rita:

- Q: Tell me about your cholera illness?
- R: I didn't have cholera, no!
- Q: No? Then did you see this type of illness in adults before?
- R: No, with this name, no... the illness I've seen.
- Q: Without the name cholera?
- R: Yes, without the name... just diarrhea, acute diarrhea... it gives hotness in the intestine, it's an intestinal infection.

Finally, a fourth popular strategy for denying cholera's existence was ridiculing the illness---to leva na brincadeira (to take it as a joke), as Brazilians say. Making cholera the brunt of jokes and teasing is what six teenagers, ages 10-15 yr, did when we interviewed the group in Gonçalves Dias. Laughs, smirks, and elbow nudges emerged, and nobody had anything serious to say about cholera-until one of the boys bellowed out: "I don't know anything about cholera. I'm not a favelado [78]. I live in Aldeota (wealthy section of Fortaleza)!" Like dominos, the teens fell contagiously into uncontrollable fits of laughter, playfully back-slapping one other. "Hey, that's a good one!" "You said it, what a joke!" However, laughing off cholera was a strategy employed by all ages. A 34 year-old, severely ill patient from Gonçalves Dias joked:

I spent three days shitting without stopping. We just took it as a big joke. People in the street would tease, Hey, are you *Colorido*? [79] We would all start to laugh... until yesterday... I almost died, so skinny, all sucked-out from inside!

CHOLERA: MORE THAN MEETS THE EYE

The obvious question remains: why go to such culturally-orchestrated lengths to deny a life-threatening disease like cholera? What hidden social forces trigger this (apparently) illogical reaction? Families in Gonçalves Dias and *Conjunto* Palmeiras believed there exists not cholera the disease, but rather cholera the conspiracy. They maintained that an organized plot exists to segregate rich from poor, or worse to "do in" poor people through massive genocide, thereby preserving the prevailing inequitable social structure. That the conspiracy threat was foremost on informants' minds was evident in the following passages:

They are going to do away with us, creating illness and hunger. (cholera patient)

There are many rich nearby that want to do away with this *favela*, for it to vanish. They say only thieves and drug addicts live here... now they've added cholera! They are even saying this! (mother)

When I pass the alley they (better-off neighbor women) harass me, 'Hey women, do you live in Gonçalves Dias?... it's only cholera... Hope your (anus is) all plugged up!' They even made a petition to evict us... They want to do away with us! (laundress)

Nobody wants to come close... when I took my nieces to nursery school, they said, 'Oh, no, for the love of God, leave them at home, they might have cholera and it could spread to the others!' (aunt)

That cholera was invented as an excuse to "execute" the poor was reinforced, according to informants, by images used in the "War Against Cholera" Campaign of the Ceará State Health Department in early 1994. The official mass media campaign, like that described by Nichter [80], was built upon an unfortunate metaphor: warfare. Along with soldiers from the Brazilian National Armed Services, the populace was called to "battle" against cholera (lutar contra), to "combat cholera" (combater), to form gangs (arrastões) (of delinquent youths) to "raid and loot" against cholera. But residents we interviewed perceived the battle and looting directed not against cholera, the water-borne bacillus, but against "we the cholera poor." Drawing upon a "battle" metaphor was especially inappropriate in 1993 for residents of Brazil's teeming favelas. The massacre at Carandiru Prison in São Paulo, the assassination of street kids in the Candelária in Rio de Janeiro, and the extermination of residents of Vigário Geral, were nightmares too recent in memory.

For this reason, drawing upon a "warfare" metaphor in the official cholera eradication campaign was especially inappropriate. The official anti-cholera campaign poster showed a blindfolded man with a red "X" over his face. The caption read: "Cholera, Don't Close your Eyes to Life: Help Combat Cholera" (Fig. 1). No more vivid and convincing evidence was needed, residents lamented, that the true "battle" ahead was against the "cholera poor;" they were being "identified during house-to-house searches, rounded-up, tested, blindfolded and donein." The blindfolded man depicted on the poster, we were told by informants, was "marked to die" and ready for execution with his hands bound behind his back, even though authorities had literally "covered-up the real truth." Who was behind the sinister plot to spread cholera and exterminate the

poor? When interpreting the poster, one 45 yr-old, semi-literate woman let her imagination roam. "The government was announcing that they would pay a ransom for anyone the community captured with cholera and turned-in to authorities!" Why did she believe a ransom would be paid by authorities? To that question, the woman, without hesitation, pointed to the bottom right of the poster. It read: "This material was sponsored by the Northeast Bank of Brazil," accompanied by the bank's familiar logotype.

As Goffman [81] (p. 46) has noted, "it is possible for signs which mean one thing to one group to mean something else to another group, the same category being designated but differently characterized." The soldiers, battles, raids, looting, blindfolded man, and red "X" meant one thing to State Secretary of Health Cholera Control workers and something quite different to families living in poverty. To authorities they were innocuous terms aimed at energizing the community; to poor families they were symbols of military, police, criminal and drug lords' brutalityomnipresent in Brazil's favelas-which foreshadowed horror and death. Termed "stigma symbols" by Goffman [81], such signs are "especially effective in drawing attention to a debasing identity discrepancy, breaking up what would otherwise be a coherent

CHOLERA

Don't close your eyes to life.



Fig. 1. Official cholera campaign poster interpreted as war against the infected poor, marked for erradication, that is, "execution."

overall picture, with a consequent reduction in our valuation of the individual" [81] (p. 43). The poster's "stigma symbols" are, thus, highly effective in transforming the poor cholera victim into a poor, cholera *criminal* who deserves justice: to be captured, blindfolded and put before the firing squad.

Residents of Gonçalves Dias and *Conjunto* Palmeiras pinpointed as responsible wealthy bankers and financial institutions and implicated an amorphous "them," referring to the power elite in general [82, 83]. They also earmarked the impeached ex-President of Brazil, Fernando Collor de Mello, as well as politicians, the pharmaceutical industry, land developers, doctors, foreigners and visiting scientists. Revolted residents explained:

There isn't research in rich houses, who wants to know if cholera is there? Nobody goes. They only visit poor *favelas* because it's the rich who are paying to know this information. (cholera patient)

The government invented this cholera because it really isn't to help us. Better to forget, to write us off at once... like they say, the poor are only worth something buried. (cholera patient)

Politicians have their reasons... they just want to win votes. (community leader)

They say they are going to give the poor food, but they just invent illness like cholera so pharmacies can get rich selling us medicines instead. (community health worker)

Health care professionals were also implicated in the cholera conspiracy, with the exception of community doctors who were largely exonerated. Implicated were distant, alien doctors working in Rio de Janeiro or São Paulo.

Doctors, not like Dr A. (UFC project physician), no. But you can bet on ones from Rio de Janeiro and São Paulo... they're only interested in cholera so they can rise (advance in their careers).

The appearance of asymptomatic carriers of Vibrio cholera added more fuel to the conspiracy fire: positive results without symptoms raised immediate suspicions that medical professionals were inventing the disease as part of the cholera conspiracy. That doctors failed to isolate an etiologic agent from diarrheal patients, reinforced an image of medical incompetence and duplicity. Said one women suffering from diarrhea but testing negative for cholera:

The community health worker did the first exam, a second exam... nothing! 'What is it now, AIDS?,' I asked. 'Are you crazy woman! It isn't AIDS!,' she said. 'Tell me, no worms, no nothing... well then, what devil of diarrhea is this anyway?' (cholera patient)

If such down-home explanations fail to convince, a great global cholera conspiracy is entertained. Sontag [31] in *AIDS and Its Metaphors*, suggests that "there is a link between imaging disease and imaging foreignness". It lies perhaps in the very concept of "wrong," which is archaically identical with the non-us, the "alien" [31] (p. 48). Informants counterattack the highly industrialized and wealthy nations—Japan and the United States of America as responsible for both inventing and planting cholera in the impoverished Northeast:

There doesn't even exist cholera in São Paulo, no way. It was invented outside Brazil. (traditional healer)

It was a band of people over there that invented cholera. The same that invented dengue... the Japanese. It already came from there to here, cholera. They invented the robot... they work, do everything, equal to a person... even weave a hammock. So they invented robots so nobody will work. And invented cholera to do away with us because they can't raise our salaries. (mother)

We all saw Dr R, the American (doctor), help by putting medicine in the well water... but the other Americans with him, they only want women to stop having babies, to exploit us. (cholera patient)

THE MENACE OF METAPHORS

Let's assume, for now, that cholera was invented and introduced into Brazilian favelas as part of an elitist's conspiracy-a global conspiracy-to exterminate the poor. The next question is: how exactly do the elite link impoverished Brazilians to the morally disgracing and disempowering imagery of cholera? Embedded in informants' narratives we discovered one devastating way: metaphors. In Metaphors We Live By, Lakoff and Johnson say "the essence of metaphor is understanding and experiencing one kind of thing in terms of another." [84] (p. 5). This is possible because the metaphor is built into the conceptual system of the culture in which we live; it is embedded in our values, perceptions and systems of meaning. When making a direct association between two domains is too abstract, unclear, difficult, or even risky-for whatever reasonmetaphors are used to define and assign meaning, thus giving us a new understanding of our experience. First, the metaphor highlights certain features while suppressing other aspects of the concept that are inconsistent with metaphor. Second, the metaphor does not merely entail other concepts, but it entails very specific aspects of these concepts. Third, because the metaphor highlights important experiences and makes them coherent while masking other experiences, the metaphor gives a new meaning. By highlighting and hiding, can come to "see" humans living in poor housing conditions without much to eat in terms of non-humans with animal motivations, actions and characteristics. Without these channeling metaphors, but others, we might just as well "see" favelados as devoted catholics, as working mothers, as migrant laborers etc.

As harmless as metaphors—a simple figure of speech—may appear, Lair Ribeiro [85] maintains that metaphors are the most powerful way to communicate because they have "condensed power." In the realm of disease, "nothing is more punitive than to give a disease a meaning". [85] (p. 17). As Sontag explains:

the subjects of deepest dread (corruption, decay, pollution, anomie, weakness) are identified with the disease. The

disease itself becomes a metaphor. Then, in the name of the disease (that is, using it as a metaphor), the horror is imposed on other things. The disease becomes adjectival. Something is said to be disease-like, meaning that it is disgusting or ugly.... Feelings about evil are projected onto a disease. And the disease (so enriched with meanings) is projected onto the world [31] (p. 58)

From informants' perspectives, the elite in Brazil seem to have a corner on using menacing metaphors. They are accused of subliminally (some may argue unconsciously, or even unwittingly) feeding into pre-existing stereotypes, equating poor people with degrading and humiliating cultural images and then playing on these potent metaphors to link the poor directly to cholera. Two such culturally construed images are the pessoa imunda (filthy-dirty person) and vira latas (stray mutt dogs). Both are cognitive constructions of the defiling, repulsive and repugnant. Both are common images in the everyday world of favelados. Both came to our attention because of the frequency with which they appeared in fieldnotes and transcriptions. We will now explore these two culturally-forged images, showing how the favelado's identity, the Dog's Disease and cholera became inexorably bound.

FILTHY, DIRTY PERSON (PESSOA IMUNDA)

"We ARE the cholera!" pronounced 18 yr-old Rosa in a matter-of-fact tone of voice, sending shivers through us. For after 1 month in the field, the force of a metaphor to spoil personal identity was becoming apparent. How had this young woman, recovering from a serious cholera infection, come to internalize that she, herself, her person, was equivalent to contaminated, polluted, dangerous and feared feces?

Being physically dirty or lacking personal hygiene is particularly abhorred in Brazilian culture. Taking innumerable baths per day, using deodorant and dousing oneself with cologne (from sweet smelling herbal water to imported French perfume, depending on class), wearing clean, pressed clothes and spotless shoes in public are valued across socioeconomic groups in Northeast Brazil. The "cult of cleanliness" is inculcated in young Brazilian children via such animated carton characters as Sujismundo (Dirty World) and Cascão, two filthy-dirty little boys, who because they never bathe are the brunt of jokes and teasing by playmates. Given this cultural abhorrence of poor personal hygiene, the dirty or the unkept are especially degrading and defiling images, spoiling one's identity.

We learned that prior to the current cholera epidemic, the *favelado's* image, in society's eyes, had already been firmly wedded to that of a *pessoa imunda* (filthy, dirty person). It makes no difference, if I clean outside because my neighbor is so *imunda*. She raises pigs... her children walk without shoes... she throws the sewerage on the street... and when it rains this dirtiness washes in front of my house. (mother)

Early in 1993, when cholera advanced quickly throughout Ceará, mass media prevention campaigns mentioned that fecal-oral contamination spreads cholera (Fig. 1). What residents "heard" on radio and television, however, was a different and more damaging message: cholera is caused not by the water-borne bacillus but by miasmic imundicie, a popular word meaning "filthy squalor," the worst kind of dirtiness or pollution. The mundo imunda, the filthy world they were forced to live in "causes cholera." Urban squalor-imundicie-was everywhere: "foul atmosphere," effusions (catinga) from decaying pigs' feces and open sewerage, decaying food from the nearby dump, garbage, rot, children playing with mud and walking without shoes, flies landing on feces then on food, proximity to the city's mortuary and bloody run-off water, homemade ice cream with decaying fly remains, and spoiled food scavenged from the dump. The generalizing of a specific infective process into an atmosphere found in urban slums-into imundicie and imundas (filthy, dirty) persons-was used to moralize cholera and to stigmatize infected persons by associating them with impurity, deviancy and disdain. Favelados were stigmatized as imundus persons; imundicie causes cholera, cholera is, therefore, favelados. Favelados are cholera.

It is no wonder, then, that an official national cholera campaign slogan in late 1992-Fora Cólera! (Get Out Cholera!)--did little to endear our informants to the government's control efforts. The slogan Fora Cólera! is a subliminal play on the words Fora Collor! (Get Out [President] Collor!) which, just months before in September 1992, had been the rallying cry, chanted by millions of Brazilian citizens who took to the streets to demonstrate and force the impeachment of the then President of Brazil, Fernando Collor de Mello. Instead of "Get Out Cholera!" families heard, "Get out, you filthy-dirty crook! Get out, you worthless cholerainfected person." The official message, rather than mobilizing persons to eradicate Vibrio cholera and, thus, protect themselves against infection, galvanized them against the (perceived) unscrupulous motives of the elite.

DOENÇA DE CACHORRO: THE DOG'S DISEASE

"Cholera, rabies, *Doença de Cachorro* (The Dog's Disease)." *Dona* Zilnar rambles the three words off so quickly, that they are hardly distinguishable. She has her reasons. In Portuguese the words are intimately related. "*Cólera*" is a pseudonym for "*raiva*," or rabies. According to the dictionary (*Novo Dicionário Aurélio da Lingua Portuguesa*), the word "*cólera*," of Greek and Latin derivation means: (1) "a violent

They nicknamed us *favelados* because we are poor, we live in a *favela*, we are *imunda* (filthy dirty), we don't have a salary, we don't have good nutrition. (12-year-old girl)

impulse against that which offends, wounds or causes us indignity; that angers or provokes raiva; (2) a ferocity of animals; (3) agitation; and (4) an infectious, acute, contagious disease, that can manifest as an epidemic, and is characterized in its classical presentation by abundant diarrhea, prostration and cramping." A colérica person is first a raivosa or angry person, and second a person infected with V. cólera. The dictionary defines the word raiva, of Latin deviation, as first rabies, a viral disease that attacks mammals, and second as V. Cólera. A raivosas person is one attached by rabies and second one full of anger, full of cólera (Novo Dicionário Aurélio da Lingua Portuguesa).

In northeastern Brazil, people use the word cholera for rabies. Dogs foam at the mouth because of cholera. A colérico dog bites and passes raiva. People vaccinate their dogs against cholera. Given the linguistic resemblance of cholera and raiva, then, the metaphorical play that associates poor persons with vira lata dogs is fairly straightforward. Favelado is cholera is raiva (rabies) is The Dog's Disease (as is cholera) is dog is vira lata (an especially scraggly, unkempt kind of dog who scavenges food from garbage cans). Metaphorically speaking, favelados are vira latas. In the eyes of the poor, how society treats a rabid stray mutt is also how it will symbolically treat a cholera-infected favelado.

STRAY MONGRELS (VIRA LATAS)

Thus, when *Dona* Zilnar screams "I'm not dog, no!," she is not referring to dog as Man's Best Friend—the pedigreed, pampered poodles rich *Madames* parade along Fortaleza's beachfront as *Dona* Zilnar begs money from tourists. The dogs *Dona* Zilnar refers to are another type: vira latas. They are the abandoned beasts that roam Fortaleza's favelas—hungry, diseased, unkempt, and unloved. Informants' colorful and degrading descriptions of vira latas would give anyone reason to revolt, if likened to them:

Vira lata is a *bruto* (ugly, wild beast) animal, a stray mutt that runs loose in the four corners of the city, wild on the streets. Everybody who sees them wants the right to do something—kick, throw rocks, hit—do all sorts of violence to these *vira latas* because they don't even have an owner. (community health worker)

Vira latas suffer a lot. They are born at home, but when they grow a little bit they must go to the streets. They scavenge garbage cans—turn them over—looking for any scrap of food. They are common animals like any other type (without pedigree). (12-year-old girl)

Vira latas don't have a place to stay... where they find someone to give a little scrap of food, they stay, but they are always an embarrassment to everyone (desprezo de todos). (cholera patient)

Vira latas are full of illness. You can almost get sick just looking at one. They are filthy-dirty... never vaccinated against rabies. If they are crazy and bite someone, this illness is very dangerous (for people)... They don't have anyone to do anything for them. They are *brutos* (wild, beasts). They don't know anything. (community leader)

Given that being likened to a vira lata is bad enough, the term vira lata is also used derogatorily in everyday language to refer to female prostitutes (i.e. commercial sex-workers). An English equivalent is "whore." The metaphorical implication is that prostitutes, like stray dogs, belong to no one and everyone, that they have no pedigree, no status, and no inherent rights. A vira lata girl is at ready disposal of anyone who desires to use and abuse her in exchange for leftovers-as little as U.S.\$4.00-5.00 per sexual encounter in Fortaleza. The word dog or cachorro alone has multiple derogatory meanings in northeastern Brazil. "Cachorro sem vergonha!" loosely translates as "You low-down bastard without scruples!" Dictionary synonyms for the word cachorro include scoundrel (a mean, immoral or wicked person or rascal) and wretch (a person who is despised or scorned) and its feminine version, cachorra include shew, strumpet (a prostitute), and harlot (rouge, vagabond, prostitute) (Michaelis Dicionário Prático). A derivative form of cachorro, cão, also refer to a masculine dog, but according to the dictionary, the word *cão* alternatively means "a contemptible person" (Michaelis Dicionário Prático) and in popular usage it signifies the "demon" or "devil." The popular sayings, Que o cão te carregue!, (May the devil carry you (to hell)! or *Ele tem parte* com o cão! (He has a pact with the devil!) illustrates in common speech the diabolical connotation of the word cão or dog in portuguese. A banda de cachorros or cachorrada literally refers to a pack of dogs; according to the dictionary, it also means a mob (a disorderly and lawless crowd or in slang, a gang of criminals) or alternatively, an ill-conceived, wicked and mischievous trick produced by cachorros (a low-down, dishonest person) (Michaelis Dicionário Prático). A cachorrice is defined as a "wicked action" or "conduct," "dirty trick," "lowness," "meanness," "indignity" (Michealis Dicionário Prático). Furthermore, anyone living in one of Fortaleza's 300 favelas can tell the fate of a colérica vira lata dog suspected of rabies: dog catchers hunt it down, restrain the feisty animal with a leash and collar, muzzle and isolate it to keep it from biting innocent victims. In cases of bites, the stray is kept under keen observation. If the unfortunate victim develops symptoms of rabies, the dog is killed. Even in less extreme cases when dogs are not infected with rabies, many well-to-do residents prefer to see them eliminated and deliberately avoid all contact (particularly that of their children) with unvaccinated, stray mutts. As one informant emphasized:

SUCAM (Government Infectious Disease Control Unit) must kill these vira latas. If not the city will be swarming with these mangy mongrels and this can't be permitted! (community leader)

As with the cholera eradication campaign poster (Fig. 1), the State Secretary of Health's reported actions reinforced, in people's minds, the menacing metaphors. Headlines in the local newspaper of 13 March 1994 read: "Secretary of Health is Accused of Executing-Dogs."[86]. The International Association for the Protection of Animals filed suit against the Secretary of Health in neighboring Maracanaú, and two Health Post Veterinarians for indiscriminately capturing and killing dogs. "The workers from the Health Post capture dogs in the street without any respect for laws governing their sacrifice (all animals are entitled to an eight-day period after capture to locate the owner or process an adoption)," the article reported. The Health workers were accused of "extreme brutality" in sacrificing the animals: the captured dogs were hit over the head with a nail protruding from a two-by-four board and their throats slashed with a large knife.

To Dona Zilnar and her neighbor friends, the vira lata metaphor rings too close to home. Handing her a positive diagnosis for V. cholera was like symbolically screaming in her face: "You no good vira lata! You filthy, dirty stray mutt! How dare you bite us, you lowly mongrel! You worthless bitch! You cheap whore!" Through Dona Zilnar's eyes, identifying her as a V. cholera carrier was equivalent to branding her as an inferior, sub-human type only worthy of eating spoiled, leftover scraps of food (like those she scavenges from the garbage bins behind the São Sebastião Market every Friday). She has no pedigree, no family name worth weight. If she strays into well-to-do-neighborhoods, the dog catcher may catch, harness, muzzle and even "sacrifice" her. In the same way, when health authorities target endemic cholera enclaves, implement door-to-door disease surveillance, erect highly visible cholera treatment tents in town centers, and set up barricades to contain the disease's transmission, she feels like a huge dog collar is being tightened around the rabid, cóleric community. Slowly it is cinched. Once the muzzle is fitted, the leash secured, the rabid, mad vira lata dog restrained, extermination proceeds.

METAPHORS, STIGMA AND SPOILED IDENTITY

Through metaphors the identity of *favelados* is inexorably bound to morally-repugnant cultural images of filth and stray mutts and, in certain instances, prostitutes. In Purity and Danger [87], Mary Douglas argues that every culture is a means of ordering experience. However, every ordering system gives rise to anomalies and ambiguities, which it must be prepared to control when they violate principles of order by crossing some forbidden line. Labeling anomalies or violators as "impure," "polluting," or otherwise "dangerous" allows society to rid of them through destruction, banishment, or execution-either directly or symbolically. Because epidemic cholera florishes in unsanitary favelas yet disregards socio-economic barriers, favelados are perceived by wealthy Brazilians as one such "danger" which

threatens the rigid class structure of Brazilian society. Order must be restored and violators controlled. One way, is to label favelados as impure, polluting, and dangerous, as we have witnessed in Conjunto Palmeiras and Gonçalves Dias. Moral sentiments support the rules of purity, according to Douglas. Favelados are not only polluting and dangerous, they are labeled as being morally-inferior to upper-class elites. A vira-lata mutt is a bastard dog (or prostitute), a morally-disgraceful identity in this largely Catholic country. The very idea of pollution occurring through, say, casual contact between the morally-inferior poor and the upstanding elite, may suffice to preserve the sharply drawn class-distinctions in Northeast Brazil, having one of the world's worst distributions of wealth [59]. Moreover, with the aggressive spread of the epidemic, the poor often come to be seen by elites as their adversaries that can attack, bite, hurt, steal (scraps of leftover food), and even kill. In keeping with the principle of purity and order, these enemies must be destroyed. Adversarial models of health interventions and education can be employed to "declare war," "target," "attack," "exterminate," "execute," those who threaten class order, temporarily upset [80].

Through such degrading and animalistic metaphors, *favelados* suffer contamination not only of their intestinal mucosa, but of their social identity. In his classic work on stigma, Erving Goffman [81] defines stigma as:

an attribute that makes him different from others.... of a less desirable kind... a person who is quite thoroughly bad, or dangerous, or weak. He is thus reduced in our minds from a whole and usual person to a tainted, discounted one. Such an attribute is a stigma, especially when its discrediting effect is very extensive. [81] (pp. 2-3)

Cholera-like tuberculosis, leprosy, and HIV/ AIDS—is a mysterious infectious disease that is not only acutely feared but is felt to be morally, if not literally, contagious. A moralistic judgement about the person accompanies the disease. Freidson [88] notes that when a moralistic judgement of blame is made, the bearer may be held responsible for the illness. Medical problems may be stigmatized to the extent that by *social* taxonomy, the illness becomes a *crime* and the sick person a deviant deserving punishment in society's eyes. Even worse, stigma may spoil normal identity permanently [89, 90].

Stigma is so closely connected with identity that even after the cause of the imputation of stigma has been removed and the societal reaction has been ostensibly redirected, identity is formed by the fact of having been in a stigmatized role... one's identity is permanently spoiled. [81] (p. 74)

In this largely Catholic world where filth and sexual immorality are formally abhorred, the social labels of *imunda* or, worse, *vira lata* are weighty, image-destroying stigmas. Besides suffering the wrenching cramps of a *V. cholera* infected intestine, cholera patients are seen by many elites as immoral individuals, who are fully responsible for the epidemic. Their identities as mothers, workers, students are spoiled permanently. Even after the cholera epidemic is controlled, the images of *imundicie* and *vira latas* will remain.

Acquiescence to such social stigmatization, however, is seldom a popular response. Rather, labeling and stigmatization more often provoke acts of subtle resistance by peripheral people against the dominant [47, 48, 91]. The highly stigmatized do not always accept the very norms that disqualify them. Explains Gussow and Tracy [92]:

Surely there are other feasible modes of adaptation. One is the development of stigma theories by the stigmatized—that is, ideologies to counter the ones that discredit them, theories that would explain or legitimize their social condition, that would attempt to disavow their imputed inferiority and danger and expose the real and alleged fallacies involved in the dominant perspective. [92] (p. 317)

So it is with cholera. If poor people cannot confront the elite or revolt violently and vociferously against their unfair characterization and stigmatization, they dig-in and brandish symbolic fists [47, 48]. Why comply with medical advice? Why obey instructions? Why become a "dog"? Why be abused, kicked, muzzled or shot? Better to define cholera as an invention, fantasy, or conspiracy and shout out. "I'm Not Dog, No!" than to internalize its accusatory message. Better to suffer in silence than to assume "stray dog status" and be buried in the weight of its prejudice. Non-compliance becomes a silent revolt against the injustices of everyday life. "It's rabies! It's cholera! Careful rich one, don't let us bite you!" bellows out Dona Beatriz, as two wealthier women pass by. Defiance serves to reverse estrangement and reconstitute the divided self. Bucking authorities, no matter how discreetly, becomes a survival strategy to keep one's identity and passionate human spirit in tact. The force and furor of the backlash churn beneath the surface largely invisible to the public eye.

In both communities we studied, examples abound of resistance, including non-compliance with recommended treatment and public health prevention efforts. Prophylactic antibiotics are expectorated and chloride for sterilizing water pots dumped out, once health workers leave. As informants explained:

God help me! I'm not taking those pills. They look like rat poison, my sister, it was rat poison! (cholera patient)

My green pills I threw over the wall. (mother)

They brought me drops (chloride) to put in my water pot... it was nothing but bleach, common bleach, women! Thanks a lot, I said, because I have a little tiny pile of clothes to wash! (laundress)

Second, as we learned from *Dona* Zilnar and others the implications of the cholera-as-invention posture is that people "hide" their symptoms from health authorities and, hence, grossly underestimate their risk of infection from V. cholera. This is particularly true of asymptomatic carriers, because without symptoms it is easier to dismiss one's role in transmitting the disease, especially if cholera is "make believe."

Third, many informants experienced exaggerated confidence in supernatural protection. Only spiritual protection was 100% effective, informants often said. Sick and suffering cholera patients retreated into their homes, into the comfort of their private saints to whom they pray for forgiveness and salvation while self-treating with herbal remedies.

Fourth, we noticed both a marked resistance and delay in seeking biomedical services. Few informants sought out nearby São José Hospital for electrolyte replacement therapy and, then, only when nearly unconscious. Finally, we identified a strange, morbid sense of pending death experienced by cholerainfected persons. With the onset of profuse watery stools, they invariably begin bidding final farewells to horrified and frantic family members.

LESSONS FOR CHOLERA CONTROL

It is clear from the above that to control cholera in Northeast Brazil, it is necessary to "remove dog collars"—that is, to listen to people's opinions, to include them in the definition of educational messages, and to design and implement control strategies which are socially and culturally appropriate. Experience shows that poor people do participate in learning experiences when opportunity is present. In such a context, people's innate learning skills are stimulated and instructions make sense [93–95].

We see none of the crippling fatalism and myopic "Limited Good" vision so often ascribed to Latin American peasants in our informants' responses [37-46]. On the contrary, residents in Gonçalves Dias and *Conjunto* Palmeiras have frustratingly down-toearth ideas about what needs to be done to control cholera in their communities. What they lack is not the will, but the way to implement changes, as comments below attest:

The government must come to see the situation here. They have been saying a lot about hygiene and we know by experience that any improvement in hygiene is good for health. Why don't they do something about sanitation? (mother of five young children).

We have been trying to do something to improve the environment but we receive no support from any institution. (community leader)

In my family nobody likes drinking chloride water but I force them to do it anyway. They say that cholera can kill us. I don't want to die. (mother)

Based on the above ethnographic findings, we can recommend to health authorities in Fortaleza, Brazil more generally, and, perhaps, to other developing regions, the following strategies to control cholera:

1. Replace moralistic miasmic theories of the spontaneous generation of cholera with the destigmatizing germ theory of water-borne contagion;

2. Promote healthy hygienic practices (handwashing, feces disposal, in-home water treatment) as an

integral part of people's daily life routine rather than an extraordinary cholera-linked measure;

3. Mobilize traditional healers and lay persons in early initiation of in-home rehydration with household fluids, herbal teas and oral rehydration salts as an alternative to hospital-based rehydration [21, 22];

4. Avoid earmarking specific communities or persons as foci of disease-transmission; control measures should be applied across-the-board to all economic classes and all persons in endemic regions;

5. Avoid "high visibility" control interventions such as community "cholera tents" and communitywide testing in public places; private, discrete faceto-face instructions will probably be more effective;

6. Avoid fear-driven educational messages; mass media campaigns should speak to specific methods to prevent infection using popular terminology and cognitive images;

7. Most important, eliminate all menacing, stigmatizing metaphors which insidiously discriminate by linking cholera to the identity of the poor.

ANTHROPOLOGY'S CONTRIBUTION TO CHOLERA CONTROL

Because of the life-threatening nature and urgency of epidemics of infectious diseases such as cholera, medical assistance must be mobilized guickly and efficiently to control their spread. In the haste to deliver emergency medical services, the cultural beliefs, perceptions, attitudes and behaviors of threatened individuals are frequently overlooked. Suffering people are often dehumanized by health workers as "disease hosts," "carriers" or "sources of contamination," and their communities as a "target population" or "foci of disease transmission." Their human qualities are transformed, or worse, forgotten. Because anthropology treats humans holistically in their natural socio-cultural setting and captures people's own representations of their day-to-day world, the discipline can help fill the conceptual gap left by medical teams studying infectious diseases. Grasping an emic perspective [96, 97], as we have seen in the case of cholera, is fundamental even in such trying, emergency situations. Control campaigns which ignore the anthropology of its "target population" at best achieve only stunted program impact, far below its full potential, and, at worse, provoke anger, resistance, revolt and rejection among infected individuals and their families.

The specific contributions of anthropology to the study of infectious diseases we identified based on our experience with cholera in Fortaleza, Brazil are as follows:

1. Key-informants' colorful descriptions of symptoms, onset, manifestations, and suffering associated with infection, which draw on cultural representations and are embedded in local systems of meaning, can speed the diagnostic process and provide invaluable insights for health professionals about the disease as "lived experience" [62]; these often differ from standard textbook accounts. Our rich descriptions of cholera episodes "lived" at home, for instance, paint a real life picture of suffering, generally not appreciated in de-contexualized, biomedical accounts of enteric infections.

2. Knowledge of people's self-care practices and health-seeking behavior in relation to a specific infection, allows health professionals to identify culturally-specific practices and resources in the community to help patients cope with illness at home. Based on this information, health professionals can prescribe interventions that are both accessible and feasible to practice. For instance, we discovered a strong resistance to the addition of bleach to household drinking water as a cholera control measure. Vinegar was identified during the ethnographic study as a more acceptable alternative. We also learned that cholera is treated at home with medicinal herbal teas and patients seek the advise of rezadeiras, or traditional folk catholic healers. Based on this ethnographic data, oral rehydration therapy can be successfully mixed with herbal teas and mild to moderate cases of cholera managed at home by rezadeiras, lay experts in diarrheal diseases [20-22].

3. In-household participant-observation of family members preforming daily chores can lead to the discovery of behavioral modes of disease transmission not previously imaged or identified by epidemiologists [98]. Preparation of homemade popsicles with cholera-infected water or the eating of feces-contaminated dirt (geophagia) by children, for instance, were two such behaviors we observed inside homes in Gonçalves Dias.

4. Anthropological analysis of symbolic behavior and hidden transcripts which gets behind the scenes of official presentations can lead to the important discovery of patients' "non-complaint" behavior and, more importantly, their rational for rejecting wellintentioned interventions, as we have discussed above.

5. Detailed linguistic and ethnographic data on lay terminology and cognition, and explanatory models of illness can help bridge sometimes fatal gaps in doctor-patient communication. Eliciting the metaphorical meanings of the "Dog's Disease," for instance, was essential for improving communication with cholera-infected individuals in Fortelza. As a result, relationships between health care providers and communities, especially poor communities, can be improved.

6. Ethnographic data can guide the re-writing of educational messages gone wrong. By situating messages in the imaginary world of "target" populations, their meaning is more easily understood and, hence, acted upon. Images and terms that provoke anger, disapproval and rejection can be avoided.

7. Rapid ethnographic assessment (RAP), which gleens essential data about infectious disease beliefs, attitudes and behaviors, can give quick responses on

how to control disease transmission. The quick turn-around time from data collection to use by program managers, is a positive feature of RAP in emergency, epidemic settings. In such trying situations, program managers are pressed to design and implement control measures immediately. Using RAP methodology in Fortaleza, we were able to provide university enteric disease specialists with preliminary ethnographic observations and impressions after one week of fieldwork, highly focused on the in-household transmission and control of cholera. Simultaneous with data collection and on-going analysis, program managers were continuously up-dated regarding our ethnographic hypotheses and findings. Our general findings, presented here in greater detail, were incorporated into the emergency cholera control program in Gonçalves Dias long before tape recorded interviews were completely transcribed and the final manuscript written. The quickness of RAP methodology together with numerous short cuts taken by the authors in organizing and processing data, permitted the anthropology of cholera victims and their communities to figure squarely in re-designing control efforts in Gonçalves Dias which were more sensitive to people's reality and proved instrumental in reducing the incidence of cholera in this favela (Dr. Aldo Lima, personal communication).

To conclude, an anthropological interpretation of contagious cholera, requires that researchers first understand the local worlds of people exposed to the water-borne, cholera-causing bacillus. Only with probing insights into this day-to-day reality can researchers and communities work together to identify possible strategies which can effectively control disease transmission within households. Without these key cultural insights, as we have clearly seen with cholera, it is difficult, if not impossible, to design highly effective educational interventions to prevent its spread and forsee the "collateral effects" such culturally-blind messages may provoke. The morally disgracing, disgusting and disempowering illness imagery associated metaphorically with cholera tainted, rather than cured, individuals and communities we studied. It is not so much the cholera-causing bacillus that is feared but the morally-polluting stigmas that are dreaded. A positive cholera diagnosis debases one's identity. Although physically recovered from painful gastric cramping, explosive diarrhea and life-threatening dehydration, patients rarely heal completely from the wounds of social stigmatization. This "collateral effect" of cholera prevention campaigns, we have seen, can spark outrage and revolt on people's part, causing them to resist well-intended control measures.

Even if a new anthropologically-sensitive approach can guard against the "collateral effects" of conventional educational interventions, we must never lose sight that there is a larger issue with which we must contend with equal urgency: the eradication of the true "Dog's Disease" in developing countries: that is, economic poverty in which families are forced to live.

Acknowledgements-We thank the Instituto Conceitos Culturais & Medicina (CC & M) and Clinical Research Unit, UFC in Fortaleza, Brazil for supporting this work. To families in Gonçalves Dias and Conjunto Palmeiras, we are indebted for their privileged personal accounts of what it is like to be poor, sick, and discriminated against because of suffering "The Dog's Disease." Special mention must be made of Dona Jandira, spirited laundress, whose piercing social critique of cholera proved to "hold water." We are particularly grateful to our COSSAH colleagues at Harvard University Medical School, Department of Social Medicine, for their comments on an earlier draft of this paper presented at a recent faculty meeting in, Chiapas, Mexico (Dr Paul Farmer's insights on the dynamics of accusations and AIDS were especially helpful as was Dr Steffan I. Ayora-Diaz's reference to James Scott's work on hidden transcripts), Dr, Aldo Lima, M.D. (UFC) for his solicitation of a social diagnosis of cholera, and Maria Auxiliadora de Souza, M.D., MPH, Ph.D. for easing our entry into the homes and lives of women in Gonçalves Dias. Finally, special recognition to Mário R. de C. Martin, Carmozita Peixoto da Silva, and Inácio de Noiola Gomes Fernandes who made possible our daily treks into the field, always emotionally and physically exhausting.

Note: Except for several structures, The *Favela* Gonçalves Dias no longer exists. In 1995, a major road was built through the community, dispersing the homeless families.

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- 50. State of Ceará's public hospital for infectious diseases notorious for its large case load of very sick patients, including HIV-infected individuals. Patients receiving treatment at São José Hospital are often stigmatized and feared as carriers of "dangerous" diseases.
- 51. Recently, the 440 families of Gonçalves Dias were evicted for the fourth time due to government plans to build a road through the *favela*. As appraisers valued homes for expropriation, one resident sobbed: "I've lived here 17 years! This is home. I was raised here. My kids were born here. Even my *anginho* (dead infant) is buried here. What *micheira* (spare change) do you think I'm going to get for my house of dirt and sticks? It will never pay for all of what is mine here!".
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- 68. That informants use the verb "to accuse" to refer to findings of the medical examination, is indirect evidence that accusatory pressures are routinely exerted by medical professionals.
- 69. The term refers to Brazil's patron saint and one of few negra (black) virgins recognized by the Roman Catholic church.
- 70. The phase "I'm Not Dog, No!" is the title of a popular song originally written by Euripides Waldick Soriano in Portuguese as Eu Não Sou Cachorro Não! and aired on country radio during the early 1970s, years of military rule and political repression. Recently the title was translated into English as "I'm Not Dog, No!" and the song re-interpreted by brega (funky folk) singers, Falcão and Tarcisio Matos.
- 71. Portuguese term which literally translates as "turn can", vividly describing stray mutts or mongrels who roam streets in poor neighborhoods and *favelas* turning over garbage cans in search of food.
- 72. The term refers to the Catholic saint revered in *Umbanda* as protector against epidemics.
- 73. *Psidium guayava L*. is an oil extract from leaves used popularly to treat diarrhea.
- 74. Stenocalyx micheli Berg is a plant medicinal whose leaves are used to make tea to treat diarrhea.
- 75. Miracle-performing Catholic saint of Juazeiro do Norte, Ceará who is a central figure in popular folk healing in Northeast Brazil.

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