Brief Research Report

"AZARCON" AND "GRETA": ETHNOMEDICAL SOLUTION TO EPIDEMIOLOGICAL MYSTERY

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Medical anthropologists often promote traditional healing practices both in Third World countries and for culturally pluralistic groups in industrialized nations. This promotion most frequently takes the form of recommending that health professionals learn indigenous ethnomedical paradigms, especially culture-bound syndromes, in order to encourage rapport between providers and recipients of health care. There are also numerous anecdotes in the literature and in collegial conversation to demonstrate that cultural sensitivity to the patient beliefs improves the chances of successfully completing a therapeutic encounter.

The greatest success for anthropologists in promoting their view of healing appears to be in the areas of cross-cultural psychiatry and psychology, with success declining in rapid, inverse relationship to the biomedical focus of the healing process. Seldom do anthropologists claim that ethnomedical research or sensitivity to folk healing and folk illnesses can lead directly to the solution of serious biophysical problems. That fact makes this report valuable as an example of sensitivity to ethnomedicine and to culture-bound syndromes being instrumental in an epidemiological investigation of several cases of lead poisoning.

The initial discovery that a folk remedy was causing lead poisoning occurred virtually simultaneously in two locations, California and Colorado. In Los Angeles County, a four-month-old male with vomiting and diarrhea was brought into the hospital. A roentgenogram of the stomach showed a radio-opaque substance, which gastric lavage and later stools showed to be a bright orange, powdery substance. Upon repeated questioning, the mother eventually admitted to giving the baby a bright orange power, called *azarcon,* which had been sent to her from Mexico. A second case, involving a 17-year-old female, occurred a couple of months later, causing the public health department to more thoroughly investigate the use of *azarcon* in Los Angeles County. In both cases, and in nine subsequently confirmed cases of lead poisoning, it was discovered that the individuals were being treated for *empacho,* a folk illness common in Mexican American communities that is thought of as a bolus of food stuck to the intestinal wall. *Empacho* is commonly identified and treated throughout Latin America, and is normally treated with massage or with herbal teas, many of which act as purgatives.

In Colorado, a 2½-year-old girl was discovered to have high lead levels as the result of general lead screenings being undertaken at a community health center. An inspection of the home environment failed to turn up any easily accessible sources of lead paint, the most common cause of lead poisoning in children. Health officials decided that a somewhat distant source of lead paint was the causal agent, despite parental affirmation that the child had no access to that source. The child was given chelation therapy, but a routine follow-up indicated that the child's blood-lead level had risen subsequent to the therapy, indicating reexposure to lead. A follow-up visit to the home, using the then available data from California, turned up the fact that this child was also being treated for *empacho* with *azarcon.*

Laboratory analysis of *azarcon* in both California and Colorado demonstrated that it is virtually pure lead tetroxide (Pb_3O_4), with an elemental lead content of 92.5%. In each of the cases investigated, the powder was purchased in Mexico and brought into the United States or sent from Mexico by a relative living there. Community research on *azarcon* revealed that the remedy is relatively widely known and used frequently enough to be of concern to the health departments of both states. The Center for Disease Control was contacted and information about the use of *azarcon* for treatment of *empacho* was disseminated. Subsequent research turned up several alternate names for the substance, and an alternate powder, called *greta,* used to treat *empacho* in Texas.

Greta was discovered to be a pale yellow, heavy powder. Samples brought in several *yerberias* and *boticas* (herb shops) in south Texas were analyzed and the powder was found to contain 89% elemental lead and to have a weight that conformed with lead oxide (Pb_2O_3). Ingested, both *greta* and *azarcon* produce lead intoxication and poisoning. *Greta* appears to dissolve in dilute acid more readily than the more stable *azarcon,* and thus would be the more dangerous of the two compounds, but both produce toxic effects with very small doses. Ethnographic reports indicated that some individuals were given as much as a teaspoon of the substance. This is more than enough to cause mental retardation, kidney failure, or death by brain swelling.

Greta was being distributed through more than 40 outlets, by at least two wholesalers in Texas. Information derived from anthropological research in south Texas on the content and use of *greta* initiated a Public Health Service embargo on the *greta,* and a subsequent recall of the material by the Food and Drug Administration. At the present time a more broadly based survey of the use of *greta* and *azarcon* is being conducted in Mexican American communities, and both the Pan American Health Organization and the Mexican government have been alerted to the availability and use of *greta* and *azarcon* in Mexico.

These findings have several implications for medical anthropology and especially for those of us who are doing either ethnopharmacological research or more generalized ethnomedical research. First, those of us who have been promoting the use of traditional healing practices now have the additional obligation of investigating and publicizing the risk presented to the population from such substances as *greta* and *azarcon,* whose immediate benefits appear to their users to make them "good medicines" but whose side effects (e.g., mental retardation, kidney failure, and death by brain swelling) put the users at risk.

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The SMA, the AAA, and MAQuality

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profitable for commercial houses; neither can they produce them in a very cost-effective manner. (The recent divestiture of *Ethos* by the University of California Press is an excellent case in point.) Thus, an organization with a small (32-36 pages per issue) publication that is issued only quarterly is not a very high priority for most presses; and even if accepted, such jobs will probably not secure a very important position in the printing queue and will be likely to be bumped regularly by larger orders. This displacement, of course, will result in substantial delays in distribution of a publication in which the utility of much of the information included is time-limited.

Failure of the merger, therefore, means that we shall have to contract out independently for most of the activities now performed for the SMA by the AAA as well as for a wide variety of other services (such as billing). As an unpaid volunteer, the Editor of *MAQ* cannot be asked to assume the added responsibilities necessary for seeing all of these tasks through successfully to completion; either he, or a business manager of some sort, will have to be paid for this work. I write here on the basis of the direct experience we obtained in 1978 in connection with the publication of *Teaching Medical Anthropology*, the SMA's special publication. All of the work done on that volume—including the double-checking of bibliographic references, submission of the manuscript to several publishing houses for bids, completion of the contracts, consultation with the publisher on formatting and artwork, proofreading of the entire manuscript, and arranging for the entire run to be shipped to the AAA office in Washington for distribution—consumed an inordinate amount of time for which we were neither reimbursed nor paid. In this era of ever-decreasing resources, however, few universities or departments will be able or willing to underwrite activities of this nature, and the financial burden will fall squarely on the shoulders of the membership of the SMA.

For almost the entire life of the *Medical Anthropology Newsletter/Quarterly*, we have worked with and through the AAA office. To be sure, there have been difficulties in our relationship, but most of those problems have long since been resolved. Together, the AAA publications staff and I have worked hard over the last eight years or so to build the SMA's publication into something that is read, respected, imitated. In guiding the recent changeover in name and format of this publication, I found the ideas, advice, and assistance of the central office indispensable. They worked long and hard on the transformation—in part, because they, too, have an investment in and a commitment to this publication. *MAQ* is more than a business arrangement to most of these individuals.

I sincerely hope that the momentum and success we have achieved thus far will not be dissipated or thrown off track by having to start anew in building ties and understandings with those responsible for the publication. I urge each of you to support the merger plan.

Azarcon and *Greta:* An Ethnomedical Solution

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Second, this investigation opens a whole new area of risk assessment and epidemiology. It has been demonstrated that there are clear biophysical consequences from the treatment of at least one culture-bound syndrome. This should lead to a reexamination of other areas where normal epidemiological research has failed to account for all or some part of a public health problem. Such reexamination could possibly bring about a refinement and redirection of health education efforts, similar to the efforts now being made in Mexican American communities to warn of the effects of *greta* and *azarcon*. The public information campaign being mounted is unusual in its use of anthropological data and its obviously necessary sensitivity to ethnomedicine.

As an aid to the overall public awareness campaign being designed on lead poisoning, the senior author would appreciate receiving any and all information that colleagues might have collected on the presence of *greta* and *azarcon* in Hispanic communities, anywhere. In addition, he would appreciate receiving any and all information about studies that have assessed the deleterious, as well as the beneficial, aspects of ethnopharmacology, anywhere in the world.

REVIEWS

Other Ways of Growing Old: Anthropological Perspectives. *Pamela T. Amoss* and *Steven Harrell*, eds. Stanford: Stanford University Press, 1981. Pp. xxi + 270. $18.50 (hardcover).

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It has been my experience that edited volumes often suffer from a lack of sufficient focus or unity to justify the inclusion of the articles they contain. However, in this welcome addition to the sparse anthropological literature on aging, the editors have maintained a high degree of integration in their work. The success of this volume rests largely on the editors' selection of articles that relate, uniformly and consistently, to the model of aging presented in the introduction.

The volume contains nine articles that give us case studies of the experience of aging in a variety of different kinds of societies and two articles that address the universal, biologically based aspects of the aging process. While the quality and quantity of data presented in these selections vary somewhat, they all fit rather well with the editors' stated goal of examining aging in both its universal and culture-specific aspects. The case studies not only provide insight into the experience of the elderly in nonindustrial societies but also help dispel myths about the elderly often held by Westerners. For example, as the articles by Sharp (on the Chipewyan) and Harrell (on the Chinese of Taiwan) show, old age