soning.<sup>12-17</sup> Rather, as a first attempt to identify issues contributing to high rates of poisoning among low-income Latino children, we documented high levels of household exposure to hazardous products and cultural factors underlying that exposure.

Results indicate that current Poison Control Center outreach efforts should be expanded. No mother interviewed in the present study had a Poison Control Center telephone number available. This finding was consistent with the results of another study indicating that parents schooled in Mexico were significantly less likely to have called a Poison Control Center before going to an emergency room for pediatric poisoning than were parents schooled in the United States. <sup>18</sup> Poison Control Center outreach messages should be adapted for use in the Spanish-language media, an important source of information for the many Latinos who are not fluent in English.

The messages should address the dangers posed by shared housing and by common products that lack childresistant packaging, such as rubbing alcohol and medicines from Mexico. Particular attention should be paid to advocating better storage practices, including the use of sturdy cabinet latches and inexpensive but lockable containers, such as small plastic toolboxes. Evidence from the present study indicates that most cabinet latches are not sturdy enough to stand up to assaults by children over time, and that mothers' reports that they have such latches need to be followed up with queries as to whether the latches are still functional.

Clinicians are in a unique position to help prevent poisonings by informing patients about safe storage and use of medicines and household chemicals. For those who do not know English, it is clearly essential to label medications and give instructions in Spanish. Spanish-language handouts on poisoning prevention are available from the American Academy of Pediatrics and regional Poison Control Centers. Above all, clinicians should keep in mind that poverty, crowding, and the inability to read

English can have far-reaching effects on children's exposure to toxic substances.

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#### References

- 1 Kogan MD, Overpeck MD, Fingerhut LA. Medically attended nonfatal injuries among preschoolage children: national estimates. Am J Prev Med 1995;11:99-104.
- 2 California Department of Health Services. Injuries in California 1991. EPIC Proportions 1994;4:23.
- US Department of Commerce. Population projections of the United States by age, race, and Hispanic origin: 1995 to 2050. Curr Popul Rep 1996.
   Olson LM, Troutman WG, Wiggins CL, Becker TM. Fatal poisoning
- 4 Olson LM, Troutman WG, Wiggins CL, Becker TM. Fatal poisoning among American Indian, Hispanic, and non-Hispanic white children in New Mexico, 1958 to 1982. Ethn Dis 1991;1(3):257-262.
- 5 Agran PF, Winn DG, Anderson CL, Del Valle CP. Pediatric injury hospitalization in Hispanic children and non-Hispanic white children in Southern California. Arch Pediatr Adolesc Med 1996;150:400-406.
- 6 Anderson CL, Agran PF, Winn DG, Tran C. Demographic risk factors for injury among Hispanic and non-Hispanic white children: an ecologic analysis. Injury Prev 1998;4:33-38.
- 7 Lead poisoning associated with use of traditional ethnic remedies—California, 1991-1992. Mor Mortal Wkly Rep 1993;42(27):521-524.
- 8 Hernandez DJ, Charney E, eds. From generation to generation: the health and well-being of children in immigrant families. Washington, DC: National Academy Press; 1998.
- 9 US Bureau of the Census. Census of population and housing: 1990. Washington, DC: US Government Printing Office; 1991.
- 10 Bernard HR. Research methods in anthropology. 2nd ed. Walnut Creek [CA]: AltaMira Press; 1995.
- 11 Ventres WB, Frankel RM. Ethnography: a stepwise approach for primary care researchers. Fam Med 1996;28(1):52-56.
- 12 Beautrais AL, Fergusson DM, Shannon FT. Accidental poisoning in the first three years of life. Aust Paediatr J 1981;17:104-109.
- 13 Baltimore C, Meyer RJ. A study of storage, child behavioral traits and mother's knowledge of toxicology in 52 poisoned families and 52 comparison families. Pediatrics 1969;44:816-820.
- 14 Shaw MTM. Accidental poisoning in children: a psychological study. N Z Med J 1977;85:269-272.
- 15 Sibert JR, Newcombe RG. Accidental ingestion of poisons and child personality. Postgrad Med J 1977;53:254-256.
- 16 Brayden ŘM, MacLean WE, Bonfiglio JF, Altemeier W. Behavioral antecedents of pediatric poisonings. Clin Pediatr 1993;32(1):30-35.
- 17 Petridou E, Kouri N, Polychronopoulou A, et al. Risk factors for child-hood poisoning: a case-control study in Greece. Injury Prev 1996;2:208-211.
- 18 Kelly NR, Kirkland RT, Holmes SE, et al. Assessing parental utilization of the poison center: an emergency center-based survey. Clin Pediatr 1997;36(8):467-473.

# COMMENTARY How to do ethnographic research

One of the most important contributions of anthropology is our research methodology, known in the field as "participant observation" but also referred to as ethnography. We believe that people must be understood in context. Cultures are seen as holistic, with each aspect influencing and being influenced by every other. It is not enough to take people's words for things, as is necessary in questionnaires and interviews, because people are notoriously unreliable. Their respect for your authority may lead them to tell you exactly what they think

you want to hear. Or they may have other agendas influencing their responses, such as fear of the immigration service. In any case, anthropologists long ago learned that to increase your chances of acquiring valid data (in the statistical sense), you need to make observations a part of the data collection process. With respect to the study of poisoning exposure among children of Mexican-born mothers, it is imperative to study the situation in the homes in areas where children are being poisoned at greater rates than in other areas.

Geri-Ann Galanti
Department of
Anthropology
California State
University, Los Angeles
Division of Nursing
CSU Dominguez Hills
Los Angeles, CA

Correspondence to: ggalanti@pacbell.net

# Original Research

The authors use the term "ethnography" to describe their methodology. They cite an important article by William Ventres and Richard Frankel entitled "Ethnography: a stepwise approach for primary care researchers." Much of this commentary is based on that article.

Ventres and Frankel define ethnography as "the research process of learning from people about their culture." Traditionally, anthropologists wrote ethnographies—complete descriptions of a culture, including its values, beliefs, marriage patterns, social structure, political system, and so forth—after living 1 to 2 years with the people, observing and participating in their lives. This does not guarantee objectivity, however, because each researcher will be influenced by his or her own biases and preconceptions, and the people will respond to the researchers as individuals, some of whom they will like more than others. It does, however, insure a deeper degree of understanding than can be gained by most field methodologies. An important goal of ethnographic research is to try to get the emic perspective-the "natives" views of their own behavior-in addition to the etic, or "outsiders," views. For example, many years ago a study was done on high rates of communicable disease in a rural Peruvian town high in the Andes.<sup>2</sup> The problem appeared easily ameliorated by having the people boil water. It was not until researchers went in to study the people that they learned why this was nearly impossible, at least from the people's point of view. For one thing, they believed that "cooked" water was related to illness, and they did not want to compromise their health by boiling the water. For another, during much of the year, fuel for fire was scarce, and collecting it would take time out of an already busy day. Most hearths were too small to fit more than two cooking vessels at a time; space was needed for food. Thus the number of times water could be boiled, using a limited fuel resource and cooking space, was greatly restricted. By learning something about these people, their beliefs, and their lifestyle, researchers came to understand why they were reluctant to boil their water.

Ethnography is defined as a "set of qualitative research methods" that can be used to investigate the human dimensions of health, illness, and disease. It is defined by 3 principles: 1) it is an observational method designed to get at the meanings underlying peoples' behaviors; 2) it focuses on everyday life as events unfold naturally; and 3) its goal is to understand behavior from the point of view of those who are being studied.

Ethnography can be used in conjunction with quantitative studies; prior to quantitative studies, if little is known about which variables to study; or after quantitative studies, to help explain findings in depth. It can also be used independently from such studies when the goal is to understand aspects of medical care related to cultural rules and expectations. Ethnography can help provide insight into seemingly puzzling or contradictory behavior.

Ethnographic research is characterized by 3 fundamental tasks: 1) observing people's behavior; 2) studying what people *say* they do, believe, and think; and 3) interpreting what people *actually* believe and think. There are 5 basic steps to accomplishing these tasks using an ethnographic research plan.

## **Defining a research question**

The research question should convey a rather general theme rather than a specific hypothesis. An important part of this step is for the researchers to examine their own biases and see how they might influence the data collection. These biases must be revealed to the readers when the research is written up. In other words, the researchers must acknowledge their own subjectivity.

### **Interviewing informants**

Open-ended, face-to-face interviews are conducted. The interviewer is on an equal footing with the interviewee, a departure from the standard physician-patient relationship. The researcher must be the curious person who wants to know more about the interviewee's perspective on his or her life experience and beliefs.

## **Participant observation**

The researcher must spend a great deal of time with the informants, interacting socially while discreetly taking systematic notes. In this way, he or she can learn the cultural rules of behavior.

#### **Analyzing observations**

Ventres and Frankel describe 3 common principles of ethnographic data analysis: 1) triangulation, or using data from a variety of sources, including interviews, participant observation, and personal diaries; 2) thick description, which involves getting "under the skin" of the people being studied, so that you can see things from their points of view; and 3) saturation, meaning that analysis is seen as completed when no new data or ideas come up.

#### **Reporting results**

The authors emphasize the importance of clearly describing your research methodology, revealing any sources of bias, and condensing large amounts of descriptive data.

In order to judge the quality of ethnographic work, Ventres and Frankel suggest that authors and readers ask the following questions: What was the design? Is the text credible? Does the study make sense clinically?

#### Reference

<sup>1</sup> Ventres WB, Frankel RM. Ethnography: a stepwise approach for primary care researchers. Fam Med 1996;28(1):52-56.

<sup>2</sup> Wellin, E. Water boiling in a Peruvian town. In: Paul BD, Miller WB, eds. Health, culture and community. New York: Russell Sage Foundation; 1955. p. 71-103.