

TABLE 2—Mean Diastolic Blood Pressures, Nurse and Physician Clinics

Interval	Nurse Clinic			Physician Clinic		
	N	DBP*	S.D.*	N	DBP*	S.D.*
Initial Visit	40	100.7 (98.6)	8.4 (9.0)	39	102.1 (103.1)	8.5 (9.0)
6 months	25	91.8 (90.3)	12.0 (12.2)	19	94.3 (94.1)	11.3 (12.4)
12 months**	23	88.0 (87.9)	7.6 (8.7)	14	94.6 (96.1)	9.9 (11.1)
15 months	19	87.8	11.2	14	94.8	14.7

*Numbers in parentheses are mean DBP and SD for patients remaining in study full 15 months (19 in nurse clinic, 14 in physician clinic).

**P < 0.05 (Irwin-Fisher Test)

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Intestinal Parasitosis among Southeast Asian Immigrants in New Mexico

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Abstract: Results of an intestinal parasite survey of 776 Southeast Asian immigrants in New Mexico are presented. Parasites were found in 71.8 per cent of the patients; 44.3 per cent were multiply infected. Twenty different parasites were identified, some of which are not common in the United States. (*Am J Public Health* 1982; 72:57-59.)

Introduction

The recent influx of Southeast Asian (SEA) immigrants in the United States has created a significant diagnostic and

logistic challenge for the public and private health agencies. One important component of refugee health evaluation involves large scale screening of fecal specimens for intestinal parasites. Some of the parasites harbored by this population are rarely if ever encountered in clinical specimens in this country, particularly in areas distant from the usual ports of entry.

Few reports describe the type or frequency of parasite infections among SEA immigrants, and those in print differ markedly in their findings. In a 1975 survey of 1,077 Vietnamese at three American refugee sites, fecal positivity rates were found to be: *Ascaris sp.* 30.5 per cent, *Trichuris trichiura* 9.0 per cent, *Giardia lamblia* 8.2 per cent, hookworm 4.1 per cent, *Entamoeba histolytica* 2.0 per cent, and *Strongyloides stercoralis* 1.2 per cent.^{1,2} A 1979 Ohio study of 100 Laotians in 14 families revealed these same organisms, although in markedly different frequencies, plus several other protozoan and helminth parasites.³ A total of 77 per cent of the individuals were infected, and 100 per cent of the families were involved. During 1980, the Colorado Department of Health reported the results of fecal parasitology

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Editor's Note: See also related editorial, p 12 this issue.

TABLE 1—Parasites Found in SEA Fecal Specimens

Parasite	Number of Positive Specimens (Per Cent of All Specimens)
<i>Clonorchis sinensis</i> / <i>Opisthorchis sp.</i>	242 (31.2)
<i>Ascaris sp.</i>	197 (25.4)
<i>Trichuris trichiura</i>	172 (22.2)
Hookworm	150 (19.3)
<i>Strongyloides stercoralis</i>	89 (11.5)
<i>Giardia lamblia</i>	89 (11.5)
<i>Entamoeba coli</i>	86 (11.1)
<i>Endolimax nana</i>	72 (9.3)
<i>Entamoeba hartmanni</i>	48 (6.2)
<i>Entamoeba histolytica</i>	34 (4.4)
<i>Taenia sp.</i>	18 (2.3)
<i>Dientamoeba fragilis</i>	13 (1.7)
<i>Chilomastix mesnili</i>	13 (1.7)
<i>Hymenolepis nana</i>	5 (<1.0)
<i>Diphyllobothrium sp.</i>	5 (<1.0)
<i>Iodamoeba butschlii</i>	4 (<1.0)
<i>Trichostrongylus sp.</i>	3 (<1.0)
<i>Trichomonas sp.</i>	3 (<1.0)
<i>Enterobius vermicularis</i>	2 (<1.0)
<i>Sarcocystis hominis</i>	2 (<1.0)

examinations on 195 patients with Indochinese surnames, as follows: *Ascaris sp.* 24.1 per cent, hookworm 23.6 per cent, *T. Trichiura* 14.9 per cent, *Clonorchis sinensis* 9.7 per cent, *G. lamblia* 2.6 per cent, *E. histolytica* 2.6 per cent, and *S. stercoralis* 3.6 per cent.⁴ In that study, one or more parasites were found in 56.4 per cent of the specimens; 14.4 per cent had two or more parasites. In another 1980 report, 165 Meo Laotians were screened by the Illinois Department of Public Health.⁵ A total of 129 (78.2 per cent) were found to be infected. In decreasing order of frequency, hookworm, *G. lamblia*, *T. trichiura*, *Ascaris lumbricoides* and other pathogens were encountered, although positivity rates were not given for each agent.

We report the results of a survey of intestinal parasites among newly arrived SEA immigrants from several nations. Southeast Asians arriving in the state of New Mexico during late 1979 and 1980 were examined for fecal parasites as part of the New Mexico Health and Environment Department's health evaluation program for refugees. National origins represented included: Laotian 57.4 per cent, Vietnamese 36.6 per cent, Thai 4.8 per cent, and Cambodian 1.2 per cent. Most were screened less than two weeks after arrival in the US, and none were known to have been recently treated with anti-helminthic or anti-protozoal chemotherapeutic agents.

Methods

One fecal sample was collected from each patient and preserved in both polyvinyl alcohol fixative (PVA) and 10 per cent neutral formalin. Smears of PVA-fixed feces were stained by a standard trichrome procedure.⁶ Formalin-fixed specimens were concentrated by either the formalin-ether or the formalin-ethyl acetate method.^{7,8} Iodine-stained and

unstained direct wet mounts and concentrates and trichrome-stained slides were examined microscopically.

Results

Our results are summarized in Table 1. Of 776 specimens examined, 557 (71.8 per cent) were positive for one or more intestinal parasites. Twenty different parasites were identified; *C. sinensis* (or *Opisthorchis sp.*), *Ascaris sp.*, *T. trichiura*, and hookworm were most common. Two or more parasites were found in 344 (44.3 per cent) of the specimens, with multiplicity of infection ranging up to eight different organisms. Our results differed from those of previous studies in that we found more types of parasites and they were present in different frequency than in other reports, perhaps due to differences in the number of patients examined and their backgrounds.

Discussion

The term "Southeast Asian" describes a heterogeneous grouping of people composed of many nationalities, ethnicities, and cultural backgrounds, further influenced by massive displacements of entire populations in recent years. Immigrants relocated in the US have been further dispersed to the various states, making it difficult to compare the health data for SEA populations between states or among national or cultural groups within a state. However, because SEA residents of the US are generally being provided health care (including laboratory services) as a group, these parasite data are offered collectively for the benefit of others who may be examining similar patients. We wish to emphasize the diversity of parasites which may be encountered in this type of specimen and the high probability of multiple infections among SEA immigrants.

Intestinal parasitosis is one of several refugee health concerns identified by the Centers for Disease Control.^{9,10} Fortunately, with few exceptions, intestinal parasites documented among SEA refugees in this and other recent studies do not create a public health problem, since risks of transmission are extremely low due to cultural and environmental differences between the countries of refugee origin and the United States.² Exceptions to this generalization include *G. lamblia*, *E. histolytica*, *S. stercoralis*, and *Taenia solium*, for which direct person-to-person spread may occur, especially in certain social (day-care center) or occupational (food handler) settings. In addition, certain parasites represent a health hazard for the infected individual, even if they are currently asymptomatic (*S. stercoralis*, *T. solium*).

Recommendations vary on the need for routine intestinal parasite screening programs for SEA refugees.^{4,5,11} Public health agency involvement in this aspect of SEA refugee health may be justified as a measure beneficial to the individual refugee, to allay community concern regarding importation of exotic diseases, and to identify and control those parasites of potential public health significance. Finally, given the medical community's lack of training or experi-

ence with parasitic diseases, the public health agency may help to ensure accurate laboratory diagnosis, proper medical management, and follow-up necessary for effective intestinal parasite control.^{12,13}

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Trends in the Incidence of Breastfeeding for Hispanics of Mexican Origin and Anglos on the US-Mexico Border

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Abstract: In 1979 the Centers for Disease Control conducted a household probability survey of reproductive aged women living in 51 selected US counties on the US-Mexico border. Information on the incidence of breastfeeding for the period 1971-1979 was analyzed on 345 Anglo women and 689 Hispanic women of Mexican origin. Results indicated that the Anglos are following the national trend of increased breastfeeding, but Hispanics show no indication of an increase in the practice of breastfeeding. (*Am J Public Health* 1982; 72:59-61.)

Introduction

Although researchers have studied the incidence of breastfeeding in the United States,¹⁻⁸ little is known about

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trends in breastfeeding among different ethnic groups. The Hispanic subpopulation in the United States was not identified specifically within the overall White population for most of these studies.¹⁻⁵ Furthermore, even when research allows for identification of the Hispanic subpopulation,⁶⁻⁷ breastfeeding practices are not analyzed separately for the three major Hispanic origin or descent groups—Mexican, Puerto Rican, and Cuban.

Our study examines trends in breastfeeding for Hispanics of Mexican origin or descent, the largest of the Hispanic groups,⁹ and compares their trends to those of White non-Hispanics (Anglos) residing in the same geographic area (the US-Mexico border).*

Methods

Data presented in this paper were collected as a part of a 1979 household sample survey conducted by the Family Planning Evaluation Division (FPED) of the Centers for Disease Control (CDC) to gain information on maternal and child health and family planning for reproductive aged women living in 51 selected counties in the four border states

*A respondent was classified as Hispanic of Mexican origin if she identified herself from an origin or descent card presented by the interviewer as any of the following: Mexican American, Chicano, Mexican, or Mexicano. A respondent was classified as Anglo if she identified herself from an origin or descent card as "White, not Hispanic origin."