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Illnesses of Migrant Farm Workers: A Study of Medical Records from Migrant Health Clinics in Michigan

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The **Julian Samora Research Institute** is committed to the generation, transmission, and application of knowledge to serve the needs of Latino communities in the Midwest. To this end, it has organized a number of publication initiatives to facilitate the timely dissemination of current research and information relevant to Latinos.

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- *Working Papers:* for scholars who want to share their preliminary findings and obtain feedback from others in Latino studies.

- *Statistical Briefs/CIFRAS:* for the Institute's dissemination of "facts and figures" on Latino issues and conditions. Also designed to address policy questions and to highlight important topics.

- *Occasional Papers:* for the dissemination of speeches, papers, and practices of value to the Latino community which are not necessarily based on a research project. Examples include historical accounts of people or events, "oral histories," motivational talks, poetry, speeches, technical reports, and related presentations.

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Table of Contents

SAMORA JULIAN RESEARCH INSTITUTE

The Julian Samora Research Institute is a unit of the College of Social Science and is affiliated with the College of Agriculture and Natural Resources.

Illnesses of Migrant Farm Workers: A Study of Medical Records from Migrant Health Clinics in Michigan

This report presents data from the medical records of patients who were migrant farmworkers or their family members, and who were last seen at migrant clinics in Michigan in the late 1980's. This project analyzed data from 154 patients who were at least five years of age.

Little is known about migrant worker health, particularly in the Midwest. The number of migrant farmworkers estimated in Michigan varies from 20,000 (MCSSA, 1995) to 103,241 (Larson and Plascencia, 1993; cf. Rochín and Siles, 1994; U.S. Dept. of Labor, 2000). Generally, state agencies estimate 45,000 workers and their families come to Michigan yearly (MCSSA, 1995).

In Michigan, migrant farmworkers tend to be invisible in state statistics, agency budgets, and even U.S. Census data. Since the U.S. Census is conducted on April 1, it misses nearly all of Michigan's migrant workers who are still out of the state at that point in the agricultural cycle.

Their low income, poor living conditions, and lack of health insurance would be expected to correlate with poor health among migrant farmworkers (Torres, 1990). On the other hand, they must be in good enough health to carry out heavy physical labor, day after day.

Methods

This project reviewed the medical records of patients who were at least five years of age and were last seen at migrant clinics in Michigan in the late 1980's. To date, 154 medical records have been abstracted. Data abstracting, coding, and entering were carried out by members of a graduate seminar, and their work was overseen by the first three authors. In the spring of 2000, the class and two authors developed the methods of data collection and devoted 636 hours of labor altogether to abstract 154 records. In 2001, Millard and Ladia continued the work of data analysis, with Ladia devoting substantial time to statistical analysis.

The medical records were loaned to the project by Health Delivery, Inc., of Saginaw, Mich., through David Gamez, CEO, and Al Adan, staff member, who collaborated with this project. The records are inactive, and strict confidentiality of the records is being maintained with the approval of the MSU Institutional Review Board (the University Committee on Research Involving Human Subjects).

We collected three types of data from the medical records. First, we gathered sociodemographic data such as date of birth, gender, and marital status. We assessed ethnicity based on the person's name; if the name was in Spanish, we coded the patient as being Latino. This approach is likely to be erroneous in some cases, but we used it for lack of any other consistent source of information. The second type of data was the medical history. This information came almost entirely from the patient, with information from another healthcare provider included in a few rare instances. The third type of data that we collected was information noted in the medical record by healthcare providers during the clinic visit such as symptoms, diagnosis, and any referrals.

We developed data collection forms and used one set of forms for each record to abstract the data. After the information was recorded on data sheets, another research team member checked the sheets to make sure they were correct. The next step was to code the data according to the International Classification of Health Problems in Primary Care (ICHPPC, 1983).

We used this system of categories because it was designed for research in primary care and classifying a health problem when a patient first arrives at a medical facility. Other systems of health problems have been developed since, such as the International Classification of Diseases X; however, they were not appropriate for our project. They were overly detailed and thus unwieldy. Although the amount of detail in some cases would have been useful for our purposes, the volumes also assumed medical knowledge that our research team lacked. The ICHPPC was practical for our project; however, there were some problems in using it. The medical records often lacked the

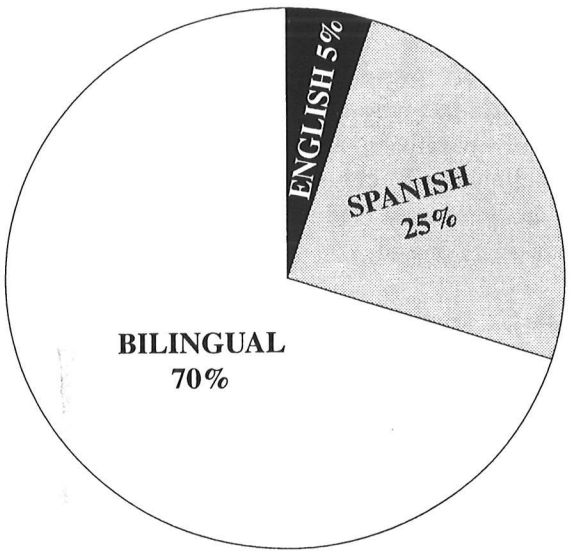
kinds of data required by the classification system. When the physician or nurse had made a diagnosis, we accepted it as though all the points of the rubric had been met. In a few cases, symptoms and signs were reported, but there was no clear diagnosis. We then categorized the problems under the category, "Symptoms, Signs, and Ill-Defined Conditions." If we had followed the rules for using the rubrics strictly, we would have categorized many more illnesses in this last category.

Once the health problems were coded, they were checked by another research team member. The next step was entering data into a Statistical Package for Social Science (SPSS) database and ensuring the data were entered correctly. The final step was the analysis of the data by producing frequency counts for the entire set of patients and according to various sociodemographic characteristics.

Sociodemographic Profile

Sex. The patients are nearly evenly divided by sex, with 56% females.

Figure 1. Languages Spoken by Patients



Languages spoken. Ninety-one records do not bear data on languages spoken by the patients. Of the 63 records with data, 16 (25%) of the patients speak only Spanish, 3 (5%) speak only English, and a great majority of them, 44 (70%) are bilingual (Fig. 1).

Figure 2. Year of Birth of Patients

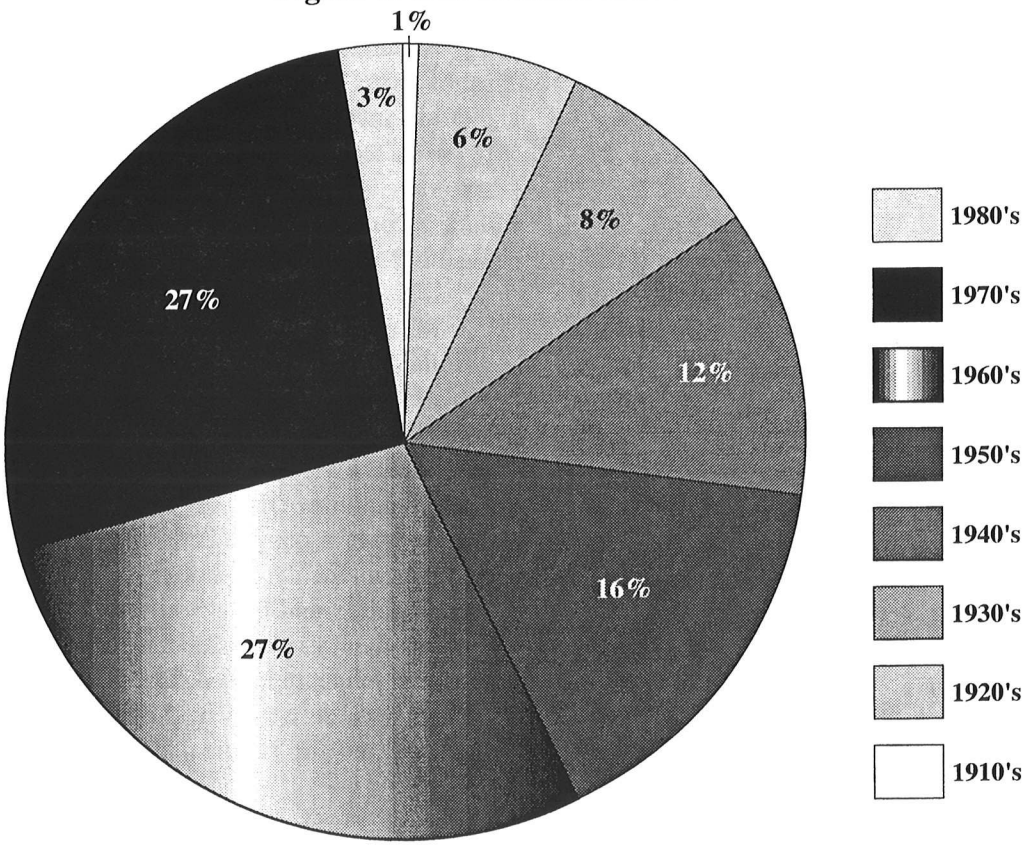


Figure 3. Number of Cigarettes Smoked Per Day

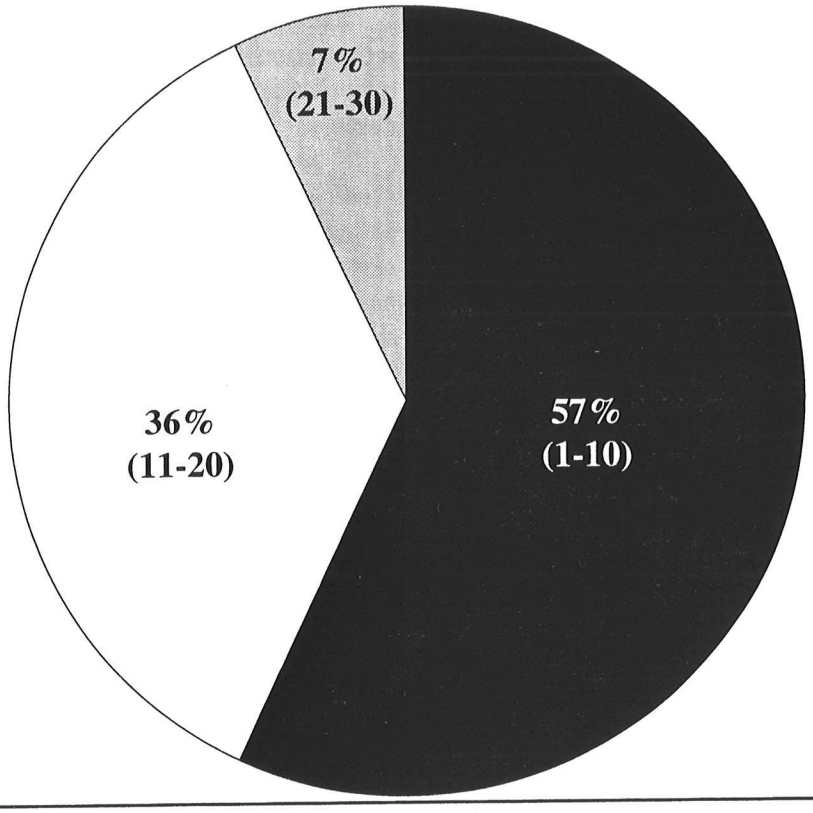
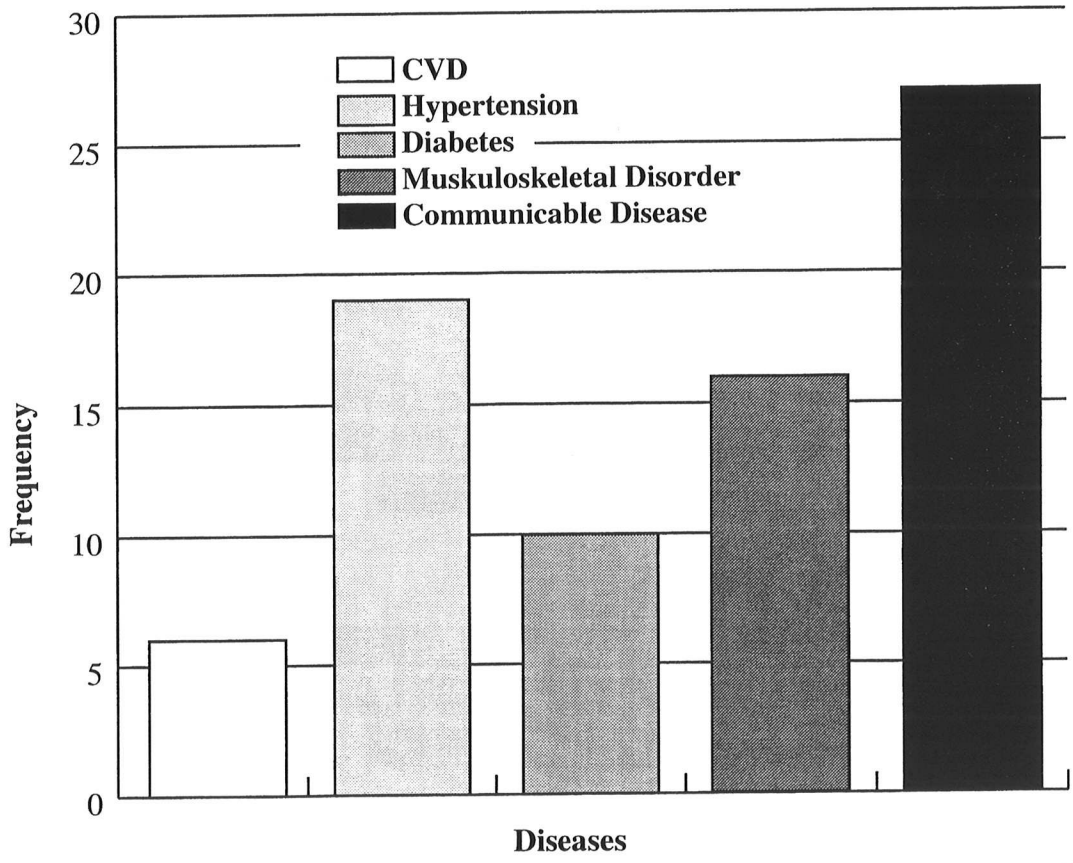


Figure 4. Medical History of Patients



Marital status. Of the 143 clients who have records on marital status, more than half, 79 (55%) are married while 61 (43%) were single. The single clients include the approximately 30% of the records that belong to children. The other patients are widowed or separated.

Date of birth. As shown in Fig. 2, 54% of the patients were born in the 60's and 70's, 16% were born in the 50's, and 12% were born in the 40's.

Smoking

Fig. 3 shows that 57% of the current smokers consume 1-10 cigarettes per day, 36% smoke 11-20 per day, and 7% smoke from 21-30 each day. The mode of cigarettes smoked per day is five.

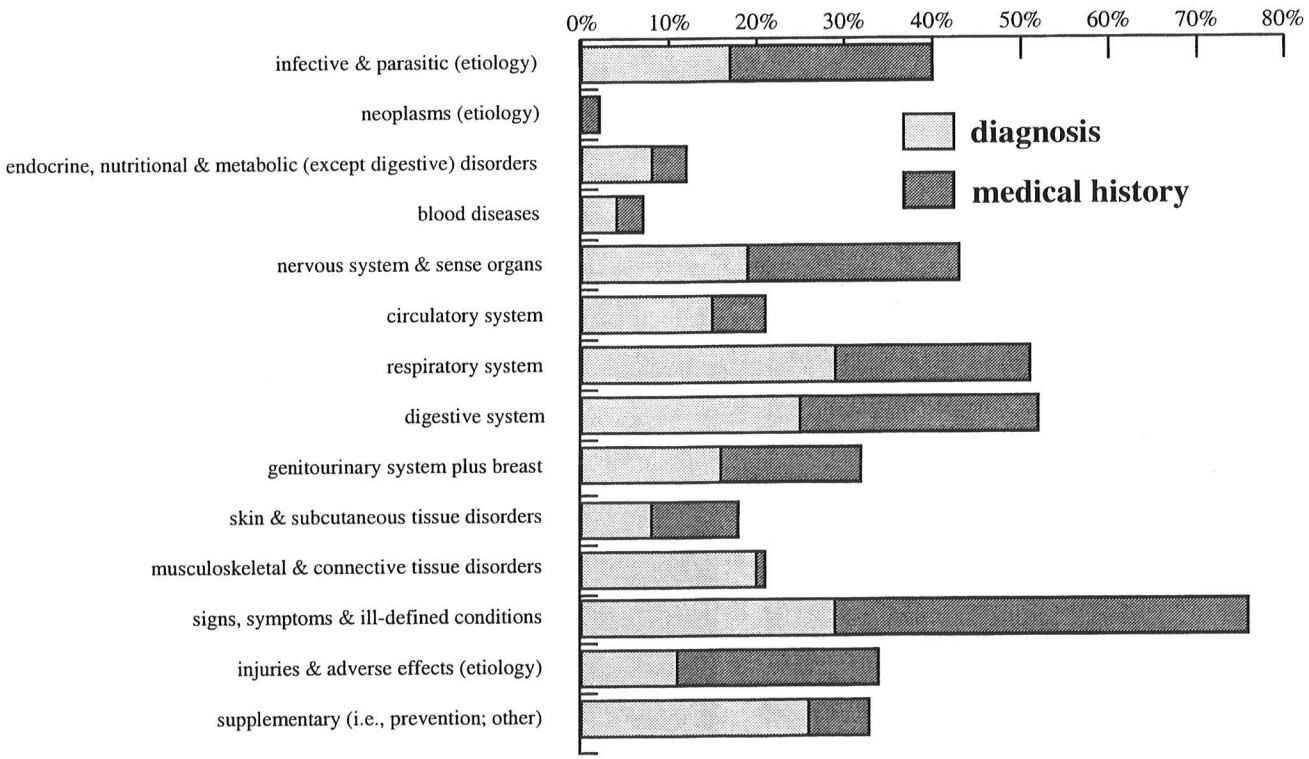
Health Problems

This section provides information about information provided by patients on their medical histories and the diagnoses made at the migrant clinics.

Medical history. As shown in Fig. 4, 27 out of 154 patients had a communicable disease (usually a respiratory infection). Nineteen had hypertension, 16 had a musculoskeletal disorder, 10 had diabetes, and six patients had cardiovascular disease.

Diseases. Together with diseases in the medical history of the patients and the diagnoses of the health personnel in the clinic, 52% of the patients had digestive system diseases and more than 50% also suffered from respiratory system diseases (see Fig. 5). Forty-three percent had nervous system and sense organ diseases while another 40% had infective and parasitic diseases.

Figure 5. Diseases: From Medical History and Diagnosis



Based on diagnosis, Fig. 5 shows that the top three disease categories — aside from signs, symptoms, and ill-defined conditions (29%) and supplemental classification (26%) — are respiratory system diseases (29%), digestive system diseases (25%), musculoskeletal system diseases, and connective tissue arthritis and arthrosis (20%).

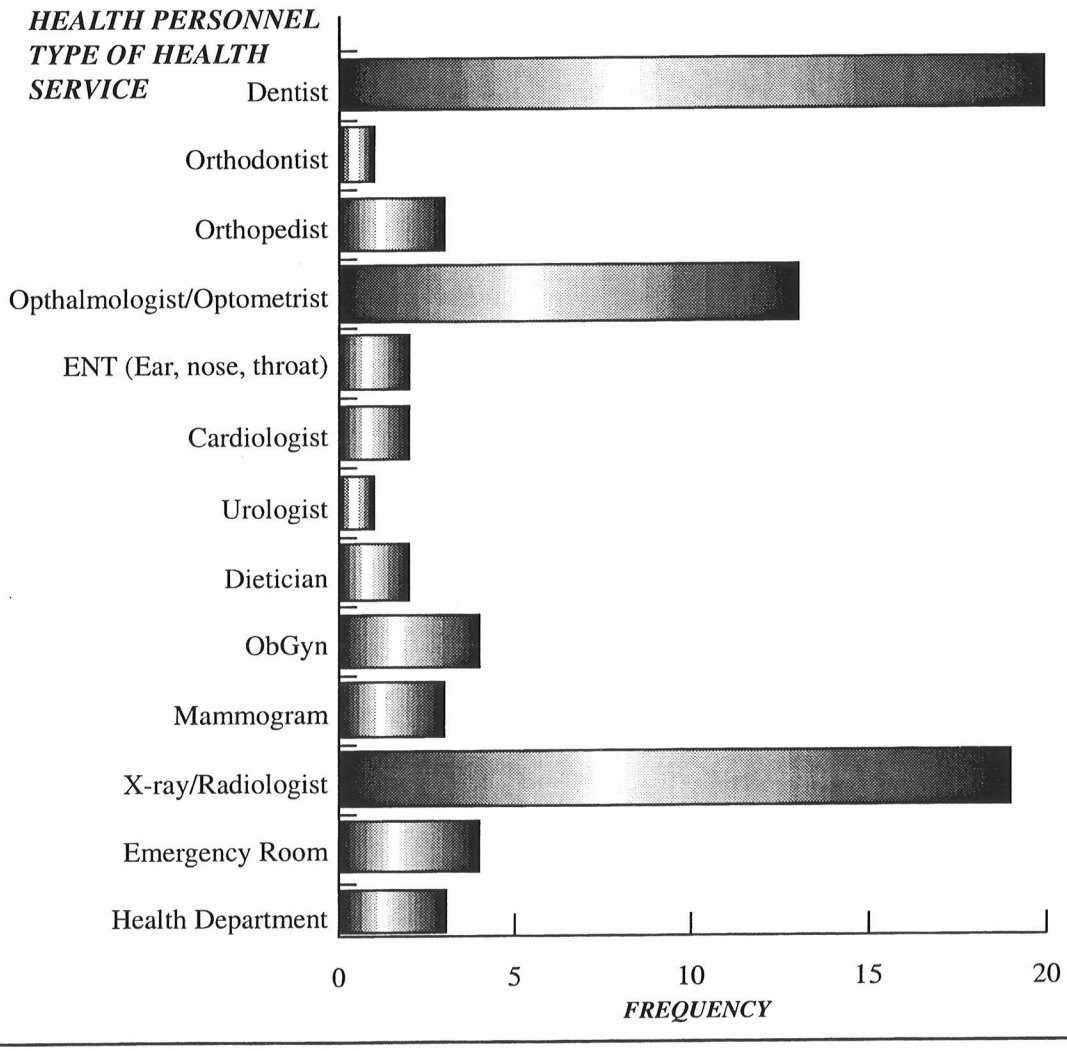
Looking at the medical history of patients, Fig. 5 shows that 27% had digestive diseases. Diseases related to the nervous system were found in the medical history of 24% of the patients while 23% of the patients also had injuries in the past. Another 23% had infective and parasitic diseases while 22% had respiratory system diseases.

It is significant to note that there were no records showing mental disorders. As the clinic offered no mental health services, this finding is not surprising. Also, nobody was diagnosed with neoplasms through clinic services, although 2% reported such diagnoses in their medical histories.

As shown in Fig. 6, 20 out of 77 patients were referred to dentists. Nineteen patients were referred to radiologists while another 13 patients had been referred to opthalmologist-optometrists.

In summary, the three most commonly treated problems at the clinic were: respiratory tract infections (29%), digestive system problems (25%), and musculoskeletal disorders (20%). The main referrals were: dental (26% of referrals), radiological (26%), and vision-related (17%).

Figure 6. Referrals



Notes

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