



MIGRANT FARMWORKER CURRICULUM

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University of South Alabama College of Nursing

Carolyn White, MSN, FNP, PNP, CCRN, Clinical Asst. Professor
e-mail: cwhite@usamail.usouthal.edu
Terri Meadows, RN, BSN, Graduate Assistant

Service Learning is an educational method that combines community based training with service. Migrant farmworkers are a vulnerable population that manifests a number of challenges to the community.

This curriculum is intended to be used as a model for nursing programs to develop community care clinical experiences with ethnic minority patients of *all* ages.

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OVERVIEW

The purpose of the Helene Fuld curriculum migrant farmworker component is to develop cross-cultural assessment abilities in the nursing student and to provide a community based service learning clinical opportunity for practice in an underserved and culturally unique setting.

STAFF CREDENTIALS

Carolyn White, MSN, CRNP, FNP, PNP, CCRN, Clinical Assistant Professor, University of South Alabama, College of Nursing, Mobile, AL. Ms White teaches FNP and PNP students in the graduate program and serves as clinical faculty for undergraduates completing the community rotation. She has over 20 years of clinical nursing experience with 3 years in the academic setting where she teaches in the graduate FNP and PNP tracks and serves as clinical faculty for a portion of the undergraduate

community rotation. Largely responsible for the organization of Clinica del Migrante, Inc., Ms White-s clinical focus is on underserved groups and barriers to access.

Terri Meadows, BSN, graduate student in the FNP track of the MSN program at USA College of Nursing, Mobile, AL is the Helene Fuld project graduate assistant. As the assistant to Ms. White, Ms. Meadows brings numerous years of public health experience to the migrant farmworker clinical site. Her clinical focus has been homeless and other underserved groups.

STUDENT PREREQUISITES

This course is appropriate for senior level baccalaureate students who have successfully completed a basic course in Med/Surg nursing care, or students enrolled in a master's degree program in nursing.

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PHOTO OF CAROLYN WHITE AND TERRI MEADOWS

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Graduate student (FNP, PNP, ANP, WHNP, PT, MS I & II, CNS, PA, Pharm D.):

Objective 1: Identify the presence and needs of migrant farmworkers in the community.

To accomplish this objective a brief lecture is given during orientation, entitled Needs of Migrant Farmworkers. The students also receive a reading list to be used throughout the course.

A sample of the lecturette follows:

NEEDS OF MIGRANT FARMWORKERS

American citizens are blessed with an abundant supply of fresh fruits and vegetables available at grocery stores and fruit stands spread across the nation. Eighty-five percent of the crops in the United States are harvested by hand (nfch.org). A vital component of such labor-intensive farming is the migrant farm worker. It is estimated that 3 to 5 million migrant workers travel across America fulfilling the labor requirements of the farming industry, from planting and cultivating, to harvesting of crops. The bulk of this work force (85%) is Hispanic. Although many migrants work legally, a 97-98 survey sponsored by the federal government revealed 52% of migrant workers lacked work authorization (NAWS, 2000).

The United States Hispanic population is predicted to grow to 18% by 2025. (Quinn, 2000). The Hispanic population is America's new wave of immigrants, mirroring the immigration of Europeans at the turn of the 20th century. Among our nation's 44 million uninsured Americans, one-third are Hispanic, despite active participation in the workforce. The United States is the only country in the world that ties its medical insurance to legal employment (Serafini, 1998). In Hispanic families who are residents, 43% have medical coverage through their own or a family member's employment. The average number of Americans that have health insurance coverage is 64% (Quinn, 2000).

There are two groups of farmworkers often referred to in the literature:

- 1) **Migrant farmworker:** One who migrates from place to place to obtain temporary agricultural employment. (There are an estimated five million migrant farmworkers in the USA. Most are Hispanic.)
- 2) **Seasonal farmworker:** One who is seasonally employed in agriculture within one primary geographical area. These workers become permanent members of the local community. According to Go and Baker (1995), the most common health problems among migrant farmworkers and seasonal farmworkers are:

1. Dental
2. Dermatologic
3. Hypertension
4. Diabetes
5. Gynecologic/Family Planning Needs
6. Occupational/Accidental Injuries (Musculoskeletal and soft tissue, degenerative joint disease)
7. Communicable Disease (TB).

Numerous factors contribute to the health risk profile of the migrant farmworkers. Extreme poverty, language barriers, cultural barriers, limited access to health care, lack of insurance, poor housing and working conditions, group/ crowded living problems, lowered educational levels all contribute to the problem of inadequate healthcare. Migrant workers tend to use health facilities as a last resort and early intervention is generally not sought for conditions such as pregnancies, chronic illnesses and injuries in general. Substance abuse and/or mental health illness often compound the already difficult life of the migrant worker. Health care is seen as a low priority when compared with food, shelter and other basic needs.

Few resources exist today for migrants. Accessing medications, and health related treatments is time consuming but critical to effectively addressing the health needs of the migrant community. Regardless of age, patients from poor socioeconomic backgrounds are pragmatic and fatalistic concerning their health beliefs. Often before seeking care, they are incapacitated by their illness, presenting greater challenges to the provider and to them. Being present oriented, patients tend to participate in high-risk behaviors such as substance use (tobacco, alcohol, and illicit drugs), poor dietary practices leading to obesity and malnutrition, and violent and dangerous activities. Chronic disease is viewed by many migrants as something inevitable, outside of their control and unmanageable. This results in failure to seek medical care early, adhere to preventive practices, and obtain screening and diagnostic tests. Late stage and complicated cases of respiratory disease, HIV, hypertension, diabetes mellitus, arthritis and dermatologic disorders are prevalent.

Although Hispanic families are traditionally matriarchal and close knit, children may not be valued individually but rather collectively. Often daughters are not encouraged to become independent, educated, and autonomous. Domestic violence against women is common. Hispanics generally are very religious and may be superstitious about health and illness. Mal de ojo (evil eye), empacho, and hot and cold theories of illness are strongly believed. It is imperative that culturally sensitive care be given to promote trust. The curandero (healer) is regarded as someone of holy distinction and is respected highly among the Latinos. Western medical models contrast sharply with the home remedies and faith of the Latinos. This is a meek and respectful ethnic group. Hispanics have a great love of family and a strong work ethic. Nursing is seen as an extremely honorable profession among Hispanics and has long been recognized as their chief provider of healthcare.

Note: See annotated bibliography for references.

AREAS OF FOCUS

Objective 2: Perform a cultural assessment.

Student: Work with a translator to perform cultural assessment on a patient in the clinical setting.

Present the history with cultural component to preceptor/instructor.

Research the theories of hot and cold in relationship to Latino health beliefs and discuss in a presentation

Preceptor: Explain template for cultural assessment.

Institute and explain bilingual form for use with cultural assessment

Objective 3: Improve history taking and physical (H & P) examination skills while becoming culturally sensitive to Latino culture.

Student:

1. Utilization of the provided template & bilingual H & P form.
2. Work 1:1 with translator prior to independently performing H & P.
3. Work 1:1 with preceptor prior to independently performing H & P.
4. Review clinic protocols and specific information regarding providing services to underserved populations, specifically migrant workers.
5. Independently perform an H & P and present your findings to the preceptor, complete with differential diagnoses and suggested plan of care.
6. Emphasize methods of care that incorporate the patient's health belief system, address the complex psychosocial issues.
7. FNPs should perform a minimum of 5 autonomous H & Ps (may use translator if not bilingual) of patients of various ages across the life span.
PNPs should perform a minimum of 5 pediatric H & Ps of patients of various stages of childhood and development.
WHNPs should perform a minimum of 5 female H & Ps across the adult lifespan from adolescence to geriatric (2 H & Ps minimum to be prenatal or post partum follow up, all H & Ps should reflect domestic violence history.)
APNs should perform a minimum of 5 adult H & Ps with a focus on chronic illness (specifically diabetes, hypertension, obesity, hyperlipidemia, and other cardiac related disorders and reflect that tuberculosis and HIV screening done.)
8. Follow/case manage the care of your patients throughout the semester rotation and prepare an evaluation of each patient's case at the end of the semester.

9. Submit a detailed synopsis regarding the outcomes of care for each of the 5 patients selected for case management. The synopsis should evaluate the level of compliance attained and discuss possible barriers preventing the plan of care from being followed and/or new considerations for changes in continued plan of care and follow up recommendations.

Preceptor: Oversee, mentor and grade student-s clinical performance.

Objective 4: Research a topic related to vulnerable migrant populations.

Clinical learning options:

Student:

1. Submit a paper in APA format 8-10 pages in length related to one of the following topics;
 - Cultural health ways and health belief systems of Hispanics
 - Reimbursement issues related to migrant health care
 - Barriers to health care related to migrant farmworkers and immigrants (legal and illegal)
 - Health care practice differences in underserved settings
 - Improvements to care that decrease barriers and increase access
 - Disease topics specific to Hispanics or prevalent among them
 - A detailed, informative research style case study.
1. Participate in grant research, writing and compliance by working with staff actively involved in such projects.
3. Participate in public screening, community teaching projects and recruitment activities as available.
4. Plan and implement or participate in ongoing research.

Faculty: Overview the above process and clinically evaluate.

B

Lecturette Outline

I. Statistics and Epidemiology

A. There are approximately 5,000,000 farmworkers and family members in the U.S. today. Their typical median family income is significantly below poverty level at about \$10,500 annually for a family of four. Nearly half of migrant farmworkers

have less than a 9th grade education. While some federally supported migrant health centers do exist, this population remains one of the most vulnerable and underserved groups.

B. Hispanics are the fastest growing minority in the United States. Most (85%) migrant farmworkers (85%) are Hispanic.

C. Delays in seeking health care.

1. Delay seeking care.

2. Increased complexity of disease.

3. Lack of transportation, insurance or income to pay for care (32.9% of Hispanics have no healthcare insurance).

4. Language/cultural barriers.

D. Lack of prenatal care leads to high-risk births and increased infant mortality.

II. Healthcare goals for migrant workers and their families:

The overall healthcare goals of migrant care are to increase availability of care, increase enrollment in services to Women and Children (i.e. WIC), and increased use of prenatal care, dental care, immunizations and family planning. Education related to planned pregnancy, contraceptive use, male involvement in family planning, male education related to condom usage, and pregnancy prevention education to teens is also needed.

III. Maternal Infant and Child Health Needs:

Preconception counseling, prenatal care, counseling regarding alcohol, tobacco, drug use and domestic violence education, breast-feeding education, post partum education and prenatal exercises.

IV. Special Pediatric Needs:

Newborn care education/parental support, breast feeding support and education, immunization education and referral, school attendance, prevention of illness, injury and teen pregnancy, daycare, Head Start, kindergarten referrals, age specific prevention/health promotion education.

V. Desired Outcomes for patients:

A. Reduce preventable hospitalizations (i.e. pediatric asthma, influenza, diabetes, CVA, injuries related to violence in the workplace).

B. Increase PAP, mammogram and annual PE rates.

C. Decrease visits to the local emergency room.

D. Decrease teen pregnancy rates.

E. Provide culturally sensitive care.

F. Make appropriate referrals (M.D., Community rural health centers, Alabama Department of Public Health; WIC, Family planning, immunizations, medically at risk).

VI. Encourage “All-Kids”, CHIPS, and traditional insurance participation if possible.

VII. History of Clinica del Migrante

Clinica del Migrante is an advanced practice nursing healthcare center, which was established to meet health prevention and primary care needs of migrant workers and their families. The clinic is donation-based and volunteer supported. It began

in June of 1997 when a local citizen approached Carolyn White, RN, MSN, FNP, about attending a migrant camp. There she observed first-hand the plight of migrants in south Alabama. What she saw was a population aggregate living in third world conditions in one of the most affluent counties in the state. With encouragement from the volunteers and Pastor Lou of San Pedro, the clinic volunteers decided to change the name of the outreach from **La Casa Del Pueblo de Dios** which means **Home of the People of God** to **Clinica del Migrante** which means **clinic of the migrant**. The purpose of the name change was to expand the appeal to migrants of all ethnicity and cultures.

White explains, **As a nurse practitioner, I was primarily concerned with the health care needs of underserved groups, the majority of which do not carry insurance and comprise a large proportion of the working poor.** Originally working in a Sunday school room in San Pedro United Methodist Church, Summerdale (a Hispanic Ministries sponsored church) on alternating Sundays, she opened a **make-shift** clinic. In 1998, clinic space was provided by the Rockwell Memorial Health Center in Robertsdale, Alabama, site of the main county health department.

Later, Ms. White was joined by other University of South Alabama faculty from various disciplines representing Medicine and Allied Health. Subscribing to the belief that community based education is at its finest when delivered via a service learning style, students from many USA colleges and various disciplines have participated in education.

Graduate and/or undergraduate nursing students will spend approximately 6 weeks in the community rotation. Students often elect to continue their rotation throughout the semester. An individualized educational plan should be developed by student and faculty.

X

CURRICULUM COMPONENT OBJECTIVES

At the completion of the clinical rotation, the student should be able to;

Undergraduate:

Objective 1: Perform a cultural assessment.

Preceptor: Explain template for cultural assessment.
Institute its use with role-play cultural assessment.

Student: Work with translator to perform an assessment on a patient in clinic.
Discuss experience in post conference.

Objective 2: Plan and develop a community project for an underserved population, the migrant workers in Baldwin County.

(Week 1)

Student: Choose a group leader.
Research needs of select group (i.e. migrant workers, teen mothers, children, diabetics, etc.).
Suggested resources/activities: Internet search, interviews with health care providers at clinic and local leaders (church, school, employers), review of literature.
Compile list of employers.
Develop a planning checklist.
Visit employers to coordinate plans

Preceptor: Facilitate process above.

(Week 2)

Student: Set date for screening and/or teaching project.
Notify employers and coordinate space and equipment.
Post flyers and posters in local area restaurants, Wal-Mart, convenience stores, schools, churches and clinic.

Preceptor: Confirm plans with employers. Review plan details.

(Weeks 3 & 4)

Student: Perform screening and/or teaching project.
Collect data.

Preceptor: Observe screening. Supervise confidentiality of data collection. Monitor safety concerns.

(Week 5)

Student: Group evaluation results of screening and/or teaching project.

Make referrals to clinic and/or other health providers and agencies.

Group evaluation of project.

Student paper(s).

Preceptor: Supervise the clinical evaluation of screening results and referrals.

Evaluate project and student paper.

Objective 3: Create a webliography about migrant farmworkers and their specific health care needs.

Student: Submit web sites in class.

Compile new information sites and submit to CON Webmaster and Migrant Clinic staff.

Preceptor: Evaluate information to be disseminated.



CLINICAL EVALUATION/GRADING

Grades are based upon the successful completion of the behavioral objectives as specific to the graduate or undergraduate rotation, preceptor evaluation, and patient satisfaction questionnaire.



SAFETY GUIDELINES

1. Do not give patients your home phone number. In case of emergency, the patient should call the referral agency, their doctor, or 911.

2. Do not take your purse with you on visits. Lock it in the trunk of your car before leaving for the clinic.
 3. Do not wear gold chains or jewelry except your watch while at the clinic.
 4. Keep the interior of your car free of personal belongings. Lock them in your trunk.
 5. As you approach your destination, carefully observe your surrounding, e.g., not location and activity of people, types & location of cars, condition of buildings (abandoned or heavily congested).
 6. Park in well-lighted and heavily traveled areas. Walk in the middle of the sidewalk. Avoid alleyways & obstructed areas with heavy shrubs.
 7. Before getting out of the car, once again, thoroughly check the surroundings. If you feel uneasy, do not get out of your car. Return to or call from a safe location.
 8. Be alert at ALL times. Remember that your safety in the community is dependent on your GOOD judgment & remaining alert. This is true whether you are in a department store, hospital parking lot, or at the clinic.
 9. Never transport patients in your vehicle.
 10. Always present your college picture ID to your patients on your first visit so that they can be assured that you are the student they were expecting.
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DRESS CODE

1. NO JEANS OF ANY KIND OR COLOR.
2. Clothes should be pressed.
3. Wear your LAB COATS AND NAME TAGS!
4. You should be well groomed, that is, clean-shaven, no heavy makeup, etc.

5. Dress professionally as if you were interviewing or applying for an important job or loan. Keep accessories to a minimum.
6. REMEMBER you need to project yourself as a knowledgeable, competent, and respectable authority in health care that can handle the job at hand. You want them to know they can trust you with their life or their loved one's life.
7. NO OPEN-TOED SHOES OF ANY KIND.

CONSENTS

1. As needed, have the patient sign the CLINIC CONSENT form and the AUTHORIZATION FOR PHOTOGRAPH form and return to the Graduate Assistant when you sign the list for your supervised clinic schedule.
2. You should also sign AUTHORIZATION for PHOTOGRAPH forms and return them at the same time as the above forms. Photo consent is not required for care.
3. The College of Nursing may take photographs during clinic activities for university use.

The students are provided with opportunities to improve their assessment, goal selection, and documentation skills by completing the following activities.

DOCUMENTATION

1. Weekly visits are to be documented and turned in each week.
2. Keep in mind as you work on these, that they will be part of the patient's chart.
3. You need to log all of your activities and hours on your MIGRANT CLINIC logs. These can be turned in on the due date for ALL paperwork.

CULTURAL ASSESSMENT FORM

1. What is your country of origin, country of birth?
What is our race or ethnicity?
Were you born in the U.S.? How long have you been in this country?

2. Linguistic and Literacy: What is your primary (native) language?
Do you speak other languages?
What language is spoken in the home?
3. Where do you live?

Are the conditions satisfactory? Running water, electricity, telephone, air conditioning, heat, smoke detectors, fenced yard, urban or rural, etc.?
4. Would you say you are present day or future minded? For example, do you have a retirement plan? If you were injured today, who would take care of your family, you?
5. What is your religion? Explain your belief in a higher power?
6. Describe traditions of your culture (country), family, personal.
7. What are your favorite foods? What is a typical daily diet?
8. Are there any forbidden foods in your diet?
9. Describe your beliefs about health, wellness and your role in acquiring good health for you and your family?
10. What is your educational background?
11. Describe the power/role structure of your family?
12. What does preventive health care mean to you?
13. What is your background with health providers, doctors, nurses, cuanderos, shamans, healers, etc.?
14. What do you believe is the best way to attain good health?

Thank you for giving me this information. It will help me to understand how to best serve you.

GENERAL INFORMATION & DEADLINES

1. During the week of ORIENTATION, you should have AT LEAST visited the clinic to become familiar with the surroundings and location of supplies.

2. Paperwork should be placed in 8 2 x 11 envelopes with your name on the outside. All work should be hard copy - no e-mail or disks. If more than one copy is required, it is the student's responsibility to make ALL copies.
3. Failure to meet deadlines will result in loss of points toward your final grade.
4. Try to determine patients' general needs to work on during your visits. Suggestions are teaching and referrals. Other needs may include diet, medication, coping, pregnancy or disease prevention. **THESE WILL BE YOUR REASONS FOR CLINIC WORK - TRY TO MAKE A DIFFERENCE IN THEIR LIVES.**
5. Chart each visit in notes and turn in weekly. ALL NOTES ARE DUE IN BY THE DATE GIVEN.
6. Fill out your time logs every time you do any work for your patient. Please turn these in by the deadline date for paperwork. PLEASE CONTACT THE GRADUATE ASSISTANT OR INSTRUCTOR FOR ANY PROBLEMS, QUESTIONS, OR CONCERNS!

A comprehensive list of local resources and phone numbers are provided to each of the students in the packets given to them during orientation. The following list includes some on-line references and resources that have been found to be useful.

RESOURCES FOR MIGRANT FARMWORKERS

1. MEDICATIONS:

1. [Http://www.med-manager.com/](http://www.med-manager.com/)

Takes the worry out of managing multiple prescriptions.

II TRANSPORTATION:

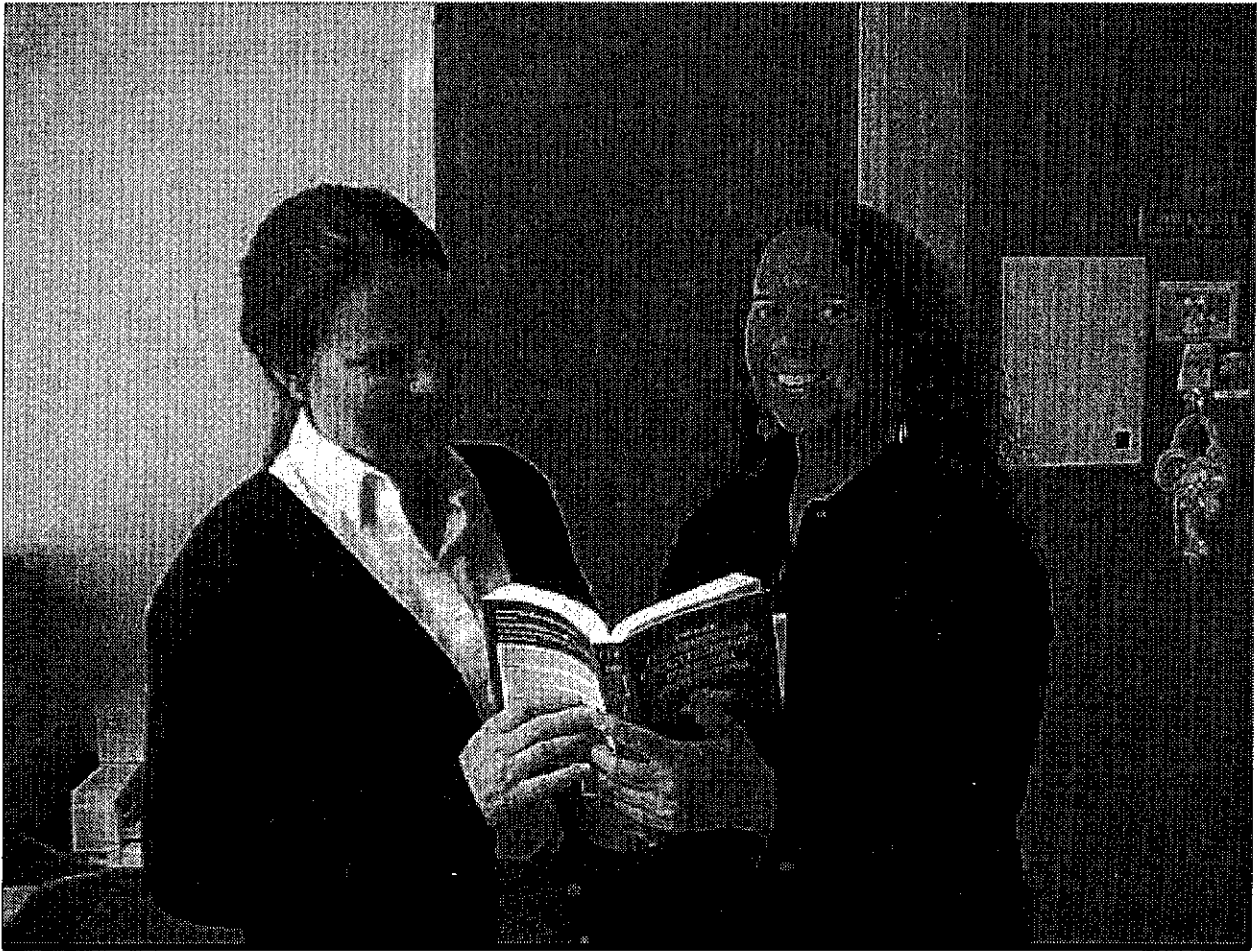
II RESOURCES AND SERVICES

EVALUATION OF STUDENTS

The student's achievements of goals are determined by the accurate completion of their written assignments, as well as through supervised clinic activities. Students are presented with rewards based on achievement and recommendations of faculty for efforts that were beyond the level required. This is done to encourage continued excellence in care and learning.

C C C

Carolyn White RN, MSN, FNP and Terri Meadows RN (Graduate Assistant) review a Spanish Medical Dictionary donated through the Helene Fuld Trustee Project Funding.



ANNOTATED BIBLIOGRAPHY

Bechtel, G. A. (1998). "Parasitic infections among migrant farm families." *J Community Health Nurse* 15(1): 1-7.

The prevalence of parasitic infestation is an indicator of the health, social, and economic conditions within a community. A retrospective study of 422 migrant farmworkers and their families found a prevalence of parasitic infestation of 11.4%. The most significant predictors of infestation were mother's years of schooling (a low level of education was associated with infestation) and the prevalence of other parasitic infections within the family. No significant differences were found between infected and non-infected individuals in country of origin, time residing in the United States, father's years of schooling, sex, or age.

Bechtel, G. A., M. A. Shepherd, et al. (1995). "Family, culture, and health practices among migrant farmworkers." *J Community Health Nurse* 12(1): 15-22.

Migrant farmworkers and their families have restricted access to health and human services because of their frequent relocation between states, language and cultural barriers, and limited economic and political resources. Living and working in substandard environments, these families are at greater risk for developing chronic and communicable disease. In an assessment of health patterns among 225 migrant workers and their families, using personal observations, unstructured interviews, and individual and state health records, children's immunizations were found to be current, but dental caries and head lice were epidemic. Among adults, almost one third tested positive for tuberculosis exposure. Urinary tract infections were the most common health problem among women. Primary and secondary prevention were almost nonexistent because funds for these services were not readily available. The patriarchal system contributes to these problems by limiting access to family-health and social service needs. Although providing comprehensive health care to migrant communities presents unique challenges, nurses can demonstrate their effectiveness in reducing morbidity through strategic interventions and alternative uses of health delivery systems.

Bletzer, K. V. (1995). "Use of ethnography in the evaluation and targeting of HIV/AIDS education among Latino farm workers." *AIDS Educ Prev* 7(2): 178-91.

Ethnography can be utilized to assess the impact of HIV/AIDS education simultaneous with the implementation of program activities. An ethnographic analysis based on field methods adapted in a Michigan program that targets migrant farmworkers highlights responses to showings of a bilingual AIDS education video; the things to which migrants attend while they are interacting with the educator and each other in HIV education presentations; the tactics they employ to direct discussion when talking about HIV/AIDS, and the manner in which they use language to "distance" themselves from the topic of HIV infection and AIDS. Migrants in Michigan experience the same risks to health as farmworkers in other states; their pay is low, their hours are long, and the time they spend in the state is seasonal (summer). They engage in risk behavior while in the state (primarily consensual/contracted sex). Some migrants through use of drugs may come closer to exposure to the HIV virus outside the state than when they are working as migrants in Michigan.

Bollini, P. and H. Siem (1995). "No real progress towards equity: health of migrants and ethnic

minorities on the eve of the year 2000." *Soc Sci Med* 41(6): 819-28.

The paper reviews the available evidence on access to health care and two health outcomes, perinatal mortality and accident/disability, for migrant and ethnic minorities in selected receiving industrialized countries. The health of these communities is analyzed using the entitlement approach, which considers health as the product of both the individual's private endowments and the social environment he or she faces. Migrants, especially first and second generations, and ethnic minorities often have reduced entitlements in receiving societies. Not only are they exposed to poor working and living conditions, which are per se determinants of poor health, but they also have reduced access to health care for a number of political, administrative and cultural reasons which are not necessarily present for the native population. The paper argues that the higher rates of perinatal mortality and accidents/disability observed in many migrant groups compared to the native population are linked to their lower entitlements in the receiving societies. Policies aimed at reducing such health gaps need to be accompanied by a more general effort to reduce inequalities and to promote full participation of these groups in the mainstream of society.

Boughton, B. (1998). "Models that work." *Healthc Forum J* 41(4): 50-2.

Brockerhoff, M. (1994). "The impact of rural-urban migration on child survival." *Health Transit Rev* 4(2): 127-49.

Large rural-urban child mortality differentials in many developing countries suggest that rural families can improve their children's survival chances by leaving the countryside and settling in towns and cities. This study uses data from Demographic and Health Surveys in 17 countries to assess the impact of maternal rural-urban migration on the survival chances of children under age two in the late 1970s and 1980s. Results show that, before migration, children of migrant women had similar or slightly higher mortality risks than children of women who remained in the village. In the two-year period surrounding their mother's migration, their chances of dying increased sharply as a result of accompanying their mothers or being left behind, to levels well above those of rural and urban non-migrant children. Children born after migrants had settled in the urban area, however, gradually experienced much better survival chances than children of rural non-migrants, as well as lower mortality risks than migrants' children born in rural areas before migration. The study concludes that many disadvantaged urban children would probably have been much worse off had their mothers remained in the village, and that millions of children's lives may have been saved in the 1980s as a result of mothers moving to urban areas.

Brockerhoff, M. (1995). "Child survival in big cities: the disadvantages of migrants." *Soc Sci Med* 40(10): 1371-83.

Data from 15 Demographic and Health Surveys are used to examine whether rural-urban migrants in developing countries experience higher child mortality after settling in towns and cities than do lifelong urban residents, and if so, what individual or household characteristics account for this. Findings indicate that children of female migrants from the countryside generally have much poorer survival chances than other urban children. This survival disadvantage is more

pronounced in big cities than in smaller urban areas, among migrants who have lived in the city for many years than among recent migrants, and in urban Latin America than in urban North Africa and sub-Saharan Africa. Within big cities, higher child mortality among migrant women is clearly related to their concentration in low-quality housing, and in part to fertility patterns at early ages of children and mother's educational attainment at later ages. Excess child mortality among urban migrants may also result from factors associated with the migration process, that are outlined in this study but not included in the analysis. Evidence of moderately high levels of residential segregation of migrant women in big cities suggests that opportunities exist for urban health programs to direct interventions to this disadvantaged segment of city populations.

Castiglia, P. T. (1997). "Health needs of migrant children." *J Pediatr Health Care* 11(6): 280-2.
de Leon Siantz, M. L. (1994). "The Mexican-American migrant farmworker family. Mental health issues." *Nurs Clin North Am* 29(1): 65-72.

This article introduced the Hispanic population of the United States. Three major subgroups were identified: Mexican-American, Cuban, and Puerto Rican. While the relative size and geographic location of each group was identified, the Mexican-American population was considered in greater detail and included the sociopolitical history and culture. The Mexican-American or Chicano migrant farmworker family was next introduced. Their lifestyle, problems, strengths, and needs were discussed. The importance of social support among the mothers was emphasized. Cultural characteristics that influence family life were considered, including religion, familism, male dominance, machismo, the role of the female and children. Culturally sensitive assessment should include evaluation of health, education, income, degree of acculturation, level of participation in traditional culture, length of time in the United States, ethnic identity access to social support, and risk for depression. The need for cultural sensitivity during this process was emphasized, especially the establishment of linguistic abilities and preferences. Finally, successful intervention strategies were introduced. These included nonjudgmental communication and the ability to convey confidence, respect, and genuine affection for the family.

Eshleman, M. J. and R. Davidhizar (1997). "Life in migrant camps for children-a hazard to health." *J Cult Divers* 4(1): 13-7.

Migrant workers are a national resource as they plant, maintain, harvest, and process America's food. However, migrant workers and their children encounter many health hazards in the course of providing this service to the nation. This article describes life among migrants, and the health hazards to which they are constantly exposed.

Ford, N. J. and S. Kittisuksathit (1996). "Sexual hazards for migrant workers." *World Health Forum* 17(3): 283-5.

In Thailand the incidence of HIV/AIDS, other sexually transmitted diseases, and unwanted pregnancies highlights the vulnerability of young people who have moved from rural to urban areas as migrant workers. Possible ways of diminishing the risks are discussed below.

Frost, J. J. (1996). "Family planning clinic services in the United States, 1994 [published erratum appears in *Fam Plann Perspect* 1996 Jul-Aug;28(4):173]." *Fam Plann Perspect* 28(3): 92-100.

In 1994, almost 6.6 million women received contraceptive services from more than 7,000 subsidized family planning clinics; these providers were located in 85% of U.S. counties. Health department clinics and Planned Parenthood sites served the largest proportions of these women (32% and 30%, respectively), followed by hospital outpatient sites (16%), independent clinics (13%) and community or migrant health centers (9%). The mix of agency types varied considerably by region and state, and the average annual number of contraceptive clients served per clinic also varied from fewer than 500 at community and migrant health centers to more than 2,000 at Planned Parenthood clinics. Nearly two-thirds of all women served (4.2 million) obtained care at one of the 4,200 clinics receiving funds from the federal Title X family planning program. Health department sites were the most likely to receive Title X funding (78%), followed by independent clinics and Planned Parenthood sites (66% each), hospital clinics (28%) and community and migrant health centers (18%). Overall, clinics receiving Title X funds serve an average of 25% more contraceptive clients than do clinics not receiving such funds.

Garcia, J. G., K. S. Matheny Dresser, et al. (1996). "Respiratory health of Hispanic migrant farm workers in Indiana." *Am J Ind Med* 29(1): 23-32.

The prevalence of respiratory disease in a Midwest Hispanic (mostly Mexican) migrant farm worker population was investigated. Chronic respiratory symptoms (cough, wheezing, sputum production) in adult workers (n = 354) were elevated (8.5%, 6.2%, 6.5%, respectively) and were accompanied by physiologic abnormalities as determined by pulmonary function testing. Over 15% of the adult cohort exhibited a FEV1/FVC or = 10 mm) in 55/195 men and 35/123 women for a total prevalence of 28.3%. No case of active tuberculosis (TB) was identified by either chest X-ray (CXR) or sputum cultures (in selected cases). In contrast to adult farm workers, who were predominantly born in Mexico (70%), only 36% of adolescent workers (age 11-18 years, n = 107) were born in Mexico with only 7.5% exhibiting TST positivity. Airflow obstruction of large airways (5.8%) and small airways (12.9%) were also less common in adolescents than adults. In summary, these studies document respiratory dysfunction in Hispanic migrant farm workers in Indiana and highlight the need to closely monitor the respiratory health of this high-risk population.

Go, V. and T. Baker (1995). "Health problems of Maryland's migrant farm laborers." *Md Med J* 44(8): 605-8.

The health problems of Maryland's agricultural migrant labor force are presented for the information of Maryland's health care providers. Maryland's problems are placed in the context of U.S. and worldwide migrant labor practices.

Goicoechea-Balbona, A. (1998). "Children with HIV/AIDS and their families: a successful social work intervention based on the culturally specific health care model." *Health Soc Work* 23(1): 619.

Health care utilization and community support are of utmost importance in minimizing the sociomedical problems of people with HIV/AIDS. This article describes a health clinic in Belle Glade, Florida, that effectively uses the Culturally Specific Health Care Model defined by the author in a previous article. The current article explains the process used to assess the immediate needs of children with HIV/AIDS and their families. It also explores some of the personal and social determinants that prevented the families from pursuing medical treatment at a community migrant health center after pediatricians had diagnosed the children as having HIV/AIDS.

Gwyther, M. E. and M. Jenkins (1998). "Migrant farmworker children: health status, barriers to care, and nursing innovations in health care delivery." *J Pediatr Health Care* 12(2): 60-6.

Migrant farmworkers are one of the most health care-impooverished populations in the United States. Mobility, hazardous occupations, cultural diversity, and low socioeconomic status place migrants, and particularly migrant children, at high risk for inadequate health care and preventable health problems. This article presents a synthesis of the existing research on migrant demographics, major health risks, and geographic, financial, and cultural barriers to health care access. Innovative nursing strategies to enhance access and improve the health of migrant children are explored. These include the use of lay community outreach workers, the creation of alternative health care delivery models, and the development of information tracking systems.

Hennink, M., P. Cooper, et al. (1999). "Safer sex at holiday centres: providing contraceptive services to seasonal workers." *Br J Fam Plann* 25(2): 45-54.

Many seasonal workers experience an increase in sexual activity whilst employed at a holiday centre. Evidence of sexual risk-taking while at a holiday centre has important social and health implications for purchasers and providers of sexual health services in areas which experience an annual influx of seasonal workers. This research investigates the contraceptive behaviour of seasonal workers and focuses on their access to contraception and sexual health services. In-depth interviews were conducted with seasonal workers at holiday centres along the south coast of England. Respondents were interviewed at the beginning of the season and again, five months later at the end of the season. This longitudinal methodology enabled changes in contraceptive behaviour to be identified as well as the strategies for seeking contraception and sexual health services throughout the season. The results of this study show that there are a range of different motivations which influence seasonal worker' use of contraception and sexual risk-taking while at a holiday centre. Categories of contraceptive protection are developed to assist purchasers and providers to identify the variety of sexual health needs of workers at holiday centres and determine the most effective strategies for delivering contraceptive and sexual health services to these workers. The paper describes the motivations which influence contraceptive use

and sexual risk-taking amongst seasonal workers, identifies the contraceptive and sexual health needs of these workers, and discusses the difficulties workers experienced in meeting these needs while at a holiday centre.

Hogan, P. (1995). "Community care. Temporary address, permanent care." *Nurs Stand* 9(33): 20-2.

Howarth, A., D. Braddock, et al. (1995). "Using Medicaid fee-for-service data to develop community health center policy." *Manag Care Q* 3(3): 91-8.

This article presents an analysis of fee-for-service Medicaid data for King County, Washington. This analysis was conducted using Department of Social and Health Services billing records for patients of the community health centers of Seattle-King County (14 primary care sites), the Seattle-King County Department of Public Health (9 primary care sites), and Harborview Medical Center (a large tertiary facility with a primary care outpatient clinic associated with the University of Washington) from January through June, 1992. The complete billing records of all patients who utilized any one of the 24 sites were made available. These records were used to review utilization patterns and patient costs. The implications for community health centers regarding Medicaid managed care, health care reform, and population-based management are discussed.

Kupersmidt, J. B. and S. L. Martin (1997). "Mental health problems of children of migrant and seasonal farm workers: a pilot study." *J Am Acad Child Adolesc Psychiatry* 36(2): 224-32.

OBJECTIVE: Children of migrant and seasonal farm workers constitute important populations for study because they chronically experience extreme poverty and parental unemployment. Also, migrant children are exposed to chronic residential and school mobility. **METHOD:** Mothers and children were interviewed using the Diagnostic Interview Schedule for Children Version 2.1. **RESULTS:** The results indicated that 66% of the children had one or more psychiatric diagnoses based on mother or child reports, with anxiety disorders being the most prevalent diagnosis. **CONCLUSIONS:** These findings suggest the need for a larger, epidemiological study of the psychiatric morbidity of rural children of farm workers.

Lambert, M. I. (1995). "Migrant and seasonal farm worker women." *J Obstet Gynecol Neonatal Nurs* 24(3): 265-8.

Migrant and seasonal farm worker women are part of a population whose health care needs are underserved. This article provides some definition of this population and reviews some of the health needs specific to them. The significant need for outreach to and assessment of this population is addressed. The significance of the nurse's role is addressed. The need for health care services being delivered in a culturally sensitive manner is discussed. Resources to assist health care providers in providing more effective interventions and referrals for care of migrant and seasonal farm worker women are identified.

Larson, K., J. McGuire, et al. (1992). "Maternal care coordination for migrant farmworker

women: program structure and evaluation of effects on use of prenatal care and birth outcome." *J Rural Health* 8(2): 128-33.

Nearly three fourths of the migrant farmworkers in the U.S. are Hispanic. Cultural and social barriers, along with constant travel, make coordination of care a significant concern for migrant health centers providing perinatal services to female farmworkers. As part of a demonstration project, a migrant-specific maternal care coordination program was developed that used bilingual staff, outreach services, lay health advisers, and a multistate tracking system. Following the initiation of the project, first-trimester entry into prenatal care and number of prenatal visits increased over a five-year period among the target population. Successful tracking methods provided outcome data on more than 80 percent of participants during the project period. The results of this study suggest that migrant health centers should focus on employing public health-oriented bilingual or bicultural health professionals and that an outreach strategy must be an integral part of a health care delivery system serving migrant farmworkers. Without these key ingredients, health care services will not be accessible or acceptable for this hard-to-reach population. Collaboration among the National Migrant Resource Program, the Migrant Clinicians Network, and the National Perinatal Association can facilitate development of a nationwide perinatal service system for female migrant farmworkers.

Mabey, D. and P. Mayaud (1997). "Sexually transmitted diseases in mobile populations." *Genitourin Med* 73(1): 18-22.

Marier, A. E. (1996). "A health education program for migrant children." *Am J Public Health* 86(4): 590-1.

Martin, S. L., T. E. Gordon, et al. (1995). "Survey of exposure to violence among the children of migrant and seasonal farm workers." *Public Health Rep* 110(3): 268-76.

Numerous children of migrant and seasonal farm workers live in rural areas of our country. The lifestyles and living conditions of farm workers place the children of these families at high risk for many health problems. However, few studies have focused on the emotional and behavioral well-being of these children. This study extends past research by examining the emotional and behavioral health of the children of farm workers in relation to a potentially risky environmental exposure, namely, exposure to violence. In this descriptive study, the extent of violence exposure, including being a witness to and a victim of violence, is examined among 8-11-year-old children of migrant and seasonal farm workers. Potential relationships between sociodemographic factors and violence exposure are examined, and associations between violence exposure and children's emotional and behavioral problems, and weapon carrying behavior are investigated. The results show that more than half of the study children had been exposed to violence, with 46 percent having witnessed violence among others and 19 percent having been the direct victims of violence. There was a fair degree of overlap between having witnessed violence and having been a victim of violence; 13 percent of all study children both witnessed and had been victims of violence, 33 percent only had witnessed violence, and 6 percent only had been victims of violence. Violence exposure was positively related to children's

emotional problems, behavioral problems, and weapon carrying behavior.(ABSTRACT TRUNCATED AT 250 WORDS)

Martin, S. L., J. B. Kupersmidt, et al. (1996). "Children of farm laborers: utilization of services for mental health problems." *Community Ment Health J* 32(4): 327-40.

Utilization of various types of services for children's mental health problems was examined among 112 agricultural farm worker families. Pairs of mothers and children (aged 8 to 11) were interviewed using the Diagnostic Interview Schedule for Children and the Child and Adolescent Services Assessment. Sixty-four percent of the children met criterion for one or more psychiatric diagnoses. Children with a psychiatric diagnosis were five times more likely to see a health professional for a mental health problem compared to children without a psychiatric diagnosis. However, less than half of the children with a psychiatric diagnosis saw a health professional for their mental health problems. Families also consulted with school professionals, religious leaders, and non-professionals (such as friends) concerning their children's mental health, but families of children who had a psychiatric diagnosis were not significantly more likely to report these types of consultations than were families of children who did not have a psychiatric diagnosis. These findings are discussed in terms of recommendations for improving the mental health service delivery system for rural children.

McCurdy, S. A., D. S. Arretz, et al. (1997). "Tuberculin reactivity among California Hispanic migrant farm workers." *Am J Ind Med* 32(6): 600-5.

We conducted a cross-sectional study of tuberculin reactivity among residents of two northern California migrant-farm-worker housing centers. Participants completed a brief health questionnaire and were offered tuberculin skin testing with radiologic and medical follow-up. Four hundred and sixty-nine persons (estimated participation rate: 70%) completed questionnaires. All but one were Hispanic. Two hundred and ninety-six (63%) participants completed tuberculin skin testing and 49 (16.6%) showed reactivity ($>$ or $=$ 10 mm induration at 48-72 hours). Increased prevalence was seen for the 15-39-year age group (vs. persons younger than 15: OR 2.59; 95% CI 0.79-8.47), former smokers (vs. never smokers: OR 3.11; 95% CI 1.20-8.09), and persons born outside the U.S. (OR 2.09; 95% CI 0.66-6.61). Prophylaxis with isoniazid was recommended for 23 persons; nine (39%) completed therapy. No cases of active tuberculosis were found. Prevalence of tuberculin reactivity in this population is lower than reported among Hispanic farm workers in the eastern and midwestern U.S. Higher prevalence may obtain among California farm workers not included in the study population, including homeless, single, and highly mobile persons. Public-health efforts in this population should focus on ever-smokers, young adults, and persons born outside the U.S.

McNally, N. J., D. R. Phillips, et al. (1998). "The problem of atopic eczema: aetiological clues from the environment and lifestyles." *Soc Sci Med* 46(6): 729-41.

Atopic eczema is the most common inflammatory skin disease in children, affecting around 10% of children in the developed world. It can be a distressing condition, influencing children's well-being, personal and educational development, and family life, and it has huge economic implications for health services and individual budgets. Like other atopic diseases such as asthma and hay fever, the prevalence of atopic eczema has increased substantially over the last 30 years, for reasons largely unknown. Although a genetic predisposition to the disease has been implicated, evidence from a range of sources suggests that environmental factors play a crucial role in the disease expression. This paper reviews the epidemiology of atopic eczema, with particular attention to potential environmental aetiological factors and draws evidence from studies in the UK and internationally. First, atopic eczema has been found to vary socially and to be more prevalent in the UK among social class I and II families than among other socio-economic groups. Second, it has been suggested that cross infection from other siblings in large families may have a protective role in atopic disease expression. Third, it has been proposed that an increased risk of atopic eczema may result from decreases in helminthic infestation. Fourth, studies of migrant groups have shown large increases in disease prevalence compared with migrants' country of origin, suggesting clues as to the importance of socio-economic and environmental changes such as those associated with industrialization. Finally, a distinct and consistent geographical pattern of eczema has been observed in the UK which cannot be explained by social class distribution. The various types of study have attempted to identify reasons for differences in prevalence but, to date, no definitive causation has been identified. In some cases, specific risk factors have been suggested and include house dust mites, dietary allergens and irritants. It is argued here that the aetiology is unlikely to be simple or uni-causal and that an understanding of the relationships between the disease and behaviour, lifestyle, home and external environmental factors is crucial. This paper reports the preliminary stages of an interdisciplinary research project involving dermatologists, epidemiologists and health geographers, and calls for investigation into associations between atopic eczema and possible environmental and lifestyle factors. These include behavioural factors, microenvironment factors and macro environments. Nunez-Rocha, G. M., M. Bullen-Navarro, et al. (1998). "[Malnutrition in pre-school infants in migrant families]."

Salud Publica Mex 40(3): 248-55.

OBJECTIVE: To compare malnutrition rates between migrant and non-migrant children. **MATERIAL AND METHODS:** One-hundred and sixty children 1-6 years old were selected at random from schools located in highly marginated areas. Excluded were infants with congenital malformations or under nutritional intervention. Migration was defined as any geographical movement during the last 6 years. Malnutrition was assessed through the weight/height and height/age indicators, as recommended by the World Health Organization. **RESULTS:** Fifty-nine percent of the infants belonged to families whose father had a non-qualified occupation, 27.5% of them did not finish elementary school. Fifty-three referred migration; malnutrition rate was 51.3% among migrant infants and 28.8%, among non-migrant infants (OR = 2.6, CI 95% = 1.2, 5.2, p = 0.006). Migrant children registered a mean Z score of -2.4 +/- .40 and non-migrant children, -2.3 +/- .33, based on the indicator height for age. **CONCLUSIONS:** Chronic malnutrition among migrant infants justifies a nutritional intervention, they constitute a specific group at risk.

Migration should be considered for health planning.

Nurko, C., L. Aponte-Merced, et al. (1998). "Dental caries prevalence and dental health care of Mexican-American workers' children." *ASDC J Dent Child* 65(1): 65-72.

The purpose of this study was to determine the prevalence of dental caries and the use of dental services in a pediatric population of Mexican-American migrant workers. The results were compared with the Mexican-American child population from the Hispanic Health and Nutrition Examination Survey (HHANES). One hundred thirty three-to- sixteen-year-old children participated in the study. The children who were born in Mexico and those who spoke Spanish had seen the dentist less often and had a higher incidence of decayed teeth than those who were born in the US and than those who spoke English (p 0.05). This study demonstrated a general lack of dental health knowledge, a disproportionate prevalence of decayed teeth and unmet dental need in the Mexican-American migrant workers' children.

O'Brien, M. E. (1983). "Reaching the migrant worker." *Am J Nurs* 83(6): 895-7.

Perilla, J. L., A. H. Wilson, et al. (1998). "Listening to migrant voices: focus groups on health issues in south Georgia." *J Community Health Nurs* 15(4): 251-63.

This qualitative study utilized focus groups to invite Latino migrant farm workers to express ideas about their health and service needs. Four focus groups composed of Latino men and women were conducted on four different evenings in the same county. Three themes emerged: health care issues, living and working conditions, and social and community issues. Specific needs of the community were also identified by the participants. For the first time, migrant farm workers in Georgia had the opportunity to lend their own voice regarding their concerns and ideas about health and social conditions. The findings from this study are congruent with other studies and provide the basis for developing interventions to enhance the health of migrant farm workers. In addition, the findings have implications for community health nursing and the proposed Vision of 2010: Healthy People in Healthy Communities, whose goals include increased years of healthy life and the elimination of health disparities.

Pillow, J. J., P. J. Forrest, et al. (1995). "Vitamin D deficiency in infants and young children born to migrant parents." *J Paediatr Child Health* 31(3): 180-4.

OBJECTIVE: To determine the current modes of presentation for the development of nutritional vitamin D deficiency in Melbourne children. **METHODOLOGY:** A retrospective descriptive review was undertaken of the case records of children less than 5 years of age discharged from three Melbourne hospitals with a diagnosis of vitamin D deficiency or hypocalcaemia from January 1992 to January 1994.

RESULTS: The study identified 13 infants and young children whose hospital admission was related to nutritional vitamin D deficiency. Significant morbidity and a broad spectrum of biochemical and clinical features were noted at presentation. All children had migrant parents and

were either exclusively or predominantly breast fed. Ten infants (77%) were less than 1 year at presentation. Associated deficiencies of iron and B12 were present in five cases. Of the five mothers tested, serum 25-hydroxy vitamin D3 was low in four. **CONCLUSIONS:** Nutritional vitamin D deficiency is a continuing health problem in infants and young children born to migrant parents living in Melbourne. Paediatricians, obstetricians and general practitioners, particularly those managing women and infants from migrant communities, should be aware of this condition. Vitamin D supplementation to high-risk women during pregnancy and to their infants should be considered.

Rangel, M. C., R. M. Sales, et al. (1999). "Rubella outbreaks among Hispanics in North Carolina: lessons learned from a field investigation." *Ethn Dis* 9(2): 230-6.

OBJECTIVE: To describe the epidemiology and the lessons learned from two simultaneous, but unrelated, outbreaks of rubella in North Carolina affecting mostly Hispanic immigrants of Mexican origin.

METHODS: A case and contact investigation was conducted at industrial work sites and Hispanic communities between March 26 and June 15, 1996, using both structured and informal interviews. Active surveillance was conducted at hospitals, clinical laboratories, primary care physicians' offices, local health departments, and migrant health centers to identify additional cases. Rubella specific IgM testing was performed by the North Carolina State Laboratory to confirm cases. Vaccination clinics were conducted in communities and at work sites with a large Hispanic population in affected counties to reduce the number of susceptible persons. **RESULTS:** Eighty-three confirmed cases of rubella were reported: 75 cases from the first outbreak and 8 from the second. The mean age of cases from both outbreaks was 24 and 20 years, respectively. Only three cases occurred among children under five years of age, two in the first outbreak and one in the second. Seventy-one (95%) cases in the first outbreak and all 8 cases in the second outbreak were Hispanics; 21 (28%) cases from the first and 3 (37%) from the second outbreak were females, and a total of 65 (78%) cases from both outbreaks were industrial workers. Six women with confirmed cases in the first outbreak were pregnant at the time of exposure. No females cases were pregnant in the second outbreak.

CONCLUSIONS: The outbreaks in North Carolina confirmed the persistent susceptibility to rubella in Hispanics and persons migrating from countries where the rubella vaccine is not used for routine childhood vaccination. The ultimate goal of rubella vaccination programs is to prevent fetal infection and congenital rubella syndrome (CRS). Thus, to eliminate rubella from the United States, efforts should focus on understanding new emerging patterns of disease transmission and vaccinating susceptible adults in settings where they congregate.

Rodriguez, R. (1993). "Violence in transience: nursing care of battered migrant women." *AWHONNS Clin Issues Perinat Womens Health Nurs* 4(3): 437-40.

Nurses working with migrant farm worker women face serious challenges. Poverty, language, and cultural differences between farm worker women and health care providers present substantial barriers to women obtaining access to the health care system. These differences are especially important in instances of domestic violence. The transient life style of migrant farm workers, combined with geographic and social isolation, make it especially difficult for health care

providers to meet the needs of migrant battered women. Strategies for working with migrant battered women are offered.

Sandhaus, S. (1998). "Migrant health: a harvest of poverty." *Am J Nurs* 98(9): 52-4.

Schaffer, S. J., M. S. Kincaid, et al. (1996). "Lead poisoning risk determination in a rural setting." *Pediatrics* 97(1): 84-90.

OBJECTIVES. To determine the prevalence of elevated blood lead levels among children living in a rural area and to determine the effectiveness of the Centers for Disease Control and Prevention (CDC) Lead Risk Assessment Questionnaire and additional questionnaire items in correctly identifying rural children having elevated blood lead levels. **RESEARCH DESIGN.** Comparison of results of a questionnaire that is intended to identify children as being at low or high risk for lead poisoning with children's blood lead levels. **SETTING.** The three practice sites of the only pediatric group in a rural county of upstate New York. **PATIENTS.** A consecutive sample of 705 children ages 6 to 72 months who were seen for health supervision visits between June and September 1993. **RESULTS.** Sixty-nine percent of the children were considered to be at high risk for lead poisoning by the CDC questionnaire. Overall, 8.4% of the children in the study had blood lead levels of 10 micrograms/dL (0.48 mmol/L) or higher, and 2.1% had blood lead levels of 15 micrograms/dL (0.72 mmol/L) or higher. No significant difference was noted between the percentages of high- and low-risk children who had elevated blood lead levels. To devise a more effective lead risk assessment tool for children in this setting, the two items from the CDC questionnaire and the two additional items that had the greatest predictive utility were combined to form a short alternative questionnaire. The alternative questionnaire thus consisted of items concerning whether the child has a sibling or playmate with lead poisoning, whether the child lives near an industry that potentially may release lead, whether the child lives in rented or owner-occupied housing, and whether the child has a parent who is a migrant farm worker. Children categorized as high risk with the alternative questionnaire were much more likely to have elevated blood lead levels than those who were categorized as low risk. The alternative questionnaire was very effective in correctly identifying children with elevated blood lead levels. Eighty-eight percent of children having blood lead levels of 10 micrograms/dL or higher and 100% of children having blood lead levels of 15 micrograms/dL or higher were classified as high risk by the questionnaire. Children classified as low risk were very unlikely to have elevated blood lead levels; 98% of low-risk children had blood lead levels of less than 10 micrograms/dL, and 100% had blood lead levels of less than 15 micrograms/dL. **CONCLUSIONS.** These results suggest that the CDC lead risk assessment questionnaire is of limited benefit in identifying rural children with blood lead levels 10 micrograms/dL or higher or 15 micrograms/dL or higher. An alternative questionnaire, however, seems to have marked clinical utility for identifying rural children with elevated blood lead levels.

Slesinger, D. P. (1992). "Health status and needs of migrant farm workers in the United States: a literature review." *J Rural Health* 8(3): 227-34.

Migrant farmworkers lead a hard life filled with strenuous work, stress, and anxiety about

employment; live under substandard conditions; and rarely get the health care they require. Preventive care is a luxury they cannot afford. Year-round nutritious meals are rarely possible, due to long working hours, traveling, and living in housing without adequate cooking and refrigeration facilities. Children may attend up to six or more schools during the course of a school year. Crowded housing conditions support the invasion of parasites, infectious diseases, and viral infections. Dermatological conditions from working around a wide variety of plants, dirt, and in the sun are frequent. Exposure to pesticides, herbicides, and other chemical additives creates the likelihood of acute reactions, such as headaches and rashes, and also puts workers at risk of developing chronic diseases as the level of exposure rises because of accumulation and mix of various chemicals. Yet, we know little about the health status of this population. We are unable to estimate crude death rates, age-specific death rates, or prevalence rates of most common causes of death, such as heart disease, cancer and stroke. There is no information about occupational accident rates, infectious disease rates, or even postneonatal mortality. We do know that when migrants go to a clinic, they are often likely to have the chronic conditions of hypertension or diabetes. They present symptoms of acute conditions such as dental problems, dermatitis, otitis media among children, and acute upper respiratory infections. Women frequently need obstetrical care, reflected (ABSTRACT TRUNCATED AT 250 WORDS)

Slesinger, D. P. and C. Ofstead (1996). "Using a voucher system to extend health services to migrant farmworkers." *Public Health Rep* 111(1): 57-62.

FAMILY HEALTH/LA CLINICA de los Campesinos, Inc., is a federally funded migrant health clinic in the heart of Wisconsin's farmland that has offered outpatient health care since 1973 and an accompanying "voucher" program since 1988. The charges for outpatient care are based on the ability to pay. The clinic issues vouchers not only to migrant workers living and working in remote parts of the State but also to patients needing services the clinic does not offer. Between 1 April 1992 and 30 March 1993, 677 participants submitted 1,794 vouchers that provided for \$83,833 in partial health care payments. La Clinica paid a median amount of \$22 for each voucher, its reimbursement value ranging from \$1 to \$979. Hospitals received the highest median payment and pharmacies the lowest. Voucher payments generally covered 60% of the bill, but dentists commanded a higher percentage (70%) and clinics and medical groups a lower one (42%). Most vouchers paid for procedures and services La Clinica could not provide. This program shows how a health care provider in one location, with a patient population scattered throughout a sizeable geographic area, can coordinate services not offered at its facility. With the national spotlight on health care reform, the concept of vouchers for people in outlying or underserved regions deserves further investigation.

Sultanov, G. V., T. V. Tsarueva, et al. (1998). "[Cytomegalovirus infection in newborn and children of nursing age]." *Zh Mikrobiol Epidemiol Immunobiol*(3): 13-5.

The work presents the results of the study on the detection of cytomegalovirus (CMV) infection in newborns and sucklings, suspected to be of intrauterine origin. 72 infants were examined with the use of immunological and microscopic techniques. In complex clinico-immunological examinations the markers of CMV infection were detected in 48 (66.6%) of sick

infants and in 68 (94.4%) of mothers. The analysis of the results of these examinations revealed that the contamination of infants in rural areas was almost twice as high as that of urban infant population. Socio-economic, ecological, ecological and ethnic conditions prevailing on the territory of the Republic of Dagestan contribute to the contamination of women of reproductive age with CMV, thus creating the danger of the intrauterine infection of the fetus, as well as the infection of newborns and sucklings born of women with CMV infection.

Sundquist, J. (1994). "Refugees, labour migrants and psychological distress. A population-based study of 338 Latin-American refugees, 161 south European and 396 Finnish labour migrants, and 996 Swedish age-, sex- and education- matched controls." *Soc Psychiatry Psychiatr Epidemiol* 29(1): 20-4.

This paper shows the strength and influence of ethnicity on mental health in comparison with material factors and lifestyle, which are well-known risk factors for psychological distress. The focus was on health differences between Latin-American refugees and labour migrants from Finland and the south of Europe. The study was designed as a population-based cross-sectional study, with 338 Latin-American refugees aged 16-74 years (response rate = 81.8%) in Lund, a random sample of 396 Finnish and 161 South European labour migrants, and 996 age-, sex- and education-matched Swedish controls from the Swedish Annual Level-of-living Surveys. The data were analysed unmatched with logistic regression in main effect models. The strongest independent risk indicator for self-reported psychological distress was being a non-European refugee, i.e. a Latin-American refugee, with an estimated odds ratio of 4.39 (2.49-7.31). There was a non-significant association in logistic regression between South European labour migrants and psychological distress, but a crude odds ratio of 2.29 (1.09-4.81). There was no association between Finnish labour migrants and psychological distress. Not feeling secure in daily life was a strong risk indicator for psychological distress, with an estimated odds ratio of 3.29 (1.90-5.45).

Sundquist, J. (1995). "Living conditions and health. A population-based study of labour migrants and Latin American refugees in Sweden and those who were repatriated." *Scand J Prim Health Care* 13(2): 128-34.

OBJECTIVE--To examine whether there are differences in living conditions and self-rated health between South European labour migrants and Latin American refugees and those who were repatriated to Latin America. **DESIGN**--Analysis of data from a survey (face-to-face interviews) in 1991 of 338 Latin American refugees and 60 repatriated refugees. A random sample of 161 South European and 396 Finnish labour migrants from the Swedish Annual Level-of-Living Surveys 1980-1981 and 1988-89 was analysed. A random sample of 1,159 age-, sex- and education- matched Swedes served as controls. **SETTING**--Lund, a medium-sized town in southern Sweden, Santiago and Montevideo, capitals of Chile and Uruguay, respectively, and Sweden. **RESULTS**--Labour migrants and refugees in particular lived in rented flats while Swedes lived in privately-owned one-family homes. All immigrants and in particular repatriated Latin Americans had low material standard and meagre economic resources compared with Swedes. Being a Latin American refugee, a South European or Finnish labour migrant were independent risk indicators of self-rated poor health in logistic regression (multivariate analyses). Not feeling

secure in everyday life and poor leisure opportunities were independent risk factors for poor health with an estimated odds ratio of 3.13(2.09-4.45) and 1.57(1.22-2.00), respectively.

CONCLUSIONS--This study shows a clear ethnic segregation in housing and other living conditions between Swedes and immigrants, where Latin American refugees and repatriated Latin Americans were most vulnerable. All immigrants had increased self-rated poor health compared with Swedes. Being an immigrant was a risk factor for poor health of equal importance to more traditional risk factors such as lifestyle factors.

Swaim, R. C., E. R. Oetting, et al. (1996). "Cigarette use among migrant and nonmigrant Mexican American youth: a socialization latent-variable model." *Health Psychol* 15(4): 269-81.

A self-report survey of cigarette use among 10th- and 12th-grade Mexican American students found no differences in rates of use by migrant status. Male students reported higher levels of lifetime, experimental, and daily smoking than female students, and 12th-grade students reported higher levels of daily smoking than 10th-grade students. A socialization model of cigarette use based on peer cluster theory was evaluated using structural equation methods, examining the effects of family strength, family tobacco use, school adjustment, religious identification, and peer tobacco associations. The basic latent-structure socialization model was supported in all groups, but final models including specific effects identified both unique and common relationships by gender and migrant status. Common patterns across groups suggest that completely different prevention programs may not be necessary for these youth. However, program elements based on subtle group differences may serve to tailor prevention efforts and make them more effective.

Uniken Venema, H. P., H. F. Garretsen, et al. (1995). "Health of migrants and migrant health policy, The Netherlands as an example." *Soc Sci Med* 41(6): 809-18.

In The Netherlands, as in many other countries, many studies have addressed the health situation of migrant groups. After a discussion on methodological pitfalls in migrant studies, the article reviews the most important results. The data show that there are differences in the health status and mortality patterns between migrant groups and the indigenous population. Most, but not all, of the differences are in disfavour of ethnic groups. Possible determinants of these differences are evident in socio/cultural, genetic and socio-economic factors. A model is presented that demonstrates the relation between these factors and health and disease. Implications for research and for health policy are discussed.

Villarejo, D. and S. L. Baron (1999). "The occupational health status of hired farm workers." *Occup Med* 14(3): 613-35.

The U.S. hired farm work force presently is two-thirds foreign-born: mostly young Mexican men with low educational attainment who neither read nor write English. Sixty percent earn so little that they and their families live in poverty. Four of ten migrate to find work, 33% are not authorized to work in the U.S., and 25% work for a labor market intermediary, usually a labor contractor. Few hired farm workers have health insurance of any kind and, despite low incomes,

relatively few seek or receive government benefits. Government regulation of the workplace exempts agricultural employers from numerous provisions that apply to other industries; for example, agriculture is exempt from portions of the Fair Labor Standards Act, allowing children as young as age 12 to work in the fields, and employers with 10 or fewer employees are exempt from OSHA regulation. Only 12 states require farm employers to carry workers' compensation insurance. While hired farm workers face significant safety and health risks, there are major gaps in existing research covering this occupational group. An ad hoc task force convened by NIOSH developed a prioritized agenda for occupational safety research in this population: musculoskeletal disorders, pesticide-related conditions, traumatic injuries, respiratory conditions, dermatitis, infectious diseases, cancer, eye conditions, and mental health.

Waldman, H. B. (1994). "Invisible children: the children of migrant farm workers." *ASDC J Dent Child* 61(3): 218-21.

Warrick, L. H., A. H. Wood, et al. (1992). "Evaluation of a peer health worker prenatal outreach and education program for Hispanic farmworker families." *J Community Health* 17(1): 13-26.

This article contains the findings from an evaluation of a prenatal education program to Hispanic migrant farmworker families using peer health workers. The focus of the evaluation was on establishing the validity of the intervention model in the target population. Data are presented on the program setting, characteristics of the clients served, and effects of the educational program on the clients and peer health workers. The evaluation identified factors that established confidence in the program model: (1) there were existing barriers to health care and health information; (2) the program served a culturally specific and disadvantaged population; (3) the prenatal curriculum was culturally sensitive; (4) the peer workers were accepted by the target community; and (5) the model did not threaten the medical community. The directions for future research are presented.

Webb, E. (1998). "Children and the inverse care law." *Bmj* 316(7144): 1588-91.

Westermeyer, J. (1990). "Working with an interpreter in psychiatric assessment and treatment." *J Nerv Ment Dis* 178(12): 745-9.

Cross-cultural assessment and care frequently involve cross-language communication via a translator, interpreter, or bilingual worker. A resurgence of immigration, legalization of former illegal migrants, and refugee flight to the United States has increased the need for such special means of communication. Psychiatrists and other mental health professionals should develop conceptual models, skills, and experience for conducting cross-language interviews. This article provides information, terminology, and models for one aspect of this special clinical task, i.e., working with translators.

Woolfolk, M. P., H. D. Sgan-Cohen, et al. (1985). "Self-reported health behavior and dental

knowledge of a migrant worker population.” *Community Dent Oral Epidemiol* 13(3): 140-2.

In conjunction with operation of a summer school-based dental program in Michigan, 101 children from migrant families, primarily Mexican- American, completed questionnaires relating demographic background, past dental experience, and knowledge of caries preventive methods. A smaller number of available mothers were asked these questions plus others relating to family dental problems, diet and knowledge of periodontal disease. Adults and children reported similar demographic backgrounds. Most children (68.7%) listed brushing as the best way to prevent cavities as did 60% of the mothers. Less than 2% of the children considered use of fluoride in any form as the best way to prevent cavities and only two of 20 mothers mentioned fluoride in this context. Members of this selected population were weak in their knowledge of the relation between a sweet diet and caries, the relation between oral hygiene and periodontal health, and the role of fluorides in caries prevention.