The Clinical Nurse Specialist in the School Setting: Case Management of Migrant Children with Dental Disease

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Dental disease is a major health problem for all school-age children in the nation; for migrant children the problem is most severe. This paper presents strategies for the clinical nurse specialist (CNS) in the school setting in case management of migrant children with dental disease. The barriers migrant families face in obtaining health care are addressed. Leininger's transcultural care theory serves as a conceptual framework. Examples of how the CNS functions in the roles of clinician, educator, consultant, and researcher are given. The federally funded Migrant Education Program is described, along with a model dental program developed by a CNS. Suggestions for documenting the effectiveness of the CNS's role in cost containment and in influencing positive outcome measures of school-age children are presented.

Key Words: case management, dental disease, migrant children

Total wellness includes good oral health. The condition and functioning of the tissues and structures of the mouth affect a person's general physical appearance, ability to speak and chew, and relations with others. Oral disease creates pain, suffering, financial burden, and loss of days from school or work.

Dental disease is the major health problem of all school-age children in the nation (California State Department of Education, 1984); for children of migrant farmworkers, the problem is even more severe (Call, Entwistle, & Swanson, 1987; Colorado State Migrant Education program, 1988; Di Angelis, Katz, Jensen, Pintado, & Johnson, 1981; Good, 1990; Graham, 1986; Ismail & Szpunar, 1990; Michael & Salend, 1985; Policy Analysis for California Education, (PACE), 1989). Poor nutrition and sanitation contribute to an increased prevalence of oral disease in migrant families, who seldom have insurance or money to obtain costly dental care. Roughly one-third of the nation's migrant children live in the state of California. This paper focuses on dental disease in California's migrant population, although the nature of the problem remains consistent across the nation.

For the purpose of this paper, the term "migrant" refers to people who have come to the United States from Mexico to seek work in agriculturally related fields. They are a highly insular and ethnically conscious group, which makes it difficult to serve them (Byerly, 1980). With minority students now the majority in many of California's public schools, clinical nurse specialists (CNSs) serving as school nurses are challenged to provide culturally sensitive care to children of diverse ethnic backgrounds.

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CLINICAL NURSE SPECIALIST

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MIGRANT HEALTH

Migrant children are among the most vulnerable in America's classrooms. They live in a world of poverty, mobility, and cultural alienation, where low expectations become self-filling prophecies (Harrington, 1987). The negative consequences of poverty and a mobile lifestyle are demonstrated in the poor health status of the migrant population (Wilk, 1986).

They are disadvantaged in access to high-quality health services that could prevent, diagnose, and treat their health problems. Poverty, fear of deportation, discrimination, language difficulties, and lack of insurance coverage have been identified as access barriers to the health care system (Marin, Marin, & Padilla, 1982). Because of frequent moves to seek employment, health care for migrant families is often fragmented at best.

Migrant children, like other poor and minority chil-

dren, are at high risk of developing dental problems. Statistics from California's Dental Disease Prevention Program show that the incidence of dental caries is highly concentrated: 25% of the children in California suffer 80% of the tooth decay (PACE, 1989). For example, Mexican-American children between 6 and 17 years of age have more than twice the mean number of untreated decayed teeth than the average for all children living in California (PACE, 1989).

Although good physical, mental, and social well-being is recognized as a necessary prerequisite for students to achieve their greatest potential in healthful living (California State Department of Education, 1984), numerous barriers restrict migrant children from obtaining health services that could improve their chances for academic success.

Dental disease can negatively impact learning potential and academic performance because of its resulting pain. Children who are in pain are often absent from school; if they are present, their attention is usually distracted. The CNS is in a strong position to improve the health status and educational experience of migrant children through case management of their dental disease.

Prevention is the preferred "treatment" for any disorder in children, including dental disease. With education, adequate nutrition, and dental hygiene (brushing, use of fluoride, and sealants), its incidence can almost totally be eliminated. Unfortunately, the lack of dentists willing to accept DentiCal (California's version of Medicaid's dental insurance) compounds the problems of securing preventive or curative treatment. The main reason dentists are unwilling to see DentiCal patients is low reimbursement for treatment. For many dentists, the reimbursement rates provided by the cost-conscious state health insurance bureaucracy do not even cover their overhead costs (PACE, 1989). Without insurance benefits, many migrant children are left without care and continue to suffer the pain and irreversible progression of dental disease.

THE MIGRANT EDUCATION PROGRAM

Obtaining valid health statistics on migrant children is not always easy. Describing the magnitude of their problems in epidemiologic terms is difficult because of two factors: (a) defining who they are, and (b) counting them. Subsequently, the difficulty of quantifying their health status with any precision is compounded. The CNS is fortunate because there is a large, readily available sample of children in the school setting on which to conduct research. Identifying which children are "migrant" is the first step in the research process.

The Migrant Education Program was established in 1964 as part of the Federal Elementary and Secondary Education Act (Public Law 95–561) to provide supplemental instructional and health and welfare services for migrant students across the nation. The Migrant Education Program can provide the CNS with lists of the names of children enrolled in its program. This valuable resource can help the CNS plan health programs for migrant children. These lists facilitate identification of a sample, from which descriptive and comparative studies can be generated.

CONCEPTUAL FRAMEWORK

Leininger's transcultural care theory (1978) serves as a useful model for the CNS working with migrant children. According to Leininger, (1978), "transcultural nurse specialists. . . . will be tomorrow's leaders in national and international teaching, research, and service programs" (p. 28). Her description of the transcultural nurse specialist is analogous with the that of the CNS. Leininger's theory is comprehensive and holistic as it addresses social structure, world view, values, environment, language, and folk-professional systems. The theory focuses on the concept of cultural congruent care, and its goal is to provide meaningful, satisfying, quality care to clients of diverse cultures (Leininger, 1988).

Leininger views people as caring beings whose lifeways are largely determined by cultural values, beliefs, and practices. Her transcultural care model provides the CNS with a framework for understanding cultural care. Her sunrise model, presented in Figure 1, illus-

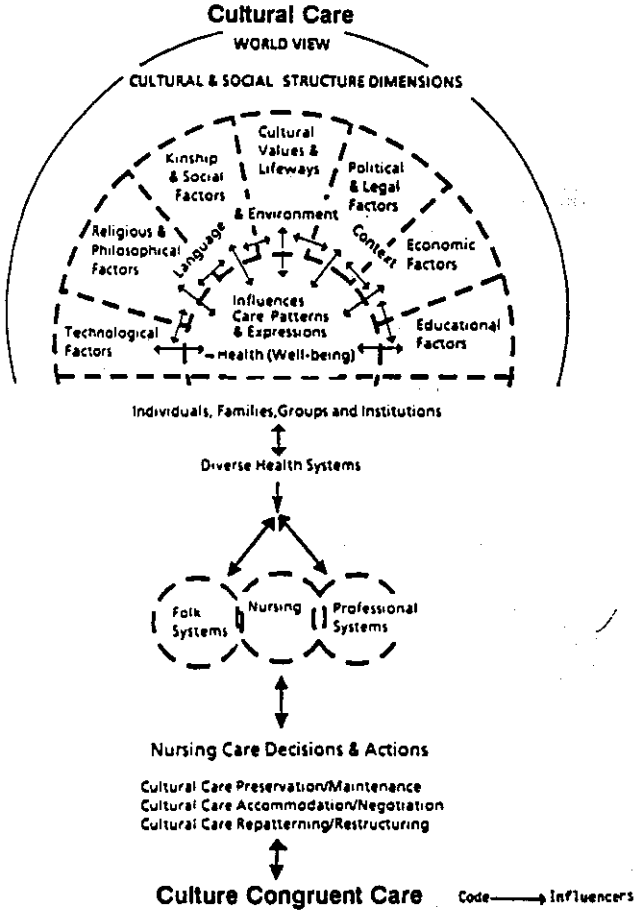

Figure 1. Leininger's Sunrise Model. From Leininger's theory of nursing: Cultural care diversity and universality by Madeleine Leininger (1988) *Nursing Science Quarterly, 1*(4) p. 157. Copyright 1980 by Williams and Wilkins. Reprinted by permission.

trates a world view approach to nursing care. In order to effect change and improve the health status of migrant children, an understanding of the migrant culture is essential. The CNS must examine the influence of economic factors, educational factors, cultural values and lifeways, and technological factors on the incidence of dental disease. Leininger's model helps the CNS examine cultural and social structure dimensions to plan culture congruent care.

Important research questions related to the causes of the very high incidence of dental disease in migrant children are generated when the CNS uses the sunrise model. Examples of research questions the CNS can address in the school setting are: Why do migrant children have such a high incidence of dental decay? What are the influences of economics, nutrition, education, and culture on dental health? What resources do migrant families have to improve the dental health of their children? What is the effect of dental disease on a child's attendance and performance in school?

THE ROLE OF THE CNS IN CASE MANAGEMENT

The CNS is ideally suited to case manage dental disease of migrant children in the school setting. The four roles of the CNS: clinician, educator, researcher, and consultant, can all be incorporated in case management of this particular health problem. The American Nurses' Association (1988) defines the goals of case management as providing quality health care along a continuum, decreasing fragmentation of care across many settings, enhancing the client's quality of life, and cost containment. The framework for nursing case management includes five components: assessing, planning, implementing, evaluating, and interacting. These components fit neatly into the four roles of the CNS.

As a clinician, the CNS assesses the dental health of children by means of dental screenings in the classroom. The examination of the teeth and gums, while not a substitute for a complete dental examination, should reveal gross problems such as decay, infection, broken teeth, malocclusion, and oral lesions. The teeth are counted, taking into consideration the child's age in determining the number of primary teeth (20), or permanent teeth (32), that are present or missing. Any signs of inflammation and hemorrhage of the gums (gingivitis) may indicate more serious periodontal disease (pyorrhea) involving the bones and ligament that anchor teeth in their sockets (Malasanos, Barkauskas, Moss, & Stoltenberg-Allen, 1990). A dental screening form useful for recording findings of dental assessments of children is presented in Figure 2.

The critical link between the practitioner and the focus of practice is the patient/client/family as the recipients of expert practice (Beecroft, & Papenhausen, 1989). As a clinician in the school setting, the CNS provides care and services to children and their families.

There are multiple causes for the high incidence of

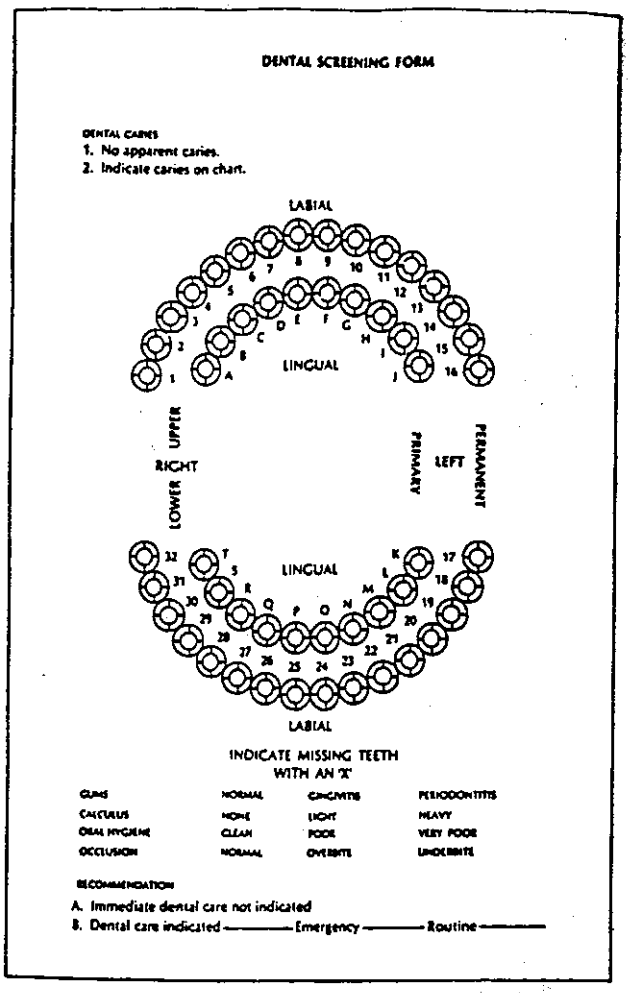

Figure 2. Dental screening form. From Health Assessment by L. Malasanos, V. Barkauskas, M. Moss, K. Stoltenberg-Allen (1990) p. 219. Copyright 1990 by the C.V. Mosby Company. Reprinted by permission.

dental disease in the migrant population. Families must be involved in identifying the causes and possible solutions to the problem. The CNS is challenged to assist migrant families to problem solve and to change health-harming behavior that may have a strong cultural base.

Identification of dental problems in migrant children is only the beginning; finding creative, cost-effective, and culturally-appropriate solutions remains a challenge. The CNS is in an excellent position to advocate and to implement such solutions. In the role of clinician, the CNS documents the incidence of the problem. As a researcher, the CNS collects and analyzes data. As an educator, the CNS provides instruction to children, teachers, and parents, to prevent and correct the problem. As a consultant, the CNS plans and evaluates programs that meet the special dental needs of migrant children. By interacting with other professionals such as dentists, administrators, and public officials, the CNS has the potential to influence change and improve the health of children.

One of the functions of the nurse case manager is to analyze and synthesize data to formulate appropri-

dental hygiene program, and the county's maternal child and adolescent health advisory board. The program was developed to address dental problems of migrant and low income children. A grant of $5,000.00 was supplied by the Community Foundation to pay a coordinator's salary. Sixteen volunteer dentists were recruited to provide dental care at the local community college's dental hygiene clinic on Saturdays, at the cost of $5.00 a visit. Most children required five visits to complete the extensive work needed; the total cost for treatment never exceeded $25.00, compared to the average cost of the same treatment in the private sector estimated at $1,500.00. The program required a parent to accompany the the child and to participate in 5 hours of preventive dental education. The Children's Dental Project has been recognized by the state of California as a model of accessing community resources to provide dental services to low-income children.

The CNS served as the case manager for the migrant children by assessing the nature of their problem (dental screening), planning the care needed to treat the problem (program development), implementing the care (health education for children and their parents), evaluating the program (annual report), and by interacting with the dental team to create a comprehensive program that was culturally congruent to the migrant community.

CONCLUSION

Hamric and Spross (1983) stress the importance of sound documentation of the effect of the CNS on practice and care. Evaluation to measure the cost-effectiveness of the CNS role in the school setting is essential. Research to document the impact of health on learning is needed, as well as the effect the CNS has on improving school attendance. Public schools receive funding based on average daily attendance; when children are absent for health reasons, the child and the school both lose. The CNS is in an ideal position to impact the health of children and the funding that provides for their education.

CNSs must document their effectiveness in outcome measures. In the school setting, cost-effectiveness can be measured by improved attendance and financial gains for the educational system. Papenhausen and Beecroft (1990) suggest that in this era of cost containment, disseminating information about the effectiveness of the CNS role is paramount to its survival. CNSs in the school setting have ample opportunities to document the effectiveness of their roles. They must recognize these opportunities and use them to define and shape the future of school health. - CNS -

REFERENCES

American Nurses' Association. (1988). *Nursing case management.* Kansas City, MO: Author.

Beecroft, P., & Papenhausen, J. (1989). Who is a clinical nurse specialist? *Clinical Nurse Specialist 3*(3), 133–136.

Byerly, E. (1980). *Health care alternatives of multiethnic migrants* (ICNE Rural Health Research Project). Washington, DC: US Public Health Service, Division of Nursing.

California State Department of Education. (1984). *Guidelines for health services for migrant students.* Sacramento, CA: Author.

Cali, R.L., Entwistle, B., & Swanson, T. (1987). Dental caries in permanent teeth of children of migrant farm workers. *American Journal of Public Health, 77,* 1001–1003.

Carpenito, L.J. (1984). *Handbook of Nursing Diagnosis.* Philadelphia: J.B. Lippincott.

Colorado State Migrant Education Program. (1988). *A case study in interagency collaboration: Colorado Migrant Health program—Colorado Migrant Education program.* (Final Report, Migrant Education Health Program). Colorado: Author.

Di Angelis, A.J., Katz, R.V., Jensen, M.E., Pintado, M., & Johnson, B. (1981). Dental needs in children of Mexican-American migrant workers. *The Journal of School Health, 51,* 395–399.

Good, M.E. (1990). *A needs assessment: The health status of migrant children as they enter kindergarten.* Unpublished masters thesis, San Jose State University, San Jose, CA.

Graham, M.L. (1986). *Health status of migrant children.* Unpublished master's thesis, California State University, Hayward, CA.

Greene, J.C., Louie, R., & Wycoff, S.J. (1989). Preventive Dentistry. *Journal of the American Medical Association, 262*(24), 3459–3463.

Hamric, A.B., & Spross, J. (1983). *The Clinical Nurse Specialist in theory and practice.* New York: Grune & Stratton.

Harrington, S. (1987, November/December). Children of the road. *Instructor,* pp. 36–39.

Ismail, A.I., Szpunar, S.M. (1990). Oral health status of Mexican-Americans with high acculturation status: Findings from Southwestern HHANES, 1982–1984. *Journal of Public Health Dentistry, 50*(1), 24–31.

Leininger, M. (1988). *Transcultural nursing: Concepts, theories, and practice.* New York: John Wiley and Sons.

Leininger, M. (1988b). Leininger's theory of nursing: Cultural care diversity and universality. *Nursing Science Quarterly, 1*(4), 152–160.

Malasanos, L., Barkauskas, V., Moss, M., Stoltenberg-Allen, K. (1990). *Health Assessment.* St. Louis, MO: C.V. Mosby.

Marin, B., Marin G., & Padilla, A. (1982). *Utilization of traditional and non-traditional sources of health care among Hispanics.* (Occasional Paper, No. 14). Los Angeles: University of California, Spanish Speaking Mental Health Research Center.

Menard, S.W. (1987). *The clinical nurse specialist.: Perspectives on practice.* New York: John Wiley and Sons.

Michael, R.J., & Salend, S.J. (1985). Health problems of migrant children. *The Journal of School Health, 55*(10), 411–412.

Papenhausen, J., & Beecroft P. (1990). Communicating clinical nurse specialist effectiveness. *Clinical Nurse Specialist* 4(1), 1–2.

Policy Analysis for California Education. (1989). *Conditions of children in California.* Berkeley: University of California, Policy Analysis for California Education Research Center.

Wilk, V.A. (1986). *The occupational health of migrant and seasonal farmworkers in the United States* (2nd ed.). Washington, DC: Farmworker Justice Fund.