1995

Health needs assessment of eighth graders in three suburban elementary public school districts

Gerri L. Carlton
San Jose State University

HEALTH NEEDS ASSESSMENT OF EIGHTH GRADERS IN THREE SUBURBAN ELEMENTARY PUBLIC SCHOOL DISTRICTS

A Thesis

Presented to

The Faculty of the School of Nursing

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Gerri L. Carlton

May, 1995

APPROVED FOR THE SCHOOL OF NURSING

Virginia Young

Virginia Young, Dr. P. H., R. N.

Ann Doordan

Ann Doordan, Ph. D., R. N.

Linda Lenoir, M.S., R.N.

Linda Lenoir, M. S., R. N.

APPROVED FOR THE UNIVERSITY

Serena R. Stanford

ABSTRACT

HEALTH NEEDS ASSESSMENT OF EIGHTH GRADERS

IN THREE SUBURBAN ELEMENTARY PUBLIC SCHOOL DISTRICTS

By Gerri L. Carlton

The identified health needs, noted on 736 eighth grade students' emergency health records, were recorded on the data collection tool. There were 245 identified health problems. There was more than one health problem for some of the students. The most frequently recorded health problems were allergies, asthma, and bee sting hypersensitivity. Handicapping conditions of students placed out of their districts were also described. Support for nursing services at the high school level was determined by the identified health needs and supported by Weekes' perspective of life-span development for adolescents with chronic illnesses.

ACKNOWLEDGMENTS

I wish to thank my family, Randy, Amy and Scott, for giving me laughter and tears, and minimal grief and guilt as I proceeded through this endeavor. I also want to thank my mom, Florance Cuno, for always seeming to believe in me. My appreciation extends to Dr. Virginia Young for her knowledge, guidance, availability, creativity, and enthusiasm. Also to Dr. Ann Doordan, the person who encouraged me to start this adventure. I am grateful to James Russell, Director of Pupil Services for Los Altos School District, who made himself and his staff available to me for my many questions. I also have great admiration for Kay Watters, School Nurse at Woodside High School, who demonstrates skill, love and compassion to students facing a great mix of emotional and physical conflicts.

Most of all, I appreciate the companionship of the seven dedicated, talented and wonderful classmates as we proceeded through this process together: Meg Fischer, Kathleen Hansell, Judy Medlin, Mary Meyer, Sarah Perez, Terry Tellep, and Jane Tran. Without you this process would have been so lonely. We have shared so much: academic and personal joys and frustrations; laughter and tears; jokes; and many meals. My life would never have been so rich if I had missed knowing any one of you.

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
Chapter	
1. INTRODUCTION	1
The Research Question	5
Purpose and Significance	6
Definition of Terms	7
Summary	10
2. CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW	11
Conceptual framework	11
Literature Review	13
Developmental Tasks of Early Adolescence	13
Adolescent Health	17
Health-Risk Behavior Research Studies	26
Health Behaviors of Various Cultures	31
Access to Health Care	36
Summary	40
3. RESEARCH DESIGN AND METHODOLOGY	41
Overview of the Study	41
Research Design	42
Research Procedures	43
Analysis Procedures	44
Summary	44

Chapter Page

4. ANALYSIS AND INTERPRETATION OF THE DATA 45

Introduction 45

Demographics of the Sample 46

Identification of Listed Health Problems . . . 49

Summary of Results 53

5. DISCUSSION 54

Conclusions 54

Scope and Limitations 58

Recommendations for Future Research 62

Recommendations for School Nursing Practice . . 63

REFERENCES 68

APPENDIXES

A. Consent Letters 80

B. The Three Elementary School Districts' Emergency Health Records 85

C. Data Collection Tool 91

D. Special Education Eligibility Definitions . 98

E. Definition of School Nursing from California Education Code 101

LIST OF TABLES

Table		Page
1.	Ethnic Composition of All Eighth Graders in the Identified Districts' Classes	46
2.	Demographics of the Sample	47
3.	Summary of Identified Health Problems	50
4.	Handicapping Conditions for Eighth Graders in Out-of-District Placements	52

Chapter 1

INTRODUCTION

Young adolescents, on the brink of high school, face many challenges. Some of these challenges are emotional, other challenges are physical. Young adolescents often experience self identification struggles at a time when they also identify with the need to be just like everyone else. Students with health conditions such as diabetes, asthma, or orthopedic challenges realize they will never be just like everyone else. They may require some assistance in meeting their health challenges from a discreet, caring professional. The school nurse has the education and skills to meet this challenge.

The health status of adolescents has improved in recent years; adolescents have low mortality rates, low rates of hospitalization, and relatively low rates of disability and chronic disease. Even so, homicides, suicides, and accidental injuries are responsible for three quarters of all adolescent deaths (Millstein, Irwin, Adler, Cohn, Kegeles, & Dolcini, 1992). Mental and social health are important factors in the health of young adolescents, and therefore, an important component of a complete health status assessment. Early intervention with students experiencing emotional struggles may eliminate the development of health problems in the future.

Early adolescence is a time of intense physical changes. "Because biological maturation occurs four months earlier each ten years, young adolescents are often in an adult body, making decisions using a child's mind" (Mercer, 1979, p. 8). Elias and Branden-Muller (1994) identify children in these years as those "at the intersection of a series of developmental crossroads that makes this a critical period for their future life course" (p. 3). Developmental tasks for this age group include beginning to separate one's identity from adults; beginning to establish one's own value systems and beliefs; coping with emotional, physical and social changes; identifying the relationship between self and peer group; and learning to make responsible decisions (Howe, 1980; Lipsitz, 1981; Mercer, 1979; Whisler, 1990).

This study documents the identified health problems of eighth grade students (class of 1994-1995) from three public elementary school districts in a suburban area of California. These health problems were documented by reviewing each eighth grade student's current emergency health record. These health records were completed by parents or guardians, and are required by each school for every enrolled student. Because of funding shortages, many California high school districts have eliminated school nurses and health clerks. This emergency health record review demonstrates the need for students entering high school to have the continued services

provided by a professional school nurse and supports the need for the re-employment of school nurses.

Young adolescents' health problems are complicated by a number of factors. McHarney-Brown and Kaufman (1991) identify adolescents as an underserved population with complex health and social needs, often engaging in high-risk behaviors. Adolescents are dealing with intimate issues, such as sexuality, substance abuse, physical abuse, or depression. Convenient resources are essential because students may be limited by lack of transportation, inadequate funds, and a reluctance to share their concerns with their family. The school nurse can be this resource especially because of her location in a place where students are expected to be each school day. The confidentiality of these contacts is essential in building the trust required to explore such issues.

Many medically fragile or technology dependent students are now in regular education classrooms as required by the passage of Public Laws 93-516 and 92-124 (California Department of Special Education, 1993). Special education students who are physically challenged are no longer educated on segregated campuses, but are included in regular education classrooms when beneficial. Working with students with special health conditions requires the complex knowledge of a professionally educated nurse. Graff and Ault (1993)

identify the following as some conditions requiring special health care in the schools:

> hereditary diseases such as cystic fibrosis, muscular dystrophy, or sickle cell anemia; congenital disorders such as spina bifida or cardiovascular disorders; respiratory disorders such as asthma or recurring pneumonia; neurologic disorders such as cerebral palsy, seizure disorder, or hearing impairment; cancer such as leukemia; or certain infectious conditions such as human immunodeficiency virus, herpes, or cytomegalovirus. Conditions from childhood trauma, such as traumatic head injury, also may be involved. (p. 335)

The precarious mental, social, and physical health of our adolescents has been identified as a national concern. Former United States Surgeon General M. Joycelyn Elders (1993) states:

> economic and social factors have seriously eroded the integrity and functioning of the American family, contributing to a range of social problems involving children and youth. These problems include not only poor social and academic development, but poor physical and mental health, abuse of drugs and alcohol and their related conditions, exposure to domestic and community violence and abuse, teenage pregnancy and the need to assume parental responsibilities prematurely, limited

> employment preparation, opportunities, and role models, and family dysfunction. (p. 312)

As a consequence of this family erosion, school personnel have often become the advocate for children with health and emotional needs. In Oda's (1979) now classic definition of the specialized role of school nurses, school nurses are identified as doing community nursing in schools. The Task Force on Standards of School Nursing Practice (1983) stated: "the purpose of school nursing is to enhance the educational process by the modification or removal of health-related barriers to learning and by promotion of an optimal level of wellness" (p. 1). Both statements underscore the need for professionally educated nurses to be available for "health supervision, health counseling, and health education" (Oda, 1981, p. 167) of an isolated and increasingly complex and needy segment of our society. This study identified health problems in a specific population and demonstrated that for young adolescents to fully participate in the educational process, school nursing services are indicated.

Research Question

The research question identified by this study was: What are the identified health problems of students in the eighth grade class of 1994-1995 in three suburban elementary public school districts?

Purpose and Significance

The purpose of this study was to identify health needs of a high school district's incoming ninth grade class in order to determine the need for school nursing services. Two of the study's elementary school districts each have one full time school district nurse, the other district employs one part-time district nurse. The three nurses often coordinate services provided to their students by assisting each other. They also share information regarding the health needs of their students, thereby increasing the professional care received by their students. In some instances, such as special education students being educated in non-public classes out of their districts, these nurses find that their students are intermingled. This intermingling of students assists the nurses in coordinating health care and health education programs. The lack of school nursing services and of an identified health professional at the high school district is unfortunate and has the potential for serious consequences. The elementary district nurses must have an identified high school nurse they can alert to the health needs of the incoming students. Students with juvenile onset diabetes or students with seizure disorders have no health care support at the high school level. In order to feel secure, students must either identify themselves as "different" to their classmates and teachers, or depend on the knowledge of a parent volunteer, who reviews student

emergency health records, to alert the faculty as to the student's health condition and necessary care in an emergency. Both of these alternatives are unreliable, and potentially dangerous for the student. These alternatives also expose the district to liability in case of a lawsuit based upon the lack of student confidentiality.

The description of these students' health problems provides concrete evidence of the identified health needs of incoming students. The data in this study was gathered and analyzed to alert this high school district to the health status of incoming students. The demonstration of need for school nursing services encourages the employment of school nurse(s) to provide nursing care and health counseling for a sector of the population needing services.

Definition of Terms

For the purpose of this study, the following definitions apply:

1. Accidents are events that cause loss or injury from carelessness, ignorance, or unavoidable causes (Parker, 1988, p. 16).

2. Chronic illness is a chronic physical disability, not a temporary condition . . . resulting in a pupil's having limited strength, vitality, or alertness (California Department of Special Education, 1993, Section I, p. 3).

3. Continuation school is designed for students not successful in regular education classrooms usually because of

the student's truancy or unwillingness to adapt his/her behavior to school standards.

4. Early adolescents are males and females ranging from 11 through 14 years of age.

5. Emergency health records are school district forms completed by parents or guardians identifying any known health problems of each of their children and providing information regarding health care source (See Appendix B).

6. Health problems are identified in the health problems record of the data collection tool (see Appendix C).

7. Health-risk behaviors are the use of motor and recreational vehicles (skateboards, bikes, in-line skates, etc.), consequences of sexual activity including unplanned pregnancy and sexually transmitted disease, and substance abuse (Millstein et al., 1992, p. 422).

8. High-risk behaviors are behaviors that increase the potential for physical or mental unhealthiness.

9. Junior high school is defined as a school with grades seventh and eighth, in a separate building from elementary students, but within the elementary school district.

10. Life change events are a variety of recent life changes including personal, social, family, and occupational areas of life adjustment (Parker, 1988, p. 16).

11. Life change unit is a numerical value that is assigned to a life change event (Parker, 1988, p. 16).

12. Medically fragile applies to pupils having a physical disability that is life threatening and requires monitoring, interpretation, or intervention (California Department of Special Education, 1993, Section I, p. 3).

13. Middle schools are schools that contain a combination of grades such as 5, 6, 7, and 8, or grades 6, 7, and 8.

14. Non-graded placement is an identification for the student, who because of severe mental or physical handicaps, is unable to conform to the regular education grade system (such as first grade, second grade, etc.).

15. Non-public schools are private schools licensed by the State of California to receive public funds to serve disabled students.

16. Out-of-district placement is placement in a class outside the student's regular school district's attendance area.

17. Regular education is the program provided for the majority of students; for students not requiring any special education services.

18. Social competence is defined as an individual's success in meeting social expectancies (Breitmayer, Gallo, Knafl & Zoeller, 1992, p. 181).

19. Special education is a program designed to meet the student's individual needs that are not met in a regular

education classroom. Admission to the program is based on criteria developed by the federal government and the State of California.

20. Technology dependent applies to students having a physical disability that requires a medical device to compensate for the loss of a vital body function (California Department of Special Education, 1993, Section I, p. 3).

21. Young adolescents are males and females ranging from 11 through 14 years of age.

Summary

Physical and emotional challenges confront the young adolescent. Having school nursing services available on a school site gives these students the opportunity to reach out for assistance from a professional, caring, confidential resource. The purpose of this study is to record identified health problems among the eighth grade students of three suburban elementary public school districts.

Chapter 2

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

The literature review focuses on the conceptual framework, developmental tasks of early adolescence, normal and abnormal growth and development of adolescents, health-risk behaviors, cultural influences on health behaviors, and access to health.

Conceptual Framework

The conceptual framework for this study is Weekes' (1991) recently published adolescent life-span developmental framework. With historical background in the 1930's, the life-span developmental perspective was developed to support research in the behavioral and social sciences. It "is concerned with the description and explication of ontogenetic (age-related) behavioral change from birth to death" (Baltes & Goulet, 1970, p. 3). This concept was not new. Shakespeare's "As You Like It" identified seven ages of man from infant to the elderly person's second childhood (Havighurst, 1973). Life-span perspectives describe intraindividual changes and interindividual differences, explaining how they come about and ways to modify them (Baltes, Reese & Nesselroade, 1977).

Weekes' (1991) expanded the perspective by defining the framework as the review of the environmental, cultural, and historical perspectives through the unique psychological

make-up of the adolescent. This framework is identified as the dialectic world view by Weekes. "The theories derived from the dialectic world view are broader in scope" and "can deal with several dimensions of behavioral response and can provide data that can be integrated with other data. . ." (Weekes, 1991, p. 40).

Petersen and Crockett (1985) discuss the usefulness of developing a life-span perspective in "understanding phenomena at early adolescence" (p. 204). Weekes and Rankin (1988) found research with adolescents most affected by the age of the adolescent when experiencing the research variable. In further research, Weekes (1995) found, in addition to age, biological and environmental variables were essential in enabling the adolescent to "modify a significant life-event" (p.27) causing a change in behavior. At this time Weekes is not aware of published studies based on her framework (D. P. Weekes, personal communication, February 17, 1995) but expects the framework she developed from her research to serve as a guide for nurses working with adolescents.

This framework is useful for identifying adolescent health-risk behaviors and health problems. As these behaviors and health problems relate to adolescent development and cultural factors, the nurse is able to modify programs and treatment modalities to best meet the adolescent's needs. Nurses, using Weekes' life-span

developmental perspective, approach the changing needs of students supported by an awareness of biological, cultural and environmental issues. These support factors are essential for successfully working with complex individuals with rapidly evolving behavioral milestones.

Literature Review

The World Health Organization has defined health as "complete physical, mental, and social well-being, not merely the absence of disease or infirmity" (Office of Technology Assessment in 1991, Section II, p. 25). "The conception of adolescent health must be broadened to include psychological and emotional well-being and the connections between them" (Family Impact Seminars with Consortium of Family Organizations (COFO), 1991, p. 4). Overall the adolescent has a lower mortality rate, fewer and shorter hospital stays, and often his/her health problem is the result of behavior choices rather than disease (Millstein et al., 1992). This literature review explores the developmental tasks of early adolescence, adolescent health, health-risk behaviors, health behaviors of various cultures, and access to health care.

Developmental Tasks of Early Adolescence

According to the Office of Technology Assessment (1991), the "contemporary" core developmental tasks of adolescence are :

- "becoming emotionally and behaviorally interdependent, rather than dependent;

- dealing with emerging sexuality;
- acquiring interpersonal skills and preparing for mate selection;
- acquiring education and other experiences needed for adult work roles; and
- resolving issues of identity and values" (Section II, p. 17).

Jean Piaget was an early researcher in the study of the mental development of children. His original works were developed by an "intuitive, nonexperimental processes and using small samples of subjects" (Wadsworth, 1989, p. 7) with a longitudinal approach. This research led to careful observation, description and analysis of children's behavior. He divided these behaviors into four stages: "sensori-motor (0-2 years), preoperational (2-7 years), concrete operations (7-11 years), and formal operations (11-15 years)" (p. 145). Having identified these stages, Piaget pointed out that the child does not develop evenly but fluctuates between these stages; "I have nowhere seen structural unity at any stage of development of the child" thereby prohibiting "fixed and verifiable correspondence in all domains." (Piaget, 1955, p. 818). With regard to reasoning, Piaget discovered that during adolescence formal thought is initially characterized by egocentrism. This egocentrism reduces all reasoning to what is logical from the adolescent's perspective, and is difficult to coordinate with what is real.

Elkind's (1984) research with adolescents concurs with this observation. He describes Piaget's formal operation as taking teenagers "beyond the here and now into the realm of possibility" (p. 384). This "realm of possibility" is reflected solely through the adolescent's perspective, developing Elkind's "imaginary audience" which is the belief that everyone is "thinking about them and is concerned with their actions and thoughts" (p. 384). This perspective explains the pervasive self-consciousness of young adolescents - they may feel embarrassed because "everyone" is looking at them and thinking about them, but on the other hand, they want to be looked at and thought about because that validates their sense of uniqueness. Jack (1989), Klaczynski (1990), and Lipsitz (1981) also identify this egocentrism as leading adolescents into "It can't happen to me" with regard to health-risk behaviors. Elkind (1984) describes this attitude as "personal fable" in which adolescents feel special and unique and protected from life's problems.

Early adolescence has also been characterized as the transition between childhood and true adolescence and has been marked by feelings of confusion, anxiety, excitement, and frustration. This transition leads to behaviors that are "troublesome, unpredictable, wild and turned off . . . known as storm and stress" (Whisler, 1990, p. 2). Family Impact Seminars with COFO (1991) found this period was not

inherently a time of storm and stress and inevitable rebellion, but a time when parents tend to place too much emphasis on acting out behaviors. "Storm and stress" are not normal and family conflicts are most often about mundane matters such as chores and haircuts, not about fundamental values (Family Impact Seminars with COFO,1991; Ooms & Herendeen, 1990; Millstein, 1989).

Lipsitz (1981) agrees that these acting out behaviors occur between the ages of 12 and 14 years of age, then tend to level off soon thereafter. She explored three myths with regard to early adolescence. The first myth regards all adolescents as "crazy, off the wall, at the mercy of their hormones and governed by forces within them over which they can have no control" (p. 3). Her research found this myth is not true for 80% of adolescents. Development to maturity is noted to be continuous, with synchronized growth by 25% of adolescents. With 35%, there are sudden growth spurts and times of stress and times of calm. "Storm and stress" is experienced by 20%, and the remaining 20% exhibit pathological behaviors which continue into adulthood.

The second myth Lipsitz (1981) exposes is that of homogeneity: a continuous, uniform growth and behavioral development. Because of the extreme variability in "biological development, social, emotional, intellectual and academic" (p. 4) it is misleading to think all 13 year olds are alike.

Lipsitz's (1981) third myth is that adolescents are children. Puberty occurs 4 months earlier every decade. This advance increases the probability of sexual activity into early adolescence, requiring the development of emotional and physical restraint at an earlier age than in previous generations. The potentially life altering decisions young adolescents are required to make are being made by young people who have not yet completed their developmental tasks.

Adolescent Health

Normal Growth and Development

Health programs for adolescents should focus on two fronts: (a) prevention strategies and (b) the development of life long positive health habits. With accidents, sports injuries, sexual activity, chemical abuse, and suicides identified as the leading health problems facing adolescents (Millstein, 1989), prevention strategies are a core of any health program. The challenge is to provide meaningful programs that involve the students, not programs that merely lecture these students. Drivers training, sex education classes, drug abuse information and counseling, availability of mental health services, and appropriate sports training or physical strengthening can prevent or reduce the number of health problems. Instruction involving positive health values and habits such as exercise and nutrition, emphasizes

the development of life-long healthy attitudes (Howe, 1980; Mercer, 1979; Wold, 1981).

Family Impact Seminars with COFO (1991) stated:

> Parents clearly play a critical role in promoting and safeguarding their children's health, and psychological and social well-being. These tasks and responsibilities are numerous and include at a minimum: teaching basic health and safety and good nutrition practices; teaching values and setting clear behavioral rules and expectations; responding promptly to evidence of illness and getting appropriate treatment; complying with prescribed regimens, etc. (p. 9)

For a variety of reasons, many families are not equipped to meet these responsibilities, requiring these tasks to be addressed by school personnel.

Whisler (1990) identified the following physical and emotional characteristics currently observed in most early adolescents:

1. Experience accelerated physical development marked by increases in weight, height, heart size, lung capacity, and muscular strength;
2. Mature at varying rates of speed. Girls tend to be taller than boys for the first two years of early adolescence and are ordinarily more physically developed than boys;

3. Experience bone growth faster than muscle development; uneven muscle/bone development results in lack of coordination and awkwardness; bones may lack protection of covering muscles and supporting tendons;

4. Reflect a wide range of individual differences which begin to appear in prepubertal and pubertal stages of development. Boys tend to lag behind girls. There are marked individual differences in physical development for boys and girls. The greatest variability in physiological development and size occurs at about age thirteen;

5. Experience biological development five years sooner than adolescents of the last century; the average age of menarche has dropped from seventeen (sic) to twelve (sic) years of age;

6. Face responsibility for sexual behavior before full emotional and social maturity has occurred;

7. Show changes in body contour including temporarily large noses, protruding ears, long arms; have posture problems;

8. Are often disturbed by body changes;

- Girls are anxious about physical changes that accompany sexual maturation;
- Boys are anxious about receding chins, cowlicks, dimples, and changes in their voices;

9. Experience fluctuations in basal metabolism which can cause extreme restlessness at times and equally extreme listlessness at other moments;

10. Have ravenous appetites and peculiar tastes; may overtax digestive system with large quantities of improper foods;

11. Lack physical health and have poor levels of endurance, strength, and flexibility; as a group are fatter and unhealthier;

12. Are physically at-risk: major causes of death are homicide, suicide, accident, and leukemia. (p. 12)

Dr. Keane of the Physiatry Medical Group of Menlo Park, California addressed a San Mateo County School Nurses Conference in March, 1993 regarding the physical development of young adolescents. He identified the physiology of young adolescents to include a period of rapid growth; an increase in body mass; finding soft tissues tight, and ligaments strong, but bones weak. He also identified injury patterns of this age group to be bone and growth cartilage injuries, with a high percentage of bone fractures near the joining of ligaments to joints. Knee injuries, usually resulting from sports injuries, and postural problems are common in this age group, usually caused by lack of adequate muscular development. Fields, Rasco, Kramer, and Cates (1992) suggest that residual weakness after a injury is a risk for recurrent injury and thus requires a proper rehabilitation program,

especially in young adolescents. Stivers (1985) identifies infections as other common health problems for adolescents. These may be mononucleosis, mumps, sexually transmitted diseases, yeast infections, hepatitis, and tuberculosis. While most of these are not usually fatal, they can all produce serious illness and life long ramifications.

Because of the fluctuations in physical growth and development, chronic health problems may be exacerbated during early adolescence. Stivers (1985) found:

> chronic disease and disabilities may cause not only physical stress but emotional stress, particularly for the adolescent who had no known problems during childhood. In addition to having to accept the fact that he is not like his friends, he must alter his activity because of the limits the condition may pose. Accommodations may include changes in diet (diabetic), restriction in physical activity (heart condition or other physical disability), use of medication (epilepsy, allergies), or other self-help skills (asthma). (p. 3)

Abnormal Growth and Development

The classic authority Erik Erikson, based on his assertion that adolescents develop their identity by interacting with peer groups and also by developing role models, concluded that the minimally disabled child has greater difficulty adjusting to adolescence than those more severely affected. "Minimally affected children cannot

identify with the world of normal children, since they cannot do many normal activities (such as run or achieve continence), nor do they identify with the world of the severely impaired individual such as a child in a wheelchair" (Revell & Liptak, 1991, p. 261). The disabled adolescent may feel angry, embarrassed, and frustrated about his condition because it requires a level of dependence that is contrary to the developmental task of establishing independence (Glassock, 1986; Waechter, 1979).

In Mercer (1979), Waechter outlined basic principles for nursing interventions with physically challenged adolescents. These include: assisting the adolescents to develop self respect and value as individuals; providing opportunities for the adolescents to experience success though their own efforts; acting as health care advocates until the adolescents are able to do so for themselves; encouraging them to become self-sufficient, to continue pursuing interests, and to reestablish friendships keeping connected with their adolescent world; helping to set limits on their behaviors until they develop internal control.

Nelson (1990) reminds all health professionals that adolescents with disabilities may have many needs requiring the involvement of other professionals such as speech therapists, and psychologists. It is essential for optimum benefit for a family to coordinate all "players" working in

unison, therefore requiring the identification of one professional as a case manager.

Asthma is an increasingly occurring chronic health problem in childhood and adolescence and there is evidence that its severity is also increasing (Fowler, Davenport, & Garg, 1992). Research by Fowler, Davenport, and Garg (1992) studied the school functioning of children with asthma; the asthmatic children had a significantly increased risk of learning disabilities when compared with well children. Since asthmatic children have more school absences, the increased absenteeism, per se, may affect their academic performance. Also the medications used for asthma may have adverse effects on school performance. Asthmatic students may also have a cumulative illness burden due to other concurrent health conditions.

Exercise-induced asthma appears to be an important cause of unexplained chest pain in children and adolescents. With bronchodilator treatment, students who have been incapacitated by chest pain may be able to participate in normal physical activity including vigorous competitive activities (Wiens, Sabath, Ewing, Gowdamarajan, Portnoy, & Scagliotti, 1992). In a study developed by Walsh and Ryan-Wenger (1992) to evaluate the stressors of adolescents with asthma, they found students with exercised-induced asthma feeling left out of the group and not feeling "good enough" to compete in athletics. These findings were rated a serious

stressor by the adolescents. School nurses can be instrumental in developing a plan of treatment and activity that would allow the student to participate in these physical activities (Larter, Kieckhefer, & Paeth, 1993).

Students with seizure disorders must be identified to school personnel in order to provide for the student's safety. Drug control is of primary concern, although emotional and psychosocial problems may be secondary problems. Students controlled through anticonvulsant medication can effectively participate in physical activities, but they have a slightly higher incidence of learning problems (American Academy of Pediatrics, 1987).

The risk of developing juvenile diabetes mellitus is greatest at puberty. Dealing with diabetes mellitus can require an increased level of psychosocial adjustment skills that develop into coping skills as adolescents experiment with developing peer relationships and demonstrate independence from their family (Dashiff, 1993; Grey, Cameron, & Thruber, 1991; Kager & Holden, 1992). The struggle of coping with diabetic control and developing self-care behaviors are factors in an increased number of adolescents experiencing anxiety and depression. Grey and Thurber (1991) found that programs designed to "increase self-efficacy through the setting of achievable long-term goals with reinforcement of positive behaviors, modeling of successful coping styles, and attention to relaxation and

stress-reduction techniques" (p. 307) reduced anxiety and depression.

La Greca (1992) found families provided more support than friends for the daily and routine aspects of diabetes management, yet friends were a very important source of emotional support for adolescents with diabetes by helping the adolescent feel accepted. Adolescents in families with conflicting parent-adolescent relations were more likely to exhibit poor diabetic control, therefore there may be a need for appropriate behavioral and psychological interventions for families (Wysocki, 1993).

Diabetes in adolescents can be well controlled with the cooperation of the student, parents, teachers, coaches and nurses. Preparations for students with diabetes involved in sports must be individualized with insulin dosage, timing of meals, and total caloric intake varying by the sport and the student's size (American Academy of Pediatrics, 1987).

Adolescents with physical disabilities face the same developmental tasks as nondisabled students. In the area of social and sexual developmental skills, Meeropol's (1991) research found that 30% of the 51 adolescents studied between 12 and 20 years of age with a "chronic condition, either congenital or acquired, entailing a visible and functional disability" (p. 245), expressed concern about finding the desired adult sexual relationship. Breitmayer et al. (1992) found that the risk of developing various social competence

difficulties was higher among chronically ill children than among healthy children, and the risk was only slightly higher in those children whose illnesses were not disabling. The child's family played a large role in developing strategies to further the social development of the disabled child. Breitmayer et al. (1992) recommended that programs developed to provide opportunities for these adolescents to learn and practice social skills may reduce their anxiety concerning the development of future relationships.

Health-Risk Behavior Research Studies

In his classic research, R. Dean Coddington (1972a) studied the significance of life events as contributing factors in the diseases of children. Using Holmes and Rahe's social readjustment rating scale, he asked 131 teachers, 25 pediatricians, and 87 mental health workers employed in academic divisions of child psychiatry to evaluate children in four age groups: preschool, elementary, junior high, and senior high school (p. 8). Each authority was asked to assign life change units to a list of 30 to 42 life events (depending on the age groups being evaluated), arranging the life events from the most disruptive to least disruptive in a student's life. With a list of 40 events, these three groups assigned life change units from 95 to 28. Coddington (1972a) found for the junior high school age group, the results were:

> acquiring a visible deformity ranked fourth with 77 life change units; having a visible congenital deformity ranked ninth, 70 life change units; becoming involved with drugs or alcohol ranked 11th, 70 life change units; and serious illness requiring hospitalization ranked 17th, 59 life change units. (p. 208)

Although this study is dated, it is the original work assigning life change units to the area of child psychiatry. It demonstrates the perceptions of these professionals that the students' fear of not conforming to the group is very intense in this age group. In a follow-up study, Coddington (1972b) directly queried junior high students. The research question for this study was: "How much psychological readjustment can the average child be expected to undergo in the course of a year?" (p. 205). The four events in the first study were identified by junior high school students with the following ranking: "becoming involved with drugs or alcohol ranked 14th; serious illness requiring hospitalization ranked 29th; having a visible congenital deformity ranked 33rd; and acquiring a visible deformity ranked 35th" (p. 208). These studies are not entirely parallel because the Coddington (1972b) study addressed only life events that had already occurred in the student's life. In terms of linking life change units to life events, the students were not asked to rank each event as they perceived

its effect would be; therefore, there can be no direct comparison of ranking between the two studies.

Groër, Thomas, and Shoffner (1992) presented a longitudinal study following high school freshman over a three year period. Their study concurred with Coddington's finding that the stress of life events varied considerably and postulates that even negative life events can be stimuli for psychological growth and development. Jacobson's (1994) research discovered young adolescents perceived they had no control over the stressors in their lives and had no options in responding to these stressors.

Although depression, suicide attempts, eating disorders, and substance abuse may rarely be reported on an emergency health record, these conditions very directly affect the health of young adolescents. Many parents of young adolescents acknowledge that their child's friends may have substance use or sexuality-related issues, but fewer than 10% believed their own adolescents may need help. This underestimation may extend to mental health needs as well. Fisher (1992) compared data from students and their parents. He found parents routinely underestimated their adolescent's participation in these behaviors. This disparity may affect the reporting of health problems on the emergency cards completed by parents. Millstein et al. (1992) found bias in self-reports; boys tend to overreport their health-risk behaviors, while girls underreport their behaviors. Studying

absenteeism in the school setting can often suggest a relationship with drugs or alcohol and increasing school absences can be a predictor of the student's potential for dropping out of school (Salmonsen, 1988).

Adolescence is normally a time of instability, role experimentation, and stress (Washburn, 1991). Millstein et al. (1992) validated this assumption in their study of health-risk behaviors and health concerns among young adolescents:

> although the perception that young adolescents are not engaging in many risky health behaviors, retrospective data from national samples of high school students point to high rates of initiation of behaviors, such as substance use, during the middle school years. (p. 422)

Elias and Branden-Muller (1994) believe that although greater autonomy and independence are considered an adolescent developmental task, in current societal realities this independence must be tempered by including self-control. Without this internal control, high risk and health compromising behaviors conflict with future health. With health decisions and behaviors there is a need for interdependence rather than independence.

To meet the health needs of adolescents, in 1989 the Center for Disease Control surveyed 8,098 adolescent students and identified six areas of concern:

> a) behaviors that result in intentional and unintentional injuries, b) tobacco use, c) alcohol and other drug use, d) sexual behaviors that result in sexually transmitted diseases, including HIV infection, and unintended pregnancy, e) dietary patterns that contribute to disease, and f) sedentary lifestyle. (Cortese, 1993, p. 22)

On an individual level, this series of health compromising behaviors result in withdrawing from family and friends, continued negative behavior, support from peers participating in similar behaviors and a deepening sense of separation and low self-esteem.

Student drug use primarily includes alcohol, marijuana, and cocaine, with the average age of 11 years for the first alcohol experience (Myers & Anderson, 1991). The onset of symptoms of drug/alcohol use are slow, and changes often occur over months or even years. When these changes proceed insidiously, it is easy for parents to adjust to them and perceive them to be a normal part of adolescence. Evidence of drug use should include evaluation of school performance such as a drop of two letter grades in two or more courses during the same academic year, truancy, or reduction of extracurricular activities. Although not found on an emergency health record, this information could be available in a student's cumulative school record.

With the passage of Public-Law 93-516 (California Department of Special Education, 1993), the federal government mandated that all children with specialized physical health needs are to be provided a regular education program at the student's neighborhood school. Public Law 94-142 (California Department of Special Education, 1993) expanded on this law.

In Public Law 94-142 chronically ill, medically fragile, and technology dependent students are entitled to regular education placement if the impairment does not adversely affect the student's educational performance. Consequently, if a student with a health problem can be appropriately educated in a regular education classroom, with assistance from school nursing services or modifications to the regular school program, this regular education classroom must be the student's placement (California Department of Special Education, 1993). These modifications might include a private area at school in which to administer a specialized care service under the supervision of a school nurse or someone instructed by the nurse. These private areas would be especially important for students needing to check blood sugar and administer insulin; complete tube feedings; or do self-catherizations.

Health Behaviors of Various Cultures

The community presented in this study contains people from numerous ethnic backgrounds. These ethnic groups

include Asian, American Indian, black, Filipino, Hispanic, and white.

Leininger (1978) reminds all nurses of the need to be informed about their client's practices, beliefs, and values, and to be sensitive to cultural differences when delivering nursing care. One's culture affects the perception of health, the threat of disease, and coping mechanisms adopted individually and within a family. Cultural awareness is crucial in dealing with families, but as families assimilate, it is important to keep confirming the perspective because it is only one clue to a family's ability to cope with illness. Wealth, social status, education, and family composition are also important coping factors. Friedman (1990) lists cultural assessment guidelines that would be very helpful when assessing an adolescent's or family's current cultural pattern. These guidelines include: ethnic identity, birthplace, language spoken in the home, religion, group affiliations, dietary habits, and use of traditional folk medicines.

Lists of developmental tasks and milestones were developed for white adolescents. These milestones may not always be the appropriate ones for adolescents of different cultural backgrounds. Generalizations are always risky, but the following insights regarding cultural attitudes towards family, adolescents, and health are intended to be helpful when working with the three most predominant minority

cultures among the students in this study: black, Latino, and Chinese students.

Friedman (1990) cites noted black sociologist Robert Staples' report of conflict between black families' ideology and their life-style. He identifies their core values as: strong kinship with extended families; involvement with a church; and active involvement in child raising. Friedman supports Staples' belief that black families are ideologically conservative with the traditional male role of "economic provider and family leader" (p. 219). Often economic struggles make this scenario impossible. This lack of role identification affects the young black adolescent by decreasing self-worth, confidence, achievement and an increasing vulnerability to peer pressure. Hayes (1979) identifies building confidence, self-esteem, and earning trust as essential components in successful health care management. "A careful assessment of the black adolescent's family support system and recognition of the cultural diversity within the black population are important in meeting individual needs" (p. 56).

In the Latino culture, current cultural assessment is an on-going process for health care providers. With continuing immigration, establishing a family's degree of acculturation is essential. Many Latinos are Roman Catholic and look to the Church as their value guide. Traditionally, the father

is the disciplinarian and the mother is the nurturer. Friedman (1990) states "individualism is not highly valued . . . the needs of the family collectively supersede the needs of each individual family member" (p. 220). Bello (1979) points out that parents are permissive with young children, but become more authoritarian as students become adolescents. There is often a double standard between expectations of males and females. Males are to be respectful of their elders, protective of their sisters, and are to "handle relationships through a dominant and assertive behavior" (p. 60). Females are to be respectful of their elders, and males in general; be intensely modest; and should not bring dishonor to the family. Gleave and Manes (1990) explain that the traditional approach to health for Latinos is based on a "classification of hot and cold qualities" (p. 51) and in order to "maintain good health, the object is to establish temperature equilibrium" (p. 52). In order to best serve the nursing needs of Latino families, it is essential to evaluate their acculturalization before presuming this traditional approach is acknowledged by a particular family.

Asians are not a homogenous group, therefore awareness of a student or family's acculturation or assimilation is essential to a health professional. Fong (1979) identifies the sacrifice of self-expression for the sake of the whole to be an over-riding trait. The family is very close to the

exclusion of anyone outside the family and the "patriarchal (male dominated) and patrilineal (vertically structured) Chinese family exerts great social control over its members" (p. 66). Parents tend to be quite authoritarian and remote emotionally. They expect unquestioning obedience. Parents expect that the main goal of adolescents is academic excellence, with adolescent social involvement a distant second. This expectation can cause conflict, requiring the health professional to become a mediator of the communication in a "I say it, you do it" (p. 70) relationship. Lai and Yue (1990) identify health for the Chinese as "a state of spiritual and physical harmony with nature, in which ying and yang are in dynamic equilibrium" (p. 78). With regard to chronic illness, Elfert, Anderson, and Lai (1991) found that Chinese families do not separate the disability from the rest of the child, but view the illness as affecting the whole child, especially the child's education and future. This view coincides with the traditional Chinese healers' view of balance in the body with illness causing unbalance, or a weakness in the entire body.

The Collaborative for Children and Families in Santa Clara County (1993) states:

> services must be multicultural and flexible, in order to accommodate the needs of diverse ethnic groups. In particular, racial and ethnic minority groups are subject to intensified stress involving any of the following:

> minority group status, cultural conflict, adjustment to immigration, refugee history, and economic struggle (p. 16).

In dealing with students and families of other cultures, the wise health professional moves slowly in seeking acceptance. It is important to learn about the immediate family and the extended one as well. It is also necessary to establish which family members must be included in any decision making. The health professional must be sensitive to the family's cultural dynamics while developing relationships based on trust, respect and confidentiality.

Access to Health Care

Young adolescents are the healthiest segment of the population. Although "deaths from natural causes (i.e. related to disease) have dropped steadily, children with seriously disabling conditions are much more likely to live to adulthood" (Family Impact Seminars with COFO, 1991, p. 3). This fact alone has increased the need for health insurance for children, yet "as many as 2.1 million children have no public or private health insurance - a 62% increase over the past 6 years. California now ranks 42nd among the 50 states in its proportion of children without health insurance" (Lazarus & Ellwood, 1991, p. 9). This state must address the health care needs of children and adolescents.

Psychosocial and behavioral problems are increasing the mortality and morbidity of this age group according to

Ellickson, Lara, Sherbourne, and Zima (1993). They write that "good physical health, at least one supportive parent, ability to sustain good peer relationships, and social competency may protect a child from developing a serious emotional or behavioral disorder" (p. 16).

The Family Impact Seminars with COFO (1991) identifies the "new morbidities" for young adolescents as including "accidental and violent deaths, accidental injuries, substance abuse, teen pregnancy, sexually transmitted diseases, depression" (p. 4). At least in theory these issues are treatable or preventable, but most often these morbidities are not an isolated issue in an adolescent's life. Effective treatment includes providing services that address the complex issues. Without coordinated management of these issues, often one issue is treated, while others go unattended, decreasing the effectiveness of the treatment. Because of the reduction of school nursing services, this coordination is left to the teacher who does not have the time, nor the knowledge, to provide coordinated services.

Despite some advances in health care to minorities, Lieu, Newacheck, and McManus (1993) found minorities still have increased morbidity and mortality over that of whites, especially in the conditions associated with low birthweight: heart disease, cancer, diabetes, asthma, and lead poisoning. Minority students were "significantly less likely than white adolescents to be in excellent or very good health" (Lieu,

Newacheck, & McManus, 1993, p. 961). Hispanic and black adolescents were found to have fewer preventative care visits than did white students. "Compared to 81% of white adolescents, only 59% of black adolescents and 58% of Hispanic adolescents had a doctor's office, private clinic, or health maintenance organization (HMO) cited as their source of routine health care" (p. 962).

Additional barriers to health care services include availability, accessibility, transportation, and parental time off from work to transport the young adolescent to the health care provider. Even for students with health insurance, the services many teens need, such as outpatient, mental health services, preventative care, and long-term, community-based care for chronically ill and disabled youth, are typically not covered (Family Impact Seminars with COFO, 1991).

The Office of Technology Assessment (1991) identified other barriers. These barriers include the lack of any independent income, fear of lack of confidentiality, need for parental consent, and lack of knowledge concerning the appropriateness of health services. Frequently minority persons use neighborhood and hospital clinics for routine and emergency care, often preventing continuity for follow-up care.

Lieu, Newacheck, and McManus (1993) have found "school-based health care is one intervention that has shown promise

in reducing barriers to care" (p.964). Sencenbaugh (1994) found that school-based clinics or school-linked clinics "can function effectively in or near the school setting, overcoming the structural, financial, and personal barriers to accessing health care" (p. 48). Hechinger (1992) writes that school-based centers will be most successful when they are available weekends and evenings so they can address the needs of the adolescent and the family as well. The professional school nurse, educated to coordinate these health care services, will provide valuable expertise in reducing barriers to health care.

Lazarus and Ellwood (1991) found the unintentional consequence of California's tax reform of 1978 was the:

> devastation of children's infrastructure - school, health clinics, child abuse prevention programs, etc. It is deceptive to think Californians can ultimately avoid paying for these necessities. The only choice we have is whether to pay now or pay considerably more later. For every $1 we short-change for immunizations, we pay $10 for children who contract measles and other preventable illnesses. For every $1 we hold back from preschool education, we pay $4.75 in the costs of special education, public assistance, and crime. For every $1 we skimp on child support enforcement, we pay an estimated $4.30 in welfare costs. (p. 6)

As costly as these remedies are, they can no longer be ignored. "Young adolescents at crucial crossroads in their lives must be helped now to avoid risks to their future well-being. To safeguard their health is not an act of charity; it is a reaffirmation of a humane society and an investment in the nation's future" (Hechinger, 1992, p. 16).

Summary

It is the purpose of this study to review the identified health problems of a convenience sample of a young adolescent population to evaluate the need for school nursing services in their upcoming high school district. The literature review demonstrates that many factors contribute to health care for young adolescents: developmental levels, cultural background, physical abilities and disabilities, and access to health care. Although these factors are not directly accessed from the emergency health records, they are important components in providing appropriate health care for adolescents.

Chapter 3

RESEARCH DESIGN AND METHODOLOGY

Overview of the Study

The purpose of this study was to record all identified health problems in the 1994-1995 class of eighth graders in three public elementary school districts in order to assess the need for nursing services in the high school district into which these elementary students are scheduled to matriculate. These students were born between 1982 and 1985. In order to quickly access parents or guardians, students in these schools districts have an emergency health record on file at the school, ideally within 30 days of enrollment. These records are formatted by each school district but universally include family emergency information; the name and phone number of the family doctor, if any; and identification of any known health problem or medication requirements. Demographic information included in this study was the gender and ethnicity of the student, and whether the student had medical health care and dental care insurance, and if so, whether insurance was private, health maintenance organization (HMO), or MediCal.

Permission for participation in this study has been granted in writing from the San Jose State University Human Sujects-Institutional Review Board, and from the school districts' superintendents. The data collection instrument developed for this study was designed by the researcher.

Research Design

The eighth grade classes selected for this study are in three separate elementary school districts. The demographics of gender, medical health care source, and dental care source reflect only those students whose records were reviewed in the study. Because ethnicity was not listed on the emergency health records, the ethnic summary was obtained from the California Department of Education. This ethnic summary includes all eighth grade students in these three elementary districts, not exclusively those students whose records were reviewed.

This sample was a convenience sample of the emergency health records of eighth grade students (N = 736). During the month of October 1994, this researcher reviewed the emergency health records completed by parents or guardians. These emergency health records list the student's identified health problems and were for the 1994-1995 class of eighth grade students in the three elementary public school districts in a suburban area of California. The month of October was selected because the student population is less transient than it is in September and the emergency health records are returned by that month. Demographic information gathered included gender, ethnicity, the source of medical health care, and the source of dental care.

This review process was completed within 1 to 2 days at each school site. Additional time was required to review the

emergency cards of students (n = 3) attending continuation schools. To maximize the learning potential for students with some handicapping conditions, these students participate in special non-public school classes. These handicapped students attend special education classes in out-of-district schools but remain enrolled in their original school district. In order to present a complete picture of these three elementary school districts, the records of these handicapped students were also reviewed.

Research Procedures

These emergency health records were reviewed for the health problems listed on the data collection tool (see Appendix C) and a check mark indicated a student with that health problem. This tool was a continuous record of the health problems, with no separation of students by school or school district. Emergency health record demographic data included in this assessment were gender, medical health care source, and dental care source. No emergency health records were photocopied nor removed from the premises at any time. No contact was made with students. No indication of the student's identification, nor the school or school district the student attended was recorded. All data collected were kept by the researcher in her home office and recorded only in reference to the numbers of cases. These data were analyzed by a tally of the numbers of students in this population with each identified health problem.

Analysis Procedures

The check marks recording each identified health problem were tabulated. The demographic information was also tabulated. All data were analyzed to determine the descriptive statistic of frequencies.

Summary

This research study was designed to answer the question: What are the identified health problems of students in the eighth grade class of 1994-1995 in three suburban elementary public school districts? After receiving the proper permissions to conduct this study, a review of the eighth grade students' emergency health records was completed during the month of October, 1994. The ethnicity information was obtained from the California State Department of Education (1994).

Chapter 4

ANALYSIS AND INTERPRETATION OF THE DATA

Introduction

Study findings are presented in Chapter 4. This research assessed the identified health needs of eighth graders in three California suburban elementary school districts.

The ethnicity data were obtained during the month of October, 1994. A review of the California State Department of Education (1994) records for these eighth grade classes revealed the ethnic background of each student in these eighth grade classes.

The other data were gathered during October, 1994, from a review of each student's emergency health record which was completed by each student's parent or guardian. Using the collection tool developed by this researcher, one check mark was made for each health problem listed on the emergency record. The findings are reported as follows: demographics of the population (Tables 1 and 2) including ethnic composition of all eighth graders (Table 1) and the demographic data for the sample which includes gender, medical health care source, and dental care source (Table 2). The summary for each identified health problem is listed Table 3 and the summary of students with handicapping conditions is shown in Table 4.

Demographics of the Sample

The class of eighth graders reviewed was composed of students attending three suburban elementary school districts. In order to include the emergency health records for all district eighth grade students, student records were reviewed in four middle or junior high schools, one continuation school, and seven out-of-district placements. According to the personnel in the district offices, there are currently no home schooled students in this class. For non-graded placements, the students with birthdates from December 1, 1980 to November 30, 1982 were considered to be eighth graders.

Table 1

Ethnic Composition of All Eighth Graders in the Identified Districts

Ethnic Composition	Male (n)	Female (n)	Total (n)	%
Asian	49	47	96	13
American Indian	0	2	2	01
Black	17	28	45	06
Filipino	17	22	39	05
Hispanic	76	67	143	19
White	228	190	418	56

Table 2

Demographics of the Sample (N = 736)

Student Gender	n	%
Males	384	52
Females	352	48
Total Records Reviewed	736	100
Medical Health Care Source	**n**	**%**
Private	461	63
MediCal	11	01
Other	104	14
None listed	160	22
Total Health Records	736	100
Dental Source	**n**	**%**
Dental Source Listed	410	56
No Dental Source Listed	184	25
No Dental Source Requested*	142	19
Total Record Reviewed	736	100

*Note. One district (n = 142 eighth grade students) did not request information regarding dental source.

In October, 1994, school district "A" had n = 176 eighth grade males, n = 153 eighth grade females (A. Carlson, personal communication, October 31, 1994). School district "B" had n = 63 eighth grade males, n = 79 eighth grade females (P. Frankenfield, personal communication, October 31, 1994). School district "C" had n = 148 eighth grade males, n = 124 eighth grade females (D. Vinson, personal communication, October 31, 1994). There was a total of 743 eighth grade students in these three school districts.

Data illustrating ethnic composition of all eighth graders is shown in Table 1. These ethnic statistics were available from the public records on file with the California Department of Education (1994).

Emergency health records were not available for seven students; three were for male and four were for female students. Since there were no emergency health records available for these students, they were not included in this study.

This researcher reviewed N = 736 eighth grade records; n = 384 were male students, n = 352 were female students (see Table 2). In some cases the grade level was not recorded on the emergency health record; the researcher then used the birthdate as the determiner for inclusion in the review.

The source of medical health care was requested and included on all emergency health records, but dental care

information was requested and included in only two of the three districts surveyed (see Table 2). The district not requesting dental information had 142 eighth grade students. In gathering information regarding health care source, "private" health care was marked with a check mark if there was a name listed; "MediCal" included any mention of the provider being MediCal even with an absence of a MediCal number; "other" included any health maintenance organization listed; and "none listed" was checked if the information was left blank, or if a non-health maintenance hospital or emergency room was listed.

Identification of Listed Health Problems

Table 3 documents the summary of health problems identified by the emergency health records review. Included in this summary are the identified health problems listed on the emergency health records for those handicapped students in out-of-district placements.

The health problems that were identified on the emergency health records are listed on the "Summary of Identified Health Problems" (Table 3). The data collection tool used to record the identified health problems is located in Appendix C. As shown in Table 3, the item "allergies" was divided into environmental and drug categories for the purpose of clarification. The item "asthma" was divided to record identified "nebulizer supported" asthma separately from "seasonal" asthma. This separation was done in order to

clarify students with mild cases of asthma from those students with a more severe condition. The statement of "intermittent catherization" was added to the item "cerebral palsy" to clarify the care requirements of the condition.

Table 3

Summary of Identified Health Problems (N=245)

Identified Health Problems	Male (n)	Female (n)	Total (N=245)
Allergy to environment	35	40	75
Allergy to medication	6	5	11
Asthma (seasonal)	22	30	52
Nebulizer supported	16	22	38
Attention deficit disorders	4	0	4
Bee sting hypersensitivity	10	10	20
Cardiac conditions	2	2	4
Diabetes	1	0	1
Fainting episodes	2	0	2
Frequent epitaxsis	0	1	1
Hearing disabilities	3	0	3
Hypoglycemia	0	1	1
Migraine headaches	0	3	3

Summary of Identified Health Problems (continued)

Identified Health Problems	Male (n)	Female (n)	Total (n)
Neurological conditions			
cerebral palsy with intermittent catherization	1	0	1
spina bifida	1	0	1
Orthopedic restrictions	5	8	13
Seizure disorders	3	0	3
Visual disabilities	13	19	32
Other Health Problems that Might Require Nursing Intervention			
Arteriovenous shunt	1	0	1
Back surgery	0	1	1
Brain surgery	1	0	1
Cramps when running	0	1	1
Excess histamine	0	1	1
Hypothyroidism	0	1	1
Lupus	0	1	1
Osgood-Schlater knee	1	2	3
Severe bleeding tendency	0	1	1
Severe menstrual cramps	0	1	1

As stated previously, each of these suburban elementary districts had students in out-of-district placements.

Appropriate class placements for these handicapped students were not available within these districts, necessitating these students' placements in out-of-district classes. The handicapping conditions of these students may not require daily nursing services, but these students often are more medically fragile than other students. Their emergency health records were reviewed as part of the eighth grade class and any identified health problems were recorded as part of the data shown in Table 2. Table 4 lists the handicapping conditions for these students.

Table 4

Handicapping Conditions for Eighth Graders in Out-of-District Placements (n = 16)

Handicapping Condition	Male (n)	Female (n)	Total (n)
Mentally retarded	3	2	5
Orthopedically impaired	3	1	4
Serious emotional disturbance	3	0	3
Specific learning disability	2	0	2
Visually impaired including blindness	0	2	2
Total Eighth Graders in Out-of-District Placements			16

Note. See Appendix D for California State Special Education definitions for these handicapping conditions.

Summary of Results

This study reviewed the emergency health records of 736 eighth grade students in order to answer the research question: What are the identified health problems of students in the eighth grade class of 1994-1995 in three suburban elementary public school districts?

The ethnicity of all eighth graders in these districts was recorded. The ethnicity number is different from the number in the sample because seven emergency health forms were missing from the review. Without student identification there was no way to eliminate these students from the ethnic composition. The gender and the source of medical and dental care as included on the emergency health records of the eighth grade students in these three suburban elementary districts was described. It was found that 72% of the students identified a health care provider. Dental care providers were identified for students on 69% of the records that included this category or for 56% of the entire sample.

There were 245 identified health problems recorded on the emergency health records for this population. This data does not indicate that 32% of the 736 students have identified health problems because the emergency health records for some students identifed multiple health problems. The qualifying handicapping conditions of students placed out of these school districts were also described.

Chapter 5

DISCUSSION

This research study was conducted in October, 1994, to record the identified health problems of eighth grade students in three suburban California elementary school districts. The purpose of the study was to assess the need for the provision of nursing services in the high school district these students will attend. The research procedure involved the onsite review of these students' emergency health records which were completed by their parents or guardians. A check mark was made on the health problems record for each reported health care problem. This chapter includes conclusions, scope and limitations of the study, and recommendations for further study and school nursing practice.

Conclusions

Immediate Care

There was a total of 245 identified health problems recorded on the emergency health records. This number does not indicate 245 students have identified health problems because a number of students had more than one health problem. Also, this number represents only the incoming freshman class in this high school district. The health status of students in the incoming sophomore, junior and senior class is unknown.

The health problems identified are potentially ones requiring nursing services. Students dealing with medication such as students with diabetes, students with asthma who regularly use nebulizers, those students hypersensitive to bee stings, or with cardiac conditions, migraine headaches, severe bleeding tendencies, and seizures, may require immediate response by professional nursing services. This high school district could be found liable in a lawsuit if no one was available to provide emergency intervention for any of these students. In terms of dollars, a lawsuit would cost the high school district many times the average annual school nurse's salary.

Future Concerns

Beyond immediate care, identification of health problems is important for these students' future health. The faculty involved with these students must be made aware of the potential ramifications of these students' health problems. Current treatment modalities must be shared with each student's instructors to safeguard his/her health status. This information is especially important in conditions in which the symptoms of impending medical emergency can be misinterpreted, such as with hyperglycemia.

In order to regularly attend class and focus on their studies, students with health problems must be in good health and supported by staff members aware of their health problems. This particular high school district does not

collect income based on the average daily attendance of their students, but there tends to be a correlation between achievement and attendance. This high school district is committed to motivating students to be high academic achievers, which is a difficult goal to attain when a student is absent due to health problems. With nursing services available on the school site, many health problems could be better controlled, reducing the amount of time a student is not able to attend class.

The community served by these three elementary districts has seen an increase in gang related activities in the last four years. Not only has the number of incidences increased, but also the level of violence has escalated. Increased tensions have developed along racial lines (L. Plummer, personal communication, November 16, 1994). These factors add stress to the open, multiracial high school district. With the potential for physical confrontation, the school nurse would provide emergency care should the need arise. Working in collaboration with others in the community, school nurses, sensitive to racial and cultural mores, can assist the faculty in defusing tensions. By providing a safe and confidential environment, school nurses can facilitate counseling for students involved in these gang related activities. The school nurse is also a resource for the identification of other agencies designed to intervene with gang related activities at a more indepth level.

The literature review addresses the health behaviors for the three largest minority groups represented in the scope of this study: Latino, black, and Asian. Cultural awareness and cultural sensitivity are essential nursing focuses in this multicultural community.

As the eighth grade students with handicapping conditions move into the high school district's domain, the school nurse can provide valuable information regarding the appropriate placement for these students. With more physically disabled students becoming part of the regular school population, the school nurse is an important member of the evaluation team. Guidance in adjusting or altering the environment will make the transition a smoother one for the student and the school.

Access to health care is a continuing issue. Students with or without insurance must have access to health care services. "Adolescents cite cost, access, and confidentiality as important issues affecting their use of health care. School based clinics were developed as one way to improve access to health care services for adolescents" (Sencenbaugh, 1994, p. 43). These school-based or school-linked clinics offer services that are providing early intervention and reduction in morbidity. As cited in Sencenbaugh (1994):

> The National Commission of the Role of the School and the Community in Improving Adolescent Health Care (1989) recommends four major actions that this nation must take

to substantially improve the health and achievement of its young people. They are:

1. Guarantee all adolescents access to health services regardless of ability to pay.

2. Make communities the front line in the battle for adolescent health.

3. Organize services around people, not people around services.

4. Urge schools to play a much stronger role in improving adolescent health. (p. 49)

The students in this study need these services and they are not available. Weekes' (1995) perspective identified the effect of environmental resources on the adaptation of adolescents to their chronic illness or handicapping condition. Supporting these students with on-site nursing services enhances the students' physical and emotional well-being.

Scope and Limitations

This study was limited to the review of the available emergency health records of the eighth graders registered in the three selected elementary school districts (N = 736). For students in non-graded classes in out-of-district placements, the records of students born between December 1, 1980 and November 30, 1982 were reviewed.

The first limitation was the unavailability of all the records. Seven records were not reviewed. Because student

names were not recorded, it is impossible to cross check which students' records are missing. This research is incomplete and health problems for some students may be unidentified. Also, on 11 of the health records, only the front side was completed (see Appendix B). The reverse side of the card, which listed health problems information, was left blank. This limited the completeness of the reporting data and its description.

It is misleading to assume that all 576 students identified by the health records as having health care sources are receiving adequate health care. Often a large individual deductible is required before the insurance begins paying, causing families to use their health care provider for only catastrophic medical problems. Treatment for many diseases may go untreated in the early stages. According to the Santa Clara County Children's Report Card (Collaborative for Children and Families in Santa Clara County, 1993), nationwide, in 1989, only 50% of insurance plans provided well-child care or annual physical examinations. Preventative diagnostic services were provided by only 67% of traditional indemnity plans. The insurance practice of denying coverage to high-risk children may alter the actual availability of health care to the students in this descriptive study.

The data were not analyzed to compare the identified health problems of those students with a listed insurance source

versus those students without a source of insurance listed. Also, the analysis does not necessarily indicate that a source of health insurance would increase usage of health services because many people may have major medical insurance only. Even for students with health insurance, the services many teenagers need such as outpatient mental health services, preventative care, and long-term, community-based care for chronically ill and disabled youth are typically not covered (Family Impact Seminars with COFO, 1991).

There is a question as to whether reviewing the emergency health records gives a complete health picture of the student. None of the records asked about the mental health of the student. The mental health of the student is an important component in the overall health status. Many young people find this stage of life stressful and need the assistance of health professionals. Sencenbaugh (1994) identified the need of adolescents to discuss "home environment, peer pressure, habits, risk-taking behavior, personal values, and plan appropriate actions" (p. 45). School nursing services provide students with this opportunity.

Also affecting this evaluation of student health status was the lack of information regarding previous injuries. Previous injuries, especially those involving growth plates, ligaments, and bone breaks, are helpful in evaluating the student's overall health. Conveying this information to

physical education teachers could present the opportunity for the development of strengthening exercises, or the avoidance of activities that might reinjure the student.

The greatest limitation of this study was relying on the self-reported information. Sexton-Hesse (1983), Sprangers (1987), and Bailey (1991), acknowledged the limitations of research involving the subjective information produced when self-reporting is the primary source. The emergency health records are supposed to be completed by parents or guardians. Some of the reviewed records appeared to be completed by students, then signed by parents or guardians. Students, as well as parents, may hesitate to divulge information they consider stigmatizing to the student. Although each district and school was very protective of revealing the information on the emergency cards, parents may be unaware of the restrictions placed on persons permitted to review these records. This lack of awareness may cause parents to be less than forthright about their student's health problems. This lack of full disclosure is especially true with regard to infectious diseases such as tuberculosis, Acquired Immune Deficiency Syndrome (AIDS), or Human Immunodeficiency Virus (HIV). Stigmatization might also extend to students with seizure disorders or ulcers.

Often among this age group, the most available resource of student information is either peers or the student's teachers. There is no place on the emergency record for

recording additional information provided by these other sources. This information then tends to be communicated by word of mouth. Because each school nurse is responsible for between 2000 and 3500 students, the consistent recording of this useful, but undocumented information, is difficult to achieve and maintain.

Recommendations for Future Research

This study needs to be replicated to validate the results. Another middle school group, with students of similar socioeconomic and ethnic background, should be chosen to validate the findings in this study.

Another interesting research study would be to correlate the number of absences due to illness for students with identified health problems and those students without identified problems. This information was not possible in this study because no names were recorded, making tracking of absences impossible. Further correlation between absences, academic achievement, and school nursing services would be valuable as a way to clarify the value of school nursing services.

Because the emergency forms were in English only in one school district, and English or Spanish in the other two, there may have been a number of misunderstandings due to language deficiencies. The most common languages spoken in these three districts include: English, Spanish, Vietnamese, Japanese, and Chinese. It is imperative that the emergency

records be available to parents in a language with which they are familiar. Equally important is the necessity that someone with a medical background be available to translate the information into a language familiar to the school nurse. The development of such health problem records would be a useful research project because it would involve not only translation of the record, but also cultural sensitivity and awareness of the medical terms used in other cultures.

Recommendations for School Nursing Practice

Weekes' (1991) framework of adolescent life-span development focuses on meeting the needs of adolescents through environmental, cultural and historical perspectives. School nurses must utilize each of these perspectives when providing appropriate care for students with chronic illness and for students requiring one time nursing support. This perspective enables the nurse to focus on the all the needs of the student, eliminating the possibility of missing an important component of the student's well-being.

Dr. Joycelyn Elders, former United States Surgeon General, states children cannot be educated if they are not healthy, and they cannot be kept healthy if they are not educated (1992). The California School Nurses Organization concurs by stating that "impaired health interferes with students' ability to fully function and adversely affects their ability to learn" (Palmer, 1993, p. 9).

The county in which these three school districts are located is experiencing substantially increasing numbers of children and families in poverty. The Children's Report Card reveals a "19% increase in children living in poverty between 1979 and 1989" (Collaborative for Children and Families in Santa Clara County, 1993, p. 1). Between 1988 and 1991, there has been "an increase of 67% for children ages 0-20 years enrolled in MediCal" (Collaborative for Children and Families in Santa Clara County, 1993, p. 9). The report cautions that eligibility does not guarantee access. Mental health services are also insufficient. From the 1990 estimated number of children needing mental health services, "85.6% were unserved" (Collaborative for Children and Families in Santa Clara County, 1993, p. 16). These facts support the increase in social and physical needs of students.

With decreasing revenues in real dollars from the State of California to school districts, the probability for increased funding for school nurses is minimal. It is recommended that school nurses identify the areas of responsibility that they are unable to adequately and effectively complete, either because of insufficient time or equipment. By uniting with other districts in adjacent neighborhoods (such as three elementary school districts feeding into one high school district), school nurses can

work effectively to support each other and expand the services available to their students.

No longer is identifying student needs sufficient. By necessity, school nurses are becoming more vocal advocates for the economic and social needs of their students as well as their physical needs. Frequently as the only health care advocate in a school district, school nurses must reach out to others in the community such as business leaders, politicians, and service groups. School nurses must be proactive by writing grant proposals to assist in meeting these needs. This advocate role requires school nurses to be effective communicators, both in group settings and through writing opportunities. Courses in public speaking and grant writing can be operative tools for increasing advocacy for their students. Also, by joining their local school nurses association, at the county or state level, school nurses are able to multiply their singular effectiveness.

As enrollment and the student/family's physical, emotional, and social needs grow, the time constraints, funding shortages, and lack of available resources will prohibit most school nurses from providing all the services as defined in the California Education Code, Section 49426 (West, 1988)(see Appendix E). This reality must be disseminated to the community. If school nurses can no longer provide these important services, they must become

creative in obtaining these services by other means so their students can be healthy and educated.

As this study demonstrates, there are students identified with health problems that could potentially require nursing services. Chronic illnesses, such as asthma, diabetes, cardiac conditions, and seizures, require on-going nursing services. These students could require emergency care at any moment. There is no one in this high school district designated to fulfill this potentially life saving role. Currently, when a student becomes ill at school, a parent or guardian is notified if the student is under 18 years of age. The parent is then requested to take the student home. If no parent can be reached, the student must spend the rest of the academic day sitting in a secretary's office.

This review of records has only identified the health problems for one of four classes in this high school district. Realistically, the number of students in this high school district with the potential need for emergency health care is significantly higher.

Students, families, and the faculty deserve the services offered by a professionally educated nurse. Using Weekes' life-span developmental perspective, school nurses are better prepared to identify students' needs based on the biological, cultural and environmental factors. These factors enable the school nurse to offer appropriate programs and flexible treatment modalities, thereby meeting the individual needs of

each student. These services ensure the students' safety and enable them to take advantage of the academic and social opportunities provided in this educational setting.

References

American Academy of Pediatrics. (1987). School health: A guide for health professionals. (1987 revision). Elk Grove Village, IL: Author.

Bailey, K. M. (1991). Diary studies of classroom language learning: The doubting game and the believing game. Language Acquisition and the Second/Foreign Language Classroom. (ERIC Document Reproduction Service No. ED 367 166)

Baltes, P. B., & Goulet, L. R. (1970). Status and issues of a life-span developmental psychology. In L. R. Goulet & P. B. Baltes (Eds.), Life-span developmental psychology: Research and theory (pp. 3-21). New York: Academic Press.

Baltes, P. B., Reese, H. W., & Nesselroade, J. R. (1977). Life-span developmental psychology: Introduction to research methods. Monterey, CA: Brooks/Cole.

Bello, T. A. (1979). The Latino adolescent. In R. T. Mercer (Ed.), Perspectives on adolescent health care (pp. 57-64). Philadelphia: Lippincott.

Breitmayer, B. J., Gallo, A. M., Knafl, K. A., & Zoeller, L. H. (1992). Social competence of school-aged children with chronic illnesses. Journal of Pediatric Nursing, 7, 181-188.

California Department of Education. (1994). California Basic Educational Data System for California Department of Education. Sacramento, CA: Author

California Department of Special Education. (1993). Special education program - A composite of laws. (ISBN 0-8011-1075-0). Sacramento, CA: California Department of Special Education Printing Office.

Coddington, R. D. (1972a). The significance of life events as etiologic factors in the diseases of children-I: A survey of professional workers. Journal of Psychomatic Research, 16, 7-18.

Coddington, R. D. (1972b). The significance of life events as etiologic factors in the diseases of children-II: A study of a normal population. Journal of Psychomatic Research, 16, 205-213.

Collaborative for Children and Families in Santa Clara County. (1993). The Santa Clara County Children's Report Card 1993. San Jose, CA: United Way of Santa Clara County and Community Foundation of Santa Clara County.

Cortese, P. A. (1993). Accomplishments in comprehensive school health education. Journal of School Health, 63, 21-23.

Dashiff, C. J. (1993). Parents' perceptions of diabetes in adolescent daughters and its impact on the family. Journal of Pediatric Nursing, 8, 361-369.

Elders, J. (1992, October 10). Keynote address. Presented at the conference "Health Issues in Today's Classroom", Santa Clara, CA.

Elders, M. J. (1993). Schools and health: A natural partnership. Journal of School Health, 63, 312-315.

Elfert, H., Anderson, J. M., & Lai, M. (1991). Parents' perceptions of children with chronic illness: A study of immigrant Chinese families. Journal of Pediatric Nursing, 6, 114-120.

Elias, M. J. & Branden-Muller, L. R. (1994). Social and life skills development during the middle school years: An emerging perspective. Middle School Journal, 4, 3-7.

Elkind, D. (1984). Teenage thinking: Implications for health care. Pediatric Nursing, 10, 383-385.

Ellickson, P. L., Lara, M. E., Sherbourne, C. D. & Zima, B. (1993). Forgotten ages, forgotten problems: Adolescents health. Santa Monica, CA: Rand Corporation. (ERIC Document Reproduction Service No. ED 362 814)

Family Impact Seminars with Consortium of Family Organizations (COFO). (July 12, 1991). Promoting health and well-being through school-linked, multi-service, family-friendly programs. Washington, DC. (ERIC Document Reproduction Service No. ED 348 348)

Fields, K. B., Rasco, T., Kramer, J. S., & Cates, R. (1992). Rehabilitation exercises for common sports injuries. American Family Physician, 45, 1233-1237.

Fisher, M. (1992). Parents' views of adolescent health issues. Pediatrics, 3, 335-341.

Fong, C. M. (1979). The Chinese adolescent. In R. T. Mercer (Ed.), Perspectives on adolescent health care (pp. 64-72). Philadelphia: Lippincott.

Fowler, M. G., Davenport, M. G., & Garg, R. (1992). School functioning of US children with asthma. Pediatrics, 90, 939-944.

Friedman, M. M. (1990). Transcultural family nursing: Application to Latino and Black families. Journal of Pediatric Nursing, 5, 214-222.

Glassock, G. T. (1986). Youth and disability: Its effect on the person. Kensington, Australia: Foundation for Child and Youth Studies. (ERIC Document Reproduction Service No. ED 270 202)

Gleave, D., & Manes, A. S. (1990). The Central Americans. In N. Waxler-Morrison, J. M. Anderson, & E. Richardson (Eds.), Cross-cultural caring: A handbook for health professionals in Western Canada (pp. 36-67). Vancouver, British Columbia, Canada: University of British Columbia.

Graff, J. C., & Ault, M. M. (1993). Guidelines for working with students having special health care needs. Journal of School Health, 63, 335-338.

Grey, M., Cameron, M. E., & Thurber, F. W. (1991). Coping and adaptation in children with diabetes. Nursing Research, 40, 144-149.

Grey, M. & Thurber, F. W. (1991). Adaptation to chronic illness in childhood: Diabetes mellitus. Journal of Pediatric Nursing, 6, 302-309.

Groër, M. W., Thomas, S. P., & Shoffner, D. (1992). Adolescent stress and coping: A longitudinal study. Research in Nursing & Health, 15, 209-217.

Havighurst, R. J. (1973). History of development psychology: Socialization and personality development through the life span. In P. B. Baltes & K. W. Schaie (Eds.), Life-Span Psychology: Personality and Socialization. (pp. 3-24). New York: Academic Press.

Hayes, C. A. (1979). The black adolescent: Attitudes and reflections. In R. T. Mercer (Ed.), Perspectives on adolescent health care (pp. 49-57). Philadelphia: Lippincott.

Hechinger, F. M. (1992). Adolescent health: A generation at risk. Carnegie Quartlerly, 37, 2-16.

Howe, J. (1980). Nursing care of adolescents. New York: McGraw-Hill.

Jack, M. S. (1989). Personal fable: A potential explanation for risk-taking behavior in adolescents. Journal of Pediatric Nursing, 4, 334-338.

Jacobson, G. (1994). Stressful life experiences in 9- to 11-year-old children: A phenomenologyical study. Nursing Research, 43, 95-99.

Kager, V. A. & Holden, E. W. (1992). Preliminary investigation of the direct and moderating effects of family and individual variables on the adjustment of children and adolescents with diabetes. Journal of Pediatric Psychology, 17, 491-502.

Keane, G. P. (1993, March). Pediatric and adolescent sports medicine. Paper presented at the meeting of the San Mateo County School Nurses' Association, San Mateo, CA.

Klaczynski, P. A. (1990). Cultural-developmental tasks and adolescent development: Theoretical and methodological considerations. Adolescence, 25, 811-823.

Lai, M. C., & Yue, K-M. K. (1990). The Chinese. In N. Waxler-Morrison, J. M. Anderson, & E. Richardson (Eds.), Cross-cultural caring: A handbook for health professionals in Western Canada (pp. 68-90). Vancouver, British Columbia, Canada: University of British Columbia.

La Greca, A. M. (1992). Peer influences in pediatric chronic illness. Journal of Pediatric Psychology, 17, 775-784.

Larter, N. L., Kieckhefer, G., & Paeth, S. T. (1993). Content validation of standards of nursing care for the child with asthma. Journal of Pediatric Nursing, 8, 15-21.

Lazarus, W. & Ellwood, D. A. (1991). What's happening to our children? A county by county guide. Los Angeles, CA: Children Now.

Leininger, M. (1978). Transcultural nursing: Concepts, theories and practices. New York: John Wiley & Sons.

Lieu, T. A., Newacheck, P. W. & McCanus, M. A. (1993). Race, ethnicity, and access to ambulatory care among US adolescents. American Journal of Public Health, 83, 960-965.

Lipsitz, J. (1981, March 7-10). Early adolescence: Social/psychological issues. Paper presented at the Annual Conference of the Association for Supervision and Curriculum Development, St. Louis, MO. (ERIC Document Reproduction Service No. ED 206 404)

McHarney-Brown, C., & Kaufman, A. (1991). Comparison of adolescent health care provided at a school-based clinic and at a hospital-based pediatric clinic. Southern Medical Journal, 84, 1340-1342.

Meeropol, E. (1991). One of the gang: Sexual development of adolescents with physical disabilities. Journal of Pediatric Nursing, 6, 243-249.

Mercer, R. T. (1979). Perspectives on adolescent health care. Philadelphia: Lipponcott.

Millstein, S. G. (1989). Adolescent health challenges for behavioral scientists. American Psychologist, 44, 837-842.

Millstein, S. G., Irwin, C. E., Adler, N. E., Cohn, L. D., Kegeles, S. M., & Dolcini, M. M. (1992). Health-risk

behaviors and health concerns among young adolescents. Pediatrics, 89, 422-428.

Myers, D. P., & Andersen, A. R. (1991). Adolescent addiction - Assessment and identification. Journal of Pediatric Health Care, 5, 86-93.

Nelson, R. P. (1990). Quality health care for people with developmental disabilities: A guide for health professionals. Minnesota University.

Oda, D. S. (1979). Community nursing in schools: Developing a specialized role. In S. E. Archer & R. P. Fleshman (Eds.), Community health nursing: Patterns and practice. (pp. 495-511). North Scituate, MA: Duxbury Press.

Oda, D. S. (1981). A viewpoint on school nursing. American Journal of Nursing, 9, 167-168.

Office of Techology Assessment. (1991). Adolescent health - volume II: Background and the effectiveness of selected prevention and treatment services. Washington, DC: Congress of the United States. (ERIC Document Reproduction Service No. ED 339 968)

Ooms, T., & Herendeen, L. (1990). The unique health needs of adolescents: Implications for health care insurance and financing. Washington, DC: Family Impact Seminar, the AAMFT Research and Education Foundation. (ERIC Document Reproduction Service No. ED 345 153)

Palmer, E. A. (1993). School nurses' perceptions of the value of their services: A descriptive study. Unpublished master's thesis, San Jose State University, San Jose, CA.

Parker, S. D. (1988). Accident or suicide? Do life change events lead to adolescent suicide? Journal of Psychosocial Nursing, 26, 15-19.

Petersen, A. C., & Crockett, L. (1985). Pubertal timing and grade effects on adjustment. Journal of Youth and Adolescence, 14, 191-205.

Piaget, J. (1955). The stages of intellectual development in childhood and adolescence. In H. E. Gruber & J. J. Vonèche (Eds.), The essential Piaget (pp. 814-819). New York: Basic Books.

Revell, G. M. & Liptak, G. S. (1991). Understanding the child with special health care needs: A developmental perspective. Journal of Pediatric Nursing, 6, 258-267.

Salmonsen, L. I. (1988). Social maladaptation to first grade and teen drug abuse. School Nurse, 5 (6), 9-14.

Santa Clara County Office of Education. (1994). Santa Clara County Special Education Eligibility Guidelines. San Jose, CA: Author.

Sencenbaugh, J. C. (1994). A comparison of adolescent health care at a school-linked clinic and at a community-based

family health center. Unpublished master's thesis, San Jose State University, San Jose, CA.

Sexton-Hesse, C. A. (1983). Critical issues in empirical human science: The contribution of phenomenology. Philadelphia, PA: Annual Meeting of the American Association for Adult and Continuing Education. (ERIC Document Reproduction Service No. ED 237 649)

Sprangers, M. (1987). Validity threats in retrospective pretest-posttest designs. Washington, DC: Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED 286 896)

Stivers, C. (1985). Health concerns associated with adolescent growth and development. (ERIC Document Reproduction Service No. ED 276 683)

Task Force on Standards of School Nursing Practice. (1983) Standards of school nurse practice. Kansas City, MO: American Nurses' Association.

Wadsworth, B. J. (1989). Piaget's theory of cognitive and affective development. (4th ed.). New York: Longman.

Waechter, E. H. (1979). The adolescent with a handicapping, chronic, or life-threatening illness. In R. T. Mercer (Ed.), Perspectives on adolescent health care (pp. 186-209). Philadelphia: Lippincott.

Walsh, M., & Ryan-Wenger, N. M. (1992). Sources of stress in children with asthma. Journal of School Health, 62, 459-463.

Washburn, P. (1991). Identification, assessment and referral of adolescent drug abusers. Pediatric Nursing, 17, 137-140.

Weekes, D. P. (1991). Application of the life-span developmental perspective to nursing research with adolescents. Journal of Pediatric Nursing, 6, 38-48.

Weekes, D. P. (1995). Adolescents growing up chronically ill: A life-span developmental view. The Journal of Health Proomotion and Maintance, 17, 22-34.

Weekes, D. P., & Rankin, S. H. (1988). Life-span developmental methods: Application to nursing research. Nursing Research, 37, 380-383.

West's Annotated California Codes. Education Code Sections 44800 to 50999, Vol. 27B (1988). St. Paul, MN: West.

Whisler, J. S. (1990). Young adolescents and middle level education: A review of curent issues, concerns, and recommendations. Aurora, CO: Mid-Continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 346 960)

Wiens, L., Sabath, R., Ewing, L., Gowdamarajan, R., Portnoy, J., & Scagliotti, D, (1992). Chest pain in otherwise healthy children and adolescents is frequently caused by exercise-induced asthma. Pediatrics, 90, 350-353.

Wold, S. J. (1981). School nursing: A framework for practice. St. Louis: Mosby.

Wysocki, T. (1993). Family communication and IDDM. Journal of Pediatric Psychology, 18, 441-451.

Appendix A

Consent Letters

SJSU SAN JOSE STATE UNIVERSITY

A campus of The California State University

Office of the Academic Vice President • Associate Academic Vice President • Graduate Studies and Research
One Washington Square • San José, California 95192-0025 • 408/924-2480

TO: Gerri L. Carlton

FROM: Serena W. Stanford, Ph.D. Serena W. Stanford
AAVP, Graduate Studies and Research

DATE: August 8, 1994

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

"Health Needs Assessment of Eighth Graders in Three Suburban Elementary Public School Districts"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research projects, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Serena Stanford immediately. Injury includes but is not limited to bodily harm, psychological trauma and relaese of potentially damaging personal information.

Please also be advised that each subject needs to be fully informed and aware that their participation in your research projects is voluntary, and that he or she may withdraw from the project at anytime. Further, a subject's participation, refusal to participate or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted. If you have questions, please contact me at (408) 924-2480.

LOS ALTOS SCHOOL DISTRICT

201 COVINGTON ROAD LOS ALTOS, CA 94024
(415) 941-4010 FAX (415) 941-7668

BOARD OF TRUSTEES: GERRI L. CARLTON, PHILIP J. FAILLACE, JOHN T. MOSS, TERRI SACHS, JAY A. THOMAS
MARGARET H. GRATIOT, SUPERINTENDENT

May 9, 1994

Ms. Gerri Carlton, R.N.

Dear Ms. Carlton:

I am happy to give you permission to look at the emergency health records of our 1994-95 eighth graders as part of your thesis research studying the health needs of early adolescents.

As we discussed on the telephone, we will arrange for you to access the emergency health records in a way which keeps the names of the students confidential, in order to comply with state law.

I am looking forward to seeing the results of your study.

Sincerely,

Margaret Gratiot
Superintendent

Dr. Patricia J. Bubenik
Superintendent

Dr. Daniel A. Vinson
Assistant Superintendent

Susan H. Spaay
Business Manager

Modrite K. Archibeque
Director of Instruction

May 6, 1994

Mrs. Gerri Carlton, RN

Dear Gerri:

I enjoyed talking with you on the telephone yesterday. As per our conversation, the Mountain View School District will allow you access during October 1994 to the emergency cards of our eighth grade students as part of your Master's thesis study. As requested by the Graham Principal, Gay Krause, the records will be made available to you after 5:00 p.m. and that our District nurse or retired nurse needs to be present with you during your search.

Please contact me at (415) 968-6555 when you are ready to begin your project.

Sincerely,

Dan

Dr. Daniel A. Vinson
Assistant Superintendent
Personnel/Student Services

cc: Dr. Patricia Bubenik, Superintendent
Mrs. Gay Krause, Graham Principal
Mrs. Sue Barrie, District Nurse

whisman school district

DISTRICT OFFICE
750-A SAN PIERRE WAY, MOUNTAIN VIEW, CA 94043
TELEPHONE: (415) 903-6900
FAX: (415) 969-1167

April 26, 1994

Ms. Gerri Carlton

Dear Gerri,

I have reviewed your proposal for a thesis study of health needs of early adolescents. I see no reason that you should not have access to the health records of our 8th grade students, given that all information you will be collecting will be anonymous.

As I mentioned to you, I will be forwarding a copy of your request to our district nurse, Diane Dizon, as well as to Jim Lianides, Principal at Crittenden Middle School.

I hope that your data gathering goes smoothly and look forward to working with you on this project next October.

Sincerely,

Eve T. Bressler, Ed.D.
Superintendent

ETB/pf

cc: Diane Dizon
Jim Lianides

Appendix B

The Three Elementary School Districts' Emergency Health Records

LOS ALTOS SCHOOL DISTRICT EMERGENCY INFORMATION

PUPIL'S NAME _____ HOME TELEPHONE _____

ADDRESS _____ CITY _____ ZIP _____

BIRTHDATE _____ GRADE _____ TEACHER _____ ROOM # _____

FATHER'S NAME _____ MOTHER'S NAME _____

ADDRESS _____ ADDRESS _____

CITY _____ ZIP _____ CITY _____ ZIP _____

HOME PHONE # _____ HOME PHONE # _____

EMPLOYER _____ EMPLOYER _____

WORK PHONE # _____ WORK PHONE # _____

SHOULD THIS CHILD BECOME ILL AT SCHOOL AND PARENT CANNOT BE REACHED, PLEASE NOTIFY ONE OF THE FOLLOWING RELATIVES OR NEIGHBORS (LOCAL PHONE NUMBERS ONLY)

(1) _____ (2) _____
NAME NAME

ADDRESS ADDRESS

PHONE # RELATIONSHIP PHONE # RELATIONSHIP

SHOULD A CIVIL DEFENSE EMERGENCY OR NATURAL DISASTER, SUCH AS AN EARTHQUAKE, OCCUR AND I AM UNABLE TO REACH THE SCHOOL TO PICK UP MY CHILD, I DESIGNATE THE PERSONS NAMED BELOW TO PICK UP MY CHILD:

PS-0070 Revised 3/94 -PLEASE COMPLETE MEDICAL INFORMATION ON OTHER SIDE-

PUPIL'S NAME _____

COMPLETION OF THIS EMERGENCY CARD DOES NOT CONSTITUTE PERMISSION FOR ANY STAFF MEMBER OR EMPLOYEE OF THE LOS ALTOS SCHOOL DISTRICT TO AUTHORIZE MEDICAL TREATMENT FOR YOUR CHILD. STUDENTS WHO MIGHT INCUR A LIFE-THREATENING INJURY OR ILLNESS WOULD BE TREATED AT A HOSPITAL.

SHOULD THIS CHILD BECOME SERIOUSLY ILL OR INJURED, PLEASE NOTIFY:

DR: _____ PHONE # _____

DR: _____ PHONE # _____

DENTIST _____ PHONE # _____

CHILD'S MEDICAL PLAN/GROUP NUMBER _____
OR SEND THIS CHILD BY AMBULANCE TO (CHECK ONE):
NEAREST HOSPITAL _____ OR TO _____ HOSPITAL

DOES YOUR CHILD HAVE A HISTORY OF: (PLEASE CHECK ANY THAT APPLY)

SEVERE BEE STING _____ ASTHMA _____ EPILEPSY _____ DIABETES _____ ALLERGIES _____

EYE PROBLEMS _____ HEARING DIFFICULTIES _____ HEART CONDITION _____ PHYSICAL LIMITATIONS _____

OTHER (PLEASE EXPLAIN) _____

PLEASE COMPLETE THE FOLLOWING SECTION IF YOUR CHILD PRESENTLY IS TAKING ANY MEDICATION ON A CONTINUING BASIS:

NAME OF MEDICATION _____ CURRENT DOSAGE _____

PLEASE NOTE: Should it be necessary for your child to take medication at school, you must provide the school with the physician's written instructions and your written permission. Forms for this purpose are available from the school.

PARENT SIGNATURE _____ DATE _____

MOUNTAIN VIEW SCHOOL DISTRICT DISASTER & EMERGENCY INFORMATION FORM
SCHOOL YEAR 19___ - 19___

DEAR PARENT OR GUARDIAN:

We need the following information for use in case your child becomes ill or is injured while at school. In cases of a minor nature, first aid will be administered. It is understood that the instructions given on this card will remain in force until revoked by the parent or guardian.

What should the school do if the injury or illness is of a serious nature:

1. Child should be placed in care of personal physician. Yes ___ No___ Hospital_____
   Name of Physician_____ Phone_____
   Physician's Address
2. If physician named above cannot be reached immediately, what action should be taken?_____
3. In the event of injury to the mouth or teeth, list family dentist:
   Name of Dentist_____ Phone_____
   Dentist's Address_____
4. Insurance Carrier (Medical)_____ Insurance #_____
5. Insurance Carrier (Dental)_____ Insurance #_____

SPECIAL HEALTH CONCERNS/PHYSICAL LIMITATIONS THE SCHOOL SHOULD KNOW ABOUT (INCLUDING DRUG/FOOD ALLERGIES):

_____

_____

_____

OTHER CHILDREN ATTENDING MOUNTAIN VIEW SCHOOLS

	CHILD'S NAME	ROOM	AGE	GRADE	SCHOOL
1.					
2.					
3.					
4.					

Your Signature_____ Relation to child_____ Date_____

Please Supply and Verify All Information – Notify School of Changes Immediately

(Over)

CHILD'S NAME:

last:_____ first:_____ grade:___ room:___ male:___ female___

address:_____ home phone:_____

Name of mother/guardian:_____ occupation:_____

employer:_____ phone number:_____

Name of father/guardian:_____ occupation:_____

employer:_____ phone number:_____

Give the names of two persons who should be contacted if there is an emergency and you cannot be reached:

1._____
name relationship

_____
address phone number

2._____
name relationship

_____
address phone number

Give the names of three persons in addition to the two above who are authorized to pick up your child from school in case of a disaster:

1._____

2._____

3._____

FOR SCHOOL OFFICE USE ONLY
Signature of person picking up student (must be listed or have parent permission):

_____

TARJETA DE EMERGENCIA DEL DISTRITO ESCOLAR DE MOUNTAIN VIEW
Año Ecolar 19___ - 19___

ESTIMADOS PADRES O TUTORES:

Se necesita la siguiente información en caso de que le ocurra a su hijo/a alguna enfermedad o accidente grave mientras esté en la escuela. En casos de menor gravedad, se administrarán primeros auxilios. Se sobrentiende que las instrucciones dadas en esta tarjeta serán válidas hasta ser revocadas por el padre o tutor.

Indicar que debería hacer la escuela si es una ocurrencia grave:

1. Poner el niño al cuidado del médico de familia. Sí ___ No___ Hospital_____
   Nombre del médico_____ Teléfono_____
   Direccion del médico_____
2. En caso de no localizar al médico inmediatamente ¿qué acción debería tomar la escuela?_____
3. Si le ocurré un accidente a la boca o a los dientes:
   Nombre del dentista_____ Teléfono_____
   Direccion del dentista_____
4. Compañía de seguros (Medical)_____ Número de seguros_____
5. Compañía de seguros (Dental)_____ Número de seguros_____

ALGÚN IMPEDIMENTO FÍSICO O PROBLEMAS DE SALUD QUE LA ESCUELA DEBERÍA SABER (INCLUYENDO ALERGIAS DE DROGAS Y COMIDA)

_____

_____

OTROS HIJOS QUE ASSISTEN A ESCUELAS DE MOUNTAIN VIEW

NOMBRE DEL HIJO/A'S	SALON	EDAD	GRADO	ESCUELA
1.				
2.				
3.				
4.				

Su firma_____ Parentesco_____ Fecha_____

Favor de llenar y verificar toda esta Informacion -- Notificar a la escuela inmediatamente si hay cambios.

(Atras)

NOMBRE DEL ESTUDIANTE:

apellido:_____ primer:_____ grado:____ salón:____ masculino__ femenino_

dirección:_____ teléfono:_____

Nombre de la madre o tutora:_____ ocupación:_____

empleada por:_____ teléfono:_____

Nombre del padre o tutor:_____ ocupación:_____

empleado por:_____ teléfono:_____

Dar los nombres de dos personas conocidas si en caso de emergencia no les podemos localizar:

1._____
nombre parentesco

_____
dirección teléfono

2._____
nombre parentesco

_____
dirección teléfono

Además de los nombres de arriba dar tres nombres de personas conocidas que son autorizadas recoger a su hijo/a de la escuela en caso de un desastre:

1._____

2._____

3._____

SOLO PARA EL USO DE LA OFICINA DE LA ESCUELA:

_____

☐ I.D.

WHISMAN SCHOOL DISTRICT EMERGENCY CARD

NAME_____ _____ M__F__TELEPHONE(___)_____
Last First Initial Area Code

ADDRESS_____ _____
Number Street City Zip Code

BIRTHDATE_____GRADE_____TEACHER_____LANGUAGE SPOKEN IN HOME_____

FATHER'S NAME_____EMPLOYER_____
(IN HOME : YES___NO___) If military, please list rank If military, please list squadron

WORK ADDRESS_____WORK TELEPHONE(___)_____

FATHER'S OCCUPATION_____MOTHER'S OCCUPATION_____

MOTHER'S NAME_____EMPLOYER_____
(IN HOME: YES___NO___) If military, please list rank If military, please list squadron

WORK ADDRESS_____WORK TELEPHONE(___)_____
If Single Parent, Custody awarded to: Mother____Father____

CHILD CARE PROVIDER NAME_____ADDRESS_____PHONE(___)_____

DOCTOR'S NAME_____ ADDRESS_____PHONE(___)_____

In case of an emergency and you are unable to be reached, please indicate person to be contacted.
NAME_____ ADDRESS_____PHONE(___)_____

EMERGENCY ACTION: If the school is unable to reach you or the doctor named above, do you give permission to take your child to the nearest doctor or medical facility for treatment, if necessary? YES___NO___If No, what do you wish school authorities to do? I understand the Whisman School District does not provide accident medical insurance for school related injuries, but does offer student accident insurance for voluntary purchase. I have received the information & application for this program.

DATE_____ SIGNATURE_____

PLEASE COMPLETE REVERSE SIDE OF CARD

DISASTER RELEASE INFORMATION

In the event of a major disaster, such as an earthquake, the following information is necessary to help insure the safe release of your student from school. All of this information will be kept confidential.

Your child will only be released to a parent or any of the following people with appropriate identification. (List as many as you can). The following people will only be contacted if a disaster/crisis/emergency has occurred.

NAME	ADDRESS	TELEPHONE NUMBER	RELATIONSHIP

MEDICAL ALERT or any special problems, medication, allergies etc. concerning your child.

_____

_____Blood Type:_____ (Optional)

DATE_____ SIGNATURE_____
My signature indicates authorization to release my child to any of the above individuals.

WITHDRAWAL DATE_____ DESTINATION_____

PLEASE COMPLETE REVERSE SIDE OF CARD

WHISMAN SCHOOL DISTRICT EMERGENCY CARD
(Tarjeta de Emergencia)

NOMBRE_____M__F__TELEFONO (___)_____
Apellido, Primero, Inicial del segundo Codigo
DOMICILIO_____ _____
Numero Calle Ciudad Codigo Postal
FECHA DE NACIMIENTO_____GRADO_____MAESTRO_____
IDIOMA HABLADO EN CASA_____
NOMBRE DEL PADRE_____EMPLEADOR_____
(En casa: si___ No____) Si es militar, indique rango Si es militar indique escuadron
DOMICILIO DE TRABAJO_____TELEFONO(____)_____
OCUPACION DEL PADRE_____OCUPACION DE LA MADRE_____
NOMBRE DE
LA MADRE_____EMPLEADOR_____
En Casa: Si__ No__) Si es militar ,indique rango Si es militar, indique escuadron
DOMICILIO DE TRABAJO_____TELEFONO(___)_____
Si es padre o madre soltero, Custodia se le otorgo a: Madre____ Padre_____
PROVEEDOR DE CUIDADO DEL NINO
NOMBRE_____DOMICILIO_____TEL. (___)_____
NOMBRE DEL MEDICO_____DOMICILIO_____TELEFONO(___)_____
En caso de emergencia y usted no puede ser contactado, por favor indique la persona a quien hay que contactar.
NOMBRE_____DOMICILIO_____TELEFONO(___)_____
ACCION DE EMERGENCIA: Si la escuela no puede ponerse en contacto con usted o su medico arriba mencionado, ¿otorga usted permiso para que su hijo sea llevado para tratamiento a la facilidad medica mas cercana? SI____ NO___ Si no, ¿Que desea que las autoridades escolares hagan? Comprendo que el Distrito Escolar Whisman no provee seguro medico de accidentes para cubrir heridas relacionadas con la escuela, pero si ofrece seguro de accidentes para alumnos para compra voluntaria. He recibido la informacion y aplicacion para este programa.

FECHA_____ FIRMA_____

POR FAVOR COMPLETE EL REVERSO DE ESTA TARJETA

INFORMACION SOBRE ENTREGA EN CASO DE DESASTRE

En caso de un desastre mayor, tal como un terremoto, la siguiente informacion es necesaria para ayudar a asegurar la entrega segura de su estudiante de la escuela.
Toda esta Informacion sera mantenida en confidencia.

Su hijo solo sera entregado a sus padres o a cualquiera de las personas siguientes con la identificacion apropiada. (Apunte cuantos pueda). Nos pondremos en contacto con las siguientes personas solo que haya ocurrido un desastre/crisis/emergencia.

NOMBRE	DOMICILIO	TELEFONO	RELACION

ALERTA MEDICA o cualquier problema especial, medicamento, alergias etc., acerca de su hijo.

_____
_____Tipo de Sangre:_____
(Opcional)

FECHA_____FIRMA_____
Mi firma indica autorizacion para entregar a mi hijo a cualquier individuo arriba mencionado.

FECHA DE RETIRO_____ DESTINO_____

POR FAVOR COMPLETE EL REVERSO DE ESTA TARJETA

Appendix C

Data Collection Tool

Data Collection Tool*

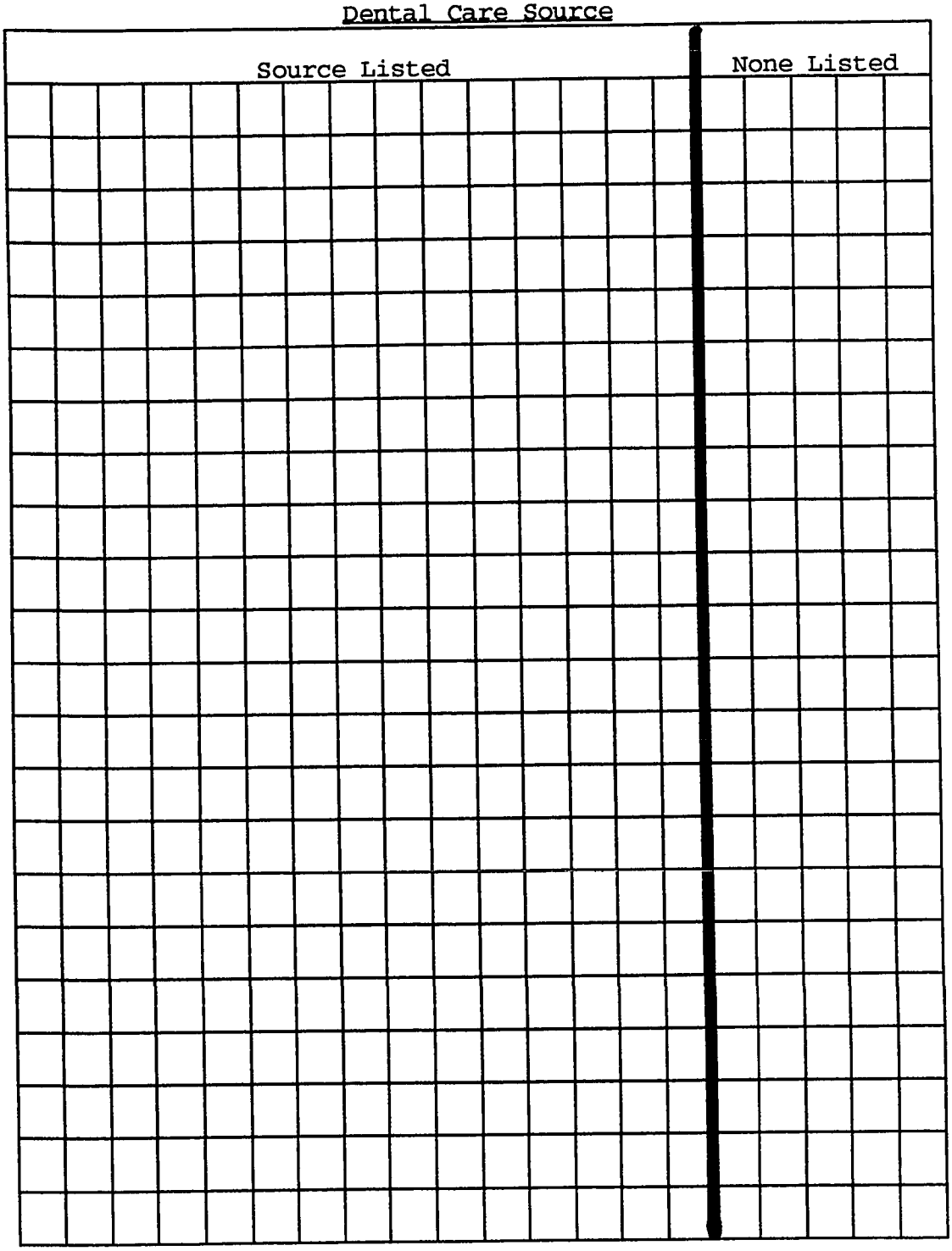
Gerri L. Carlton, RN, Masters Candidate

Health Care Source

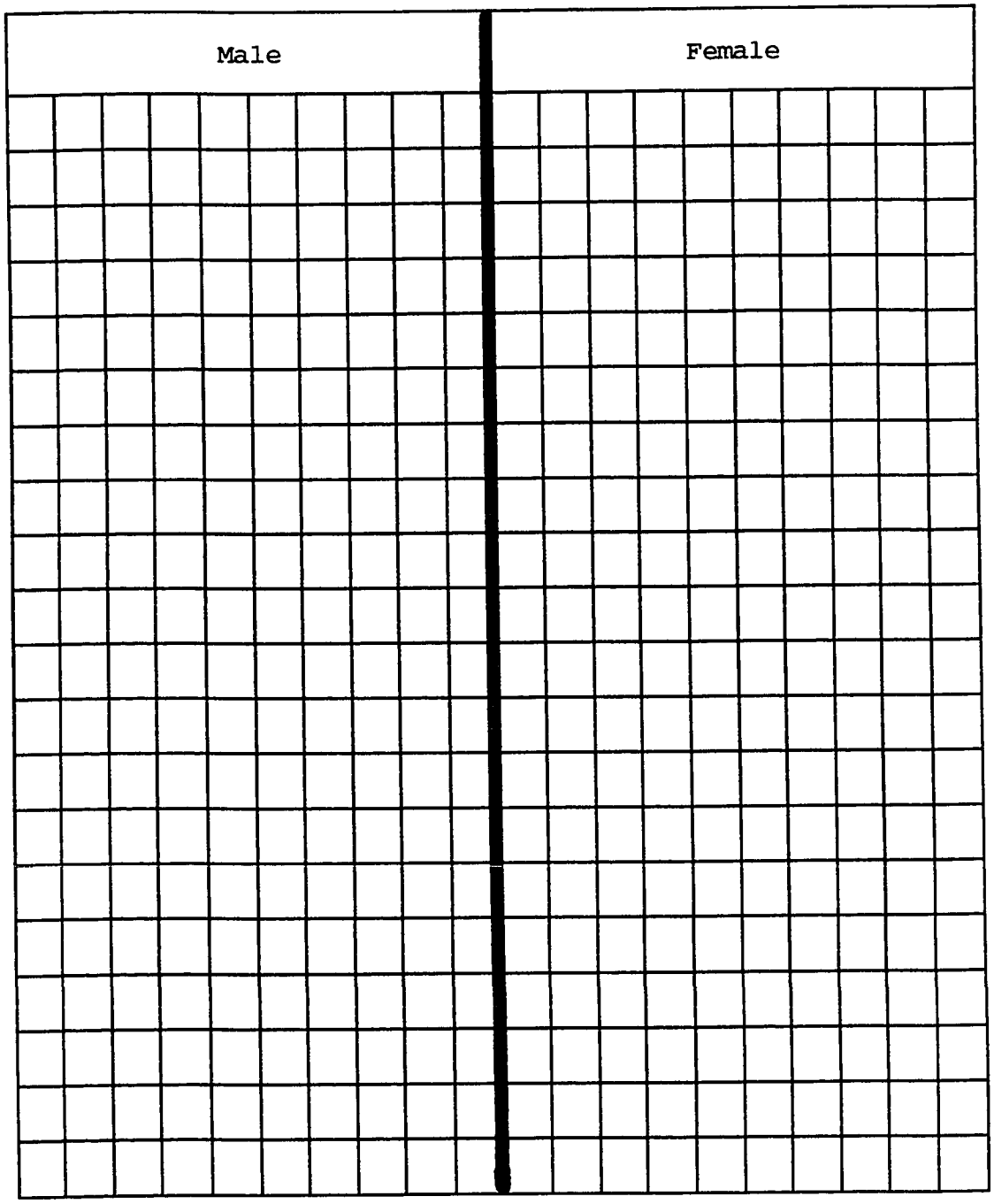
Private	MediCal	Other	None Listed

*Additional copies of forms were required to complete data collection.

Dental Care Source



Gender Identification



Health Problems Record

Health Problem	Male					Female					Total
Allergies											
Arthritis											
Asthma (seasonal)											
Asthma-nebulizer assisted											
Attention deficit disorder											
Bee sting hypersensitivity											
Cancer											
Cardiac conditions											
Diabetes											
Fainting episodes											
Frequent epitaxisis											
Hearing disabilties											
Hereditary disorders											
Cushing's disease											
Cystic fibrosis											
Downs Syndrome											
Muscular dystrophy											
Sickle cell anemia											
Infectious diseases											
AIDS											
Cytomeglovirus											

Health Problems Record

Health Problem	Male					Female					Total
Hepatitis											
Herpes											
HIV											
Tuberculosis											
Migraine headaches											
Neurological conditions											
Cerebral palsy with intermittent catherization											
Spina Bifida											
Orthopedic restrictions											
Pregnant/post-partum											
Seizure disorders											
Thyroid disorders											
Ulcers											
Vision disabilities											
Other health problems that may require nursing intervention											
Arteriovenous shunt											
Back surgery											
Brain surgery											
Cramping when running											

Health Problems Record

Health Problem	Male					Female					Total
Excess histamine											
Hypothroidism											
Lupus											
Osgood-Schlater knee											
Severe bleeding tendency											
Severe menstrual cramps											

APPENDIX D

Special Education Eligibility Definitions

Special Education Eligibility Definitions

Santa Clara County Office of Education (1994) applies the following definitions of eligibility to special education students in Santa Clara County:

Mental Retardation: "A pupil has significantly below average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affect a pupil's educational performance" (p. 9).

Orthopedic Impairment: "A pupil has a severe orthopedic impairment which adversely affects the pupil's educational performance. Such orthopedic impairments include impairments caused by congenital anomaly, impairments caused by disease, and impairments from other causes" (p. 11).

Serious Emotional Disturbance:

> Because of a serious emotional disturbance, a pupil exhibits one or more of the following characteristics over a long period of time and to a marked degree, which adversely affect educational performance:
>
> 1. An inability to learn which cannot be explained by intellectual, sensory, or health factors.
> 2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
> 3. Inappropriate types of behavior or feelings under normal circumstances exhibited in several situations.

4. A general pervasive mood of unhappiness or depression.

5. A tendency to develop physical symptoms or fears associated with personal or school problems. (p. 13)

Specific Learning Disability: A pupil has a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an impaired ability to listen, think, speak, read, write, spell, or do mathematical calculations, and has a severe discrepancy between intellectual ability and achievement in one or more of the academic areas specified in Section 56337 (a) of the Education Code. (p. 15)

Visual Impairment including blindness: "A pupil has a visual impairment which, even with correction, adversely affects a pupil's education performance" (p. 24).

APPENDIX E

Definition of School Nursing from California Education Code

School Nurse Definition (West, 1988, pp. 185-186). School nurses; qualifications; services.

School nurses strengthen and facilitate the educational process by improving and protecting the health status of children by identification and assistance in the removal or modification of health-related barriers to learning in individual children. The major focus of school health services is the prevention of illness and disability, and the early detection and correction of health problems. The school nurse is especially prepared and uniquely qualified in preventive health, health assessment, and referral procedures.

Nothing in this section shall be construed to limit the scope of professional practice or otherwise to change the legal scope of practice for any registered nurse or other licensed health arts practitioner. Rather, it is the intent of the Legislature to provide positively for the health services, many of which may be performed in the public schools only by physicians and school nurses. School nurses may perform, if authorized by the local governing board, the following services:

(a) Conduct immunization programs . . .

(b) Assess and evaluate the health and developmental status of pupils . . .

(c) Interpret the health and developmental assessment to parents, teachers, administrators, and other professionals directly concerned with the pupil.

(d) Design and implement a health maintenance plan to meet the individual health needs of the students . . .

(e) Refer the pupil and his or her parent or guardian to appropriate community resources for necessary services.

(f) Maintain communication with parents and all involved community practitioners and agencies to promote needed treatment and secure reports of findings pertinent to educational planning.

(g) Interpret medical and nursing findings appropriate to the student's individual educational plan and make recommendations to professional personnel directly involved.

(h) Consult with, conduct in-service training to, and serve as a resource person to teachers and administrators, and act as a participant in implementing any section or sections of a comprehensive health instruction curriculum for students by providing current scientific information regarding nutrition, preventive dentistry, mental health, genetics, prevention of communicable diseases, self-health care, consumer education, and other areas of health.

(i) Counsel pupils and parents . . .

(j) Assist parents and pupils to solve financial, transportation and other barriers to needed health services.