

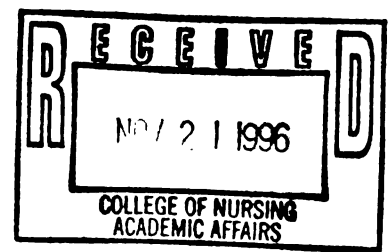


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A PLAN FOR IMPLEMENTING AND EVALUATING THE
ADVANCED PRACTICE NURSE IN PROVIDING
SCHOOL BASED HEALTH SERVICES FOR
LUDINGTON JUNIOR/SENIOR HIGH SCHOOL

Scholarly Project for the Degree of M. S.
MICHIGAN STATE UNIVERSITY
BETHANY HARTRUM
1996

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By

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MASTER OF SCIENCE

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ABSTRACT

A PLAN FOR IMPLEMENTING AND EVALUATING THE ADVANCED PRACTICE NURSE IN PROVIDING SCHOOL BASED HEALTH SERVICES FOR LUDINGTON JUNIOR/SENIOR HIGH SCHOOL

By

Bethany Hartum

There is an opportunity to improve the health of the students within the Ludington Area School District. This project provides a draft plan for the implementation and evaluation of an advanced practice nurse providing school based health services to increase access to care, improve student health, and forming a partnership with local health care providers. The plan includes a position description for the advanced practice nurse, a list of services to be provided, and an outline of how the advanced practice nurse would be implemented and evaluated within the school. There is overwhelming literature that supports school based health services to address the health care issues that are interfering with the education process. The advanced practice nurse as the provider of these services offers a comprehensive, holistic, and practical approach in the prevention of disease and promotion of health.

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Brigid Warren, R.N., M.S.N.

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1996

This project is lovingly dedicated to my dear husband Laude for his never ending support, encouragment, and patience. His enthusiasm and understanding has helped me stay focused so I could complete this project. I would also like to dedicate this project to my parents Richard and Barbara Furstenberg who have never stopped encouraging me to reach for my goals. The countless words of encouragement and love have given me the strength to keep going. My two children Laude and Emily were born while I was working on this degree, and it is for them that I made a commitment to finish.

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**A plan for implementing and evaluating
the Advanced Practice Nurse
in providing school based health services for
Ludington Junior/Senior High School**

INTRODUCTION

According to former Surgeon General Antonio Novello, all children have the right to be educated and the right to be healthy (1991). In an effort to address the needs of children, the National Goals for Education presented at the National Education Summit in 1991, stated that by the year 2000, all American children will start school ready to learn. In accordance with Healthy People 2000: National Health Promotion and Disease Prevention Objectives as they relate to schools and health, the objectives are arranged in two categories whose achievements depends directly on the existence of school health programs and those that can be influenced in important ways by schools (Kolbe & Iverson, 1983).

Research has proven that there is an inextricable link between a child's health and education (American Academy of Pediatrics, 1992, & Lewis, 1994). There is no question when a child is at a high level of wellness he/she will come to school ready to learn and demonstrate desirable outcomes both in learning and in health.(DeGraw, Kleinman, & Novello 1992).

Health related issues that face today's children, however, are growing more serious and more life threatening (OTA, 1991). Drug and alcohol use, cigarette use, violence, abuse, and STD's are creating life altering and/or deadly consequences for our youth and are interfering with their attainment of wellness (KIDS COUNT, 1996). In addition to the changing concept and structure of the family being changed, there is a large number of American children who live in poverty despite the fact that one or both

of their parents are working (KIDS COUNT, 1996). The challenge is for educators and health professionals to come together and address these issues with the hopes of improving the health and learning opportunities for our children.

Forming partnerships in health and education will have a significant impact as to whether or not our children are coming to school ready to learn. The focal point for this partnership within communities where integrated social, health, mental health and other support services for children/families are offered will be within the school systems. Even though the outcome of health care reform is uncertain, it is well documented that the focus should be on disease prevention and health promotion (Biester, 1994). This paradigm shift in health care will create opportunities for primary care providers such as advanced practice nurses to join in the revitalization of school health and improve the health of children and their families in the school setting (Salmon, 1994).

BACKGROUND OF THE PROBLEM

There are 2751 students (K-12, 358 junior high, and 1077 senior high) enrolled in the Ludington Area Schools (Ludington Schools is the largest school district within Mason County). This represents 9.2% of the population in Mason County. The percentage of children who live below the poverty level is 56% in Mason County (Office of the State Registrar and Center for Health Statistics). Mason County is 17.7% above the State in the categories of families with children in poverty, single parent families with children in poverty, and single parent families with children less than five in poverty (Community Health Profile for Mason County, 1995).

The health program within the schools of Ludington consists mostly of classroom instruction provided by non-health care professionals. The potential problem this brings forth is that students may be given the wrong information or misguided because of a biased viewpoint on a particular health care topic. Although the elementary level (K-6) uses the Michigan Model for Comprehensive School Health Education to guide health education to their students, the junior high's health class is optional. The high school

health class is mandatory. The curricula for these courses cover a wide range of subjects from anatomy/physiology of the human body to substance abuse and assertiveness/ self esteem instruction. Although the content of these courses are appropriate, they are not comprehensive according to the President of the school board for Ludington schools. (S.Peterson, R.N., B.S.N., personal communication, April, 1996).

Although other health related services provided by the school include free sports physicals at the high school level provided by local physicians volunteering their time, there are no school nurses or clinics that would provide a more comprehensive assessment for the young adult or non-sports participant. There is current discussion on discontinuing the sports physicals within the school district. The services provided by the local health department include immunizations, EPSDT screening, family planning, and scoliosis screening. Currently, there are no specific health statistics or measurements that portray the health status of the students attending Ludington Area Schools.

A recent focus group survey conducted by Memorial Medical Center as part of Mason County's 1994-1995 Behavioral Risk Factor Survey involved area school teachers (n=13, K-12) (Appendix A). All the teachers present related that they are having to cope with health care related issues which interfere with the education process. Major problems the teachers perceived as to why children were not coming to school ready to learn were the number of students using drugs and alcohol, lack of sound dietary practices, and the number of children coming to school without breakfast. The teachers were asked to list the health issues or concerns and rank them in order of severity. The top six concerns were: (a) neglected children/apathetic parents; (b) lack of preventive care; (c) mental health issues; (d) lack of sleep; (e) general cleanliness; and (f) health care costs.

In 1994, the State of Michigan allotted funds to school districts to implement programs designed to meet the needs of at-risk students (State of Michigan Section 3a Programs for At-risk pupils). The criteria to be considered at-risk is based on results of

MEAP (Michigan Educational Assessment Program) scores along with other socioeconomic conditions, i.e. pregnancy, victims of abuse/neglect, substance abuse, failure in school, or family income. Once the at-risk students are identified, then programs were developed to address specific areas of concern.

The programs developed for the Ludington schools were home/school liaisons, attendance specialists, reading programs, in school suspension, extended day programs, and summer opportunities.

At this time, there are no programs or services in place in the Ludington schools that address health care related issues that may be interfering with the students educational process and contributing to their at risk status.

PURPOSE

In recognition of the need to form a partnership and respond to the shift in health care, there is an opportunity to improve the health of the students within the Ludington Area School District. Advanced practice nurses providing school based health services can be utilized to improve student health.

The purpose of this project is to develop a draft plan to implement and evaluate the role of the advanced practice nurse in providing school based health services for Ludington Junior/Senior High School. Thus, the intended target group for this project is the pre-adolescent/adolescent. The plan to be developed will include a detailed position description for an advanced practice nurse within the school elaborating on the roles and responsibilities, school health services to be provided by the advanced practice nurse demonstrating a collaborative relationship among local health care providers, and suggestions on how to evaluate the effectiveness of an advanced practice nurse within a school setting.

This plan reflects one component of the School Health Model for the 1990's (Nader, 1990) selected as the conceptual framework for this project to support the link between health and education. There will be discussion on the implications for advanced

practice nurses as key players in providing school health services as well as discussions on education and research. It is hoped that a proposal will be presented to the school board to implement the use of advanced practice nurses to provide health services for the students in the Junior/Senior High School in Ludington.

DEFINITIONS OF CONCEPTS

School Based Health Services

School based health services is defined by Yates (1994) as a program of health offered within the school setting for the purpose of ensuring that school-aged children have access to needed health services. School based health services can be delivered in several ways depending on the model chosen. The models illustrated in the literature are dependent on the needs of the children, school, and community. Dr. M. Joycelyn Elders (1992) defines school based services as:

" those that promote the health of students through prevention, case finding, early intervention, and remediation of specific health problems, provision of first aid triage of illness and injuries, provision of direct services for handicapped students, and provision of health counseling and health instruction for faculty, staff and students" (p.18).

Providers of these services include physicians (staff or consultants), advanced practice nurses, registered nurses, social workers, counselors and paraprofessionals (Igoe,1996).

Advanced Practice Nurse

Advanced Practice Nurses are registered nurses who have completed a graduate level of education and/or are certified in an area of specialization (ANA, 1991). They can provide 60% to 80% of primary and preventive care traditionally performed by physicians and are proven to be cost effective (ANA,1991). Advanced practice nurses are educated in the provision of primary health care and are available for a variety of health care settings including the workplace, schools, daycare centers. The focus is

wellness and prevention and assisting persons in the attainment of health (ANA, 1991). There are four categories of advanced practice nurses: (a) Nurse Practitioners, (b) Clinical Nurse Specialists, (c) Certified Nurse-Midwives, and (d) Certified Registered Nurse Anesthetists.

Health Promotion

The next concept to be defined is health promotion. As illustrated in Nader's School Health Model for the 1990's, health promotion is a component within the school and community dimension that could ultimately affect the health status and educational achievement of the school child. For purposes of this project, the definition of health promotion will come from Nola Pender's Health Promotion Model (1996). The literature review on health promotion will focus on the role of the advanced practice nurse in health promotion within the school setting.

Nola Pender defines health promotion as activities directed toward increasing the level of well being and actualizing the health potential of individuals, families, communities, and society. She describes health promotion as an "approach" behavior that seeks to expand a positive potential for health. It is a positive dynamic process affected by the community, environment, and society in which we live (Pender, 1996).

Child /Youth Health Status

A definition of health status as it pertains to children is outlined in Barbara Starfield's article published in U.S. Health Care for Children (1992). Starfield defines health status among children as a way of looking at the health of populations of children measured by a group of indicators that are obtainable from data collected as part of vital statistics or as part of ongoing surveillance systems. For instance, infant mortality rates, proportion of low birth weight infants, rates of various communicable diseases, immunization status, growth stunting, suicides, child abuse/neglect are some examples of indicators of health status (Starfield, 1992). Other examples of indicators that relate to

the school child include days missed from school, learning disabilities, school failures/dropouts, involvement in substance abuse and/or violent crime (Starfield, 1992).

In Nader's model of school health, an improved child's/youth health status is a desirable outcome, yet he does not define health status. There is a considerable amount of literature defining or describing health status mostly as an outcome measurement. Although it will be difficult to determine indicators of health status before conducting a needs assessment of the student body, for purposes of this project, health status will be initially measured by the number of students who seek or require services from the advanced practice nurse.

Educational Achievement

The other outcome in Nader's model of school health is educational achievement. Achievement is defined by Webster's Dictionary (1995) as successful completion or a result brought about by resolve, persistence, or endeavor. The dictionary also states that achievement is the quality or quantity of a student's work. Although educational achievement can be measured at many different levels, for purposes of this project the definition will come from the Michigan Department of Education.

The state of Michigan recognizes educational achievement more than just the completion of a grade or school. Currently, educational achievement is measured in batteries of tests called MEAP tests (Michigan Educational Assessment Program). These tests are given to all students in the 5th, 8th, and 11th grades, and assess proficiency in the areas of math, science, and reading. They are also used to assess students who are at risk as aforementioned. The most current testing tool are the High School Proficiency Tests (HSPT) given to the same target students, but determines whether or not a graduating student will receive a state endorsed diploma, which states the achievement of proficiency, versus a certificate of attendance of a high school. The implications for the student without a state endorsed diploma may be having great difficulty seeking employment or college entrance. Spring of 1996 marks the first statewide utilization of

the HSPT and therefore the results are undetermined at this time. The HSPT is currently being studied and no guidelines have been established to determine what is proficient in terms of scores (Michigan Department of Education).

CONCEPTUAL FRAMEWORK

A model that illustrates a comprehensive school health program and partnerships between communities, educators, health professionals and families is Philip Nader's School Health Model for the 1990's (Nader, 1990).

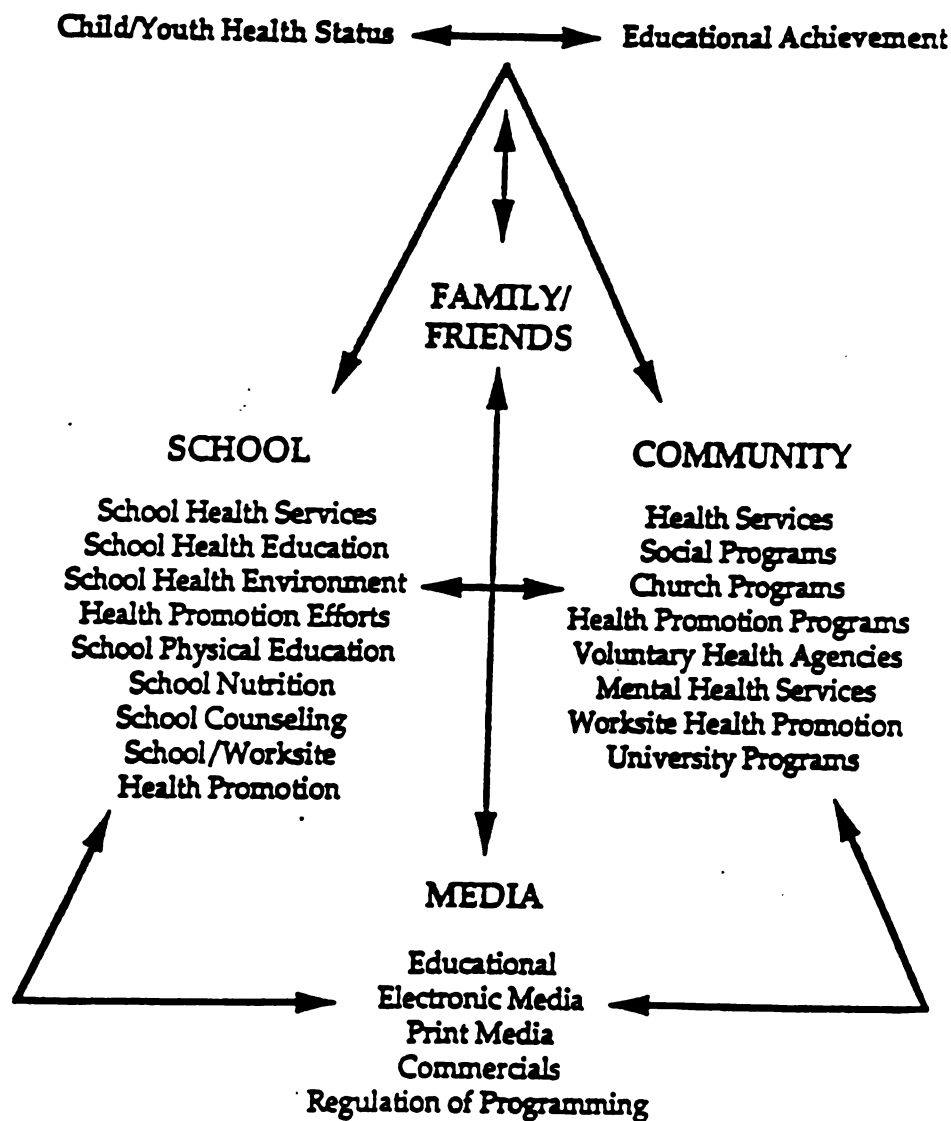
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Nader's model for school health clearly demonstrates that the school, family/friends, community, and the media directly influence a child/youth health status and their educational achievement (1990). The outcomes illustrated are the health status and educational achievement of the school child. The arrows reflect the interactions and reciprocal influences between the components, thus leading to the stated outcomes. This model incorporates multidisciplinary involvement and allows for interaction with the community to meet and promote student health needs (Kozlak, 1992). Nader's model does provide a foundation upon which schools can build a program specific to the needs of their school and community (Kozlak, 1992).

One component of the model on which this project is based, is school health services. For purposes of this project, school health services will be addressed as that provided by the advanced practice nurse. A review of literature will reflect how school health services, that provide advanced practice nursing, affect child/youth health status and educational achievement.

Nader (1990) relates that there are five steps to achieve desirable outcomes of the model. The first step is to establish links between health services and programs within the community. Such as expanding beyond what is provided by local health departments

Table 1

A School Health Model for the 1990s

Nader, P.R. (1990). The concept of "comprehensiveness" in the design and implementation of school health programs. Journal of School Health, 60, (4).

and forming partnerships with other health agencies and providers. The second step is to perform a needs assessment to help prioritize health, health promotion, educational needs and resources. This prioritization should reflect national trends and projections such as the National Health Promotion and Disease Prevention Objectives (1990). The third step, which is the basis for this project, is to modify school health services that relate to access to care, crisis medical situations, health screenings, child-initiated care, health problem identification, and chronic care. The fourth step is to develop/modify school health education. This involves looking at the philosophy, restrictions, categories, outcomes, and comprehensiveness. The fifth and final step is to develop/modify the school environment. Safety, cleanliness, healthy nutrition, physical education and a smoke free environment are priorities. The goal of this step is to evaluate the overall educational philosophy and insure that there are high expectations for the achievement performance of both students and staff (Nader, 1990).

Although Nader does not address advanced practice nurses specifically, it is clear how advanced practice nurses can facilitate linking health services to the community by performing a needs assessment, improving access to care, performing health screenings, identifying health problems, providing health education, and, thereby helping to improve the school environment.

The advanced practice nurse is at the center of this model and is the link between the family/friends, school, community, and media in providing health services that could ultimately affect health status and educational achievement of the students.

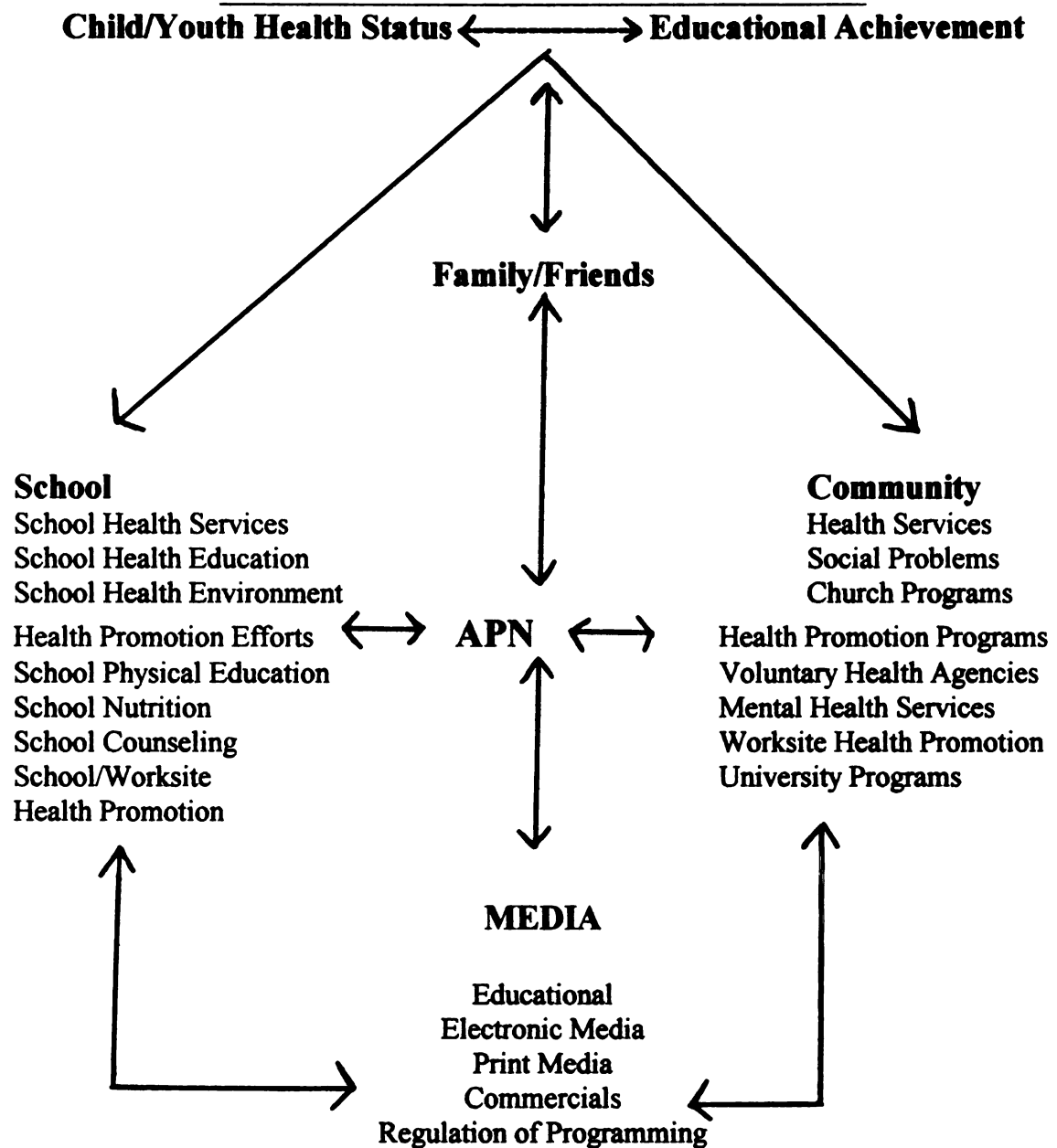
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REVIEW OF LITERATURE

The following is a review of the literature exploring the interdependent link between health and education, school health services and the utilization of advanced

Table 2

Revised School Health Model of the 1990's



Nader, P.R. (1990). The concept of "comprehensiveness" in the design and implementation of school health programs. *Journal of School Health*, 60 (4).

practice nurses in order to support the implementation and evaluation of school based health services for Ludington Area Schools.

Health Status and Education

There are many authors that state that health and education are interrelated (Novello, 1991; Lavin, 1993; Bartfay, 1994; Biester, 1994; Kozlak, 1992; Elders, 1994; DeGraw et al, 1992; DeGraw & McGinnis, 1991; Bagnall, 1994; Prophet, 1994; and Ambach, 1991). The literature that supports the interdependence between health and education is current and is strong in its message that today's health problems among our children have interfered with their ability to learn.

Igoe (1994) points out in her article that the links between poverty and poor health have been well established for school age youth. The relationship between poverty and education demonstrate that students who live in poverty were two to three times more likely to have a condition that limited their school activity; twice as likely to have mental health problems; and 40 percent more likely to be absent from school. Thus, poverty having a direct influence over the health status of the student will ultimately affect the learning process and the students opportunity to learn (Igoe, 1994).

A recent study conducted by the University of Michigan and supported by the National Institute on Drug Abuse called "Monitoring the Future Study", looks at a series of annual surveys of some 50,000 students in over 400 public and private schools nationwide. The results show that the use of drugs among American secondary school students rose again in 1995, with a continued trend that began in 1991 among eighth grade students, and in 1992 among 10th and 12th graders (Bachman, Johnston & O'Malley, 1995). The most concerning finding was the continuing rise in daily marijuana use along with a gradual increase in the use of other illicit drugs such as LSD, amphetamines, stimulants and inhalants. The use of alcohol among secondary students has remained fairly stable according to the researchers, yet the amount consumed is unacceptably high (Bachman et al, 1995).

Along with an increase in drugs and alcohol, there has also been an increase in cigarette smoking among the students (Bachman et al, 1995). The researchers also note that peer disapproval of cigarette smoking has dropped and the number of students who see smoking as dangerous is declining. What is alarming in this study is the number of eighth graders who are smoking and using drugs and alcohol. Although no correlation's were done in regards to educational achievement and the use of drugs and alcohol with this study group, the assumption that students who use drugs, alcohol, and cigarettes have a poor health status and therefore are not performing to their maximum potential in school.

In the spring of 1995, the results of a survey in Mason County looking at high school senior drug use was compared with the results from the University of Michigan "Monitoring the Future Study". The results show that local use by students exceed the national average for almost every type of drug (Braciszkeski, 1996).

Mason County seniors graduating in 1995 report that during the past year, two of five used some illicit drug, more than one in three used marijuana, almost one in four used a drug other than marijuana, one in five used inhalants, and almost three in four drank alcohol (Braciszkeski, 1996). Although this study just looked at a small proportion of the student body in Mason County, area educators, health professionals, parents and community leaders need to respond. Again, no correlation's to educational achievement were performed on these students. Regardless, these findings will help to support the rationale for implementing school health services.

A study conducted for the American Academy of Pediatrics in 1992 surveying elementary school teachers (n=500, K-6) focused on health care and the child's ability to learn (AAP, 1992). This was a telephone survey conducted by an independent research company. Results of the survey were accurate to within +/- 4.5 percentage points at the 95% confidence level of the total sample. The results of this survey reflect the

perceptions of classroom teachers in elementary schools of their students health and well-being and how that affects a child's ability to learn and perform at school.

Some key findings of this survey were that teachers unanimously (94%) agreed that a child's overall health and fitness are very important to his or her performance in school. Poor student health is widespread and growing particularly in rural settings and they are seeing more and more health problems than in the past. Most often cited health problems were psychological/emotional problems, unhealthy lifestyle habits, and family violence and abuse. Cost of care and lack of insurance were considered the most common barriers to care. The responsibility for ensuring access to care was felt to come from the individual families. The most needed actions cited by the teachers in this study were (a) educate parents about health care issues and practices, (b) ensuring that schools provide services such as health screenings and on-site health care professionals, programs and treatment, (c) making health care affordable and accessible, and (d) government action to reform the health care system. The teachers in this study most often cited parent education as the key step toward ensuring that children are healthy enough to learn effectively and that this was not the responsibility of the schools. Although this study was much larger in scale, the perceptions of the teachers surveyed are very similar to the perceptions of the teachers in Ludington.

A study (1994) conducted by UCLA medical researchers on three groups of fifth grade students in Arizona school's, supervised by Charles E. Lewis, MD, Professor of Medicine, examined the relationship of school nurse visits to standardized test scores (Iowa Test of Basic Skills). The researchers mention that the number of visits to the school nurse is indicative of the health status of that student. Results demonstrated that children who had never seen the school nurse had higher test scores. Those who saw the school nurse most frequently had the lowest test scores. This study did not suggest that the school nursing visits contributed to lower tests scores, but suggests that students needing to see the school nurse were in poor health. Although this was a very simple

study, the assumption is made that students with a poor health status will have lower test scores.

A project conducted at the Harvard School of Public Health in 1990 provided a synopsis of 25 reports from national commissions, federal and state agencies, and other sources that addressed the interconnectedness of children's health and education (Lavin, Shapiro, & Weill, 1992). The purpose of this project was to raise public and professional awareness of school health promotion issues and to contribute to the theory, policy, practice, and evaluation of comprehensive school health (Lavin et al, 1992). The researchers found five common themes among the reports: (a) education and health are interrelated, (b) the biggest threat to health are "social morbidity's", all of which are preventable; (c) a more comprehensive, integrated approach is needed; (d) health promotion and education efforts should be centered in and around schools; and (e) prevention efforts are cost effective whereas the cost of doing nothing is too high and escalating (Lavin et al, 1992). Examples of innovative programs in place were cited by the authors to address these issues such as the Michigan Model for Comprehensive School Health Education. This synopsis called for making health and education of children a national priority.

School Health Services

One of the steps in Nader's Model of School Health was to perform a needs assessment to help prioritize health, health promotion, education needs, and resources in order to have a desirable outcome (Nader, 1992). A recent project completed by Batey, Gingiss, Grunbaum, Orphinas, & Parcel (1995), tested an approach for school districts to use when conducting a needs assessment of school health programs. The researchers assessed health related behaviors such as violence, use of drugs, alcohol, and tobacco, sexual behavior, nutrition, and physical activity that coincide with national health objectives (Batey, et al 1995). They also assessed components that would be included in a comprehensive school health program such as health services, education, physical

education, food service, counseling, and school-site health promotion programs (Batey et al, 1995).

This multidimensional and comprehensive approach was tested in 1991 by using the Youth Risk Behavior Survey from the CDC, a district personnel survey, observing physical education classes, interviews, and a school lunch menu analysis within a school district in Houston, Texas. The results demonstrated that there was a need for violence and injury prevention programs, that a large percentage of teachers perceived students to be at high risk for tobacco, drug and alcohol use, and that sexuality education needs to start as early as elementary school. This study also helped to quantify the amount of time actually devoted to moderate-to-vigorous physical activity, and highlighted concerns about student's eating habits.

Although time consuming and labor intensive, this method proved that data from multiple sources helps to support implementation of any school health programs (Batey, et al, 1995). The results also suggest that this method can be used to set priorities and to guide policy and program decisions as with school nursing services.

The importance of a needs assessment before implementing health services was also stressed by Dr. Joycelyn Elders (1993) in her article. She mentions that this is critical in understanding the needs of the community, it's demographics, racial composition, cultural and language diversity, poverty levels, and risk indicators (Elders, 1993).

In this same article by Dr. Joycelyn Elders (1993) a description of how school-based health services in Arkansas have been successful in meeting the health care needs of the students. Dr. Elders (1993) relates that school-based health services are convenient, cost effective, confidential, and comprehensive. The success of the health services in Arkansas is due to the partnership that was formed between the school district, health department, and the community. Dr. Elders (1993) also outlines in detail

the components of a comprehensive school health service program all of which can be implemented by advanced practice nurses within the school setting.

According to the Michigan Department of Public Health/Bureau of Child Family Services, there are 22 school based student health programs/centers and 12 school linked student health programs throughout the various school districts in Michigan. It was noted that the school based health programs directly relate to adolescents in the form of "teen health centers" in the school. The school linked services are directly affiliated with the local health departments. Of the 22 school based health centers, five are not funded by the Michigan Department of Public Health. Funding sources for the other programs are through grants or the federal government (MDPH, 1996).

Much of the literature on school health supports the partnership between school, families and the community in providing health services to students with schools being the most logical site to deliver these services (Dryfoos, 1993; Lear, 1992; Feroli et al, 1992; DeGraw, 1994; Baker, 1994; Terwilliger, 1994; Hofford & Cate, 1993; Yates, 1994a, 1994b; Cowell et al, 1991; Harold & Harold, 1993; Gullotta & Noyes, 1995; Goldsmith, 1991; Nicholson, 1993; and Igoe & Giordano, 1992; and Uphold & Graham, 1993).

Not only do these authors support the partnership but also support the need to have services accessible and user friendly. Uphold & Graham (1993) state schools are accessible, convenient, and eliminate the need to arrange transportation or take time off from school or work to obtain educational, social, and health services. They relate that schools are a familiar place and are often viewed as a safe place that students, particularly adolescents can turn to in times of need (Uphold & Graham, 1993).

Igoe & Giordano (1992) cite that " schools are the one institution in society that has assured contact with children " p.17. The authors also state that schools are being seen as a highly desirable vehicle through which significant gains in the health status of children and families can be made. (Igoe & Giordano, 1992). This is important to keep

in mind based on the demographics of Mason County and the potential barriers to access students may have in seeking health care.

Advanced Practice Nurses within the School

The article by Uphold & Graham (1993) helps to support the concepts within Nader's School Health Model for the 1990's and to support the role of advanced practice nurses within the school. The authors state that in order to address America's faltering health care system to increase children's accessibility to health care and improve their health, schools, communities, families, and health care providers must work together to develop comprehensive programs (Uphold & Graham, 1993). They also state that nurses are the "single most important group of health care providers" to support the partnerships between schools, families, and the community.

Much of the literature that supports the effectiveness of school nurses is recent and speaks favorably of advanced practice nurses in the school setting (Passarelli, 1994; Fritsch-deBruyn et al, 1991; Bolton, 1994; Salmon, 1994; Poulton, 1992; Chen et al, 1987; Brophy, 1982; Altschuler, 1991; Hootman, 1994; Hansen & Moeckly, 1994; Barribell & While, 1993; Berry et al, 1991; Corliss et al, 1994; Oda, 1991; Chen et al, 1991; Igoe, 1994; Niznik, 1994; Barnfather, 1991; Clark & Jones, 1993; Nothrup, 1992; and Nudel, 1992). The following will provide examples within the literature of the effectiveness of advanced practice nurses within the school, some of which illustrate their involvement with health promotion activities.

A study conducted by Hansen & Moeckly (1994) compared at-risk students versus students considered not to be at risk to the number of visits to see the school nurse. An analysis of a daily log found that 60% of the visits to the school nurse were made by students considered to be at risk. The authors state that this study demonstrated that school nurses are essential to the identification of and intervention for the at risk student (Hansen & Moeckly, 1994). Although the authors do not identify the school nurse

as an advanced practice nurse, a major role for the advanced practice nurse is case finding and management of the at-risk student.

A school based program developed by nurse practitioners and a nurse educator helped to educate parents, students and the community on sexuality, and the prevention of AIDS and STD's (Fritsch-deBruyn et al, 1991). Pre-tests and post tests were given to evaluate the program showing improvements in the post test scores. The success of this program was also attributed to involving the parents in the education right from the beginning to inform them of the curriculum, objectives, and content, even though there was a low turn out. Conclusions made by the authors were that nurse practitioners can reach youth before sexual habits are formed, and can play a large role in prevention of diseases.

Another group of school nurses developed a health education program for Chicago area teachers to assist them in identifying children's health problems, using health records effectively, and making referrals to the school nurse (Chen et al, 1987). Sixty-three percent (n=102) rated the program from good to excellent. This evaluation supports the advanced practice nurses role as consultant and educator and helps to contribute to the concept of the partnership that is needed between educators and health professionals.

One study that demonstrates how school nursing affects health status and educational achievement is the study conducted by Clark and Jones (1993). Clark and Jones (1993) examined the relationship between the functions of the school nurse and student absenteeism due to a health problem. The functions were characterized into four categories, which included primary and secondary diagnosis using 24 nursing diagnosis from North American Nursing Diagnosis Association (NANDA), the level of care provided, treatments and interventions and referrals. After examining student absenteeism (time lost from school. or away from the classroom) prior to, during, and after visits to the school nurse, and the function the nurse performed, conclusion were

made that there was a decrease in the amount of time the student spent out of the classroom (Clark & Jones, 1993). The functions of the nurse that contributed to this decrease was mostly monitoring and assessment of the situation, and counseling the student. Because of the nurses expertise in areas as assessment, they were able to get the students back in the classroom. It goes without saying that if a student is not in the classroom and frequently absent from school, their educational achievement is at risk. Again, even though the authors do not address advanced practice nurses specifically, the expertise of the advanced practice nurse in the areas of assessing, evaluating and counseling will help to keep the students in the classroom.

In summary, the amount of current literature on school health is overwhelming. It is clear in the literature that the health of students directly affects their opportunity to learn and educational achievement. There is less and less argument for not having some model or program of school based health services that address the health issues of school aged-children and make health care accessible, affordable, and comprehensive.

The opportunity to improve the health of the students in Ludington rests on the educators, health professionals, and the local community leaders ability to recognize that there is a need to form a partnership and provide a link within the school to increase access of care. This link is the advanced practice nurse. The advanced practice nurse can help to address the ever increasing drug, alcohol, and cigarette use among the students, conduct health surveys to assess the overall health status of the student body, provide health promoting education to students, families, and faculty, and help to reduce absenteeism by early identification of a problem and astutely assessing the situation.

METHODOLOGY

The goal of this project is to develop a draft plan to implement and evaluate advanced practice nursing services for Ludington Junior/Senior High School in an attempt to improve the health of the students. Keeping in mind the reciprocal nature of Nader's School Health Model for the 1990's, it is important to recognize the persons or

organizations that would be involved in developing this health partnership (Appendix B). Elders (1993) states that the superintendent and the governing body of the school district must be involved from the beginning and must view themselves as equals with other community agencies involved in the collaborative process. It will be essential to elicit the support of these key players in order for this project to be successful.

The first step in developing this project is to outline the role of the advanced practice nurse within the school setting. Having advanced practice nurses within the schools of Ludington is not only a new concept for the schools, but a new concept for the community. Because of this, a detailed outline describing the roles and responsibilities of the advanced practice nurse functioning as a school nurse is necessary. The best way to achieve this is to develop a position description that incorporates the standards of practice from the American Academy of Nurse Practitioners, along with the role characteristics of an advance practice nurse (Appendix C). This will help to educate key persons on the role of the advanced practice nurse within the school setting.

The next step is to outline the services to be provided by the advanced practice nurse within the school setting (Appendix D). These school based services are based on components of a comprehensive school health program and demonstrate a holistic approach such as the one described by Elders (1993). Protocols for each service would be developed and approved by the school board or governing body. This chart illustrates the collaborative nature in which the services are provided. The asterisks indicate when the service and to who the service would be referred. The details on the procedure for implementing these school based services will be provided later in this document. It is difficult to determine pre-implementation of this project whether or not one advanced practice nurse will be sufficient to provide the services listed. This will need to be assessed after a needs assessment is completed. There may be a need for either a medical assistant/school aid or secretary to assist the advanced practice nurse in delivering these services.

To avoid fragmentation of care and promote student use of the services, a collaborative relationship with local providers is essential. The intent is not to duplicate services or compete with local health care providers. The intent is to have services that are accessible, convenient, and affordable and to establish partnerships to meet the needs of the students. It is imperative that the students, parents, staff, and community be educated about the nature and type of services provided to avoid misconceptions about the purpose and role of the advanced practice nurse.

The third step is to determine the funding of the nursing services provided by the advanced practice nurse. There are three options to be considered for implementing advanced practice nursing services. The first option is a partnership between the local hospital, Memorial Medical Center of West Michigan (MMCWM) and Ludington Area School District. In this option the nurse is employed by MMCWM and contracted out to the school to provide services. This would be the ideal option for the school district and a demonstration of commitment to the community by MMCWM.

The second option is a joint effort between the two agencies with funding coming from state and federal monies such as the money allotted to the school district for students at risk (State of Michigan Section 3a Programs for At-risk pupils). The criteria for the development of programs with this money is very broad. Consequently, funding for an advanced practice nurse could easily be implemented to address the health care needs of the at-risk students. The concern with this option is that the money designated for at-risk programs is not guaranteed year to year.

The third option is that the advanced practice nurse would be solely employed by the school district with support of monies from programs mentioned above or other grant monies that would need to be explored. The benefits of choosing this option is that the nurse would be covered under the teacher's contract and be eligible to receive the same salary and compensation package as the teacher's.

An important aspect of the advanced practice nurse providing health services to the students is that the majority of the services are reimbursable by Medicaid. This is particularly important considering the number of low income families within the school district and could be very attractive to the school when considering implementing this concept.

To aid in the decision of how school nursing services would be funded a projected budget outlining salaries, benefits, and supplies would need to be presented to the agencies. Details on reimbursement would also need to be presented and explained. The budget would be prepared annually and submitted for approval to the governing body for the services.

All in all, financial constraints should not be a deterrent when considering a service that can impact the health status and educational achievement of the students. The willingness of other agencies such as MMCWM to come together to respond to the health care needs of the children in the community speaks highly of the concern and commitment to improve the health of the community.

Once the concept of having an advanced practice nurse providing health services has been approved and supported by the key players, an educational campaign will need to take place. There are several ways in which to educate the students, parents, staff, and community about school health services provided by an advanced practice nurse. The media, as illustrated within Nader's model is a valuable vehicle to educate the community on the definition and the role of the advanced practice nurse. Valuable ways in which to market the advanced practice nurse could include getting involved with a local event such as the Family Affair Day or the Health Fair, present a lecture held during parent-teacher conferences, or place articles in the local newspaper or school newsletter to the parents. The advanced practice nurse will be able to conduct in-service programs for faculty on first aid, managing crisis situations, such as death of a faculty member or student, and current health topics. Providing brochures describing the role of the

advanced practice nurse such as the one prepared by the American Academy of Nurse Practitioners is another valuable vehicle in which to educate the public. The key is to become visible and accessible to the public, along with presenting a clear picture of what an advanced practice nurse looks like.

PROCEDURE FOR IMPLEMENTING SERVICES

School based health services for Ludington Junior/Senior High School will need to be based within the complex. Office space that is accessible, private, and functional will be necessary. An ideal location would to have the office located between the two schools. There is space available within the complex that is currently being used for storage that could be created into an office for school health services. Even though a home base is necessary, the advanced practice nurse will be providing services throughout the school and into the community.

The hours of service would be Monday through Friday, available a half hour before school starts and an hour after school ends (7:00am to 4:30pm) during the school year. Hours of service will also be provided during school breaks but would be determined on the need and funding source. Students would be encouraged to make appointments, yet walk-ins are acceptable. It will be important to be available to parents who are working, so there must be flexibility in the hours and a willingness to see parents after hours. Education to the staff on referral for services would also be necessary. In this age of technology, the accessibility of the advanced practice nurse would be enhanced by having a voice mail system and pager to respond when needed by staff and/or students.

Although a consent for services is not necessary, parental consent is essential. Before any services are implemented, a consent for services from the parents would need to be provided (Appendix E). The purpose of this consent is to seek permission from the parents to obtain a release of information from the primary care providers to maintain continuity of care. The nurse must be familiar with school policy and laws regarding treatment of minors and notification of parents. This consent form would be distributed

the first day of class during the first class period where the students meet in their homeroom for an informational session. The consent form would need to be returned and filed, thus the beginning of a medical record for the student.

Record keeping will include a daily log with the time, date, students name and chief complaint along with time spent in the office. Ideally, this information should be computerized so data could be compiled and extracted for reports and research. Each student that seeks services will have a medical record generated that is confidential and kept in a locked file cabinet. Only the nurse would have access to the record. Students that have on-going problems will have individualized health care plans developed with short and long term goals identified. The nursing care plan will have specific goals and interventions unique to each student. A procedure for follow-up, referrals, and missed appointments would also need to be developed.

Recommended data that would be collected reflecting health status includes a growth and development history, health history, screening results, physical assessment, emotional status, nutritional status, immunizations, student's perception of health status, student health goals, and a performance level of activities of daily living (Northup, 1994). Another resource for organizing data to assist in identifying health problems and rating outcomes is The Omaha System: Application for Community Health Nursing (1992) by K.S. Martin and N.J. Sheet.

An essential component of providing the services in Appendix D is the collaboration of the advanced practice nurse with community agencies. An effective vehicle to communicate issues, changes in policy, problem solve, and exchange information is to form an advisory council or health committee that includes the key players listed in this project. The main focus of this participation with key players in the community is to assess, plan, implement, and evaluate the services provided to the students. Policies regarding a referral process to these agencies would need to be developed and approved by this group. The advanced practice nurse will also play an

active role in the development of the health education curriculum and will include teaching some of the classes.

In an effort to address the substance abuse problem within the school, the advanced practice nurse will need to form a task force of educators, parents, students, and community members to develop an action plan with the purpose of launching an educational campaign informing students about the consequences of using drugs, alcohol and cigarettes, and particularly the danger of inhalants.

The nurse will also participate on the Reproductive Health Advisory Committee as a consultant and educator to the members.

EVALUATION OF SERVICES

There are several ways in which to evaluate the effectiveness of implementing school nursing services. Yet, before this can be achieved, some baseline information about the current health status of the students would be necessary. As mentioned within the position description, the first order of business for the advanced practice nurse will be conducting a needs assessment to determine the priorities for the development of health and education programs. Along with a needs assessment, a risk behavior survey such as the Youth Risk Behavior Survey designed by the CDC, for each grade would be beneficial in assessing the problems areas. Once this information is obtained and specific health and educational programs are developed, then studies can be initiated to determine effectiveness.

The effectiveness of implementing school nursing services will be measured by the number of referrals made to the school nurse and the number of student visits. Since this is a new concept for the school system, a comparison to other programs of similar size and scope would need to take place to determine if the number of referrals and visits indicate success. Data collected quarterly throughout the year from this source of evaluation would indicate that the education about the services was effective and would certainly demonstrate the need to have such services in place. This data collection will

be ongoing and reported annually, along with outcomes identified through benchmarking priority problem areas such as student use of drugs and alcohol and smoking.

An example of how the services of an advanced nurse practitioner in the school could be evaluated is to take a specific health problem, such as asthma and closely monitor select indicators identified as having a direct influence involving educational achievement. For instance, looking at the number of days missed from school and the number of emergency room visits or hospitalizations due to exacerbation's. The advanced practice nurse could be closely involved with students to case manage and develop a plan with outcomes to keep these students in the classroom. Through a multidisciplinary approach, education of the disease process, monitoring of medication compliance and administration, and early intervention, the nurse could demonstrate an effectiveness that would ultimately affect this particular students education. A retrospective and concurrent review of the students record would be essential to validate this effectiveness.

Another way to evaluate effectiveness is to look at the absenteeism among the students prior to the implementation of services and determine if those seeking services are staying in school. At this time reasons for being absent are not recorded within the school system, so it is difficult to determine the percentages of absences that are due to illness. Regardless, students are not in school. Short and long term goals would be made based on the current percentages of absenteeism.

Another easy method to evaluate effectiveness of the services is to compare the immunization status among the students pre and post implementation to see if there is an increase in the number of students immunized.

Lastly, the effectiveness of implementing school nursing services will be measured through a satisfaction survey given to students, faculty, community agencies, and parents one year after implementation of services. Results of this will determine

whether or not the school nurse is accessible, reliable, and visible in meeting the health care needs of the students.

IMPLICATIONS FOR ADVANCED PRACTICE

The implications of introducing an advanced practice nurse into a setting that has no experience with this type of provider is extremely challenging. Having an advanced practice nurse within the school will present the opportunity to educate the community regarding the diverse roles and responsibilities. Although, the position description gives an outline of the characteristics of these roles, the implications for each role within the school setting will be discussed.

The advanced practice nurse as assessor will present an opportunity to the school and to the community to seek information regarding the health status of the students. As mentioned previously, there is no measurement or data that portrays the health of students attending Ludington Schools. The advanced practice nurse will be in a prime position to assess the needs and health problems of the students, families, school, and community.

There is no question that implementing an advanced practice nurse within the school to improve the health of the students will fulfill the role of change agent. This would be new venture for not only the school, but for the community. Providing this link to the community to improve the health of its children will enhance the current delivery of health care for the children.

The advanced practice nurse as client advocate has definite implications, particularly for the adolescent. This is accomplished by creating an environment for students to take the responsibility for their own health care by making services accessible, convenient and confidential. Mutual goal setting when developing the plan of care will also accomplish the goal of this characteristic.

The advanced practice nurse as clinician within the school setting would be demonstrated by promoting self-care activities through health promotion programs and

disease prevention education among the adolescent population. Particularly in the area of reproductive health, the advanced practice nurse will be in a position to help adolescents make informed choices that will make a difference in their decision not to participate in risk taking behaviors.

The role of the advanced practice nurse as a clinician will be one that is based on advanced clinical judgment based on nursing theories to diagnose and treat primary care problems within the school setting. Along with the advanced nursing theory, there is substantial knowledge of physical and psychosocial assessment to develop a management plan that addresses the health care needs of the students (Mc Givern, 1993).

One central theme of this project is the partnership between health providers and educators to improve the health of students. The advanced practice nurse as a collaborator will be the essential link between the agencies to encourage joint responsibility and accountability in developing health services for the students. This will be accomplished through the committees and task forces created to address the needs of the students.

The advanced practice nurse within the school setting will allow the opportunity for educators to utilize the nurse as a consultant when developing health curriculum. This consultant role will be taken throughout the community by promoting the role of the advanced practice nurse and assisting in health care planning for area students.

Coordinating the health services of the students with the junior/senior high will be the focus of the advanced practice nurse in developing a school-linked model of health care. The nurse will be a key player in identifying the health care needs and developing a plan to respond to those needs.

The majority of the advanced practice nurses time within the school setting will be spent in fulfilling the counselor role. By creating a helping relationship, the students and their families will have an objective person in which to express concerns and fears regarding their health.

Along with counseling, the advanced practice nurse will also be instrumental in educating the students in the areas of health promotion, health maintenance, and disease prevention. Even so, the greatest educational challenge for the advanced practice nurse will be in educating the community on the role.

Ways in which the advanced practice nurse will carry out the evaluator role have already been discussed earlier in this project. This characteristics of this role will be ongoing as the success of implementing school nursing services is measured. Not only will the success of the services be evaluated, but the success of the individual care provided be evaluated based on the selected outcomes and goals of the care plans.

The advanced practice nurse within the school setting will become the leader in directing all health related activity and will take responsibility for directing the activity. For example, formulating and directing an interdisciplinary committee that addresses the health issues of the students will be one of the first responsibilities for the advanced practice nurse.

The role of planner speaks for itself in developing school health services for Ludington Junior/Senior High School. This will involve astute organizational skills and the ability to prioritize, especially when the referrals start to come in. The advanced practice nurse will also be put in the position to delegate and supervise tasks in an effort to deliver care to the students. Much has been said about the delegation of nursing care to non-licensed personnel. Consequently, the advanced practice nurse is put in a position to effectively plan which tasks can be delegated in order to provide comprehensive services.

One characteristic that will be very important to the advanced practice nurse within the school is that of the role model. As a provider of "health" care, the nurse will be considered to be the expert on health in a setting where there will be no other health related personnel. Students should view the advanced practice nurse as one they can seek out to gain advice regarding their health.

Finally, the role of researcher will be ongoing for the advanced practice nurse. The nurse will be instrumental in measuring the effectiveness of their services against the improvement of health and educational achievement.

IMPLICATIONS FOR EDUCATION

The implications for education are fourfold. As discussed in the plan for implementation, the success of this project is dependent on the education to the students, families, staff, and community about the role of the advanced practice nurse within a school setting. This would be a major change for Ludington, and the more education provided, the more acceptance and support will be granted to help improve the health of the students.

The other implication for education is the inclusion of a health professional into the curriculum to deliver health education to the students. The students will have the opportunity to seek advice, voice fears or concerns, and receive unbiased correct information about important health care topics. There is much to be said about education regarding the sensitive issues surrounding sexuality coming from a health professional versus coming from a gym teacher.

The third implication for education from a students perspective, is the potential to make a difference in their educational achievement. Helping students improve their health status by encouraging them to live a healthy lifestyle, teaching alternative ways in which to cope, and improving their access to care, will help to keep them in the classroom both physically and mentally.

Lastly, the implications for institutions preparing advanced practice nurses is to include education and training for the advanced practice nurse to function within the school setting. Health education, and education regarding school health would need to be included within the curriculum to adequately prepare advanced practice nurse for this type setting.

IMPLICATIONS FOR RESEARCH

So much can be done in the way of research to determine the effectiveness of advanced practice nursing within a school setting. As mentioned earlier, there is very little scientific evidence measuring this effectiveness. The opportunity to conduct qualitative and quantitative longitudinal studies within the school to measure and assess the improvement of the students health in relation to educational achievement would be greatly enhanced by having school nursing services in place. What will be valuable is the start of a database in which to draw from to initiate research projects.

A large part of the advanced practice role is to conduct research. This contribution to the educational arena will provide educators with information regarding the health status of their students and may influence the methods in which they teach.

A major portion of the plan to implement school health services involves conducting research, particularly the needs assessment to help prioritize programs. Along with the needs assessment, is a risk behavior survey and a satisfaction survey will be conducted to help guide the objectives for school health services. This is just the beginning of the potential research projects that may be conducted to measure effectiveness of the nurses interventions to promote health and prevent disease.

CONCLUSION

The implementation of school nursing services for Ludington Junior/Senior High may seem like an overwhelming task. Yet, it is the beginning of responding to a need within the community to improve the health of future generations. Bringing school health services back into Ludington will help to link agencies that are concerned with the health and welfare of its children.

We have only four years left to meet the objectives in making sure our children are coming to school ready to learn. By providing a liaison such as the advanced practice nurse, a commitment will be made to achieving this goal.

APPENDICES

APPENDIX A

APPENDIX A

SCHOOL FOCUS GROUP QUESTIONS

1. How many children in your school do you think are overweight?
2. Do the children in your school participate in daily physical education?
 - a. Is 50% of that PE spent engaging in "lifetime" physical activities?
3. How many children in your school now smoke?
4. How many children in your school have used marijuana or cocaine?
5. How many children in your school drink alcohol?
6. How many children in your school engage in physical fighting?
7. How many children in your school carry weapons?
8. How many children in your school wear helmets when riding bicycles?
9. How many classes discuss human sexuality? How many of the children in you school have received this information from another parentally endorsed group such as youth, school, or religious programs?
 - a. For Jr. and Sr. High- Do you have children in your classes that are sexually active?
10. How many children in your school have sound dietary practices?
11. How many children in your school come to school without having had breakfast?
12. Any other health-related issues of concerns?
13. What are the most important health related issues you deal with as a teacher?
14. How should we ask questions to get the best information from students?
15. What is the best way to survey the students?
16. What else should we ask?

Taken from the marketing department at Memorial Medical Center of West Michigan who conducted the focus group study.

APPENDIX B

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APPENDIX B

PERSONS/ORGANIZATIONS INVOLVED WITH DEVELOPMENT OF SCHOOL HEALTH SERVICES FOR LUDINGTON JUNIOR/SENIOR HIGH

Advanced Practice Nurse

Members of Ludington Area School Board of Education

Administrative staff and teachers for Ludington Junior/ Senior High School Complex

Memorial Medical Center of West Michigan, CEO and CFO

Local Pediatrician/Family Practice Physician

Mason County Public Health Department

Mason County Department of Social Services

Mason County Community Mental Health

APPENDIX C

APPENDIX C

POSITION DESCRIPTION FOR THE ADVANCED PRACTICE NURSE FOR LUDINGTON JUNIOR/SENIOR HIGH SCHOOL

General Summary:

The advanced practice nurse within the school setting is a registered professional nurse prepared in a formal graduate educational program. The practice builds on: (a) previous knowledge and skill in utilizing the nursing process, (b) knowledge of the educational system, school health, community health, health education.

Responsibilities:

1. Performs need assessments to determine areas of priority to base decisions when developing programs, protocols, or policies that relate to the health of the pre-adolescent/adolescent. Assessment and screening* of the health needs of this population will be ongoing with the continuous collection of subjective and objective data.
2. Utilizes the nursing process to coordinate and collaborate activities that will assist students in making health care decisions about their health. This includes the development of a mutual plan of care, formulating a nursing diagnosis with short and long term goals and anticipated outcomes outlined by the nurse and the student along with a method to evaluate. Unresolved problems will be reassessed with an ongoing evaluation.
3. Functions as an advocate for the student and families in assisting them to make informed health care decisions and encouraging self care activities. This includes providing information that will increase the access to affordable health care, and aid in protection of the abused/neglected student*.
4. Works with students, families, and faculty in the promotion of health and self care. This includes educating on the prevention of disease, complications, encouragement to be compliant with a medical regime, and assisting with the mobilization of coping mechanisms to deal with health care problems or disabilities.
5. Identifies students with chronic illness or disabilities such as Diabetes, Asthma, Epilepsy, ADHD, etc.. and assists the students, families and faculty with education about the disease process, medications, complications, and responses to the illness and/or treatments*.

6. Collaborates with local health officials and providers in the identification of students and families who are at-risk and need placement in special programs or need treatment. This includes formulating a plan through an interdisciplinary approach to assist these students, families, and faculty to maximize their health and education potential.
7. Acts as a consultant/resource person to faculty and community in the provision of health education and promotion, first aid and emergency care, or other health related issues.
8. Coordinates the development of health education programs that are comprehensive and participates in the development and education of the curriculum using learning theories and methods for delivering health instruction.
9. Counsels individuals or groups concerning health problems that may be interfering with the educational process. Assists the individual/group in achieving optimal levels of wellness by providing knowledge of the situation, maintaining objectivity, and facilitating the mobilization of resources.
10. Maintains confidentiality at all times regarding health information other than conditions that are required to be reported by law.
11. Develops methods to evaluate the effectiveness of interventions or programs based on desired outcomes or objectives. This includes conducting systematic and scientific investigations to measure effectiveness of services provided.
12. Leads the development of policies and procedures that are health related and assumes responsibility for the implementation, maintenance, revision, and evaluation of such.
13. Coordinates referrals to area health providers, specialists, and agencies as deemed necessary to provide comprehensive quality care.
14. Responsible for maintaining and reviewing health records and communicating appropriate health information to staff.
15. Role model of the profession and is responsible for professional development and continuing education.

* See Appendix D for the specific services to be provided by the advanced practice nurse

APPENDIX D

APPENDIX D

ADVANCED PRACTICE NURSING SERVICES^ FOR LUDINGTON JUNIOR/SENIOR HIGH SCHOOL

Health Assessments:

- Routine screenings of hearing, vision, and scoliosis.**
- Blood pressure screening**
- Immunization status***
- Sports Physicals***
- WIC assessments***
- Weight/Height assessments**
- Screening for tobacco, alcohol, and drug use**
- Screening for depression/suicidal ideation's**
- Screening for abuse/neglect (Includes reporting cases to DSS and completing the 3200 form for abuse/neglect).**

Assessment and referral of minor illness, disease and injury*:

Example:

- Flu/colds**
- Sprains, cuts, burns etc...**
- Sore throat**
- Headaches**
- Skin conditions**
- Dysmenorrhea**
- STD's**
- Pregnancy**

Assessment, referral, case management*, and follow up for chronic illness or disease:

- Diabetes**
- Hypertension**
- Eating disorders**
- Asthma**
- Epilepsy**
- ADHD**
- Alcoholism/Drug addiction**

Assistance with medication administration, education, and observation of those prescribed by a primary care provider for chronic illnesses mentioned above.

Counseling and Education regarding*:

- Nutrition/Weight management
- Smoking prevention and cessation
- Alcohol and drug abuse prevention
- Stress Management
- Safety (seat belts, car seat, helmets)
- Sexuality/Abstinence
- Contraception (referral only)
- STD prevention
- Mental health/suicide prevention
- Pregnancy
- Breast self exam/testicular self exam
- Parenting classes

Assist school personnel with environmental health and school safety inspections.

Provides instruction in the prevention of communicable diseases. This includes reporting an outbreak to the health department.

Educate faculty and students about OSHA's Blood Borne Pathogen Guidelines.

Educate faculty on how to handle crisis medical situations along with the development of triage guidelines in the event of a crisis.

Initiates the Critical Incident Response Team in the event of a major episode within the school community.

Provides home visits if necessary for at home counseling with parents/students, or follow up of problems.

Assist students/families with low incomes in accessing health coverage through Michcare, Medicaid, emergency funding*.

Assists students/families with referrals to primary care providers if they currently do not have one.

^ Services are based on Dr.Elder's (1993) components of a comprehensive school health program and the Guidelines for Adolescent Preventive Services (GAP) from the American Medical Association.

*** This service is in collaboration or consultation with other providers in the community such as public health department, social services, mental health, hospital, or primary care provider.**

APPENDIX E

APPENDIX E
COMPONENTS FOR CONSENT

Demographics:

Name
Parents/Caregiver Name
Age
Address
Phone- home and work
Emergency contact
Primary care provider (s)
Pharmacy preferred

Medical History:

Present illness or condition
Past history of any illness or condition
Allergies
Medications: Dosage
 Time schedule
 When medication was started
 Side effects
Dates of Immunizations:
 Hepatitis series
 Tetanus
 MMR

Special equipment or devices needed i.e. hearing aids, braces, feeding tube etc...

Permission to obtain information from primary care provider to seek health information,
and permission to release information to providers.

LIST OF REFERENCES

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- American Nurses Association (1991). Nursing agenda for health care reform. Kansas City, MO: American Nurses Association.
- Ambach, M.G. (1994). Linking health and education in the middle grades. Teachers College Record: At the crossroads, 653-655.
- Bachman, J.G., Johnston, L.D., & O'Malley, P.M. (1995). National survey results on drug use. The Monitoring the Future Study, 1975-1994. Vol. 1 Secondary school students. Rockville, Maryland: U.S. Department of Health and Human Services.
- Baker, C.M. (1994). School Health: Policy issues. Nursing and Health Care, 15 (4), 178-184.
- Baribell, K.L., And While, A.E. (1993). School Nursing: history, present practice and possibilities reviewed. Journal of Advanced Nursing, 18, 1202-1211.
- Barnfather, J.S. (1991). Restructuring the role of the school nurse in health promotion. Public Health Nursing, 8 (4), 234-238.
- Bartfay, W. (1994). Reading, writing and health. The Canadian Nurse, 29-32.
- Bately, L.S., Gingess, P., Grunbaum, J., Orphinas, P. & Parcel, G.S. (1995). A comprehensive approach to school health program needs assessment. Journal of School Health, 65 (2), 54-59.
- Berry, B., Cameron, M.E., & Thurber, F. (1991). The role of school nursing in the United States. Journal of Pediatric Health Care, 5 (3), 135-140.
- Biester, D.J. (1994). Schools and health: a partnership for a healthier future. Journal of Pediatric Nursing, 9 (6), 414-416.
- Bocchino, C. (1991). School-based clinics: ensuring access to health care for the adolescent in America. Pediatric Nursing, 17 (4), 398-399.
- Bolton, P. (1994). School entry screening by the school nurse. Health Visitor, 67 (4), 135-136.

- Braciszkeski, K. (1996, May 20). Drug use on the increase. Ludington Daily News, pp. 1, 9.
- Brophy, H. (1982). School nursing services: a century of change. Health Values, 6 (1), 36-40.
- Community Health Profile for Mason County. (1995). Manistee-Mason County Health Department.
- Corliss, P., Hayes, E.R., & Hawkins, J.W. (1994). School nursing in America 1902-1994: a return to public health nursing. Public Health Nursing, 11 (6), 416-425.
- Cowell, J.M., Mosley, E., Pelt, P., & Mootry, P. (1991). School health services: a hub of services to children and their families. Pediatric Nursing, 17 (1), 86-88.
- Cowley, S. (1993). Collaboration in health care: the education link. Health Visitor, 67 (1), 13-15.
- Chen, S.C., Rose, D.A., & Souter, C.M. (1987). Development of an inservice education program by school nurses. Journal of Community Health Nursing, 4, (3), 171-178.
- Chen, S.C., Chen, E.H., DeStefano, L.M., & Fitzgerald, M.C. (1991). Effects of a school nurse prenatal counseling program. Public Health Nursing, 8 (4), 212-218.
- Clark, D., & Jones, M.E. (1993). A study of school nurse utilization. Journal of School Nursing, 2 (2), 10-16.
- DeGraw, C. (1994). A community based school health system; parameters for developing a comprehensive student health promotion program. Journal of School Health, 64, (5), 192-195.
- DeGraw, C. & McGinnis, J.M. (1991). Health schools 2000: creating partnerships for the decade. Journal of School Health, 61 (7), 292-297.
- DeGraw, C., Novello, A.C., & Kleinman, D.V. (1992). Healthy children ready to learn: an essential collaboration between health and education. Public Health Reports, 107 (1), 3-15.
- Dryfoos, J.G. (1993). Full-service schools: what they are and how to get to be one. NASSP Bulletin 77 (557), 29-36.
- Elders, J.M. (1992). School based clinics to the rescue. The School Administrator, September, 16-21.
- Elders, J.M. (1993a). Schools and health: a natural partnership. Journal of School Health, 63 (7), 312-315.

- Elders, J.M. (1993b). The U.S. Surgeon General on schools and health. Journal of School Health, 63, 312-315.
- Feroli, K.L., Hobson, S.K., Miola, E.S., Scott, P.N., & Waterfield, G.D. (1992). School based clinics: the Baltimore experience. Journal of Pediatric Nursing, 6, 127-131.
- Fritsch-deBruyn, R., Gruen, S.M., & Hayes, E. (1991). Setting up a school based sexual education program to help prevent AIDS and other sexually transmitted diseases. Nurse Practitioner, 16 (18), 47-51.
- Goldsmith, M.F. (1991). School based clinics provide essential care. Journal of American Medical Association, 265 (19), 2458-2460.
- Graham, M.V., & Uphold, C.R. (1993). Schools as centers for collaborative services for families: a vision for change. Nursing Outlook, 41 (5), 204-211.
- Gullotta, T.P. & Noyes, L. (1995). The changing paradigm of community health: the role of the school based health centers. Adolescence, 30, (117), 107-115.
- Hansen, M.C., & Moekley, E. (1994). The at-risk student: a study of visits to the school nurse. Journal of School Nursing, 10, (4), 15-18.
- Harold, R.D. & Harold, N.B. (1993). School based clinics: a response to the physical and mental health needs of adolescents. Health & Social Work, 18 (1), 65-74.
- Hofford, C.W. & Cate, J. (1993). Comprehensive school health programs: striving for excellence in an environment of competitive budgeting. Viewpoints (Opinions Position Papers, Essays, etc.), May: U.S. Department of Education.
- Hootman, J. (1994). Nursing our most valuable resource: school-aged children. Nursing Forum, 29 (3), 5-17.
- Igoe, J.B. & Giordano, B.P. (1992). Expanding School Health Services to serve families in the 21st century. Washington D.C. : American Nurses Association.
- Igoe, J.B. (1994). School nursing. Nursing Clinics of North America, 29 (3), 443-457.
- Kaplan, P. & Tenoschok, M. (1994). Growing up healthy. The American School Board Journal, 50-51.
- KIDS COUNT Data Book. (1996). Baltimore, Maryland.
- Kozlak, L.A. (1992). Comprehensive school health programs: the challenge for school nurses. Journal of School Health, 62 (10), 475-477.

- Lavin, A.T. (1993). Comprehensive school health education: barriers and opportunities. Journal of School Health, 63 (1), 24-27.
- Lavin, A.T., Shapiro, G.R., & Weill, K.S. (1992). Creating an agenda for school based health promotion: a review of 25 selected reports. Journal of School Health, 62 (6), 212-228.
- Lear, J.G. (1992). Building a health/education partnership: the role of school based health centers. Pediatric Nursing, 18 (2), 172-173.
- Lewis, C. (1994). Finally-documentation that healthy kids learn better. NASN Newsletter, 4-6.
- Martin, K.S. & Sheet, N.J. (1992). The Omaha System: Application for Community Health Nursing. Philadelphia: WB Saunders.
- Mezey, M.D. & McGivern, D.O. (1993). Nurses, Nurse Practitioners. New York: Springer Publishing Company.
- Nader, P.R. (1990). The concept of "comprehensiveness" in the design and implementation of school health programs. Journal of School Health, 60 (4), 133-138.
- National Association of School Nurses (1988-1990). Philosophy of school health services and school nursing. Scarborough, ME: National Association of School Nurses Inc.
- National Action Plan for comprehensive school health education (1993). Journal of School Health, 63 (1), 46-66.
- Nicholson, B. (1993). School based adolescent health care in the 90's. NASSP Bulletin, December.
- Niznik, K. (1994). The nurse's role in school based mental health promotion: easing the transition into adolescence. JCAPN, 7(1), 5-8.
- Northup, C.E. (Ed.). (1987). Legal Issues in Nursing. C.V. Mosby.
- Novello, A.C. (1991). Healthy children ready to learn: the Surgeon General's initiative for children. Journal of School Health, 61 (8), 359-360.
- Nudel, M. (1992). Health for hire: how outside providers bring health care services to students. The American School Board Journal, Oct. 36-38.
- Oda, D.S. (1991). The invisible nursing practice. Nursing Outlook, 39 (1), 26-29.

- Office of Technology Assessment. (1991) Adolescent Health Vols.I & II: Summary and policy options. Washington, D.C.: U.S. Government Printing Office.
- Passarelli, C. (1994). School nursing: trends for the future. Journal of School Health, 64 (4), 141-149.
- Pender, N. (1996). Health Promotion in Nursing Practice. Stamford, Connecticut: Appleton & Lange.
- Prophet, M. (1995). The role of the school in assuring the future of healthy children. The Black Scholar, 21 (3), 2-6.
- Salmon, M.E. (1994). School (health) nursing in the era of health care reform: what is the outlook? Journal of School Health, 64 (4), 137-140.
- Starfield, B. (1992). Child and adolescent health status measures. The Future of Children, Winter, 1992.
- U.S. Department of Health and Human Services, Public Health Service (1991). Healthy People 2000: National health promotion and disease prevention objectives. Washinton, D.C. : Government Printing Office.
- Terwilliger, S.H. (1994). Early access to health care services through a rural school based health center. Journal of School Health, 64 (7), 284-289.
- The American Academy of Pediatrics (1992). Health care and a child's ability to learn: a survey of elementary school teachers. Chicago, Ill.
- Yates, S. (1994). School health delivery programs throughout the United States. Journal of School Nursing, 10 (2), 31-36.
- Yates, S. (1995). The practice of school nursing: integration with new models of health service delivery. Journal of School Nursing, 10 (1), 10-14.

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