

## The Role of School-based Programs in Protection and Development of School Health

Canan Birimoglu Okuyan<sup>1\*</sup> and Sultan Ayaz Alkaya<sup>2</sup>

<sup>1</sup>Department of Public Health Nursing, Hatay Health School, Mustafa Kemal University, Hatay, Turkey

<sup>2</sup>Department of Public Health Nursing, Faculty of Health Sciences, Gazi University, Ankara, Turkey

\*Corresponding author: Canan Birimoglu Okuyan, Ph.D., Postdoctoral Researcher, Department of Public Health Nursing, Hatay Health School, Mustafa Kemal University, Tayfur Sökmen Campus, 31060 Alahan-Antakya/Hatay, Turkey, Tel: +903262160686; Fax: +903262160667; E-mail: cananbirimoglu@gmail.com

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### Abstract

The children who attend preschool, primary and secondary education institutions comprise about 32% of the total population. School health includes all aspects of service of evaluating and improving the health of the students and the school staff and providing and maintaining a healthy school life. The aim of school health services is to provide and maintain the best possible physical, mental and social health of all children in the school age in the community. So that, the health degree of the children and the community rises altogether, also the goal of school-based programs is to improve and preserve the health of the students and the school staff with multidisciplinary team. This study focuses on the role of school-based programs in protection and development of school health.

**Keywords:** School health; Students; School-based programs

### Introduction

Although, the elderly population in our country shows an increase compared to the young population, the share of our young population in the general population is quite high compared to many countries. The 5-19 age population of our country is still more than 24 million. The children who attend preschool, primary and secondary education institutions comprise about 32% of the total population [1]. The World Health Organization (WHO) has addressed health as a holistic view and defined it as "not only the absence of illness or disability, but also a state of complete well-being from physical, mental and social aspects". School health includes all aspects of service of evaluating and improving the health of the students and the school staff and providing and maintaining a healthy school life [2]. The aim of school health services is to provide and maintain the best possible physical, mental and social health of all children in the school age in the community so that the health degree of the children and the community raise altogether [3], meanwhile the goal of school-based programs is to improve and preserve the health of the students and the school staff with multidisciplinary team. It is necessary to continuously develop the programs and activities applied in our schools, including multidisciplinary team and family members, in parallel with the changes in the world and our country in order to reach the desired aims in education, to improve the student health, to increase the quality of education, to fulfill requests and requests of students, parents and society.

### Methods

In this study, literature review was conducted by using international and national databases. In the review, key words such as school health, school-based programs, school health nursing were used. Inclusion criteria: articles written in English and Turkish, publications after 2000. Exclusion criteria: articles not written in English and Turkish, publications before 2000, thesis, published abstracts.

### What are the components of school health?

There are four aspects of school health; student health, school environment, health education and the health of the school employees [4-7]. Student health includes protecting and improving health, preventing illnesses, detecting health problems and making definite diagnosis, treating them if necessary, providing immediate care for sudden illnesses and injuries, giving counsel and education about health [4].

### Whom school health team formed from?

The school health team consists of doctor, nurse, teacher, student's parent, psychological counsellor and guide, also, if possible, psychologist, social worker and nutritionist. For school health, not only school and school employees, but also families' and community' cooperation is necessary. Health workers are the best group in transferring and practicing health development programs to the students, thanks to their knowledge and resources. One of the most efficient ways of improving health is that the teachers giving health education with counselling health workers. The nurse, as the member of school health team, is the ideal person to undertake the duty of coordinator. There is a defined relation between health and education and the existence of the school nurse directly affects the well-being of the student and school's success [8-10]. The nurse is the center in the school health team and plays a key role in school. A nurse who can be always in school can do health screenings and follow ups, give health education, help the health coordinator, make the school vaccines and intervene in emergencies [11,12].

### School Based Program

It is all of the event schedules that contains healthy nutrition, physical activity, health education, preventing violence in order to protect and improve the health of students and school staffs, while taking into consideration the community and the parents, with the help of multidisciplinary approach (with the team cooperation of;

school doctor, school nurse, nutritionist, teacher, school administrator, sport instructor, parents, social worker, school psychologist, psychological guidance counselling, dentist and audiologist).

### For school based parent participation

In order to increase the participation of the parents, it is important to support the educational objectives of the school, to act as a decision maker, school advocate, active volunteer at home and school, communicative role between home and school to support the student's homework. An important factor is to keep the communication with the parents strong and to help them in understanding the child development, always be in touch regarding the children's condition and involve the parents in the decision making process and offering consultation service to them if necessary. Organizing events to increase parental involvement to remove obstacles of parental involvement, building school clubs for it, creating touch parents, creating homework-help line and parental line, setting up workplace seminars, setting up family counselling hours and integrating community services and resources to ensure the strength of the development of students, school programs and families are important to increase the parental involvement. Family involvement ensures the integrity of the child's life in order to provide adaptation between home and school and to minimize differences. Through family involvement, education at home and at school is supported and this increases the student's success during the period of school and maintains continuity for going to school. With this way the education's purpose, permanent behavioral changes in the desired direction, are giving to child more easily. It is also accepted idea that family involvement increases the academic success of the student [13-17]. In the research made by Çelenk [15]; children who took educational assistance from their family members and children who come from families that are close relationship with the school have a higher reading achievement. The school-family association, the school protection association and the school administration, which are intermediary institutions that provide school-environment, needs to work regularly and in harmony. The organization of school-parent associations and school protection associations is very important in this sense. Arts and crafts, reading together, games, listening and music center, housework activities, outdoor activities, helping parents working with their children; taking a walk, visiting library, visiting a shop, organizing a museum tour, visiting historical places, visiting places like airport, bus stations, metro, etc., making virtual tours on web and reaching the silent-unconcerned parents (refugee and immigrant families, one of the parents are working, both of the parents are working, stress in families, feeling excluded from the school, not aware of the importance of being participant in child's education, teachers not knowing a family's talents, strengths and interests).

### School Based Programs for the Protection and Development of School Health

- Suggestions for healthy nutrition, nourishment mistakes that are common during school age and puberty,
- Physical activity; importance of physical activities, in school physical education programs, out of school physical activity programs,
- Health education, healthy start to life, healthy physical growth, healthy mental, social and emotional development, healthy living habits, personal hygiene and care, protection from sexual and

physical abuse, healthy environment, effective usage of health services,

- Smoking, alcohol and substance use, tobacco use, alcohol and non-alcohol use,
- Prevention of violence, frequency of seeing, the reasons of violence, environments with violence, effects of violence, children under risk, role of primary health care workers in preventing violence, evaluation of school for violence, general approaches to the solution of violence problem, diagnosis and approach to the students which are exposed to violence, diagnosis and treatment of children who might use violence,
- Child abuse and approach, risk factors, guidelines for the school.
- Substance use and dependence is a major public health problem in the United States and in the world. In many developed countries, adolescents, along with their peers, when they are in the first stage of substance use they also use alcohol and tobacco with it. In recent years, there has been a decrease in the use of this substance among young people in the US and other countries and there has been an increase in the use of other substances. From a developmental point of view, alcohol, tobacco, cannabis and other illegal drug usage rate were to be found high in adolescents. Most young people, despite being young, do not receive adult responsibilities due to substance use. Considering the onset and progress of drug use, it is important to apply preventive interventions during the early puberty. For this reason, it is very important that most drug prevention and education programs must provide in the school environment [18].

Assessment of stress-related well-being in school-based health promotion programs in adolescents aged 12-15 years, stress-related prosperity-focused school-based adolescent health promotion program. Pre and post-test were applied and evaluated. The study was conducted in two secondary schools in a town on the western coast of Sweden (grades 6 and 8). A questionnaire was developed and tested. The questionnaire was obtained from 23 items that contains 6 fields: A questionnaire called 'good about stress adolescent emotion' was applied and this survey contains questions about student's stress experiences.

The research applied in a single academic year to 153 affiliated persons and 287 unaffiliated persons. For a period of time only applied to a group of people and not applied to another group. A letter was sent to the parents of the students to inform them and permission was obtained for voluntary participation. Situations in which students may be associated with stress are carefully watched (school, entertainment, living environments, home, etc.). Began teaching health sciences in one of the schools and it was applied to increase the health status of students during 1 course every week. In this way, students are able to cope with stress using massage and mind exercises. Students are divided into groups of 15-20 people. A physiotherapist with experience in stress management was responsible for this practice and they were mainly focused on practical exercises, the theoretical components. The students made massages as friends to friends. They did facial, hand, foot, neck and back massage. Techniques also consist of impulses from special patterns (hitting). Another exercise is a simple mind exercise and this mind exercise contains components that will provide muscle relaxation, such as stretching. Among the 2 groups only 1 of them performed muscle relaxant exercises and stretching movements, besides these, muscle relaxation sessions to different groups are not done. The comparison of the 6 fields was done in each school as pre-test and post-test. The intervention school, the stress related situation in 6 areas of men was very good and good, while 5 areas of the girls

were good and one area was not good. In the non-intervention school, the stress related situation in the 4 areas of the boys was very good and good, while the girls were good in 2 areas and bad in 4 areas. As a result, adolescents have also found that massage and mental training are helpful in maintaining good and very good health associated with stress. A questionnaire, with credibility, was developed to assess health promotion approaches. However, there is a need for more work for both surveys and intervention studies for young people to develop [19].

In the effectiveness of universal school-based programs to prevent violence and aggression, the effectiveness of school-based programs in preventing violence and aggressive behavior among children, preschool and school age youth has been assessed and this review refers to both violence and exposure to violence. This review's main and only purpose is to reduce the violent and aggressive behaviors. In order to reduce this violence and aggression; students, parents, school administrators and teachers need to coexist. This school-based program not only includes violence and aggression behaviors but also minimizes the risk factors that lead to these behaviors. School-based programs are available for all children and represent all children. Students who carry high risk towards violence are considered as priority subjects on schools. This program not only includes public schools but also private schools. School programs for reducing and preventing aggressive behavior and violence in pre-school (kindergarten), primary school, junior high school and high school children were evaluated and students taught by these programs:

- Emotional self-awareness,
- Emotional control,
- Self-respect,
- Positive social skills,
- Social problem solving,
- Conflict resolution and group work.

In this review, students taken into consideration in five basic field:

- Behavioral Strategies,
- Cognitive Aim Strategies,
- School Skills Programs,
- Counselling and Speech Therapy.

In order to prevent violence, school-based programs have been used at all class levels from kindergartens to universities. These programs aimed at selected classes in schools with low socioeconomic status or high crime rates. All children were taken in the program, not in their classrooms but in the pull-out sessions. According to the systematic review criteria developed for the guidance of community services there is strong evidence that universal school-based programs reduce the rate of violence among children and adolescents. The program was successful at all class levels. School-based programs confirm the recently renewed meta-analysis studies and complete the community guide findings [20].

The study of Assessment of the Effectiveness of the School Based Cannabis Prevention Program was conducted semi-empirically. It was held in 86 schools out of 224 secondary schools in Barcelona in the 2005-2006 academic year and intervened after 15 months. 39 of these schools are consisted the experimental group and 47 of them consisted the control group. Participants consisted of 4848 9th grade students (14-15 years old) (VG: 2803 KG: 2043). The drug prevention program lasted for 4 sessions and was conducted within 6-10 h of web-based student and mother participation (xkpts.com). During the 15-month

follow-up, cannabis use initiation and duration were assessed. As a result of 15 months follow-up, 8.2% of males and 8.3% of females in the experimental group; 11, 8% of the males and 11.6 of the females in the control group were found out to have been using cannabis.

When experimental and control group were compared there was a 29% reduction in the classes in which cannabis frequency program was used within a month. Xkpts.com program was effective in preventing cannabis use [21].

Prevention of HIV-AIDS in Indonesia, West Java, Bandung by School-based Programs: Education programs in the research of "Evidence of Partnership and Empowerment in Education" are comprehensive and effective protection programs for the growing HIV-AIDS. The target is middle school students. For this reason, it is planned to improve survival skills in schools by increasing HIV-related curriculum to prevent HIV-AIDS infection through drug use and risky sexual behavior. Schools and teachers made plans to improve intervention designs and to embrace students more than before. The curriculum was divided into two, taking into account the risk of drug use and unprotected sex for HIV-AIDS. Drug and sex education was given to students. After this education students are expected to quit smoking and reduce drug use. For sexual and reproductive health, abstinence from sexual activities were targeted. The next step is to divide these goals into curriculum topics. The topics are; developing positive attitudes related to protection from HIV as well as interpersonal and cognitive self-management skills. In the process, school counsellors have a big and an important role to play. These counsellors are responsible for problems such as smoking, drug abuse, crime and sexual behavior of students and have developed a good partnership through the Teachers' Association called Guidance and Psychological Counselling. This partnership has been very beneficial for the students. In particular, they have assisted in planning, application, school management and family relations. All applications have been examined by the school counsellors. The key to the success of this HIV prevention school program is the involvement of community leaders in the process of development and application of the program as well as the authorities in local government and education [22].

Also, it has been stated that obesity in children is an important health problem today in many countries and increases morbidity and mortality rates in older ages [23]. School Health and Nutrition Programs play an important role in making children and adolescents adopt healthy eating and physical activity habits. Schools are an important part of nationwide struggle to prevent chronic diseases such as childhood obesity, coronary heart disease, diabetes and cancer. Nutrition programs implemented by schools increase children's potential to participate in education, increase their academic performance and quality of life. School-based nutrition education programs should be given national priority to ensure a healthy future for children. School nutrition programs should be supported and continued with the participations of governments, community leaders, doctors, dietitians, nurses, teachers and families. This review summarizes school health and nutrition programs that are part of public health and education [24].

In the School-Based Vaccination and Adolescent Immunization Programs to support Family and Community, vaccines such as the human papilloma virus were administered through a series of school-based vaccination programs in Australia (SBIPs). It was done to assess community attitudes towards the immunization of adolescents through SBIPs. It is a cross-sectional conducted in the rural and

metropolitan settlements in South Australia in 2011. As a result, 1926 adults were interviewed and 57.3% attended. Overall, 79.9% stated that the best place for adolescent immunization was school, while 16.4% said family physicians. 88.4% of parents of high school students support SBIP and 87.9% participated in the program Adults (79.4%, 18-34 years) are more likely to support this program compared to their elderly population (68.7%>55) and men (80.3%) are more likely to support it than women (71.7%). 39.9% of the participants stated that the convenience as the reason for their participation in SBIP, 32.4% participated because of public finance for service and 21% participated due to their belief in the program. As a result, most families of adolescents supported and participated in SBIP [25,26].

School Based Sleep Promotion Programs: In the study of Efficiency, Feasibility and Insights into Future Studies, it is stated that sleep deprivation in adolescents affects their development negatively and is a widespread phenomenon. In this review, the aim is to reduce sleep restriction in adolescents with school-based sleep promotion programs. Such programs improve sleep awareness but are not successful in altering behaviors for sleep. In addition to this training, it is very important to combine these programs with motivational components because otherwise they may be insufficient on their own. It is suggested for future initiatives regarding sleep improvement that they should be prepared individual-specific. Thus, motivation hindrances are determined by identifying individual differences. In addition, personalized sleep promotion strategies are thought to be transmitted to a large proportion of adolescents through internet-based communication [26].

In the study of "Development of a Safer Transportation with the School-Based Injury Prevention "motor vehicle accidents are the leading cause of death among young people. Within 3 months, 14% of adolescents between the ages of 13 and 14 were injured during the journey. Intervention programs are usually consisted of young drivers and are focused on potential protective effects. This descriptive study focuses on intervention studies to improve personal and peer protective behavior of passengers and this study was conducted to evaluate the effectiveness of curriculum-based preventive programs. In taking risks and injuries related to the passenger, the intentions of their friends to intervene in risky road behavior have been evaluated. It was evaluated by applying questionnaire in 8th grade health classes with 843 in 10 Australian secondary schools. Within the following 6 months of the program, fewer students who show risky behaviors related to travel were reported and the rate of intervention to their friends in risky road behavior has increased. According to the results of this study, road safety in adolescents can be improved with the help of school-based programs aimed at individual and social change [27].

In the research of "Activity of Universal School-Based Programs to Prevent Violence and Aggression", school-based programs have been used at all levels from pre-school to university to prevent violence. These programs targeted the selected classes in schools with low socioeconomic status or high crime rates. In these classes all children were taken into the program, but not in their classrooms, but with the pull-out sessions. According to the systematic review criteria developed for the guidance of community preventive services, there is strong evidence that universal school-based programs reduce the rate of violence among children and young people in school age. The impact of the program was successful at all class levels. School-based programs confirm the recently refined meta-analysis studies and complete the community guide findings [21].

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