SCHOOL HEALTH

School Health Program

- Health is extremely linked to educational achievements, quality of life, and economic productivity.
- □ **School Health Program:** Program that promotes health through schools, when delivered through schools that are themselves organized to promote health are one of the essential means through which the twin goals of health for all and education for all can be achieved.

School health program goals

- School health program goals: The overall goal of a school health program is to provide a standard, healthy environment for all students.
- A comprehensive, coordinated school health program helps each child achieve and maintain an optimal health condition so that maximal physical, emotional and intellectual growth can occur.

Major components of the school health program

Major components of the school health program: School health has been conceptualized as including three interdependent components: school health services, school health education and healthful school environment.

A coordinated school health program

- A coordinated school health program: In recent years, much work has been done to define just what constitutes a coordinated school health program.
 The Court of Direct Court has been done to define just what constitutes a coordinated school health program.
- The Centers for Disease Control and Prevention has developed the following descriptions of the eight components of a coordinated school health program:
- Health Education
- Physical Education
- Health Services
- □ □Nutrition Services
- ${\color{gray}ullet}$ Health Promotion for Staff
- \supset \square Counseling and Psychological Services
- \Box Healthy School Environment
- □ Parent/Community Involvement

School health services

□ School health services: Health services include the procedures carried out by members of the school health team (physicians, nurses, dentists, psychologists, counselors, teachers, dietitians, and others) to appraise, promote and protect the health of every child in the school that total well-being of the child-physical, social, emotional and intellectual is the primary concern. Certain activities that are usually provided to accomplish this goal include the following:

- Continuous observation: Teachers are in a position to observe their students in a unique context.
- Their professional objectivity and training can help them to recognize health concerns in children that may go unrecognized by others.

Health appraisal

- Medical examination: At least four physical examinations should be carried out during the school life of a child.
- The health examination should provide a history of the health status of the child and identify any health problems that the child might have.
- This experience should be used to reinforce to the child the importance of health examination. Further, this practice can help the child to develop a positive attitude toward health care providers.

Health appraisal

Screening programs:

A number of different health screening activities are conducted in the elementary and middle level schools. The most commonly found screening activities are height and weight screening, urine and stool screening, vision and hearing screening.

Common school children immunizations

- Common school children immunizations: Common school children immunizations in KSA are:
- **BCG**: was given at first for children in the first primary year and 3rd preparatory then due to some complications after its administration and the argument regarding its efficiency it was stopped.
- □ DT: for the first and fourth primary student.
- Meningitis vaccination: for children in the preschool and 1st primary.

Communicable disease control

- Communicable disease control: Control of the communicable diseases is the responsibility shared by the home, school and community. Primarily, it is the responsibility of the parent, to keep a sick child at home.
- Absence should be encouraged when children have even minor cold symptoms, since most childhood diseases have those same signs in the early stages.
- The teacher is responsible for detecting and excluding any child from the classroom who has symptoms of a communicable disease

Dental services

- Dental services: Dental disease begins in childhood.
- Three basic forms of activity should be included in a school dental health program:
- Dental health education.
- Prevention measures.
- Referral with follow through procedures in cases of discovered dental problems

Health records

Health records:

- Most schools maintain cumulative health folders as a means of steering and organizing all the data accumulated for each child during school years.
- A health record typically contains information related to the health history of the individual, height, weight at specific intervals, records of illnesses, results of any psychometric procedure and nurses reports.
- A health record should be started when the child enters the school and added to as the child progress from grade to grade.
- Ordinarily, if a child transfers to another school, the record goes with him or her.

First aid and emergency care

First aid and emergency care:

- First aid is skilled application of accepted principle treatment on the occurrence of an accident or in case of sudden illness.
- The school has three responsibilities for emergency care and disaster control:
 - (1) to prevent injuries from happing in school;
 - (2) to provide safety education;
 - (3) to develop a plan for handling emergencies.
- The school medical advisor should provide detailed instructions for the guidance of teachers and the school nurse with reference to the immediate treatment of common emergencies such as abdominal pain, menstrual problems and headache, as well as less frequent emergencies such as epileptic fits or insulin shock.

Mental health

Mental health:

Counseling and Psychological Services are services provided to improve students' mental, emotional, and social health. These services include individual and group assessments, interventions, and referrals.

Health education

- Health education: Health education in school setting is essentially important for helping children and youth develop the knowledge and skills they will need to avoid health risks and maintain good health throughout life.
- Health education addresses the physical, mental, emotional and social dimensions of health.

Nutrition Services

Nutrition Services:

- Access to a variety of nutritious and appealing meals that accommodate the health and nutrition needs of all students. It must include special nutrients for dental caries, endemic goiter, night blindness, PEM and anemia. Mid-day school meal is a supplement, provides
 - 1/3 of the energy requirement, at low cost, in acceptable form, and the menu per child per day includes cereal and millet 75g, pulses 30g, leafy vegetable 30g and non leafy vegetable 30g.
- half of pulse can be substituted by 15g fish or 120g skimmed milk.

Healthful School Environment

Healthful School Environment:

- The importance of sanitary school environment on effective learning and providing comfort and educational facilities is also emphasized. Poor sanitation has its impact on health and health teaching as well.
- Schools should have their own building design while residential buildings are not satisfactory.

School building

□ Site:

- The school should be built in the center of the area it is intended to serve so that it would be easily reached by the pupils.
- It must not be near sources of noise, fumes, dust, bad odors like industries, etc...
- It should be built on the side of a wide street with wideopen space around. Streets with heavy traffic are to be avoided to guard against accidents.
- The selected site has to be dry, elevated with good access to air and sun.

School Size:

- The space area of the school must allow at least 10 square meters per pupil in primary schools and 15 square meters per pupil in preparatory and secondary schools.
- At least two thirds of the space area should be given to the playgrounds, part of which should be covered to give shade in the summer and part should be paved with asphalt to suit physical exercises. An area at one end of the playground could be cultivated and used for teaching gardening.

School Shape:

The design of the building should be in blocks either separated or joined at right angles in the shape of L,F,T etc. with open spaces in between allowing ample access of sun and air.

The classroom

- The classroom: Under the school environment, classrooms are of prime importance and should fulfill certain sanitary requirements. including spacing and a suitable surface area for every pupil.
- □ Shape and space: rectangular in shape with a space area of at least 2 square meters per scholar, the distance between the blackboard and the last row should not be more than 8 meters and between it and the first row not less than 1.5 meters and a passage of 60 centimeters should be allowed between every two rows of desks.
- Crowded classrooms may predispose to ill ventilation and its sequelae and spread of droplet infection and lead to inadequate supervision of the pupils.

□ Ventilation of the classroom: Adequate ventilation can be provided by a suitable window area (1/4-1/5) the floor area and arrangement of the windows opposite each other for cross ventilation, windows should have top hoppers that open upwards directing the incoming air upwards thus avoiding the draft of cold air in the winter.

Classroom Lighting:

- Adequate lighting; optimum power and distribution, uniform light in each room, absence of glare and walls and ceiling of good light reflecting colors as white, ivory, yellow, light buff or light gray.
- Lighting correlates positively with school-specific student performance.

Desks and seats:

The desks must be so designed to keep the back straight, the feet can rest flat on the floor, the writing surface should be smooth with a sloop of 15degrees for writing with an adjustment to 45 degrees for reading to provide comfort and minimize visual strain. They also need to be properly spaced and with adequate distances from front and sideways.

Water supply:

□ Schools must be provided with safe water supply, from the public municipal supply in urban areas and other sources in the rural areas. Then it is recommended to use sanitary fountains for drinking built in the play ground, one fountain provided for every 100-120 scholars so as to avoid the risk of infection through the contaminated ordinary taps

- Sanitary premises:
- □ 1-For elementary girls toilets, 1/20 students, (1/25) students, or at least (1/30) students.
- \square 2-For elementary boys toilets and urinals, 1/20 students, (1/25) students, or at least (1/30) students.
- \square 3- Preparatory and secondary schools for girls: 1 /45 students, 1/50 students or at least 1/55 students or more.
- 4- Preparatory and secondary schools for boys:
- \square 1/60 students, 1/65 students, or at least 1/70 students.
- Sanitary premises comprise water closets, urinals and latrines. They must be of adequate number:
- □ For boys: 5 urinals and 5 W.C. for every 100 boys.
- □ For girls: 7 W.C. for every 100 girls.

Waste disposal:

Wastes of school, whether solid or liquid need to be collected and disposed of by sanitary methods. Small baskets in the classrooms and playgrounds for collection of waste paper and other objects to keep cleanliness of schools and the practice of clean habits.

Food sanitation:

By the same principles followed in the community, special consideration is given to food handlers and the school canteen, avoid having food peddlers around the school. According to the school environment evaluation scale, the food service room is properly located on the ground floor, sale of carbonated beverages, gum, and candy must be prohibited or at least restricted, storage room should be cool, well lighted, adequately ventilated, and vermin free.

Food Sanitation:

- There should be adequate shelves and tightcovered garbage receptacles should be emptied daily, floors should be mopped daily, walls and ceilings should be clean and light in color. Good storage including refrigeration is both sanitary and economical.
- All food handlers must be instructed in sanitary food handling and personal health practices.

Health problems among school students

- Health problems among school students: School students may be exposed to a variety of health hazards:
- infectious, parasitic and deficiency diseases, psychological disturbances, ailment of special senses and accidents.

- Infectious diseases: The contributing factors are childhood malnutrition, defective immunization, environmental problems and other economic and political factors. Prevention of infectious diseases is mainly by environmental sanitation, health education, immunization and good nutritional support.
- a-Respiratory infections: Respiratory infections are the most frequent occurring illness in childhood.
- b-Parasitic infestation: These include helminthes (e.g. round worm, hook worm, entrobius) and protozoa (e.g. amaebiasis) but the commonest are enterobiasis and H. nana.
- **c-Urinary tract infection:** Approximately 3-5% of girls and 1% of boys acquire UTIs. The prevalence of urinary tract infection in school children ranging from 0.4% in boys to 2.0% in girls.

2-Deficiency diseases: Anemia and vitamin A deficiency is the commonest among them. Risk factors are poor personal hygiene, nutrition ignorance of the child and family, parasitic infestations and acute respiratory infections causing anorexia and secondary deficiency. Preventive measures include nutritional education of the pupils, teachers and parents and improvement of the school sanitation with directing of the school based services toward the deficiency disorders.

3-Skin disease: Low socioeconomic status, malnutrition, overcrowding, and poor standard of hygiene are important factors accounting for the distribution of skin diseases in school children in developing countries.

- 4-Dental problems: Until very recently, it was not uncommon to see nearly two thirds of the school population affected to some degree by dental caries.
- 5-Handicaps: Mainly arise from errors of refraction, defective hearing and heart diseases rheumatic valvular diseases or congenital is the most important

- 6-Chronic illnesses: It was found that prevalence of chronic illness in school-aged children was up to 20%. These chronic illnesses including mainly the following:
- Diabetes millets:
- Epilepsy: The prevalence of epilepsy amongst school children was found to be 4.5- 7.0 per thousand.

7-Accidents and Emergencies: At school children may be exposed to the risk of a variety of injuries as wounds, bleeding, fractures, broken teeth, and eye injuries and occasionally burns and others. In the rood, wounds and traffic accidents estimated that every US\$1.00 invested in schools on effective tobacco education saves US\$18.80 in the costs of addressing health and non-health problems caused by smoking. The study further estimates that the benefit of every US\$1.00 spent on education for alcohol and other drug abuse prevention saves US\$5.69.

9-Reproductive health problems: School health programs delivered through health promoting schools can address many of the major challenges to health throughout the world these include poor reproductive health.