# School health services

# **Objectives:**

- 1. Define school health services
- 2. List components of school health
- 3. Define responsibilities of school health team members.
- 4. Define functions of school health programs and preventive services that can be provided in school setting.
- 5. Define School health services in KSA, scope and structure.
- 6. List the common conditions school health deals with in KSA.

# **Define school health services**

## School health services (SHS) :

"are services provided by a health worker to students enrolled in primary or secondary education, either within school premises or in a health service situated outside the school."

# List the components of school health services

A Comprehensive school health program include 8 component:

#### 1. Health Education:

provides students with opportunities to obtain the attitudes, skills, and knowledge necessary for making health-promoting decisions, adopting health-enhancing behaviors, and achieving health literacy. Health education involves a wide variety of different courses that address topics such as alcohol, usage or abuse of other drugs, healthy nutrition, tobacco use, emotional and mental health, and violence prevention.it helps students live a healthier life.

#### 2. Physical Education:

Equips students the essential knowledge and skills for lifelong participation in physical activity ,It is characterized by a designed, sequential curriculum that provide cognitive content and learning experiences in a variety of activity areas. The result of a quality physical education program is a physically educated person who has the skills, knowledge , and confidence to enjoy a lifetime of healthful physical activity.

#### 3. Health services

Services that are designed to guarantee access and referral to primary health care services, prevent and control communicable disease and other health problems, foster appropriate use of primary health care services, provide emergency care for illness or injury, provide educational and counseling opportunities for promoting and maintaining individual, family, and community health, promote and provide optimum sanitary conditions for a safe school facility.

### 4. Nutrition services

Schools need to offer a variety of nutritious, healthy and attractive meals that meet the nutritional and health needs of all students.

## 5. Healthy and safe school environment

A healthy and safe school environment includes the physical and aesthetic surroundings and the psychosocial climate and culture of the school. There are many Factors that influence the physical environment of the school which include the school building and the area surrounding like any biological or chemical agents that are detrimental to health. The psychosocial environment includes the social, physical, and emotional conditions that affect the well-being of students and staff.

## 6. Health promotion for staff

Schools can provide opportunities for school staff members to boost their health through activities such as health education, and health-related fitness activities , health assessment which helps the staff members to follow a healthier lifestyle that improves their health status and their productivity.

#### 7. Counseling

Counseling and support services improves students' social and mental health and it includes group and individual assessments, referrals and interventions. Organizational assessment, counselors and psychologists contribute to the health of the school environment and to the student health.

#### 8. Family/community involvements

A well-integrated approach by parents, schools and the community can improve the health and well-being of students. Schools actively encourage parental participation and use community resources and services to better address student health needs.

## The components of school environment are divided into three categories:

#### A-academic components:

1-Teacher relationship with student	2-Teaching strategies
3- Tests and Evaluations	4-Teaching methods

<b>B- physical co</b> 1- schoolyard	•	oonents: 2- classrooms		
<b>C- Social com</b> 1-Justice	ponents: 2-Sustainability	3-Wellbeing	4-Social coexistence	
Responsibilities of school health team members				

## School health services (SHS):

are services provided by a health worker to students enrolled in primary or secondary education, either within school premises or in a health service situated outside the school.

## A health worker:

is a person whose main function is to deliver health promotion, prevention, care and/or treatment services, such as a nurse or clinical psychologist, but not a teacher.

#### **School Nurses:**

1- Acute and Emergency - Injury or illness emergencies can happen at any time including during the school day. Often the school nurse may be the only health professional in the building who is formally trained to respond to a medical crisis. In addition, school nurses are also prepared to assist in larger emergency events or disasters that affect multiple students and staff, such as weather related events, environmental exposures, or violent crimes.

2- Care coordination - Care coordination in schools involves school nurses organizing the care of students by sharing information and maintaining communication among those concerned with the needs and care of students with chronic health conditions (e.g., asthma, diabetes, epilepsy).

3- Chronic Diseases Management - Children and adolescents spend many hours in school; therefore, those students who have chronic health conditions might have daily challenges with managing their condition. Examples of chronic health conditions are asthma, diabetes, food allergies, poor oral health, epilepsy, and other seizure disorders.

# **School Psychologists:**

Services Provided. Services provided by school psychologists can be categorized as follows:

- Consultation: Collaborate with teachers, parents, and other school personnel about learning, social, emotional, and behavioral problems.
- Education: Provide educational programs on classroom management strategies, parenting skills, substance abuse, and teaching and learning strategies.
- Research: Evaluate the effectiveness of academic programs, behavior management procedures, and other services provided in the school setting.
- Assessment: Work closely with parents and teachers, using a variety of techniques, to evaluate academic skills, social skills, self-help skills, and personality and emotional development.
- Intervention: Work directly with students and families to help solve conflicts related to learning and adjustment. Provide psychological counseling, social skills training, behavior management, and other interventions.

# **School Counselor:**

School counselors are specialists who assist students, school staff, parents, and community members in problem-solving and decision making on issues involving learning, development, and human relations, Counseling can take place in individual, small group, or large group settings. School counselors typically advise students in course selections, career options, college application procedures, and school-to-work programs.

# Functions of school health programs and preventive services that can be provided in school settings

Comprehensive school health programs are integrated set of planned, sequential, school-affiliated strategies, activities, and services designed to promote the optimal physical, emotional, social, and educational development of students. The program involves and is supportive of families and is determined by the local community, based on community needs, resources, standards, and requirements. It is coordinated by a multidisciplinary team and accountable to the community for program quality and effectiveness

A comprehensive school health program should:

- promote health and wellness.
- prevent specific diseases, disorders and injury.
- prevent high risk social behaviors.
- Intervene to assist children and youth who are in need or at risk.
- Help support those who are already exhibiting special health care needs.
- Promote positive health and safety behaviors.

School health services staff can help all students with preventive care such as flu shots and vision and hearing screening, as well as acute and emergency care. Qualified professionals such as school nurses, nurse practitioners, dentists, health educators, physicians, physician assistants, and allied health personnel provide these services

# Nurses and Nurse Practitioners:

School nurses are the traditional "backbone" of school health services. They typically provide population-based primary prevention and health care services, including:

# Functions of school health programs and preventive services that can be provided in school settings cont.

- Physical and mental health assessment and referral for care
- Health counseling
- Mandated screenings, such as vision, hearing, and immunization status
- Monitoring the presence of infectious conditions among students and enforcing public health precautions to prevent spread of infections and infestations
- Case management of students with chronic and special health care needs
- Development and implementation of emergency care plans and provision of emergency care and first aid
- Provision of primary care, including prescribing medications when allowed (for nurse practitioners only) under the State Nurse Practice Act.

# **Physicians:**

Physicians are involved in schools and school health programs from many vantage points, including serving as public health officials to university teachers and researchers and as generalist and specialist providers of direct patient services. The services they provide include:

- Consultation on health policy
- Health curricula
- Evaluation of programs and services
- Direct consultation regarding individual patients or groups of patients
- Participation in provision of health services at the school site

Asthma specialists have set up asthma education programs, orthopedic surgeons have set up scoliosis screening and sports medicine programs and so on.

### **Definition of SHS in KSA**

School health services (SHS) are services provided by a health worker to students enrolled in primary or secondary education, either within school premises or in a health service situated outside the school, applied in KSA.

## From MOH:

The Ministry of Health (MOH), represented by the Public Health Agency, has launched the «Healthy Schools» Program to improve the health of students in concordance with the global standards, policies, and procedures of the World Health Organization (WHO).

(The Healthy School can be defined as a place where all school community members, including students, their parents, teachers, and administrators work together to enhance student health.)

Also, the Healthy School takes all measures to promote the student health along with the educational process through the integrated partnership between MOH and the Ministry of Education (MOE), in addition to adopting all existing measures and a set of basic programs of school health education.

MOH has recently developed a more comprehensive approach that focuses on students in all physical, psychological, social, and religious aspects, in line with the National Transformation Program (NTP) 2020 and Saudi Vision 2030, in terms of education and health aspects.

### Scope

Healthy schools are schools that constantly strengthen their capabilities to be a healthy place to live, learn, work. So the Ministry of Health developed a program that goes along with Saudi Arabia's 2030 vision to make sure students achieve the best knowledge and health throughout their learning journey and promote health throughout the community. This goal would only be achieved by integrating and developing several factors and components such as schools' physical and moralistic aspects, students' health and wellness, and the surrounding community. In addition to improving students' awareness and health behaviors, it would also help in keeping the school environment safe and healthy and promote public health. The importance of this issue is due to the students' ability to receive and obtain good positive health-knowledge throughout their school day and spreading it to their communities.

## SHS

School health services in KSA are concerned with both the actual and potential issues that can occur within schools, as well as public health promotion. Potential issues that could have had bad consequences would be stopped or diverted into better outcomes. This could be done through providing first aid, medical care in cases of emergency, and managing chronic cases within the schools. Also, preventative care and its services should be presented to students to help them reach the optimum level of health and wellness at all times, so parents would need to provide the necessary information to schools in regards to

any illnesses that require immediate care or follow up to provide them with care speedily when needed through a medical team or a mentor that is medically qualified. Preventative services additionally provide support for students and their families and help them adapt to health and social problems and even overcome them. Ultimately, School health services wouldn't be contingent unless with the school having an in-school clinic and a health mentor.

# School Health Services provided in Saudi Arabia

• Pre-school medical checking up

The school health team will perform an entrance examination for the 1st new school grade students to assess their physical wellbeing which will help schools monitor their students and help in detecting any abnormalities in their health. The examination would measure their vital signs, visual acuity, height, weight, blood, urine, and stool analysis and a general medical examination.

• School Immunization

School Immunization for students of certain ages, for instance tetanus vaccine for females in their 1st year in high school and varicella for students entering kindergarten.

• School intervention programs

Schools could also offer annual Intervention Programs for visual equity and head lice. That would involve screening head lice and undiagnosed myopia, and recommendations on what to do if the students were positive whether its by giving them medications or referring them to doctors the ultimate goal would be to have students in an optimal health.

• Health Education

Health Education plays a vital part in SHS because if students know the necessary health information, it would cease the bad outcomes of their unhealthy behaviors. Various topics could be presented to cover different health aspects such as nutrition, prevention of disease, personal hygiene and dental care.

# • School Environmental Health

Another aspect the SHS draws its attention on is the schools' physical condition and what it offers to the students. The schools need to be a safe and healthy place seeing that students, teachers, and workers are there for long hours. Regular inspection should be done to ensure that the level of adequateness is optimal at all times, if any health hazards or inadequacies are found, improvement is to be done immediately.

• Inspection of School canteens and food handlers

Finally, healthy nutrition is an important part for students' growth and development. So conducting a regular inspection of the canteen and food handlers is necessary to make sure that the best standards are met

# **School Health Objectives:**

## **Overall Objective**

Raising awareness, promoting and maintaining student health by using particular health indicators, and monitoring them regularly.

## **Detailed Objectives**

- Identifying health priorities in the school community.
- Acquiring planning, implementation, and maintenance skills in school health.
- Training educational practitioners in early detection of health problems.
- Providing educational practitioners at school with health awareness skills.
- Activating coordination between health practitioners and the school community.
- Providing health services that enhance school and community health.
- Developing the skills of health practitioners to interact effectively with the school Community.

# COVID-19:

One of the diseases that risen In the last two years is COVID-19 which has been considered a global pandemic, considering that the risk of infection increases in crowded places, The school administration prepared a plan under the supervision of the School Health Affairs Department at the Ministry of Education and includes the following:

- The school administration must conduct training courses for the educational and administrative staff on the training package for the basics of infection control that prepared by the School Health Department at the Ministry of Health.
- The plans should cover all the activities and places that the teacher or student goes through during the school day.
- Social distancing should be maintained in all students in crowded places and facilities
- The mechanisms of communication for the parents, employees and the healthcare center are as follows:
  - 1. A clear mechanism to deal with suspected cases and isolate them from the rest of the contacts to stop the infection and spread.
  - 2. A clear mechanism for dealing with positive cases that may exist in the school and tracing the contacts and suspension of the educational process as determined by the local health authorities.
  - 3. A clear communication mechanism between the school, the responsible healthcare center, and the responsible authorities, and reporting the emergency cases in the school as soon as possible.
- The school must in cooperation with the healthcare center prepare a plan to provide necessary support raise the schools' readiness.

# **Smoking:**

One of the issues that is frequently found in adolescents living in Saudi Arabia is smoking, it is said that there is 1.3 billion smoker worldwide, its' importance become greatly magnified especially as 1.2 million premature deaths yearly due to second hand smoking, It is found that males smoke more than females, although it is decreasing worldwide, the prevalence of smoking is found to be increasing in the WHO Eastern Mediterranean Region and the African Region.

Current adolescent smokers in Saudi Arabia ranged from 2.4%-39.6%, there was a cooperation between the ministry of health and the ministry of education to arrange visits to smoking cessation clinic team in attempt to change this habit and support the person to provide support since it is thought that the cause is one or more of the following:Family negligence, stress relief, pleasure, and social situations.

# **Obesity:**

As Rates of overweight and obesity continue to grow in adults and children. In the last four decades, the prevalence of overweight or obese children and adolescents aged 5–19 years increased more than four-fold, the MOH, in collaboration with the Ministry of Education, adopted an initiative to reduce obesity rates among school students (Rashaqa), to raise the awareness about the of obesity and ways of prevention and increasing physical activity for students, considering that schools are one of the convenient ways for preventive interventions, furthermore making use of primary healthcare centers in residential areas that are readily accessible. This initiative aims to reduce the obesity rate by 5% in children and adolescents in the Kingdom in some selected schools in the upcoming 5 years.

# **Diabetes mellitus:**

The World Health Organization has ranked Saudi Arabia as having the second highest rate of diabetes in the Middle East with an estimated population of 7 million diabetic and 3 million pre-diabetics. With a percentage of 10.1% in males and 9.8% in females at the age of 15 and above in a family survey, this could be potentially tackled by with serving healthier meals and good moderate exercise.

# Mental illness:

As Depression, anxiety and behavioural disorders are among the leading causes of illness and disability among adolescents, it is of great importance to tackle this topic. There were notable research in KSA:

• A study was conducted in Abha to measure the prevalence anxiety depression and stress on 545 secondary school girl showed that 73.4% had the symptoms of at least one of the three studied disorders 50.1% had at least two disorders. The prevalence of symptoms of depression, anxiety and stress was 41.5 %, 66.2% and 52.5% respectively, the majority of symptoms were mild to moderate in severity.

• Another study was conducted in high school students in National Guard Housing, Riyadh, Saudi Arabia, the results of this study showed a prevalence of mental disorders was found to be 48%, more than 80% of these cases were mild to moderate.

This further enforces the need for school health services to help the student cope with their situation and elevate them from their pressures.

# **Physical inactivity:**

Physical inactivity is the fourth leading cause of death worldwide. A study showed that the majority of Saudi children, youth and adults were not active enough to meet the recommended guidelines for moderate to vigorous Physical Activity, females were disproportionately less active than males which can be due to the lack of variety of activity at schools<sup>13</sup>.

# References

- Institute of Medicine (US) Committee on Comprehensive School Health Programs in Grades K-12. Schools & Health: Our Nation's Investment. Allensworth D, Lawson E, Nicholson L, Wyche J, editors. Washington (DC): National Academies Press (US); 1997. PMID: 25121262.
- 2. Centers for disease control and prevention 2021, United states, accessed November 24 2021, https://www.cdc.gov/healthyschools/chronicconditions.htm
- 3. <u>https://www.cdc.gov/healthyschools/shi/pdf/training-manual/team.pdf</u>
- 4. https://www.cdc.gov/healthyschools/schoolhealthservices.htm
- 5. https://www.nap.edu/read/5153/chapter/6
- WHO guideline on school health services . <u>https://www.who.int/publications/i/item/9789240029392</u>
- WHO guideline on school health services. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO
- 8. Ministry Of Health.(2020, august 20). "Healthy Schools" Retrieved from <u>https://www.moh.gov.sa/en/Ministry/Projects/Healthy-Schools/Pages/default.aspx</u>
- 9. <u>https://www.mchenrycountyil.gov/county-government/departments-a-i/health-department/publi</u> <u>c-health-nursing/community-health-program/8-components-of-coordinated-school-health</u>
- 10. https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00510/full
- 11. World Health Organisation. (n.d). "*Obesity*". Retrieved from: <u>https://www.who.int/health-topics/obesity</u>
- 12. World Health Organisation. (2021, November 17). "Adolescent mental health". Retrieved from: https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health
- Kohl, H., Craig, C., Lambert, E., Inoue, S., Alkandari, J., Leetongin, G., & Kahlmeier, S. (2012). The pandemic of physical inactivity: global action for public health. The Lancet, 380(9838), 294-305. doi: 10.1016/s0140-6736(12)60898-8.
- 14. World Health Organisation. (2021, July 26). "*Tobacco*". Retrieved from: https://www.who.int/news-room/fact-sheets/detail/tobacco
- 15. <u>https://www.moe.gov.sa/en/education/generaleducation/Pages/SchoolHealth.aspx</u>