

# SCHOOL HEALTH SERV

FirstRanker.

# SCHOOL HEALTH SERVICES

## Introduction

- ▶ An important branch of community health.
- ▶ According to modern concepts, school health service is an economical and **powerful means of community health**, and more important, in future generations.
- ▶ The school health service is **a personal health service**.
- ▶ It has developed during the past 70 years from a narrower concept of **medical examination** of children to the present-day broader concept of **comprehensive care of the health and well-being** of children throughout the school years.

## What is School Health Service?

“It is the branch of community medicine which deals with the provision of **preventive, promotive, curative** **rehabilitative services** to the student teachers in the school environment.”

# Duties Of A School Medical Officer

1. Preparation and maintenance of health record of children/teachers and other staff.
2. Routine medical inspection of children/teachers.
3. Treatment of common ailments/injuries.
4. Referral (if required) and follow up of cases.
5. Health education and training in first aid.
6. Coordination for physical education
7. Inspection of class rooms, canteen, wash playground, hostels, offices, etc. The aim is to inspect
  1. Seating arrangements
  2. Lighting, ventilation, heating, cooling facilities
  3. Waste disposal system
  4. Drinking water facility
8. Meeting with the administration and parents (if required)

# Comprehensive Medical Examination



## Health Problems of the School Children

- ▶ Any discussion of a school health service must be based on:
  1. the local health problems of the school
  2. the culture of the community and
  3. the available resources in terms of material and manpower.
  4. While the health problems of school children vary from one place to another, studies indicate that the main emphasis will fall on the following categories.

## Health Problems of the School Children

1. Dental problems
2. Malnutrition
3. Infectious diseases/Communicable diseases
4. Parasitic infestations
5. Lice infestation
6. Diseases of skin
7. Diseases of eye
8. Diseases of ear
9. Congenital abnormalities
10. Psychological problems

## Health Problems of the School Children

1. **Dental problems:** Dental caries, fluorosis, gingivitis
2. **Malnutrition:** Stunting, anemia, Vit.A deficiency, obesity
3. **Infectious diseases/Communicable diseases:**
  - ▶ Measles, mumps, rubella, chicken pox, whooping cough, acute tonsillitis, pneumonia, etc.
1. **Parasitic infestations:** Hook worm, round worm, pinworm
2. **Lice infestation**
3. **Diseases of skin:** Scabies, fungal infections
4. **Diseases of eye :** Poor eyesight, color blindness
5. **Diseases of ear:** Acute or chronic OM, ear wax, ear infection
6. **Congenital abnormalities:** Cleft of lip/palate
7. **Psychological problems**
8. **Injuries/falls:** Major/minor

## Objectives of School Health Service

The objectives of the program of a school service:

1. The **promotion** of positive health
2. The **prevention** of diseases
3. Early **diagnosis, treatment and follow-up** defects
4. **Awakening health consciousness** in children
5. The provision of **healthful environment.**

# Aspects of School Health Serv

- ▶ Manifold
- ▶ Local priorities.
- ▶ If plentiful resources, special school health services may be developed.
- ▶ Some aspects of a school health services follows:

## Aspects of School Health Service

1. Health appraisal of school children and school personnel
2. Remedial measures and follow-up
3. Prevention of communicable diseases
4. Healthful school environment
5. Nutritional services
6. First aid and emergency care
7. Mental health
8. Dental health
9. Eye health
10. Health education
11. Education of handicap children
12. Proper maintenance and use of school health records

## 1. Health Appraisal (inspection and examination)

- ▶ “Health appraisal consists of periodic medical examinations and observations of children by the class teacher and Medical Officer”

## 1. Health Appraisal (inspection and examination)

- ▶ The health appraisal should cover not only students but also the teachers and other personnel.
  - a. Periodic medical examination
  - b. School personnel medical examination
  - c. Daily morning inspection
  - d. Children showing any signs or symptoms should be referred to the school medical officer. For this purpose, the teachers should be adequately trained during Teacher Training Courses and subsequently during In-Service Training Courses.

# 1. Health Appraisal (inspection and examination)

## a. Periodic medical examination:

- ▶ medical examination of children at the time of enrollment and thereafter every four years.
- ▶ The initial examination should be thorough and include a careful history and physical examination of the child, with tests for vision, hearing and speech.
- ▶ A routine examination of blood and urine should be carried out.
- ▶ Clinical examination for nutritional deficiencies and examination of faces for intestinal parasitosis are particularly important. Cont

# 1. Health Appraisal (inspection and examination)

## a. Periodic medical examination:

- ▶ Tuberculin testing or mass screening.
- ▶ The parents should be persuaded to be present at these examinations.
- ▶ The teacher should help in the medical inspection by recording the medical history, regular (quarterly) recording of height and weight, annual testing of vision, and preparing children for the medical examination by helping them understand the “how” and “why” of health appraisal.

## 1. Health Appraisal (inspection and examination)

**b. School Personnel:** Medical examination of teachers and other school personnel as the part of the environment to which the children are exposed.

### **c. Daily Morning Inspection:**

- ▶ The teacher is in a unique position to carry out “daily inspection”, as he/she is familiar with the children and can detect changes in their appearance or behavior that suggest illness, improper growth and development. The following clues will help the school teacher in suspecting children who need medical attention:

## 1. Health Appraisal (inspection and examination)

**d. The clues** which help the school teacher in suspecting children who need medical attention

- (1) unusually flushed face
- (2) any rash or spots
- (3) symptoms of acute cold
- (4) coughing and sneezing
- (5) sore throat
- (6) rigid neck
- (7) nausea and vomiting
- (8) red or watery eyes

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# 1. Health Appraisal (inspection and examination)

- (9) headache
- (10) chills or fever
- (11) listlessness or sleepiness
- (12) disinclination
- (13) diarrhea
- (14) pains in the body
- (15) skin conditions like scabies and ringworm

## 1. Health Appraisal (inspection and examination)

- ▶ Children showing any such signs or symptoms should be referred to the school medical officer.
- ▶ Teacher observation of school children is of particular importance because of the large number of trained personnel for school work.
- ▶ For this work, the teachers should be adequately trained during Teacher Training Course and subsequently trained during In-Service Training Courses.

## 2. Remedial measures and follow-up

- ▶ **Medical examinations** are not an end in themselves; they should be **followed** by appropriate **treatment** and follow-up.
- ▶ **Special clinics** should be conducted exclusively for school children at the primary health centers in rural areas, and
- ▶ in one of the **selected schools or dispensaries** in the group of about 5000 children in the urban

### 3. Prevention of Communicable diseases

- ▶ Communicable diseases control through immunization is the most emphasized school health service function.
- ▶ A well planned immunization program should be drawn up against the common communicable diseases.
- ▶ A record of all immunizations should be maintained.

## 4. Healthful School Environment

- ▶ The school building, site and equipment are part of the environment in which the child grows and develops.
- ▶ Healthful school environment therefore is necessary for the best emotional, social and personal health of the pupils.
- ▶ Schools should also serve as demonstration of good sanitation to the community. The following minimum standards for sanitation of the school and its environs have been suggested.

## 4. Healthful School Environment

**Minimum standards** for sanitation of the school and environs have been suggested.

1. **Location**
2. **Site**
3. **Structure**
4. **Classroom**
5. **Furniture**
6. **Doors & Windows**
7. **Color**
8. **Lightning**
9. **Water Supply**
10. **Eating Facilities**
11. **Lavatory**

## 4. Healthful School Environment

Minimum standards for sanitation of the school environs have been suggested.

### 1. Location

- ▶ The school should normally be centrally situated with proper approach roads and at a fair distance from busy places and roads, cinema houses, factories, railway tracks and market places.
- ▶ The school premises should be properly fenced and kept free from all hazards.

## 4. Healthful School Environment

### 2. Site

- ▶ Site should be on suitable high land and not to inundation or dampness and can be drained.
- ▶ **10 acres of land** be provided for higher elementary schools and **5 acres** for primary schools with additional one acre of land per 100 students.
- ▶ In congested areas, the nearest public playground should be made available to students.

# School Site



## 4. Healthful School Environment

### 3. Structure

- ▶ Nursery and secondary schools, as far as possible, should be single storied.
- ▶ Exterior walls should have a minimum thickness of 10 inches and should be heat resistant.

### 4. Classroom

- ▶ Verandahs should be attached to classrooms.
- ▶ No class room should accommodate more than 40 students.
- ▶ Per capita space for students in a class room should not be less than 10 sq.ft.

# School Building



## 4. Healthful School Environment

### 5. Furniture

- ▶ Furniture should suit the age group of students.
- ▶ It is desirable to provide single desks and chairs.
- ▶ Desks should be of “minus” type.
- ▶ Chairs should be provided with proper backrests and armrests, with facilities for desk-work.

# Class Rooms



# Types of desks?

## What is a minus desk?

A vertical line drawn from the edge of the desk falls on the seat.

## What is a zero desk?

A vertical line drawn from the edge of the desk touches the edge of the seat.

## What is a plus desk?

A vertical line drawn from the edge of the desk falls outside the edge of the seat.

# Desks and Seats



## Which type of desk is recommended for school children?

- ▶ **Minus or zero desks** are recommended for school children.
- ▶ Minus or zero desk will enable the student
  - to keep the proper distance from the desk to his eyes.
  - and also avoid postural deformities.

## 4. Healthful School Environment

### 6. Doors & Windows

- ▶ The windows should be broad with the bottom a height of 2'– 6' from the floor level;
- ▶ combined door and windows are should be a 25 per cent of the floor space;
- ▶ windows should be placed on different walls for cross ventilation;
- ▶ the ventilators should not be less than 2 per cent of the floor area.

# Ventilation



## 4. Healthful School Environment

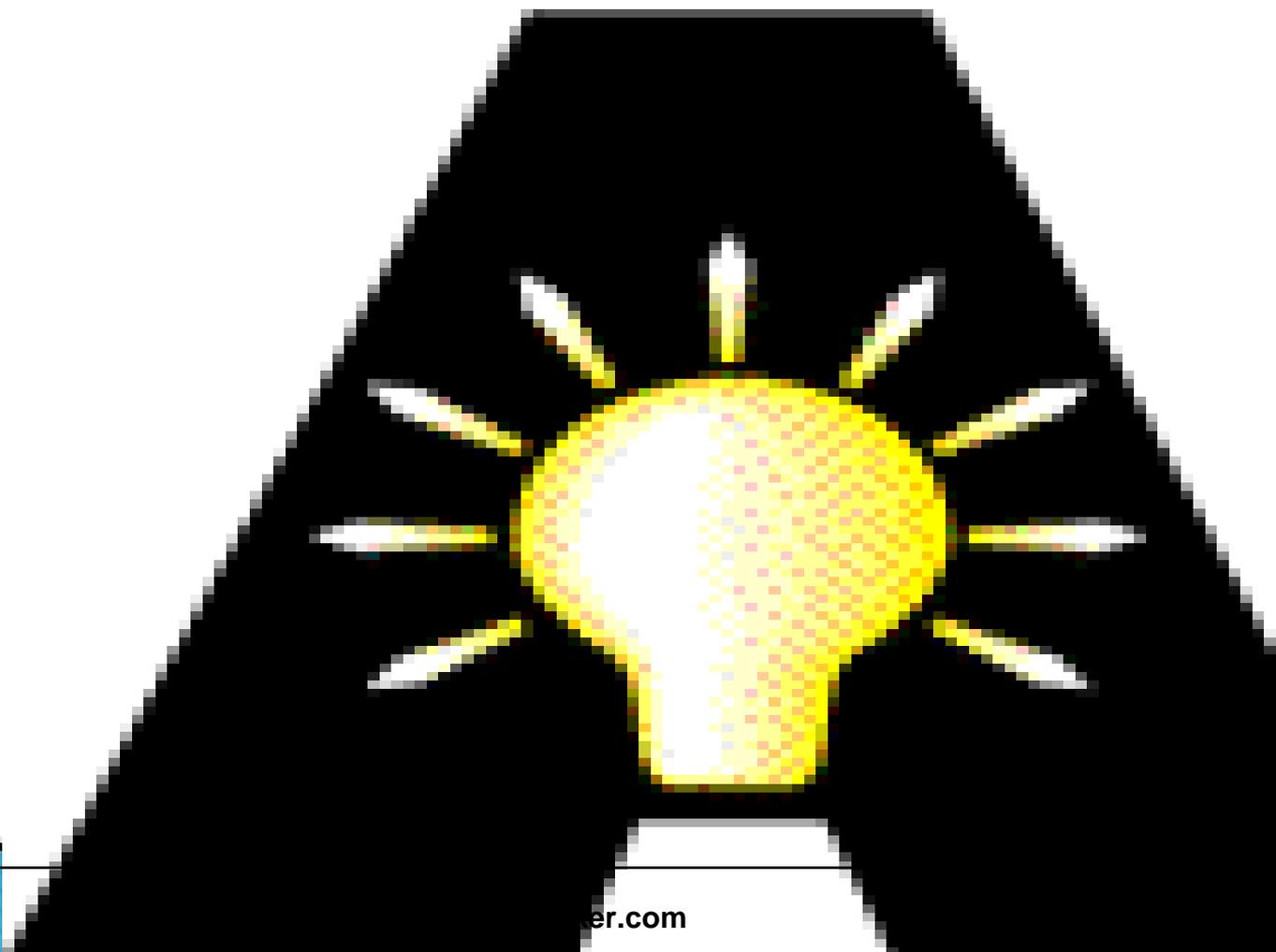
### 7. Color

- ▶ Inside color of the classroom should be white
- ▶ should be periodically white-washed.

### 8. Lighting

- ▶ Classrooms should have sufficient natural light preferably from the left, and should not be facing front.
- ▶ Adequate artificial lighting arrangements
- ▶ No glare on the board

# illumination



## 4. Healthful School Environment

### 9. Water Supply

- ▶ There should be an independent source of safe potable water supply, which should be
  - continuous, and
  - distributed from the taps
  - Periodically tested

### 10. Eating Facilities

- ▶ Vendors other than those approved by the authorities should not be allowed inside/school premises;
- ▶ there should be a separate room provided for day meals.

# Water Supply



# Healthful School Day

- 1–Educational aspect.
- 2–Schedule of the day.
- 3–Emotional climate.
- 4–Mental health.
- 5–Food services.



## 4. Healthful School Environment

### 11. Lavatory

- ▶ Privies and urinals should be provided –
- ▶ One urinal for 60 students and
- ▶ one latrine for 100 students.
- ▶ Arrangements should be separately made for boys and girls.

# Waste Disposal



## 5. Nutritional Services

- ▶ A child who is physically weak will be mentally weak, and cannot be expected to take full advantage of schooling.
- ▶ The diet of school child should, therefore receive first attention.
- ▶ Milk, food supplements be provided.

# Food Sanitation



## 6. First-aid and Emergency Care

- ▶ The responsibility of given first-aid and emergency care rests with the teacher, to pupils who become sick or injured on school premises.
- ▶ therefore all teachers should receive adequate training during “Teacher Training Programs” or “In-service Training Programs” to prepare them to carry out their obligation.
- ▶ The emergencies commonly met within schools are
  - (a) accidents leading to minor or serious injuries, and
  - (b) medical emergencies such as gastroenteritis, colic, epistaxis, fainting etc.
  - In every school a fully equipped First-Aid-Post should be maintained as per regulations.

## 7. Mental Health

- ▶ The mental health of the child affects his physical health and the learning process.
- ▶ Juvenile delinquency, maladjustment and drug addiction are becoming problems among school children.
- ▶ The school is the most strategic place for shaping the child's behavior and promoting mental health.
- ▶ The school teacher has both a positive and preventive role – he/she should be concerned in helping all children attain mental health, so that they may develop into mature, responsible and well-adjusted adults.

## 8. Dental Health

- ▶ Children frequently suffer from dental diseases and defects.
- ▶ Dental caries and periodontal disease are the two common dental diseases children.
- ▶ Educating the children about dental hygiene/ brushing the teeth. Villages?
- ▶ A school health program should have provision for dental examination, at le  
once a year.

## 9. Eye Health Services

Schools should be responsible for

- ▶ the early detection of refractive errors,
- ▶ treatment of squint and amblyopia and
- ▶ detection and treatment of eye infections as trachoma.
- ▶ Administration of vitamin A to children has shown gratifying results.
- ▶ In other words, basic eye health services be provided in schools.

## 10. Health Education:

- ▶ The most important elements of the school program is health education.
- ▶ The goal of health education should be to bring desirable changes in:
  - health knowledge,
  - in attitudes and
  - in practices,
  - and not merely to teach the children a set of hygiene.

1. **Personal Hygiene**
2. **Environmental Health**
3. **Family life**

## 10. Health Education:

- ▶ Health Education in schools is a function of the **school teacher**.
- ▶ The **health officer** and the **public health nurse/health worker/health assistant** may furnish teaching materials and advice, but the **teacher is the key person** in the presentation of the material to the children.
- ▶ To do this important work, the teacher should be well versed in health education techniques, and sincerely interested in the welfare of the pupils.
- ▶ **Children take back to their parents the health instructions** they receive in schools, and even more important, when they become adults they apply this knowledge to their own families.
- ▶ In developing countries, where ill-health is a major problem, **“every school child is a health worker”**.

## 11. Education of Handicapped children

**The ultimate goal is to assist the handicapped child and his family so that:**

- ▶ the child will be able to reach his maximum potential,
- ▶ to lead as normal a life as possible,
- ▶ to become as independent as possible
- ▶ to become a productive and self-supporting member of society.



## 12. School health records

A cumulative health record of each student should be maintained.

- ▶ Such records should contain
  - **Identifying data** – name, date of birth, parent's name and address etc.
  - **Past Health History**
  - **Record of findings** of physical examination and screening tests and record of services provided
  - These records will also be useful in analyzing and **evaluating school health programs** and providing a useful link between the home, school and the community

# School Health Administration

Health of the school child is the responsibility of

- ▶ parents,
- ▶ teachers,
- ▶ health administrators and
- ▶ the community.
- ▶ The general health services in Pakistan are administered largely through **the primary health centers in the rural areas**, where the bulk of the population lives.
- ▶ **School health service is therefore an important function of the primary health centers.**

- ▶ School health services are not well organized in our country, especially in the rural areas.
- ▶ School health services tend to be neglected. Morbidity and mortality are comparatively much higher in the school age than in the preschool years and in the old periods of life.
- ▶ In the West, the importance of this service was first recognized when deficiencies in health status were found in soldiers at the time of recruitment for the First World War. These deficiencies were noticed too late for correction but would have been remedied easily had they had been detected and treated during the school years.

- ▶ Dental ailments 70-90%
- ▶ Malnutrition 40-75%
- ▶ Worm infestations 20-40%
- ▶ Skin diseases 10%
- ▶ Eye diseases 4-8%
- ▶ Pulmonary TB 4-5%
- ▶ Diseases of
  - cardiovascular,
  - respiratory,
  - gastrointestinal and
  - urogenital systems

# Special Needs of the School Child

- ▶ The school age is a formative period physically as well as mentally transforming the school child into a promising adult.
- ▶ Health habits formed at this stage can be carried to the adult age, old age and even to the next generation.
- ▶ Thus school health service is a key factor for the improvement of the health of the nation.

# Special Needs of the School Child

There are *two special needs in school years*

## **1. Health guidance:**

*Children are continuously undergoing changes in their physical, mental, emotional and social development. In the absence of such guidance, their growth and development may be affected.*

## **2. Education in group-living:**

- ▶ *The child plays, travels and learns things from others.*
- ▶ He has to learn to adjust and adapt to the school environment, which is quite different from home.

## School Health Program-**OBJECTIVES**

- ▶ Health consciousness among school children.
- ▶ Providing health instruction in a healthy environment.
- ▶ Prevention of disease; early diagnosis, treatment and follow-up of defects.
- ▶ Promotion of positive health.
- ▶ Recognizing the child as a “change agent” in the family.

## *Medical check-up*

- ▶ A detailed examination of each child in the school should be done by a school medical officer, and should fill the school health card.
- ▶ He may be assisted by a school health assistant or a class teacher for recording general and family history, weight, and height,
- ▶ A minimum of three examinations should be carried out as follows:
  - ▶ On school entry at the age of 5 to 6 years.
  - ▶ On passing out from primary school at age 10 to 11
  - ▶ On passing out from middle school at age 13 to 14
- ▶ In addition, periodic (twice a year) testing of vision, height, and hearing may be done by auxiliaries and teachers oriented towards school health.
- ▶ Daily observations made by the class teacher.

# *Special Problems*

- ▶ ***Teeth services*** of a full or part-time dentist should be available. Dental health education and knowledge about caries and gingivitis should be imparted.
- ▶ ***Eyes defective vision and squint*** need the service of a specialist who should prescribe glasses and treat squint.
- ▶ ***Ears wax, discharge and hearing defects*** should be attended to.
- ▶ ***Communicable diseases***: These should be promptly treated and also notified for mass measures, if necessary. Examples of important communicable diseases are leprosy, tuberculosis, diphtheria, scarlet fever, ring worm, etc.

## HOW TO START A SCHOOL HEALTH PROGRAM

**Step 1:** Organize the principals of the school.

**Step 2:** Motivate and involve the teachers.

**Step 3:** Provide health education to teachers.

**Step 4:** Develop resource materials and child health activities.

**Step 5:** Implement the program.

It is essential to form a coordinating health committee for this purpose, consisting of the principal, teachers, community leaders, parents, and children.



# Thank you