STATUS OF HEALTH CARE AND HYGIENE IN PRIMARY SCHOOLS

MS. MAMTA ARORA

PROMOTED BY ASSOCIATION FOR INNOVATION, INDIA
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Publisher:
Pratima Prakashan
R2/29, Gurudwara Road, Ramesh Park, Laxmi Nagar, Delhi-110092
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ISBN: 978-93-81713-34-1

PROMOTED BY:
Association for Innovation, INDIA
DEDICATED

TO

MY HUSBAND MR. SATISH ARORA

& MY KIDS KHUSHI AND NISHITH ARORA

FOR

THEIR IMMENSE SUPPORT AND INSPIRATION

BEHIND MY RESEARCH
ACKNOWLEDGEMENT

With great contentment and a sense of appreciation I express my heartfelt thanks to my revered supervisor Dr. Kuldeep Kaur Faculty Education Panjab University Chandigarh for her excellent guidance. Her scientific perception is perhaps only surpassed by her courage in allowing me to discover the vast scientific landscape, in order to train me to be free thinker during his journey. She made me realize that apart from knowing your subject & hard work, one need passion & imagination to invent and discover.

I am highly indebted and express my heartfelt thanks to my institute. I am grateful to my friends who always helped me in hard times. Their cherishing attitude, perpetual guidance, painstaking, friendly discussion & forbearance have given me strength and self identity for the satisfactory completion of this work as book. I would also like to thanks to Principal for genuine support whenever asked for.

I would like to thanks all the principals of different schools for providing requisite data and cooperation, support during execution of my work.

Thanks to all members of Biotechnology Department for their kind cooperation.

Mamta Arora
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CHAPTER –1

THEORETICAL RATIONALE OF THE STUDY

INTRODUCTION

‘Health is Wealth’

Each year on April 7th the world celebrates World Health Day. On this day around the globe, thousands of events mark the importance of health for productive and happy lives. In 2003 the theme for World Day was ‘Health Environment for Children’. The slogan for Word Health day 2006 is ‘working Together for Health’.

A child’s world centres around the home, school and the local community. These should be healthy places where children can thrive, protected from diseases. Children have unique vulnerability as they grow and develop. They are windows of susceptibility. Millions of children die annually from environmentally related illness who could be saved through creation of healthy settings.

Degraded environments are the breeding grounds for germs, worms and disease: bearing insects. Half a billion children worldwide are debilitated by diseases such as Malaria, schistomiasis, dengue fever and Cholera. Some diseases result in long term disability; others cause more immediate and short term effect.

In turn, this huge burden of ill health among children constraints the social and economic development of their countries. Currently the economic burden of health care and hygiene is enormous. This problem has to be tackled seriously.

IMPORTANCE OF HEALTH AND HYGIENE

One’s ideal of health should be the highest realization of his physical, mental and spiritual possibilities rather than mere freedom from diseases and deformities.
The prosperity of a nation depends upon the quality of its children - their physical, intellectual and moral equipment. If the children of a nation especially at primary education level, are healthy and strong, the nation is sure to make a steady headway in all spheres.

One of the main functions of education is to help every pupil in developing a healthy body, an alert mind and sound emotional attitudes.

According to Gandhi, 'By education I mean an all round development of child; body, mind and spirit". A healthy mind lives only in a healthy body. Health is the basis of individual and social welfare. It is the basis of life. Man's happiness in life depends upon good health, vigour and vitality. Good health is clearly related to efficiency in learning. A child in poor health is a burden to himself, to his family and more so to a school. Without good health he is not able to read and study. Ill health causes educational delinquency and retardation. Life without health is a misery, a virtual death. Good health enables a person not only to pull his own weight but also to be of service to his family.

MEANING OF HEALTH:

The Oxford defines health as freedom from disease or pain. The physician also seems to agree with this definition where he views health as a normal functioning of the body organs and systems.

Siddalingariya's view: "Health aims at making growth more perfect, life more vigorous, decay less rapid and death more remote."

View of World Health Organization: According to the World Health Organisation of the United Nations, "Health is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity."

Thus on one side, health includes normal growth and development of the body, proper functioning of each organ and system, physical strength and vigour, resistance to disease and endurance to work. On the other side, health means absence of deformities or disabilities and ailments. The ailments may be either organic diseases such as poor eye-sight, diabetes, dyspepsia etc. or diseases due to infection of parasites. Broadly speaking, health implies not merely physical health but social, moral, emotional and mental health also.
MEANING OF HYGIENE
The word ‘Hygiene’ has been derived from Greek word ‘Hygia’, which means the ‘Goodness of health’ or ‘healthful’. In modern times it means the art of living.

C.B Good’s View :
Cater V. Good in Dictionary of Education defines personal hygiene as “The study and application of preventive medicine and physiology for the preservation of the health of the individual.”
Thus personal hygiene aims at the promotion of health and long life by cultivating hygienic and healthy habits of proper living, cleanliness, proper rest, regular exercise and adequate sleep. In other words personal hygiene implies instruction in simple functional matters related to health, cleanliness. Special emphasis being placed on healthful eating sleeping and toilet habits, care of skin, eyes ears, nose, throat, teeth, nails, hair, clothes and foot wear guidance and correct posture, safety precautions and development of emotional stability.

ELEMENTS OF PERSONAL HYGIENE
1) Cleanliness of body and its parts which includes :-

i) Cleanliness of skin
Skin is the outer surface of the body. If the surface is kept clean it is able to check the influence of the germs on the body. It is necessary to keep the outer surface of the body clean because it comes in contact with the outside world which is full of germs and infectious elements. If the skin is kept dirty for a longer time, ailments like eczema and pimples develop on it. To keep skin clean, students should be encouraged to take a regular bath with fresh water.

ii) Cleanliness and care of eyes
Eyes are vital organs of the body. Sense of sight is due to eyes. Dust, dirt or any foreign material when gets into eye, affects the sense of sight. Hence children should be encouraged to keep their eyes clean and healthy.

iii) Cleanliness and care of ears
Ears give the sense of hearing. It should be kept clean and do not insert any sharp material into the ear. If there is discharge or pain in the ear a doctor must be consulted.
iv) **Cleanliness and care of nose**
Nose gives us the idea of smell. Air is inhaled through nose. If the nose gets choked, we start respiration through mouth which is responsible for causing various diseases.

v) **Cleanliness and care of throat:**
Throat is connected with tongue, nose, ear, etc. Avoid taking sour eatables. It should be treated properly if any ailment is there.

vi) **Care and cleanliness of teeth**
We chew food with the help of teeth. Teeth should be cleaned twice everyday. Dirty teeth not only give a bad look but they are a danger to the digestive system. If teeth are kept dirty ailments like Pyorrhea develop.

vii) **Cleanliness of nails and hands**
Nails should be cut as soon as they grow, otherwise dirt would creep into them which may cause several diseases and ailments. Nails should not be bitten by teeth. Nails and hands should be kept clean and tidy. Hands should be washed with soap from time to time in order to avoid any type of ailment.

viii) **Cleanliness of hair**
Hair ends go deeper into skin. These should be kept clean, well groomed and in good condition. Sometimes lice grow in the hairs and cause serious type of fever. Each member of the family must keep a separate comb to dress hair.

2) **Cleanliness and fitness of clothes**
We put on different clothes in different seasons. Clothes are intended to project our body from the effect of weather and germs of the diseases. They also add beauty and a good look to our personality. Clothes should be kept clean. Children should be encouraged and made to keep their under garments very clean. If they are kept dirty, it can cause many diseases. Clothes should be neither too tight nor too loose. Too much tight clothes are very unhygienic and effect our health.

3) **Size of the footwear**
Shoes save our foot from the effect of weather and attacks of the germs. Footwear should be comfortable and fit. Wrong and faulty shoes can cause disease like bunions, corns, chilblains.
4) **Provision of rest and sleep**

Rest is very helpful in removing and curing fatigue. Rest means giving sometime for relaxation to the part or system of the body. The rest may be brought about by recreation, change of work or lying down or sitting comfortably. It safeguards against over-work. It refreshes the body and mind. It is helpful for mental assimilation also. Hence pupils should be encouraged to take proper Rest. Sleep hours should have fresh air. It is possible to have a sound sleep in the room which is free from noise and disturbance. Bedding should be clean and free from dust. It should be Cozy and comfortable. While going to bed, clothes should be loose so that there may be free movements of the organs of the body in the bed.

5) **Provision of nutrition and balanced diet**

For good health and healthy body we must take nutritive and balanced diet. It should meet the requirements of body and mind. Food should be saved from adulteration and infections.

6) **Provision of personal comfort**

There should be proper ventilation, light and temperature. Proper ventilation, light temperature, clothing and footwear add to personal comforts.

7) **Provision of relaxation**

Recreation and relaxation relieve the individual from pressure of work. Recreation are very essential. One feels refresh after recreation. One drives recreation from film shows, games and sports, tours and excursions, painting and drawing, playing on musical instruments, picnics, jokes, singing, dancing, mono-acting, radio, television, tape recorder etc.

8) **Maintaining good posture**

Good postures enable the body to function efficiently. They help in maintaining health and gaining alertness. Wrong postures have adverse effect on physical and mental efficiency, moral attitude and appearance of an individual.
9) **Good and healthy habits**

Habits formed during childhood period serve as a foundation stone in adult life. Hence habits of keeping clean, neat tidy etc. must be developed in children at an early age. Good habits serve as an aid to the promotion of health and longevity of life.

**ROLE OF SCHOOL IN PROMOTING HEALTH OF CHILDREN**

Educators in school- like a teacher, a headmaster, an inspector or educational officer- can play a very important role in promoting health of children, but it is the teacher who is closely associated with the school programme and has day-to-day contact with the pupils.

Following role can be played by school and teachers in promoting health:-

1) **Imparting instructions about health and hygiene:**

The teacher should impart instructions about health and hygiene. For imparting instructions about health and hygiene, the teacher can use special methods in the form of health posters, health projects, health weeks, health clubs, health exhibitions, films and film strips, excursions, health counselling, follow up, healthy environment and incidental teaching.

2) **Inspecting personal cleanliness:**

The teacher should have the daily morning inspection of the cleanliness of the students. Within a few minutes a rapid survey of the whole class may be made at the time of morning assembly. He should look at faces, nails, fingers, health and clothes and should demand a high standard of cleanliness.

3) **Detecting cases of diseases:**

Inspection should be done by the teacher to detect the cases of communicable diseases and to exclude them in the beginning of the session to protect the remaining class from catching infection. The teacher is justified in excluding a pupil when he finds one or more suffering from these conditions: nasal discharge, cough, red or watery or sore eyes, vomiting, aches and pains when accompanied by other symptoms, drowsiness, sore throat etc. When the child is ill, he should be sent to the nearest physician.
Developing Health habits:

The teacher should inculcate healthful habits among the pupils. He should pay special attention to the following habits:

(i) **Habits regarding fresh air**: The teacher should emphasise the need of fresh air at all times and especially while sleeping. The students should be asked not to cover their mouth at night. They should be asked to breathe through their noses.

(ii) **Habit of hygienic feeding**: Correct habit of hygienic feeding should be developed. The students should be taught to take right type of food in a proper quantity. They should be told the harmful effects of overeating. They should be made to understand the importance of drinking plenty of pure water. They should be acquainted with the importance of washing hands after toilet with soap and before taking food. They should be told that fruits should not be eaten without washing them and eatables should not be taken from everywhere or any where.

(iii) **Classroom habits**: The teacher should pay special attention to the postures of children in the class, correct reading, writing and standing postures may be taught. There is a common practice among children of moistening the tips of pencils with their lips and of biting on wooden pencils. This practice should be discouraged. They should be instructed to use a handkerchief when coughing or sneezing and cover their mouth or nose. It is the most effective measure for preventing the spread of colds and other spray borne diseases.

5) **Arranging physico-medical inspection**:

The teacher should arrange physico-medical inspection of the pupils. With the help of qualified doctors, its follow up should be taken seriously.

6) **Arranging vaccination and inoculation**:

The teacher should arrange regular vaccination and inoculation with the cooperation of authorities of the institute.
7) **First-aid training:**
A first aid centre may be started in the school. The teacher should provide assistance in the functioning of this centre. Junior Red Cross Society may be requested to train a group of children every year in the first aid. The school doctor or teacher in charge of medical fund may also provide first aid training. The students should be instructed to give immediate attention to burns and bruises.

8) **Physical exercises:**
The teacher should help in providing a variety of programmes of physical activities so that the students may choose suitable physical exercise of their likings.

9) **Arrange mid-day meals:**
The teacher should take another responsibility of monitoring and supervising mid-day meals in the school and look to the problems of malnutrition. Various commissions and committees have placed emphasis upon this important and useful programme. Let the teacher ask the pupils to bring their meals from their homes and take the same during school interval in his presence so that he may see what they take and how they take. At least he will be able to tell the merits and demerits of various eatables they generally relish.

10) **Looking to the class-room conditions:**
The teacher should look to the class-room conditions in general-such as ventilation, light, seating arrangement, cleanliness.

11) **Teacher as model:**
The teacher can develop healthy habits and attitudes among the pupils through his personal example. Example is better than percept. Teacher should observe the cardinal rules of health, follows the principles of nutrition, sticks to food habits and believes in preventive measures rather than curative methods.

In short, it can be stated that teacher plays an important role in all the three aspects of health education:

(i) Health instruction

(ii) Health services

(iii) Health supervision
PRINCIPLES OF HEALTH CARE AND HYGIENE

Following principles should be adopted while providing health care and hygiene instruction to the students:

1) **Emphasis on habit formation**: The teacher should place emphasis on habit formation rather than theoretical knowledge. The habits of school pupils should be supervised daily.

2) **Positive instructions**: The positive must be emphasised as against the negative. The important thing is "what to do" and not "what not to do". Hence the instructions should be given in a positive manner, like 'Be clean', and not in negative manner 'do not remain dirty'.

3) **No punishment**: Instructions when not complied by pupils should not lead to punishment. It is not for fear of punishment that the pupils should live healthy situations should be created so that the pupils can adopt the ideals quickly.

4) **No use of fear**: Instruction in health should not invariably use fear as a motive because conduct controlled by fear is the conduct of a slave. Fear of disease cannot be a goal, but the desire to have vigorous health and strength in order to live most effectively and to serve society in the best possible way should be set up as an ideal.

5) **Correlating with each subject**: Health instruction may not form a separate subject in the curriculum. It should be correlated to each subject.

6) **Making Instruction practical**: Health instructions should be made as practical as possible. Opportunities should be provided in the school programme and outdoor activities where the pupils gather new knowledge and imbibe good habits.

7) **Use of illustrative material**: Health instructions should be imparted on scientific lines. Audio-visual aids and illustrative material should be used in explaining various points and facts.

8) **Scientific knowledge**: Scientific knowledge about bodily preservation should be introduced as its need arises. In the primary classes there is little need for scientific knowledge as a vehicle of ideas, but still it is extremely important
that the teacher should possess it as a background and rational basis for his teaching.

PROGRAMME OF HEALTH CARE OR SCHOOL MEDICAL SERVICE

Programme of health service should consist of:

1. Medical inspection of the pupils.
2. Maintaining records of medical inspection and health of the pupils.
3. Dispatching notices to parents regarding the physical health of the pupils.
4. Clinical treatment of students who suffer from some diseases.
5. Vaccination and immunization.
6. Paying special attention to the health conditions of the pupils e.g. posture, skin, ears, heart, lungs, eyes, nose, throat, chest, feet and nervous disorders.
7. Recording of history and defects regarding special cases.
8. Follow-up work regarding medical inspection.
9. First-Aid service.
10. Provision of mid-day meals and looking to the nutrition.
11. Attention to the healthy and sanitary school conditions.

REASONS FOR PROVIDING SCHOOL HEALTH SERVICES:

1. To realize educational aims.
2. To minimise the hazards of school attendance.
3. To organise school programmes according to individual capacities and needs.
4. To ensure normal and sound health of the pupils.
### Agencies of Health Service at School Level

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### Pre-Requisites for Healthy School Living:

It is an important function of the school to supervise various health services regularly. It must be seen that the school work is done under hygienic conditions. There must be healthy environment of the school and the classroom. The important aspects about which the school must be particular are as under:

1. **The site of the school:**
   
The school should be located in a congenial and pleasant environment. It should be in natural surrounding with a touch of beauty. The school site should be free from noise, dust, smoke, dampness and other unhygienic conditions.

2. **The School Building:**
   
The school building, classroom and play grounds should be spacious, neat, clean, attractive and appropriate to child's growth and development.

3. **Light and Ventilation:**
   
There should be adequate light and ventilation arrangements. It is important that there should be no glare from light. A systematic arrangement should be made so that sunlight may not enter the rooms directly during the summer. The purpose is to have
maximum sunlight in winter and minimum sunlight in summer. Both natural and artificial arrangement of light and ventilation should be made.

4. **Furniture and Seats:**
   Furniture plays an important role in the physical, moral and mental welfare of the pupils. Furniture of the school should be adequate and comfortable for the students. It should be so designed so as to meet the requirements of the students. There should be properly adjusted seats.

5. **Drinking water**
   There should be adequate provision for fresh drinking water.

6. **Provision for toilet:**
   Adequate provision for separate toilets for boys and girls should be there in each and every school.

7. **Sanitation and hygiene:**
   There should be adequate sanitary facilities. School building should be properly cleaned. The class-rooms laboratories, bathrooms etc. should be neat and clean. Disinfectants should be properly used and utilized.

8. **Dust-bins:**
   Dust-bins should be provided at suitable corners and rubbish pieces of waste paper, fruit skins and such other useless things should be thrown into them.

9. **Attention to bad-habits:**
   Due attention should be paid to bad habits of spitting and blowing of nose anywhere, improper use of toilets and passing of urine at any place.

10. **Cleanliness of body and clothes:**
    Students should be made to develop the habit of keeping their body and clothes clean. They should be examined when they come in the school whether they have their body and clothes clean. It will be better to encourage them to develop such a habit by telling them stories relating to the importance of good habits.

11. **Good postures:**
    Good postures of sitting, standing, reading, writing, lying on the bed should be emphasised because they beget good health. A wrong posture leads to dangerous consequences.

12. **Games and exercises:**
    In school there should be good arrangement for games and physical exercises.
13. **Mid-day meals:**
Proper arrangement of nutritious midday meals should be made. In most of the school, the children bring their lunch packets. The school authorities can make arrangements to keep them hot during winter.

14. **School programme:**
The school programme should be so organized that it does not cause fatigue to the students. The arrangement of teaching periods should be such as promotes variety to decrease the element of fatigue. The school hours should be according to the age-group of pupils.

15. **Teacher and healthy classroom environment:**
Healthy classroom environment should be created by a friendly atmosphere by the teachers. The teacher should have a proper emotional balance and a sense of humour to maintain a healthy classroom environment. He should be fair, honest and impartial. He should not be prejudiced against any pupil. He should respect the personality of the pupils. He should respect the personality of the pupils.

16. **Prevention of diseases**
Infectious diseases should be prevented.

17. **Provision of medical examination**
Medical check up is very important for the health and physical well-being of the person. There should be provision for thorough and comprehensive medical examination. Reports of medical examination should be communicated to parents. Remedial measures should be adopted to remove defects and restore health after medical examination, follow-up work should be done.

18. **Provision of school medical services**
There should be provision of school medical services and school clinic. Every school should set up a school dispensary to look after the health of the pupils.

19. **Provision of First aid**
First aid is immediate and prompt help given to the victim of an accident or sudden illnesses before the services of doctor are obtained. First aid has to be applied in the cases of bleeding, sprains and dislocations, fractures, burns or
scalds, drowning, convulsions, electric shock, snake or dog bite or other poisonous bites. First aid is an essential part of the school life. Every school must have a first aid box.

SIGNIFICANCE OF THE STUDY

India has 375 million children, more than any other country in the world and it has largest primary school system in the world, schools play an important role in the development of child.

India is one of the largest countries of the world with diverse population both in geographical and cultural terms. The ideology of co-existence made India one of the most vibrant civilizations of the world. With a population of about 1,000 million, India is the 2nd most populated country in the world after China. Having 29 States, 594 districts, India has about half million locally self-governmental institution in rural areas.

School is important for cognitive, creative and social development of children. So is the School Sanitation and Hygiene Education, necessary for the safe, secure and healthy environment for children to learn better and face the challenges of future life.

According to an information displayed on website*

- 380,000 deaths occur each year due to Vitamin A, iron and iodine deficiencies. And 210,000 children are born cretins are turn blind at pre-school age.
- Every year 7 to 8 Lakh children die from a preventable disease, like diarrhoea.
- In a country that has buffer stocks of food grains, nearly 75 million children below the age of 5 years are malnourished.
- About 40 percent of children drop out of school before they reach class V.
- Fifty four percent of children drop out to school before they complete their elementary education of them 51 percent are boys and 59 percent are girls.
- As per back as 1962, the Kothari commission had recommended a minimum of 6 percent of the GNP as allocation for education. Four dealers later, our allocation for education is a mere 3.5 percent.
Twelve percent of primary schools have only one teacher, 58 percent had only two rooms, 60 percent had leaking roofs and only 25 percent of teachers were found teaching.

The suffering of children because of environmental hazards is not inevitable. There are solutions: most of the environment-related disease and deaths can be prevented. Never before has there been such a range of tools and strategies to protect children from the dangers lurking in their environments. The Healthy Environments for Children Alliance will Mobilize these tools and strategies through a world wide movement, involving a wide range of stakeholders, building on the work that is already being done. School is an important place where problems of health care and hygiene can be tackled.

Promotion of sanitation was very close to the heart of Mahatma Gandhi that formed a formidable plank of his social reform and health efforts during the first half of the twentieth century. After India’s independence in 1947, that momentum somehow got blunted. Although, both water supply and sanitation were a part of the national agenda since the very first five-year plan (1951-56), the accent remained on water supply whereas the pace of progress on sanitation, until recently, remained slow.

* http://www.webhealthcentre.com

District Primary Education Programme (DPEP) initiated under the ministry of Human Resource Development, GoI in 1994, gave sufficient focus on water and sanitation facilities especially in uncovered school in 176 districts of 15 states. It has subsequently scaled up throughout the country and called the Sarva Shiksha Abhiyan (SSA). SSA aims to universalize elementary education in the country by 2010.

India has to take gigantic strides to achieve its ambitious target of providing water and sanitation facilities for its millions of school going children in a short span. To translate this dream into reality, a key step will be to constantly assess the situation, document key lessons and constantly update the steps to be taken.

The present study is an endeavour to access the problem of health and hygiene at the primary school level.
STATEMENT OF THE PROBLEM

“STATUS OF HEALTH CARE AND HYGIENE IN PRIMARY SCHOOLS”

Operational definitions of the terms used :-

HEALTH CARE :
Health includes physical, mental and social and spiritual health. However in the present survey the investigator studied only the physical aspects of the health (As given in observation scale–I, Appendix).

HYGIENE
In the present survey the investigator has observed personal hygiene of students and sanitation conditions of school (Observation Scale-II, Appendix).

OBJECTIVES OF THE STUDY
1) To survey the status of health care and hygiene in primary schools.
2) To compare the status of health care in Govt. primary schools and Public primary schools.
3) To compare the status of hygiene in Govt. primary schools and Public primary schools.

DELIMITATIONS OF THE STUDY
1) 14 primary schools (8 Govt. and 6 Public schools) of Chamkaur Sahib Block, district Ropar, Punjab were included in the study.
2) Only 100 students were observed from Govt. schools and 100 students (boys & girls) from public schools were observed.

Following schools of Block Chamkaur Sahib were surveyed by the investigator
Table 1.1 showing name of Govt. Primary schools surveyed by the investigator.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Govt. Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Govt. Primary School, Bela.</td>
</tr>
<tr>
<td>2</td>
<td>Govt. Primary School, Chamkaur Sahib.</td>
</tr>
<tr>
<td>3</td>
<td>Govt. Primary School, Ferozpur.</td>
</tr>
<tr>
<td>4</td>
<td>Govt. Primary School, Daudpur.</td>
</tr>
<tr>
<td>5</td>
<td>Govt. Primary School, Dumana.</td>
</tr>
<tr>
<td>6</td>
<td>Govt. Primary School, Ataari.</td>
</tr>
<tr>
<td>7</td>
<td>Govt. Primary School, Behrampur</td>
</tr>
<tr>
<td>8</td>
<td>Govt. Primary School, Bahrampur</td>
</tr>
</tbody>
</table>

Table 1.2 showing name of Public Primary schools surveyed by the investigator.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Public School</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Himalya Public Sen. Sec. School Muzafat</td>
</tr>
<tr>
<td>3</td>
<td>Holy little Child School, Bela</td>
</tr>
<tr>
<td>4</td>
<td>Hetaji Model School, Bela</td>
</tr>
<tr>
<td>5</td>
<td>Sant Baba Pyara Singh School, Chamkaur Sahib</td>
</tr>
<tr>
<td>6</td>
<td>Punjab International Public School, Pipal Majra</td>
</tr>
</tbody>
</table>
CHAPTER 2

LITERATURE REVIEW

All progress, which is traceable today, is the result of centuries of efforts undertaken by man in close succession. Whenever a man confronted with some problems he seeks guidance from the experience of other.

A review of related literature means the view of problem which has been dealt and are related to the problem undertaken by the investigator. Unlike other animals that must start a new with each generation, man builds upon the accumulated knowledge of the past. The survey of related literature is a crucial aspect in the planning of the study. It is an exacting task calling for deep insight and clear perspective of overall field. It makes us aware of what is being done in the field of knowledge. Most importantly the review of related literature may serve to avoid unnecessary duplication of any help to progress towards the solution of new problem.

➢ Busch, M.B. and sudame, G.R. (1990)
Carried out an in depth study of the status of primary education in selected urban areas in Gujarat and found that:-

i) a large number of primary schools, irrespective of their management faced shortage of space,

ii) many of them were located in areas that were prone to heavy traffic and noise pollution,

iii) the location of some of the schools was in unhealthy surroundings and even frequented by anti-social elements,

iv) many primary schools did not have their own building and conducted class in rented buildings, while most of these schools had provision of drinking water, some of them lacked even toilet facilities, libraries and laboratories.
Studied primary education problems in Jorhat district of Assam and reported that lack of Physical facilities at school was a major problem.

UNICEF (1993)
gave 6 prime messages for hygiene for preventing illness by : i) washing hands, 2) using latrines, 3) using clean water, 4) boiling drinking water, 5) keeping food clean, 6) proper dumping household refuse.

ALL INDIA EDUCATIONAL SURVEYS (1993-94)
reported that Out of 6.3 lakh primary and upper primary rural schools, only 44 percent have water supply facilities, 19 percent have urinals and 8 percent have lavatory facilities. Only 19 percent have separate urinals and 4 percent lavatory facility for girls. Though, recent estimates show that the number of schools as well as coverage of water and sanitation facilities has increased. The number of rural schools of all categories has gone to more than one million out of which 45.9% are without toilets and only 17.3 % are without water supply as projected by Ministry of HRD, GoI.

Table no. 1.3 showing school, water and sanitation facilities according to all India educational surveys 1993-94.

<table>
<thead>
<tr>
<th>Total No. of Schools</th>
<th>Without Toilets</th>
<th>Without water supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>10, 24,996</td>
<td>45.9%</td>
<td>17.3%</td>
</tr>
</tbody>
</table>

Projected Coverage of School water and sanitation facilities
MIS Data MoHRD 2003

The consequences of the given situation are not far to see. Diarrhea takes a heavy toll. Typhoid, dysentery, gastroenteritis, hepatitis A, intestinal worms and malaria continue to kill, debilitate and contribute to the high rates of malnutrition among young children in the country. While acute malnutrition has diminished, 47 percent under-5
children are under-weight. The child mortality rate stands at a high of 95 in the under-5 age group. Only 7 out of 10 children aged 6-14 years attend primary school. There is a high drop out rate, especially among girls. Only 42 percent girls and 48 percent boys reach class eight (Indian Child, Ministry of Human Resource Development, 2002). Therefore, a coordinated and regular activities at school are needed pertaining to health and hygiene specially health check up and de-worming for better and healthy environment.

➢ Project entitled “Creating health- promoting schools is rural china”-(1996) was started in selected township of Fujian and an other three provinces. The average prevalence of helminthes infection in children under 15 years of age in Fujian was 82.6% in 1992. There are ~5200000 students in 17880 primary and secondary schools in the province. About 80% of them live in rural areas.

One primary school and one junior secondary school were involved in the project in each township. These schools were divided in to three groups each receiving different combinations of interventions. Each group was evaluated to determine the results: Groups A and B received deworming, health education and other interventions; Group C received deworming only.

Findings
The pre-intervention survey showed that only 10.9% of the students had a basic knowledge about helminth infection and relevant health behaviours; among students, 29.6% demonstrated recommended or ‘good’ health behaviours which are related to worm infections, 65.4% had ‘fair’ and 5.0% ‘poor’ health practices.

The post-intervention questionnaire, administered after 1 year intervention in September 1997, showed that the students’ knowledge had improved markedly in students who attended schools where health education was provided. The passing rate on health knowledge in students of schools in Groups A and B increased from 10.9 to 82.7% \( (p < 0.01) \). The percentage of students who were practising recommended or ‘good’ health behaviours changed from 29.6 to 43.8%. However, Group C (deworming only), where health education was not given, did not show a significant difference in health knowledge and healthy behavioural practice after the helminth interventions (Table 1). The difference between Groups A and B, and Group
C is highly significant for knowledge improvement ($p < 0.005$) and for behaviour change ($p < 0.005$).

- **A SURVEY (2002)** was conducted by experts and reported that daily primary schools lack hygiene, sanitation. Sakshi and NGO reported Lack of health, hygiene and sanitation in primary schools in the capital has reached alarming proportions and needs to be tackled on a war-footing, cautions a multi-disciplinary group of educationist, social scientist and communication experts.

- **A report of Department of school sanitation, West Bengal (2003)** reported that By 2002, the programme had enabled 31 percent schools have sanitation facilities and 69 percent have water facilities.

**A study of Alwar, Rajasthan (Source : DEO, Alwar)**

In March 2000, the School Health & Sanitation Programme was launched under the District Primary Education Programme (DPEP) with support from UNICEF and Rajasthan Council of Primary Education (RCPE). Started initially in 5 blocks, it was later extended to all 14 blocks by 2003, covering over 1600 primary and upper primary schools in Alwar.

Schools in Alwar district in Rajasthan had many reasons to complain and display low performance. Hygiene practices among school children were poor. Schools lacked safe drinking water and the absenteeism rates were high. Students would go back to their homes to drink water or use the toilet and simply not return. There was high dropout rate among girls as there were no toilet facilities, especially for the grown up ones.

**Beginning in 2002, out of the targeted 2276 schools, the number of schools with functional drinking water rose to 2026 and schools with latrines to 1667 in 2003.**

**In the period from 1998-99 to 2003-4, the enrolment of boys and girls both has increased impressively:** Recently analyzed data suggest a steep increase in girl’s
enrolment by 78 per cent while that of boys by 38 per cent (overall 53.31 per cent).

The Alwar experience has gone further into studying scholastic performance of children in classes III to VIII. Performance data from project schools has shown tremendous improvement vis-à-vis non-project schools. The average percentage of marks obtained by boys and girls under project schools (taken up in Phase I in 2000) were 81 and 80.5 per cent respectively compared to the 53.7 and 51.7 per cent obtained by boys and girls of non-project schools. (See Table). This clearly vindicates that schools where basic amenities are available show not only better enrolment but also better academic performance of students.

Table 1.4 shows Linking of Hygiene Education with school Curriculum: Better achievements of school children

<table>
<thead>
<tr>
<th>Classes</th>
<th>Average Percentage of marks obtained by children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Phase I Schools (Taken up in March 2000)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>III</td>
<td>74.5</td>
</tr>
<tr>
<td>IV</td>
<td>73.5</td>
</tr>
<tr>
<td>V</td>
<td>81</td>
</tr>
<tr>
<td>VI</td>
<td>79.5</td>
</tr>
<tr>
<td>VII</td>
<td>84</td>
</tr>
<tr>
<td>VIII</td>
<td>92</td>
</tr>
<tr>
<td>Average %</td>
<td>80.75</td>
</tr>
</tbody>
</table>

  A study in Gujarat has shown that lack of proper sanitation facilities in schools keeps away girls from pursuing upper primary schools. The Anandshala project launched in March 2003 selected 10 schools in each of the three districts of Gujarat as demonstration schools. The physical components were water supply, toilets, landscaping, paving, fencing and establishment of Child Environment corners. The process of enabling includes training of teachers with study tours and exposure visits of teachers and children. Conduct of Bal-Melas (Children’s Fairs) around water, sanitation, hygiene, individual school master plans and energization of the Village Education Committee (VEC). The Village Civil Works Committees (VCWC) is chaired by the Sarpanch (or the village head person) and includes the headmaster as the member secretary. Other members are the village artisans and members of the Parent – Teacher’s Association.
(PTA). In Anandshala project, which covers more than 10,000 students in 30 schools spread over three districts, 100% enrolment and retention were observed during 2003. Water and sanitation facilities were built, contributed to, owned and maintained by the schools. All the schools have Eco-Clubs and Village Education Committees who maintain the facilities.

➢ A report from RGNWDWM, GOI, 2004 and WSP-SA-India.

As per census 2001 only 36.4 percent of the total population of India had latrines within their households. This was even less in rural areas i.e. 21.9 percent, and out of this, only 7.1 percent households have latrines with water closet. Also, only 34.2 percent households had drainage facilities for the waste water disposal in rural areas. Though, the status has improved over the years and the coverage of rural sanitation has increased which as per recent estimates is about 35 percent. Similarly, inadequate use of water & sanitation facilities and poor hygiene practices has enhanced the severity of such challenges. This is indicated in National Sample Survey, 54th round published in 1999, which showed the usage behavior restricted to only 17.5 percent in the rural population. Another important feature of the sanitation coverage has been the large-scale inter-state disparity in household toilet use. On the one hand, coverage and use in Kerala and Assam have been very good i.e. 81 percent and 60 percent respectively. On the other hand, it has been as low as 8 percent in Orissa.

Open defecation remains the predominant norm and poses one of the biggest threats to the health of the people in India. Estimates suggest that nearly 65 percent of India’s population still defecate in the open. This results in a faecal load of 200,000 metric tons per day, which finds its way into soil and water bodies, contaminating them with pathogens. The practice of open defecation is reinforced by traditional behaviour patterns and lack of awareness about the health threats posed by it. At the same time, there is little awareness about the potential health and consequent economic benefits of sanitation facilities. This is a key causative factor behind the high prevalence of soil and water borne diseases in rural India. The magnitude of the challenge has also been underscored by World Health Organisation (WHO) ascribing about 80 percent of all sicknesses and diseases to lack of safe water and sanitation such as diarrhoea, cholera, malaria, etc. in the country. This indicates an annual loss of 180 million man-days and Rs.12 billion to the economy owing to sanitation related diseases.*
India has one of the largest numbers of school going children, especially in rural areas. In fact, the primary education system in India is one of the largest in the world with over six hundred thirty thousand (630,000) primary and upper rural primary schools, over 3 million teachers, and a student strength exceeding 100 million children (Sixth All Indian Education Survey, 1993-94). There are more than 500,000 Integrated Child Development Service Centres (ICDS) in India offering a package of health, nutrition and non-formal pre-school services to more than 18 million children aged 6 months to 5 years. There is high level of diversity especially in the case of enrollment, for instance in some states the enrolment of children is around 100%, and overall literacy ranges above 80%. In other states, the primary enrolment of children is around 60% and literacy overall is less than 40%.

Belcher, Michae D’s (2004)

A dissertation for doctors of education titled ‘the impact of a rural school-based health center on students and their families in Sneedville, Tennessee: A case study’ reported students who attended Hancock country high school access to primary comprehensive health care services. Benefits to parents included a reduction of time in missed work and lower medical care costs for students without health insurance. The center promoted and improved school attendance while distributing valuable health education information to students and parents. Because the city of Sneedville has only one medical center and no hospital, the school-based health center served the rural residents well.


Conducted a study to find out the existing common health problems among school children and to arouse health consciousness among the children. All the students studying in Mandev Amrit Smriti school, Thaukel of Bhakatpur District, Kathmandu were included in the sample.
The methods used were the interview, clinical history and checkups of provision diagnosis questionnaire was used to record information regarding name, age, sex, weight machine, measuring tap and thermometer.

Results : 118 students were studied from 3-13 years. 13 health related problems were detected. Most important were ear problems (22.03%) worm infestation and dental carries.

Rajiv Gandhi National Drinking Water Mission (RGNDWM) reported that :

- 345,000 Primary and upper primary schools are without drinking water facilities.
- 573,000 primary and upper primary schools are without toilet facilities.

A study commissioned by the Government of Norway (2004) says
Securing sanitation : The compelling case to address the crisis; “Raising the profile of sanitation and hygiene is difficult principally because it is a topic that’s subject to wide-ranging cultural taboos”.

Swiss Agency for development and cooperation SDC, in a publication released in Bangladesh said that both UN and aid agencies have supported around 1000 government latrine production centers in rural Bangladesh. “ Latrine coverage remained at a low level, despite high investments.

Lenton, Robert (Aug. 2005)
Chairperson of the World Health Organisation water supply and Sanitation collaborative Council (WSSCC) reported people are largely aware of the link between clean water and health but the relationship between sanitation and health is less understood. For instance hundreds of slum dwellers in the huge metropolis of Mumbai, India are forced to use rail tracks as public toilets every morning. The toilet habits of the slum dwellers are therefore subject to the daily train schedulers, or rush hours trains come hurtling down the tracks every five or 10 minutes. “it is a reality- but an unfortunate reality”. He added of the 2.6 billion people, with no access to improved sanitation globally. At least 75% live in Asia, 18% in Africa and 5% in Latin America and the Caribbean.
The Hindu (September 16, 2005)

**Studied 63% of injections in India are unsafe: the world health organisation estimates that of the 12-16 billion injections administered in the world every year, at least 50% are unsafe, particularly in developing countries. Out of this one –third carry the risk of transmitting viruses, including the human Immuno Virus or HIV.**

Worse, a large number of injections are unnecessary given for common ailments such as fever, cough and diarrhoea, says the study carried out by the Indian Clinical Epidemiology Network (India CLEN) and the All-India institute of Medical Sciences New Delhi. 68.7% of injections at government health facilities were found to be unsafe and the rural sector accounted for a higher percentage of unsafe injections.

The Hindu (September 24, 2005)

**Reported India close to polio-eradication goal: with the number of children having contracted polio falling by nearly half this year, the government hopes to cut down transmission of the polio virus to zero by the end of 2005.**

Elisabeth (Sept. 2005)

**Conducted a study on nutrition education programme for promoting healthy beverage consumption in High School students and reported that the rise of unhealthy beverage consumption, such as soft drinks, in children and youth for the last 25 years has increased the risk of low bone mass density by replacing milk (a major source of Ca^{2+} intake) compromised dental health and possibly contributed obesity.**

Thapa (2005)

**According to Thapa Diarrhoea a major threat to children’s health. Acute diarrhoea remains a great public health problem in developing countries. The morbidity and mortality is still very high. Better understanding of the problem and its management in time has helped to control it to a great extent.**
Farid, Tauhid Ibne (2006)

Associate coordinator for natural resources and services informed that we are concentrating more on sanitation that on water, government do not realize that if they do not supply water, sanitation will not work”.

Singla’s (21 Aug. 2006)

Minister for health and family welfare) said, though India was moving towards becoming a global power, it was the poorest performer as far as health and education were concerned. He said 90 per cent of the students studying in primary and middle level government schools suffered various kinds of ailments but were not examined by any government doctor.

Tribune News service reported on 23rd August (2006).

That ‘State a poor 29th in implementing schemes’. The Union ministry on Programme Implementation has said Punjab has been placed at a low 29th rank- second from the bottom- among all states in India as far as the implementation of some programmes for the rural area are concerned.

The state was found lagging behind badly on drinking water supply in villages. Punjab was given eight schemes to follow and targets were fixed (April 2005). These included the provision of drinking water in 800 villages or clusters. The state managed to do it only in 417 villages or clusters.

Peter Li, Inc.(2006)

In journal entitle “School Planning and Management, January 2006)” reported school are different than commercial or government office building. A typical school houses four times as many occupants as an office building and contains more polluting sources.

Indoor Air Quality (IAQ) problems can be worse in schools than other kinds of building. IAQ can make it harder for students to learn, teachers to teach and staff to work. And they stated “Schools are begging to address indoor Air Pollution.”
CHAPTER 3

PLAN & PROCEDURE

DESIGN OF THE STUDY

Design is like a blue print. It provides the researcher an opportunity for comparisons and enables him/her to make a meaningful interpretation of the results of the study. In the present study investigator surveyed 14 primary schools of Chamkaur Sahib Block out of which 8 were Govt. primary schools and 6 were Public primary schools.

SAMPLE OF THE STUDY

Sample consisted of 8 Govt. & 6 Public primary schools and included two hundred primary school children of both Govt. and Primary schools randomly.
TOOLS USED FOR STUDY

The study is descriptive survey type

The investigator has used following tools for collecting data:

- Observations
- Check list
- Rating scale
- Interview

OBSERVATION:

Observation is the process in which person observe what occurs in real life situation. The person classify and record pertinent happening according to some planned scheme. Self made observation scale was used by the investigator.

CHECK LIST

A check list is a simple device consisting of a prepared list of items which are thought by the investigator to be relevant to the problem being studied. After each item a space is provided for the observer to indicate the presence or absence of the item by checking ‘Yes’ or ‘ No’ or a type or number of items may be indicated by inserting the appropriate word or number. A checklist draws the attention of the observer to relevant factors and enables him/ her to record data quickly and systematically. In the observation scale the investigator had included items some of which were rated on 5 points scale and some on the 3 points scale.

RATING SCALE

In the words of Barr, Davis and Johnson (1953):

“ Rating is a term applied to expression of opinion or Judgment regarding some situation, object or character. Opinions are usually expressed on a scale of values.”

Rating scale refers to a scale with a set of points which describe varying degrees of the dimension of an attribute observed. In the observation scale the investigator had included items some of which were rated on 5 points scale and some on the 3 points scale.
INTERVIEW

The interview is a process of communication or interaction in which the subject or interviewee gives the needed information verbally in a face to face situation. It provides an opportunity to the interviewer to question thoroughly certain areas of inquiry. The interview permits greater depth of response and enables the interviewer to get information concerning feelings, attitudes or emotions in relation to certain questions.
CHAPTER -4
ANALYSIS & INTERPRETATION

Any study is incomplete without analysis & interpretation. The data collected by the investigator for the research work was analysed by drawing tables, graphs and pie charts.

OBJECTIVE – I:
OVERALL STATUS OF PRIMARY SCHOOLS

Table 4.1 showing overall Status of Schools regarding the components of health care

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>COMPONENTS OF HEALTH CARE</th>
<th>FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Drinking Water facility</td>
<td>1 source for 130 students</td>
</tr>
<tr>
<td>2</td>
<td>Toilets</td>
<td>46 students use 1 toilet</td>
</tr>
<tr>
<td>3</td>
<td>School Location</td>
<td>Excellent 26%, V. Good 23%, Good 23%, Poor 13%, V.Poor 16%</td>
</tr>
<tr>
<td>4</td>
<td>School environment</td>
<td>Excellent 14%, V.Good 21%, Good 29%, Poor 29%, V.Poor 7%</td>
</tr>
<tr>
<td>5</td>
<td>No. of Dustbins</td>
<td>245 students use 1 dustbin</td>
</tr>
<tr>
<td>6</td>
<td>Health care services</td>
<td>Visiting doctor 14%, Special retiring room 14%, First aid facility 64%-- it was poorly maintained, Hospital in the vicinity 79%</td>
</tr>
<tr>
<td>7</td>
<td>Health Check ups</td>
<td>In 43% schools annually.</td>
</tr>
<tr>
<td>8</td>
<td>Infrastructure</td>
<td>29 students sit in one room and one fan is provided for 22 students.</td>
</tr>
<tr>
<td>9</td>
<td>Furniture</td>
<td>It is insufficient in 64% of schools.</td>
</tr>
<tr>
<td>10</td>
<td>Light and ventilation</td>
<td>Light and ventilation is good in 76% of the schools.</td>
</tr>
<tr>
<td>11</td>
<td>Mid day meal</td>
<td>It is provided in 57% of the schools.</td>
</tr>
<tr>
<td>12</td>
<td>Games &amp; sports</td>
<td>Games and sports were not at all played in 43% of the schools.</td>
</tr>
<tr>
<td>13</td>
<td>Parent- teacher meeting</td>
<td>Parent – teacher was held only in 43% of the schools.</td>
</tr>
<tr>
<td>14</td>
<td>DPE / PTI teachers</td>
<td>DPE / PTI in appointed in 36% of schools.</td>
</tr>
<tr>
<td>15</td>
<td>Maintenance of Health records</td>
<td>Record was maintained in 36% of the schools.</td>
</tr>
</tbody>
</table>

CONCLUSIONS

- No. of sources for drinking water were not sufficient.
- School environment was poor in 36% of schools.
- No. of dustbins were very less, 245 students use 1 dustbins.
Health care services were poor.
Annual health checkups were done only in 43% of schools.
In 64% of primary schools furniture was insufficient.
Mid day meal was provided only in 57% of schools.
Light and ventilation conditions was poor in 14% of schools.

SANITATION

Table 4.2a showing Overall Status of Schools regarding the components of sanitation conditions

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>V. Good</th>
<th>Good</th>
<th>Poor</th>
<th>V. Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanliness of Rooms</td>
<td>14.3%</td>
<td>22%</td>
<td>36%</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>Garbage disposal</td>
<td>0%</td>
<td>14%</td>
<td>36%</td>
<td>29%</td>
<td>21%</td>
</tr>
<tr>
<td>Classroom environment</td>
<td>7%</td>
<td>14.5%</td>
<td>28%</td>
<td>36%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Cleanliness of drinking water area</td>
<td>7%</td>
<td>21.5%</td>
<td>21%</td>
<td>29%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Cleanliness of toilets</td>
<td>0%</td>
<td>0%</td>
<td>7%</td>
<td>43%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Graph – 4.1 showing the % age status of schools regarding Excellent & very poor sanitation conditions.
FINDINGS

- Not even a single school surveyed have excellence for garbage disposal and cleanliness of toilets.
- In most of schools surveyed papers were thrown in corners of rooms.
- In Govt. schools students are generally use to clean rooms and warandha of school.
- Cleanliness of toilets were worse in all primary schools surveyed.
OVERALL STATUS OF SCHOOLS SHOWING COMPONENTS OF PERSONAL HYGIENE

Table 4.2b: Showing % age values of Govt. & Public primary schools of students on the components of personal hygiene

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (No. of students = 100)</th>
<th>Public Schools (N= 100)</th>
<th>Total number of untidy students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tidy</td>
<td>Untidy</td>
<td>Tidy</td>
</tr>
<tr>
<td>Nails</td>
<td>19</td>
<td>81</td>
<td>74</td>
</tr>
<tr>
<td>Clothing</td>
<td>15</td>
<td>85</td>
<td>89</td>
</tr>
<tr>
<td>Teeth</td>
<td>43</td>
<td>57</td>
<td>77</td>
</tr>
<tr>
<td>Shoes</td>
<td>13</td>
<td>87</td>
<td>81</td>
</tr>
<tr>
<td>Hairs</td>
<td>62</td>
<td>38</td>
<td>90</td>
</tr>
<tr>
<td>Nose</td>
<td>33</td>
<td>67</td>
<td>8</td>
</tr>
</tbody>
</table>

Graph 4.2:- showing % age values of Govt. & Public primary schools of untidy students on the components of personal hygiene.
CONCLUSION –

➢ Govt. primary schools have comparatively lower status of sanitation conditions and personal hygiene of students.
OBJECTIVE – II

Comparative study of status of Health Care in Public primary schools & Govt. Primary schools

1. DRINKING WATER FACILITY:

Drinking water facility is present in all schools surveyed whether government or public.

Table 4.3 showing comparison of Govt. primary schools and Public primary schools regarding drinking water facility

<table>
<thead>
<tr>
<th>Source</th>
<th>Govt. Schools N= 8</th>
<th>Public Schools N=6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taps</td>
<td>-----</td>
<td>1 tap for 29 students</td>
</tr>
<tr>
<td>Coolers</td>
<td>-----</td>
<td>1 cooler for 170 students</td>
</tr>
<tr>
<td>Hand Pumps</td>
<td>One pump per 113 Students</td>
<td>One pump per 238 students</td>
</tr>
<tr>
<td>Total Source of drinking water</td>
<td>1 for 113 students</td>
<td>3 for 437, 1 for 146 students</td>
</tr>
</tbody>
</table>

FINDINGS:

➢ Government schools generally have hand pumps whereas in public schools hand pumps, taps and coolers are present for drinking water.
➢ One hand pump is present in one government school.
➢ Out of 8 School surveyed 1 govt. has taps also but without supply of water.
➢ Comparatively more students per source of drinking water are present in public schools as compared to govt. schools.

2. TOILET:

TABLE 4.4 showing comparison of Govt. primary schools and Public primary schools regarding toilet facility.
### Govt. Schools (N= 8) vs. Public Schools (N= 5)

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools</th>
<th>Public Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Students</td>
<td>926</td>
<td>1194</td>
</tr>
<tr>
<td>No. of Toilets</td>
<td>16 = 57.8</td>
<td>30 = 37.3</td>
</tr>
<tr>
<td>No. of students per toilet</td>
<td>58</td>
<td>37</td>
</tr>
</tbody>
</table>

**FINDINGS**

- Generally in all Govt. primary schools there was one, toilet separate for boys and girls per school.
- In a most of public schools, there were generally four-four separate toilets for boys and girls per school.
- In one public school surveyed, students go for open defecation sometimes due to shortage of toilets.

Toilets are present in all schools surveyed except one public school where students also go far open defecation due to shortage of toilets.

### 3. SCHOOL LOCATION

Here school location means surrounding of school building. Excellent school location means environment of school is pollution free, located in open space, no garbage is there in surrounding away from crowd or it is located in the lap of nature.

**Table 4.5 showing comparison of Govt. primary schools and Public primary schools regarding school location.**

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools N = 8</th>
<th>Public Schools N = 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>12.5 %</td>
<td>40 %</td>
</tr>
<tr>
<td>V. Good</td>
<td>25 %</td>
<td>20 %</td>
</tr>
<tr>
<td>Good</td>
<td>25 %</td>
<td>20 %</td>
</tr>
<tr>
<td>Poor</td>
<td>25 %</td>
<td>0 %</td>
</tr>
<tr>
<td>V. Poor</td>
<td>12.5 %</td>
<td>20 %</td>
</tr>
</tbody>
</table>
Graph -4.3 showing school location comparisons between
Govt. primary schools and Public primary Schools

FINDINGS:

- Out of 8 schools surveyed of block Chamkaur Sahib, 1 had located near the pond and it was without any boundary.
- Out of 8 Govt. primary schools surveyed
- Poor school location means schools are without boundary of school wall and they are located near ponds and dirty areas where chances of infection areas are comparatively very high. Out of 14 schools survey
- Schools have very poor location. No government school have excellent location. They are generally located in the village or near village 2 public schools are located in the greenery area which is pollution free and suitable for overall growth of the students.

4. SCHOOL ENVIRONMENT

Here school environment means overall internal environment of the school.

Table 4.6 showing comparison of Govt. primary schools and Public primary schools regarding school environment.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N=8)</th>
<th>Public Schools (N=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of school</td>
<td>% age of school</td>
</tr>
<tr>
<td>Excellent</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>V. Good</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>Good</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>V. Poor</td>
<td>1</td>
<td>12.5%</td>
</tr>
</tbody>
</table>
Graph 4.4 showing comparison of Govt. primary schools and Public primary schools regarding school environment

FINDINGS

- Out of 14 schools surveyed, 2 Public schools have excellent school environment.
- 2 Government schools have very poor school environment. Teachers were sitting under trees. Students were asked to blow air with hand fan. Classes were clubbed together. Teacher instructed the students not to sit and stand nearby them.

6. NO. OF DUSTBINS

Table 4.7 showing comparison of Govt. primary schools and Public primary schools regarding number of dustbins

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th>Public Schools (N= 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On average no. of dustbins = 926 /2 = 463</td>
<td>On average no. of dustbins= 1394/43 = 32</td>
<td></td>
</tr>
<tr>
<td>One dustbin for 463 students</td>
<td>One dustbin for 32 students</td>
<td></td>
</tr>
</tbody>
</table>
FINDINGS

- No. of dustbins are very few in government schools. Out of 8 schools observed, only in one school, two dustbins per school were there.
- In all public schools surveyed there was at least 1 dustbin per school.

7. HEALTH CARE SERVICES.

Table 4.8 showing comparison of Govt. primary schools and Public primary schools regarding health care services.

<table>
<thead>
<tr>
<th>Item</th>
<th>Govt. Schools No. = 8</th>
<th>Public Schools N= 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Visiting doctor</td>
<td>No facility</td>
<td>Only in two schools</td>
</tr>
<tr>
<td>Special retiring room</td>
<td>No facility in any Govt. schools</td>
<td>Only in two schools. These are poorly maintained.</td>
</tr>
<tr>
<td>First aid facility</td>
<td>Only in 3 schools and that is very poor</td>
<td>Out of 6 schools observed in all present good in 3 schools Poor in 3 schools</td>
</tr>
<tr>
<td>Hospital dispensary in the vicinity</td>
<td>Out of 8 schools observed, 6 are nearby hospital or dispensary</td>
<td>Out of 6, 5 have nearby hospital/ dispensary</td>
</tr>
</tbody>
</table>

FINDINGS

- Health care services were very poor in Govt. schools as compared to public schools. Govt. schools have no facility of visiting doctor or special retiring room.
- Special retiring rooms were present in 2 out of 6 Public primary schools observed and that two were poorly maintained.
- In 5 out of 8 Govt. primary schools surveyed no first aid facility was present.

8. HEALTH CHECK UP

Table 4.9 showing comparison of Govt. primary schools and Public primary schools regarding health check up.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th>Public Schools (N= 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Annually</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Half yearly</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
FINDINGS

➢ Out of 8 Govt. schools surveyed 5 schools didn’t have even annually health check-up.

➢ Out of 8 Govt. schools surveyed 3 have annual check ups and that too in papers. Doctors visit for check-up because it is compulsory for them. They came for half an hour, check 2-3 students, fill forms and go away.

9. INFRASTRUCTURE

Table 4.10 showing comparison of Govt. primary schools and Public primary schools regarding infrastructure

<table>
<thead>
<tr>
<th>Item</th>
<th>Govt. Schools</th>
<th>Public Schools</th>
</tr>
</thead>
</table>
| a) No. of Rooms | No. of students / No. of rooms  
926 / 25 = 37.04 = 37  
One room per 37 students | No. of students / No. of rooms  
1394 / 67 = 20.8 = 21  
One room per 21 students |
| Fans        | 926 / 35 = 26.5 = 27  
One Fan for 27 students | 1394 / 81 = 17.2 = 17  
One Fan for 17 students |

FINDINGS

➢ Although sufficient rooms were there in some Govt. schools still classes are clubbed together due to shortage of teachers.

➢ Fans were there in all Govt. and Public schools, Fans in Govt. schools were never seen in working condition due to power cut.

10. FURNITURE

Table 4.11 showing comparison of Govt. primary schools and Public primary schools regarding furniture facility.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th>Public Schools (N= 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient</td>
<td>--</td>
<td>5</td>
</tr>
<tr>
<td>Insufficient</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>
FINDINGS

There is Furniture in all schools surveyed. In all Govt. schools it is insufficient & lower classes sit on ground. Desks are available for higher classes.

Out of 6 public schools surveyed 5 have sufficient furniture only in one school insufficient furniture is there.

11. LIGHT AND VENTILATION

Table 4.12 showing comparison of Govt. primary schools and Public primary schools regarding light and sanitation facility.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th></th>
<th>Public Schools, (N= 6)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of school</td>
<td>% age of school</td>
<td>No. of school</td>
<td>% age of school</td>
</tr>
<tr>
<td>Excellent</td>
<td>1</td>
<td>12.5 %</td>
<td>1</td>
<td>16.67 %</td>
</tr>
<tr>
<td>V. Good</td>
<td>3</td>
<td>37.5 %</td>
<td>2</td>
<td>33.33 %</td>
</tr>
<tr>
<td>Good</td>
<td>2</td>
<td>25 %</td>
<td>1</td>
<td>16.67 %</td>
</tr>
<tr>
<td>Poor</td>
<td>1</td>
<td>12.5 %</td>
<td>1</td>
<td>16.67 %</td>
</tr>
<tr>
<td>V. Poor</td>
<td>1</td>
<td>12.5 %</td>
<td>1</td>
<td>16.67 %</td>
</tr>
</tbody>
</table>

Graph 4.5 showing comparison of Govt. primary schools and Public primary schools regarding light and sanitation facility

FINDINGS

- Out of 8 Govt. primary schools surveyed 4 were spacious having proper light and ventilation.
- Out of 14 primary schools surveyed, 2 schools have very suffocated rooms.
12 MID DAY MEAL

Table 4.13 showing comparison of Govt. primary schools and Public primary schools regarding Mid day meal facility.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th>Public Schools (N= 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>In Sufficient</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Insufficient</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

FINDINGS

- Out of 14 schools surveyed only Govt. schools provide mid day meal.
- The grant for food item worth Rs. 1 per student was provided.
- Govt. School children generally did not bring tiffins.
- Amount of food provided to students was insufficient.
- Public school children bring Tiffin's. In most of these schools, class teacher was not concerned what type of food item children brought.

13. GAMES AND SPORTS

Table 4.14 showing comparison of Govt. primary schools and Public primary schools regarding games & sports.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th>Public Schools (N= 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor games</td>
<td>Indoor games are not present in all schools surveyed.</td>
<td>Present in 5 out of 6 schools</td>
</tr>
<tr>
<td>Outdoor games</td>
<td>Are played in 3 schools out of 8 govt. primary school surveyed and that are poorly maintained.</td>
<td>Outdoor games are played in all 6 schools.</td>
</tr>
</tbody>
</table>

FINDINGS

- In only 3 Govt. primary schools out of 8 surveyed only outdoor games are played annually.
- In public schools due attention is provided towards games. All schools surveyed except one have facility for Indoor and outdoor games.
- Out of 6 primary schools surveyed, students of 1 public schools go to national level also.
- Out of 6 Primary schools surveyed 5 have game period in their time table.
14. **PARENT TEACHER MEETING**

Table 4.15 showing comparison of Govt. primary schools and Public primary schools regarding parent teacher meeting.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th>Public Schools (N= 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>8</td>
<td>--</td>
</tr>
<tr>
<td>Half yearly</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Monthly</td>
<td>--</td>
<td>5</td>
</tr>
</tbody>
</table>

**FINDINGS**

- Govt. schools do not have any Parent Teacher meeting, however these are held in all public schools surveyed.

15. **DPE/ PTI TEACHERS**

**FINDINGS**

- No DPE or PTI (Diploma in Physical education or physical training instructor) are appointed in Govt. schools.
- In most of the public schools (5 out of 6) minimum one DPE/ PTI is there per school.
- 3 public schools have both DPE and PTI.

16. **MAINTENANCE OF HEALTH RECORD**

Table 4.16 showing comparison of Govt. primary schools and Public primary schools regarding maintenance of health record.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N= 8)</th>
<th>Public Schools (N= 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health record is not maintained in any school.</td>
<td>Health record is maintained in 5 out of 6 schools although it is poorly maintained.</td>
<td></td>
</tr>
</tbody>
</table>
CONCLUSION

- It was found that public primary schools are better as compared to Govt. primary schools on the following components of health care:
  
a) School location, school environment, health care services, infrastructure facilities, furniture, games and sports facilities are better in Public schools as compared to Govt. Primary schools. (Table No. 4.5, 4.6, 4.8, 4.11, 4.14 and Graph No. 4.3, 4.4)

b) Parents teacher meeting were held in 83% of public primary schools surveyed whereas these were absent in Govt. primary schools. (Table 4.5)

c) In 83% of Public primary schools surveyed atleast 1 DPE/ PTI was appointed whereas no physical education teacher was appointed in Govt. primary schools.

d) 83% of Public primary schools surveyed maintained health records of students whereas no such record was maintained in govt. primary schools. (Table 4.16)

- Govt. Primary schools are better as compared to Public primary schools on the following components of health care:
  
a) Drinking water facility was better in Govt. Primary schools as compare to Public Primary schools. In Govt. Primary schools one source of water for 113 students was observed whereas in public primary school 146 students use 1 source of water. (Table 4.3)

b) Light and ventilation conditions were better as compared to Public primary schools. (Table 4.12 and graph 4.5)

c) Mid day meal was provided in all Govt. Primary schools surveyed whereas such facility was absent in Public primary schools surveyed. (Table 4.13)

- Both type of schools were worse in following conditions
a) Health care services were either absent or very poor. (Table 4.8)

b) Health check ups were not done in most of the schools (Table 4.9)

c) In some schools health check ups were done annually but those were not up to mark.

SANITATION

1. CLEANLINESS OF ROOMS

Table 4.17 showing comparison of Govt. primary schools and Public primary schools regarding cleanliness of rooms.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N=8)</th>
<th>Public Schools (N=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Schools</td>
<td>% age of Schools</td>
<td>No. of Schools</td>
</tr>
<tr>
<td>Excellent</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>V. Good</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Good</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>V. Poor</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

4.6 (a) 4.6 (b)

Graph – 4.6 (a) & (b) showing comparison of Govt. & Public schools regarding Cleanliness of rooms
2. **GARBAGE DISPOSAL**

Proper garbage disposal is very important for healthful living and to avoid contamination of environment.

**Table 4.18 showing comparison of Govt. primary schools and Public primary schools regarding garbage disposal**

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N=8)</th>
<th>Public Schools (N=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Schools</td>
<td>% age of Schools</td>
</tr>
<tr>
<td>Excellent</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>V. Good</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Good</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>V. Poor</td>
<td>2</td>
<td>25%</td>
</tr>
</tbody>
</table>

**Graph – 4.7 showing comparison between Govt. & public schools regarding garbage disposal**

**FINDINGS**

- Out of 14 schools surveyed, no one has excellent system for garbage disposal.
- In some public schools and Govt. schools, V.Good system for garbage was thrown in garbage pit.
- In Govt. schools, generally students are used to clean room and varanda of schools.
- In most of Govt. schools, poor garbage disposal is there rooms seems to appear very dirty. Almost all classrooms corners were filled with garbage.

3. **QUALITY OF MID DAY MEAL**

It is provided only In Govt. Schools
FINDINGS:

- Quality of mid day meal is poor
- Out of 8 Govt. Schools surveyed mid day meal which is provided to students is not hygienic.
- Students get ‘Kachha Halwa’.
- ‘Khichari’ and ‘Dal’s’ preparation is poor.
- Utensils which are used far preparation are not washed properly.

4. CLASSROOM ENVIRONMENT

Table 4.19 showing comparison of Govt. primary schools and Public primary schools regarding classroom environment

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (N=8)</th>
<th>Public Schools (N=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Schools</td>
<td>% age of Schools</td>
</tr>
<tr>
<td>Excellent</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>V. Good</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Good</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td>Poor</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td>V. Poor</td>
<td>2</td>
<td>25%</td>
</tr>
</tbody>
</table>

Graph- 4.8 a & b showing comparison of Govt. & public schools regarding Classroom Environment
5. **CLEANLINESS OF DRINKING WATER AREA**

Table 4.20 showing comparison of Govt. primary schools and Public primary schools regarding cleanliness of drinking water.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools</th>
<th>Public Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 8</td>
<td>N= 6</td>
</tr>
<tr>
<td>No. of Schools</td>
<td>% age of Schools</td>
<td>No. of Schools</td>
</tr>
<tr>
<td>Excellent</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>V. Good</td>
<td>12.5%</td>
<td>2</td>
</tr>
<tr>
<td>Good</td>
<td>25%</td>
<td>1</td>
</tr>
<tr>
<td>Poor</td>
<td>37.5%</td>
<td>1</td>
</tr>
<tr>
<td>V. Poor</td>
<td>25%</td>
<td>1</td>
</tr>
</tbody>
</table>

Graph- 4.9 showing comparison of Govt. & public schools regarding cleanliness of drinking water area.
6. CLEANLINESS OF TOILETS

Table 4.21 showing comparison of Govt. primary schools and Public primary schools regarding cleanliness of toilets.

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools N = 8</th>
<th>Public Schools N= 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Schools</td>
<td>% age of Schools</td>
</tr>
<tr>
<td>Excellent</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>V. Good</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Good</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Poor</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td>V. Poor</td>
<td>6</td>
<td>75%</td>
</tr>
</tbody>
</table>

Graph 4.10 showing comparison of Govt. & public schools regarding cleanliness of toilets
COMPARISON OF GOVT. PRIMARY SCHOOLS & PUBLIC PRIMARY SCHOOL SHOWING COMPONENTS OF PERSONAL HYGIENE

Table 4.22 Showing % age values of Govt. & Public primary schools of students on the components of personal hygiene

<table>
<thead>
<tr>
<th></th>
<th>Govt. Schools (No. of students = 100)</th>
<th>Public Schools (N= 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tidy</td>
<td>Untidy</td>
</tr>
<tr>
<td>Nails</td>
<td>19</td>
<td>81</td>
</tr>
<tr>
<td>Clothing</td>
<td>15</td>
<td>85</td>
</tr>
<tr>
<td>Teeth</td>
<td>43</td>
<td>57</td>
</tr>
<tr>
<td>Shoes</td>
<td>13</td>
<td>87</td>
</tr>
<tr>
<td>Hairs</td>
<td>62</td>
<td>38</td>
</tr>
<tr>
<td>Nose</td>
<td>33</td>
<td>67</td>
</tr>
</tbody>
</table>

CONCLUSION

- It was found that Public primary schools were comparatively better than Govt. primary schools on the following components of hygiene:
  a) Public primary schools were having better sanitation conditions as compared to Govt. primary schools. (Table 4.12, Graph 4.5).
  b) Public primary schools were better in personal hygiene of students as compared to Govt. primary schools. (Table 4.22, Graph 4.2).
SUMMARY & CONCLUSION

INTRODUCTION

‘Health is Wealth’

Each year on April 7th the world celebrates World Health Day. On this day around the globe, thousands of events mark the importance of health of productive and happy lives. In 2003 the theme for World Day was ‘Health Environment for Children’. The slogan for Woman Health day 2006 is working Together for Health.

A child’s world centres around the home, school and the local community. These should be healthy places where children can thrive, protected from diseases. Children have unique vulnerability as they grow and develop. They are windows of susceptibility. Millions of children die annually from environmentally related illness who could be saved through creation of healthy settings.

Degraded environments are the breeding grounds for germs, worms and disease bearing insects. Half a billion children worldwide are debilitated by diseases such as Malaria, schistomiasis, dengue fever and Cholera. Some diseases result in long term disability; others cause more immediate and short term, effect.

In turn, thus huge burden of ill health among children constraints the social and economic development of their countries. Currently the economic development of their countries. Currently the economic burden of health care and hygiene is enormous. This problem has to be tackled seriously.
SIGNIFICANCE OF THE STUDY

India has 375 million children, more than any other country in the world and it has largest primary school system in the world, schools play an important role in the development of child.

India is one of the largest countries of the world with diverse population both in geographical and cultural terms. The ideology of co-existence made India one of the most vibrant civilizations of the world. With a population of about 1,000 million, India is the 2nd most populated country in the world after China. Having 29 States, 594 districts, India has about half million locally self-governmental institution in rural areas.

School is important for cognitive, creative and social development of children. So is the School Sanitation and Hygiene Education, necessary for the safe, secure and healthy environment for children to learn better and face the challenges of future life.

A child’s world centers around the home, school and the local community. These should be healthy place where children can thrive, protected from disease.

But in reality these places are often so unhealthy that they underlie the majority of deaths and a huge burden of disease among children in the developing world. More than 5 million children from 0 to 14 years old die every year from diseases linked to the environments in which they live, learn and play –their home, their school and their community.

The proposed study is an endeavour to access the problem of health and hygiene at the primary school level.
STATEMENT OF THE PROBLEM

STATUS OF HEALTH CARE AND HYGIENE IN PRIMARY SCHOOLS

Operational definitions of the terms used :-

Health care :

“Health includes physical, mental and social and spiritual health. However in the present survey the investigator studied only the physical aspects of the health (As given in observation scale–I, Appendix).

HYGIENE

In the present survey the investigator means physical hygiene. He has observed personal hygiene of students and sanitation conditions of school (Observation Scale-II, Appendix).

OBJECTIVES OF THE STUDY

1) To survey the status of health care and hygiene in primary schools.

2) To compare the status of health care in Govt. primary schools and Public primary schools.

3) To compare the status of hygiene in Govt. primary schools and Public primary schools.

DELIMITATIONS OF THE STUDY

1) 14 primary schools (8 Govt. and 6 Public schools) of Chamkaur Sahib Block, district Ropar, Punjab are included in the study.

2) Only 100 students were be observed from Govt. schools and 100 students (boys & girls) from public schools were observed.
DESIGN OF THE STUDY

Design a blue print. It provides the researcher an opportunity for a comparisons and enables him/her to make a meaningful interpretation of the results of the study.

Primary Schools (N-14)

Government Schools (N = 8)  Public Schools (N=6)
Boys + Girls  Boys + Girls

Health Care  Hygiene  Health Care  Hygiene
(N =100)  (N =100)

SAMPLE OF THE STUDY

1) Sample is consisted of 8 Govt. & 6 Public primary schools and include two hundred primary school children of both Govt. and Primary schools randomly.

TOOLS USED FOR STUDY

The study is survey type

The investigator has used following tools for collecting data:

- Observation
- Check list
- Rating scale
- Interview
RESULTS & CONCLUSIONS

On the basis of analysis the investigator has concluded the following points:-

- No. of sources for drinking water were not sufficient.
- School environment was poor in 36% of schools.
- No. of dustbins were very less, 245 students use 1 dustbins.
- Health care services were poor.
- Annual health checkups were done only in 43% of schools.
- In 64% of primary schools furniture was insufficient.
- Mid day meal was provided only in 57% of schools.
- Light and ventilation conditions was poor in 14% of schools
- Govt. primary schools have comparatively lower status of sanitation conditions and personal hygiene of students.
- It was found that public primary schools are better as compared to Govt. primary schools on the following components of health care.
- Govt. primary schools have comparatively lower status of sanitation conditions and personal hygiene of students
- It was found that public primary schools are better as compared to Govt. primary schools on the following components of health care :-
  a) School location, school environment, health care services, infrastructure facilities, furniture, games and sports facilities are better in Public schools as compared to Govt. Primary schools.(Table No. 4.5, 4.6, 4.8, 4.11, 4.14 and Graph No. 4.3, 4.4)
  b) Parents teacher meeting were held in 83% of public primary schools surveyed whereas these were absent in Govt. primary schools. (Table 4.5)
  c) In 83% of Public primary schools surveyed atleast 1 DPE/ PTI was appointed whereas no physical education teacher was appointed in Govt. primary schools.
d) 83% of Public primary schools surveyed maintained health records of students whereas no such record was maintained in govt. primary schools. (Table 4.16)

- Govt. Primary schools are better as compared to Public primary schools on the following components of health care:
  a) Drinking water facility was better in Govt. Primary schools as compare to Public Primary schools. In Govt. Primary schools one source of water for 113 students was observed whereas in public primary school 146 students use 1 source of water. (Table 4.3)
  b) Light and ventilation conditions were better as compared to Public primary schools. (Table 4.12 and graph 4.5)
  c) Mid day meal was provided in all Govt. Primary schools surveyed whereas such facility was absent in Public primary schools surveyed. (Table 4.13)

- Both type of schools were worse in following conditions
  a) Health care services were either absent or very poor. (Table 4.8)
  b) Health check ups were not done in most of the schools (Table 4.9)
  c) In some schools health check ups were done annually but those were not up to mark.

- It was found that Public primary schools were comparatively better than Govt. primary schools on the following components of hygiene:
  a) Public primary schools were having better sanitation conditions as compare to Govt. primary schools. (Table 4.12, Graph 4.5).
  b) Public primary schools were better in personal hygiene of students as compare to Govt. primary schools. (Table 4.22, Graph 4.2).

EDUCATIONAL IMPLICATIONS

The study done by the investigator has following educational Implications:
The survey can sensitize the teachers, educators and Govt. to plan new policies and modify the existing policies regarding health care and hygiene in primary schools.

The survey emphasizes the importance of healthy atmosphere in the school.

The survey stresses on medical examination and inspection which may help in preventing the contagious and infectious.

The survey emphasizes importance of personal hygiene of students and sanitation of a school.

The study may help in creating awareness among teachers and students about the health care and hygiene.

It can help in sensitizing the teachers about importance of maintaining health records.

The survey can add to public health.

SUGGESTIONS FOR FURTHER STUDY

- Status of health care and hygiene can be studied in secondary schools or in other blocks or at district level or at state level.
- A study can be done relating basic school amenities with academic performance.
- Survey can be done to study status of health care services for physically challenged children.
- Gender differences can be studied regarding health care and hygiene practices.
- A study can be done on school water supply, sanitation and Hygiene Education
- Role of management or communities in maintaining the status of health care and hygiene can be studied.
- A study can be done on policies of government regarding health care and hygiene and percentage utilization of funds by schools.
- Status of Students of different school can be studied for oral hygiene.
REFERENCE

- Chowdhary, M., Haq, M.N. Ahmad. Z. (1997) *Quality of Primary Education in Bangladesh*, Perspective in Education.
- http://Health-related-info.com
- http://www.cdc.gov/handhygiene
- http://www.crazycolour.com
- http://www.trivuneindia.com
- http://www.webhealthcentre.com
http://www.webmd.com/health-andwellness/living_better/dental
http://www.who.int/heca/en/
http://cyber-info.net.
http://www.ndltd.com
http://www.scriius.com
http://www.connectindia.com
http://www.inforchaneindia.org
http://www.connectindia.com
http://www.oai.dlib.vt.edu
http://etd-submit.etsu.edu
http://www.peterli.com
http://ddws.nic.in
http://www.blackwell-synergy.com
http://heapro.oxformjournals.org


Ministry of Rural Development (2003), GOI. School drinking water supply, sanitation and hygiene education. Action plan Template., Department of Drinking water supply.

MoHRD (2003), Swajaldhara Guideline.


MoHRD (2004), Total Sanitation Campaign Guideline.


The Tribune, Published at Chandigarh (August 24th & 26th 2006).


The Netherlands IRC, Delft *School Sanitation and Hygiene Education* (2002)– India, IRC Technical paper Series


HEALTH CARE: OBSERVATION SCALE

Name of the School : ________________________________

Class up to : ________________________________

Strength of Primary Wing: ________________________________

No. of Teachers in Primary Wing: ________________________________

1. DRINKING WATER FACILITY : Yes ☐ No ☐
   a) Taps ☐ No. of Students / No. of Taps ☐
   b) Coolers ☐ No. of Students/ No. of Coolers ☐
   c) Hand pumps ☐ No. of Students/ No. of hand pumps ☐

2. TOILETS
   No. of Students / No. of Toilets ☐ / ☐

3. SCHOOL LOCATION
   Excellent ☐ Very good ☐ Good ☐ Poor ☐ V. Poor ☐

4. SCHOOL ENVIRONMENT
   Excellent ☐ Very good ☐ Good ☐ Poor ☐ V. Poor ☐
5. **GARBAGE DISPOSAL**

   - Excellent
   - Very good
   - Good
   - Poor
   - V. Poor

6. **DUSTBINS**  No. of Students / No. of dustbins

    -

7. **HEALTH CHECK – UP**

   - Not at all
   - Annually
   - Half yearly
8. **HEALTH CARE SERVICES**

a) **Visiting doctor**
   - Yes [ ]
   - No [ ]
   

b) **Special retiring room**
   - Yes [ ]
   - No [ ]
   
   If yes
   - Excellent [ ]
   - Very good [ ]
   - Good [ ]
   - Poor [ ]
   - V. Poor [ ]
   

c) **First – aid facility**
   - Yes [ ]
   - No [ ]
   
   If Yes
   - Excellent [ ]
   - Very good [ ]
   - Good [ ]
   - Poor [ ]
   - V. Poor [ ]

**Hospital/ Dispensary in the Vicinity ( up to 1 km )** [ ]

9) **INFRASTRUCTURE**

a) **No. of rooms**
   - No. of students / No. of rooms [ ] / [ ]

b) **Fans**
   - No. of students / No. of Fans [ ] / [ ]

c) **Furniture**
   - Not at all [ ]
   - Sufficient [ ]
   - Insufficient [ ]
d) Light and ventilation

Excellent □  Very good □  Good □  Poor □  V.Poor □

10) MID DAY MEAL

Not at all □  Quantity Sufficient for a Student □  Insufficient □
11) GAMES AND SPORTS FACILITY

a) Indoor games

Yes ☐ No ☐

If yes

Excellent ☐ Very good ☐ Good ☐ Poor ☐ V. Poor ☐

b) Outdoor games

Yes ☐ No ☐

Excellently ☐ Very good ☐ Good ☐ Poor ☐ V. Poor ☐

12) PARENT TEACHER MEETING

Not at all ☐

Once a month ☐

Half yearly ☐

Annually ☐

13) IS THERE ANY DPE / PTI

Yes ☐ No ☐
14) MAINTENANCE OF HEALTH RECORDS

Yes ☐ No ☐
HYGIENE: OBSERVATION SCALE

PART – A

SANITATION

<table>
<thead>
<tr>
<th>Name of the school:</th>
<th>__________________________________________________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class upto:</td>
<td>__________________________________________________________________________</td>
</tr>
<tr>
<td>Strength of primary wing:</td>
<td>__________________________________________________________________________</td>
</tr>
<tr>
<td>No. of Teachers in primary wing:</td>
<td>__________________________________________________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>V. Good</th>
<th>Good</th>
<th>Poor</th>
<th>V. Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cleanliness of Rooms</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>2. Garbage disposal</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>3. Quality of mid day meal</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>4. Classroom environment</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>5. Cleanliness of drinking</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>
water area

6. Cleanliness of toilets

Page 1 of 2
PART – B

PERSONAL HYGIENE

Name of Student _________________________  Age ______________
Class ________________________________

<table>
<thead>
<tr>
<th></th>
<th>Tidy</th>
<th>Untidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teeth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nose</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ABOUT AUTHOR

The author is Associate Professor in Biotechnology at A.S.B.A.S.J.S.M. College Bela Roopnagar. She is coordinator of Internal Quality Assurance Cell of the P.G. College as well as U.G.C. She has done B.Sc., B.Ed. and M.Ed. from Punjab University Chandigarh. M.Sc. from Punjabi University Patiala. She has qualified CSIR NET in Life Science and U.G.C. NET in Education. She has worked for four years in Pharmacy College, Bela and presently working as HOD Biotechnology, PG College Bela. She has got best teacher and best coordinator award 2013. She has designed syllabus for add on courses and was member of board of study Biotechnology Punjabi University Patiala. She has presented various national and International papers. She has organised various Faculty Development Programmes and Conferences, Seminars etc.