School Health *

Emphasis of School Health on

- Malnutrition
- Infectious Diseases
- Intestinal Parasites
- Dental Caries
- Diseases of skin, eyes and ears.

Objectives of School Health

- Promotion of Positive Health
- Prevention of diseases
- Early diagnosis, treatment and follow-up of defects
- Health consciousness awakening
- Maintaining a healthy environment.

Different Aspects of School Health

- Medical check-up of school children
- Remedial measures and follow-up
- Prevention of Communicable Diseases
- Healthy school environment
- Nutrition
- First Aid and emergency care
- Mental health
- Dental health
- Eye health
- Health education
- Education of handicapped
- School health records.

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* Preliminary Note prepared for HNP project for discussion at the meeting on 7.3.2001 between Department of Education and Health.

School Health Issues

- Shift from medical check-ups only to comprehensive care of health and well being throughout the school year.
- Teacher should assist in medical examination.
- Children should be explained the reason for regular check-ups (once in 4 years adequate).
- Daily morning inspection of children in the class by teacher
  - unusually flushed face
  - rash or spots
  - cold, cough, sneezing, sore throat
  - fever
  - nausea or vomiting
  - stiff neck
  - redness or watering of eyes
  - headache
  - listlessness or sleepiness
  - diarrhoea
  - pains in the body, stomachaches, etc.
  - any skin patches, itching, etc. (including scabies)
  - head louse infection.

Children should be sent to the nearest medical facility after calling for the parents.

- Healthy school environment
  - playground
  - toilets (separate for boys and girls)
  - safe drinking water
  - screening of eating facilities around the schools.
- Nutrition programme if being implemented.
- Mental health
  - Counselling skills of teachers
  - School is the place for shaping the child's behaviour and overall mental development
  - Gender bias and discrimination of marginalized.
- Health education
  - personal hygiene and care of eyes, ears, teeth
  - nutrition, infectious diseases
  - environment
  - family life skills
  - sex education and life skill education

"Every school child is a potential health worker".

- Integrated education of the handicapped.

In the child to child method, children take new knowledge and better practices, learnt through interesting activity based learning, home to their families. They could also be organised to reach, out of school children.

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CHAPTER - I

INTRODUCTION

SCHOOL HEALTH

Of the 60 crore Indians almost 42%, i.e. 232 million are below the age of 14 years and we plan to overtake China by the turn of the century in terms of population.

We have not been able to provide basic health care to everyone, inspite of our numerous hospitals and doctors. Our doctor population ratio is I:4246 almost fulfilling WHO's recommendation criteria.

We have only 20% of our doctors taking care of the health needs of our 80% population living in 560,000 villages of rural India.

Just to give an idea about the magnitude of the problem we quote from March 4, 1979 Hindustan Times, "The number of children suffering from malnutrition is estimated at between 40 million to 120 million and every month nearly 100,000 children die of malnutrition. Nearly 92 million children in India live below the poverty line in a socio-economic environments, which are unfavourable for their survival. Further 90% of the school going children in India weigh 10-40% less than those in the affluent countries. Besides causing low birth weight malnutrition is responsible for 17% pf premature births leading to poor resistance to diseases and stunted growth, both physical and mental. It is estimated that 22% of school going children show one or more signs of nutritional deficiency."

There are over 3 million children suffering from some kind of handicap or other. There are 17 million births a month. Out of every 100 children who enter class 1, less than half complete class V and only 24 complete class VIII.

Out of the 6.26%of the total plan outlay set aside for health, 90% is spent in urban areas.

With such meagre resources and such gross maldistribution of manpower material, finances, two things become clear:

1. There is an urgent need for the community to participate more activity for its own health care delivery.
2. It is essential that the meagre resources be used as sensibly as possible through well planned programmes and not erratically.

The two programmes which can very effectively take care of 2/3rd of our population (21% mothers in reproductive age group and 42% of 15) are : Maternal Child Health Programme and School Health Programme. Bhore Committee on Health Services for School Children recommended the establishment of school health programmes, the need to train teachers for health education in 1946. It outlined the objectives and functions of school health programme. Emphasised the need of provision of a balanced midday meal as part of the scheme' and for satisfactory arrangements for school medical inspection and treatment.

In 1965 almost 20 years later, the Report of the School Health Committee which studied the various aspects of school health admitted:-

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"It is needless to point out that although the need for school health services has been felt by one and all,no concrete steps have so far /taken either by state or central govt. to implement any comprehensive /been programme particularly in the rural parts of the country". It was mentioned that some cities and towns did have some sort of health services available, but the villages did not have any organised school health service .

The Committee stated that "we are of the opinion that the facilities available at present for school health in different states are not satisfactory although the system of school medical inspection has been in vogue for a number of years in many states. Carrying out of school medical inspection in a perfunctory manner, the non availability of remedial facilities, lack of follow up even in the cases of those declared to have defects and the lack of co-operation, between the school authorities and parents are some of the factors which have contributed to unsatisfactory results in the school health services. We feel therefore, that unless present system is considerably improved, it would be a mere waste of time and money to continue it."

The third Five Year Plan states that "Care of the health of such large numbers of children is not only vital in itself but is a most important aspect of the health of the community as a whole."

1. Clean drinking water sanitary facilities in schools;
2. Arrangements for medical inspection
3. Follow up services in association with primary health unit in the development block and
4. Instruction of teachers in health education

These were to be the minimum services for care of health in the schools.

Many recommendations have been made, many plans chalked out but so far in rural schools, effective school health programmes have not yet come into existence in most places.

Even the term School Health Programme is ill understood by most teachers, school authorities, educationists and even those involved in the health field.

It implies occasional medical check ups to some, midday meal to others', physical education or giving of vaccination in school campus.

The concept, the knowledge of its various components has not reached down to those whom it is supposed to involve. School Health Programme has remained an intellectual exercise in health planning at central and state level and wishful thinking and a seemingly unrealistic dream by those involved with rural schools.

This report is written with those rural schools in mind who are desirous of doing something for their school children but do not know 'what to do and how'.

Each individual school unit, with its differing management pattern, financial capacity, staff and student population, health problems, health facilities will have to have a rationally planned school health programme to suit its own particular need.

The objectives of this report are to :

1. Emphasise the need of a well planned school health programme
2. Give outline of a procedure for formulating a simple meaningful S.H.P.

- defining its essential components
  - health instruction
  - school health service
  - healthful school living
- presenting government's graded curriculum
- various methodologies for teaching, evaluation and recording
- listing resource material relevant for such a programme

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C H A P T E R - II

W H Y D O W E N E E D A S C H O O L H E A L T H P R O G R A M M E

WHO and Govt. of India are formulating strategies for "health for all by the year 2000 A.D.", It is obviously our health care delivery system has neglected a very large section of society - i.e. those living in rural India.

When we talk of health care, we don't talk of high powered, sophisticated curative care, but of basic or primary health care.

Measles and Diarrhoea comprise about 50 - 70% of infections for 'Under-5' in the third world. They cause not merely deaths but 50 - 70% of all causes of malnutrition.

Dr C. Gopalan addressing Indian Association for the Study of Populations in Dec. 1982 said :

> " Of the nearly 23 million children who will be born in our country in 1983, nearly 3 million may be expected to die before they reach the first year, another 1 million will drop by the wayside before they complete their childhood. Of the remaining 19 million, nearly 9 million will emerge into adulthood with impaired physical stamina, low productivity and poor mentalabilities because of serious undernutrition and ill healthduring their childhood; yet another million who will suffer milder forms of malnutrition may reach adulthood with less stucking physical and mental impairment. Only less than 3 million of the 23 million to be born in 1983 will become truely healthy, physically fit, productive and intellectually capable citizens of this country."

Schools tend to reach most even in under privileged rural communities. Education field has highest concentration of educated manpower & resource of high order. There are :

60,000,000 kids in 500,000 primary schools.

71% of the school going population

i.e 80% of the population of 6 - 10 years age group . It is well known that for 75%, this primary education is terminal.

Regarding

/ Education - Primary and Middle: Paragraph 3 (iv) of the National Policy on Primary Secondary Middle Education statement states that a time-bound programme should be prepared to cover all the children in the age group 6 - 14 years with free and compulsory education. This objective poses two fold problems:

" firstly, the quantitative problem. The population in the age group 6-14 years is expected to be 135 millions by 1982-83. The present enrolment in this age groups is about 90 millions. Therefore, for total coverage, the existing programme should expand by 50 per cent."

"secondly, the qualitative problem. An alarming feature of the primary and middle school education is the high rate of dropouts viz. 60 per cent at the primary stage (6-11 years) and about 40 per cent at the middle stage (11-14 years). In other words out of 100 students who enter the primary stage at the age of 6 years, only 25 complete the middle class at the age of 14 years."

A document of the Union Department of Social Welfare views the present picture where education is concerned, in the following words: "Thus, if we look at the overall situation, child education presents a very dismal picture".

Disparity where allocation for education budget is concerned is as obvious as it is in health where 80% budget is spent for 20% population in urban areas:

Education Budget

1st plan	2nd plan	3rd plan
8.7 %	4.6%	

Elementary Education

56% (First Plan) 26% 3rd plan)

University

9% " " 25% " "

In 1971 29.3% literate
" 1975 32.1% literate
" 1971 271 million illiterates
" 1976 410 " "

The Alma-Ata Declaration states that at least the following should be included in primary health care:

"Education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition, an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases, prevention and control of locally endemic diseases, appropriate treatments of common diseases and injuries and provision of essential drugs."

A Community Health Programme goes beyond the hospital walls, beyond mere curative care - it looks at the preventive, promotive, curative and rehabilitative aspects of health.

If the urgent need for the delivery of primary health care to the community is recognised, the important role of school health in any such programme becomes obvious.

1. A sizable proportion of population constituting of children our 25% of the national wealth can be reached through S.H.P.

   "Children of school age should be considered a segment of the life time of the whole population. During this segment of life span, all children are exposed to situations and are undergoing development changes with call for watchful care". WHO expert committee on School Health Services Geneva, Aug. 5 - gave this as reasons for special consideration of the school age group.

2. Easy accessibility for delivery of different components of health care, as children are consolidated in one place.

3. S.H.P. being an important component of C.H.P. (for proper functioning of the latter due attention to the former has to be given) school is an avenue of approach to the community.

4. These are the formative years of an individual, children and youth respond better to health education developing favourable attitudes and formulate desirable health practices. It is more difficult to teach these to the adult.

5. To learn effectively child or youth needs good health, also in the final alanysis health is "both a requisite for amd a goal of, formal education," for the student can hardly achieve any other goal without having his health.

6. Children and youth can receive correct instruction from qualified teachers instead of relying only on information obtained from peers neighbours and family members which may be based on superstition.

7. School is geared to handle these matters from the educational point of view. It reaches a large percent of individuals of the community face to face. Teaching this way has more impact than mass media or any other mode of imparting health education - because of difficulty in reaching out with our limited resources and manpower.

8. Health education (which can alter disease related poor health habits) is taken home to siblings and parents by the child. A major thrust at school going section of community shares its effects in the community as a whole. Those children not attending school, be it due to poverty or ignorance, can also be reached this way indirectly. These children are not forgotten and through the school health programme something specific can be done for them because they too are part of the community and a good school health programme should be the community's programme based in school but spreading out. Early detection of problems and prevention of chronic and serious defects and basic health care is possible through this "second front" of health workers.

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Our objectives are :

1. To teach students through their trained teachers to feel responsible for their own health, of that of their family and community. To realize that health can't be 'given' or 'bought' but has to be 'earned'.

2. To avoid undue dependence on medical professionals and make health care low cost, and easily available by using local resources and inculcate self reliance.

3. To make teachers the change agents in the community where health knowledge - attitudes and behaviours of the community are concerned.

OBJECTIVES OF THE TOTAL SCHOOL HEALTH PROGRAMME indicate that it seeks to bring each child up to his optimum level through

- providing healthful school living
- providing children with protection against communicable and other preventable diseases
- discovering physical defects and other abnormalities in the child and promoting their connection if they are remedial at the earliest.
- developing the knowledge and attitudes which will enable the individual to make intelligent health decisions.
- provising desirable health habits.
- developing school, home and community cooperation in health promotion.

Why do we need a planned programme in health education for the individual school system a planned programme.

1. It informs the teacher as to what is expected in health education.
2. Outlines the activities and relationships of different members of the school health team.
3. Presents a progressive outline of work by grades suggesting to each teacher the objectives for his grade and avoiding the same programme for a individual in succeeding years.
4. It specifies a time allotment for health education.
5. Suggests many teaching possibilities, methods, procedures and resources from which the teacher may choose.
6. It often suggests ways to evaluate results.
7. It helps to ensure the completeness of the programme as a whole.

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CHAPTER III

THE IMPORTANCE OF TEACHERS INVOLVEMENT IN SCHOOL HEALTH PROGRAMME

There are 1,500,000 primary school teachers for 500,000 primary schools with 60,000,000 kids being taught,

1. Teachers are where the schools are, and they are a rich local resource. They are available in large numbers, present even in remotest areas.

2. They are best equipped to undertake the task of health education, their educational background and skills befit them for this work.

3. Considerable acceptability - personal as well as of what they teach - with pupils and their parents and through them the community. Most teachers specially are natives of the region and know the beliefs and customs. Convincing them to change those affecting will be something exemplary for the community.

4. Social status in the community and faith of the people, good support with voluntary agencies and govt. and community.

5. Involvement of teachers in health programme is consistent with overall philosophy of developing nations to maximally utilize locally available resources. Teacher knows the customary behaviour; therefore can pick any deviations. A good teacher understandsstudents' physical, social and emotional needs more than an outside health personnel.

   - Teacher can observe pupils' eating, study, health and play habits
     - their attendance
     - their growth chart
     - their scholastic record any discrepancy between capacity and performance.

   Health education helps the teacher in developing and maintaining his own health; objective consideration of existing prejudices and superstitions about health are made.

<u>The Principle Objectives in Teacher Preparation for Health Education according to WHO/Unesco Expert Committee</u> - are to develop

a. a standard of personal health practices which will help maintain the health of the individual and serve as an example to the pupils

b. understanding and developing skill in maintaining an optional emotional environment through desirable inter-personal relations.

c. an appreciation of the value, importance and place of education in health as a part of the total education programme.

d. a willingness to play an appropriate part in the promotion of health in the school and in the community.

e. an adequate background of professional knowledge about child growth development, personal and community health and programmes and procedure in school health.

f. understanding and appreciation of a healthy physical environment and how it is maintained.

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g. skill in promoting health education and in working cooperatively with others in this sphere.

h. a knowledge of community health and social agencies and the ways in which the teacher may work effectively with them and with the home.

Preparation in health education helps the teacher to meet the expectations of society. She will help to develop attitudes, habits and knowledge in the field of health which are needed by the younger generation.

It also makes the teacher aware of her own health requirements and she learns how to meet them.

- it helps the teacher to understand the child psychologically
- it helps the teacher to work more effectively with the mother members of the school staff and contribute more to the community.
- the teacher understands the health problems of children and can collaborate with the home more effectively.
- it helps the teacher realize that even though knowledge of fundamental health facts is essential for any positive change in health behaviour mere imparting of knowledge cannot be expected to do so.

Behaviour is more important than either knowledge or elusive attitude because without action the thought is unimportant and hence a trained teacher's approach is 'behaviour oriented' rather than 'knowledge oriented'.

No one is better equipped than an observant trained teacher who can observe and encourage good health behaviour and can check unhealthy behaviour.

Changing Role of Teachers

Past Role	New Role
Teaching facts and techniques preparing child to pass examination	1. Transmitting of a capacity to handle facts, to know where and how to find them and what to do with them.
Preparing child to pass examination	2. Preparing the child for life long learning.
Isolating child from environment	3. Stimulating the child to identify himself/herself with the environment and awakening in him/her a loving concern to take care of it.
Teaching a curriculum irrelevant and divorced from life needs and aspiration of the community.	4. Implementing a curriculum relevant and related to life, needs, aspirations of the community.
Being indifferent to the place of school in the community.	5. Taking loving care to make the school an integral part of the community and a centre of love, learning, beauty, harmony

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CHAPTER IV

PLANNING SCHOOL HEALTH PROGRAMME

According to C.E. Turner in his book 'Planning for Health Education', he gives the values of a planned programme in health education.

1. It informs the teacher as to what is expected in health education.
2. It outlines the activities and relationships of different members of school health team.
3. It presents a progressive outline of work by grades suggesting to each teacher the objectives for his grade and avoiding the same programme for an individual child in succeeding years.
4. It specifies a time allotment for health education.
5. It suggests many teaching possibilities, methods, procedures and resources from which the teacher may choose.
6. It often suggests ways to evaluate results.
7. It helps to ensure the completeness of the programme as a whole.

Organization:

Need for a planning committee/advisory committee with representatives from

1. School administration	◊ Principal/Head Master ◊ Manager/Administrator
2. Parent or Community	
3. Community Health	- Govt. or Voluntary Agency
4. Education Department	- Govt. official or anyone in charge
5. Teachers trained	- Voluntary school or diocesan programme.

There is a need for school health councils in each school. Major purpose is to

- identify and solve school health problem
- idea is to share responsibility and decentralize decision making

Functions and composition of council depend upon local interest and needs. Some guides are:

1. The purposes, objectives, and policies of the council should be stated clearly, reviewed periodically.

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2. The council should include representation from parents, school health and education department.

3. Each member agency should be given an opportunity to select its own representative who may be elected for specified period of time.

4. The council should meet at regular intervals with prepared agenda.

5. Each agency should be permitted to present for council consideration any problems dealing with the health of school children, particular attention should be given to these problems requiring joint action by community, school and professional group.

6. Sub-committees if needed may be made to report back to council any specific matter of most feasible method to collect finances for health fund.

7. Although long term projects are necessary and appropriate projects which can be completed successfully in a short period of time should receive attention.

8. The community should be kept informed about the council's progress accomplishments and problems, health and department.

9. Emphasis should be placed on solving pertinent problems rather than organization or on routine procedures.

Some of the operating procedures of a council include:

1. Survey of the entire school health programme for strengths and weaknesses.

2. Complete detailed data on the school health programme of morbidity pattern absenteism due to illness etc.

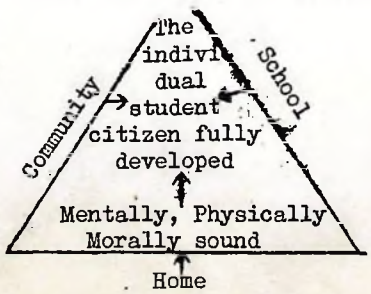
3. Analyse the various school and community resources for meeting certain health problems.

4. Recommend to the school administratora course of action for meeting each problem.

5. Evaluate the influence of recommended improvements that are put into operation.

6. Develop long range plans for coordination of the school and community health programme.

Inter relation between school, home and community - Foundation being health needs of interests of individuals, community health and cultural problems, conditions.



Health agencies operating in the area	Health Instruction
	Instructional objectives
Govt.	Learning opportunities
	Organization of Health Institutions
Voluntary	Evaluation
Church related	
	Health Services
Parent Teacher Association (if any)	Teacher Observation
	Medical Examination
	Health Guidance and Follow up
Women's groups (Mahila Mandals)	Communicable Disease control
	Special services - dental, eye
	Healthful School Living
Youth Clubs	
Youth Farmers Club	Safe drinking water
Cooperatives	Sanitation
Religious groups	Toilet facilities
Private Industry	School meal
	Health of School personnel and healthy interaction
Community Health Council	School Health Council

Inter-relationship of school, home and community is illustrated with respect to nutrition by the following statement from joint UNESCO/WHO/FAO Committee Report in Paris Sept. 1964.

"A national programme for improvement of nutrition involves national planning and local implementation in such areas as

- improved use of available foods
- improved production of essential foods
- prevention of the waste of foods through improved storage, presentation, handling and marketing.
- wise selection of food for the daily diet of the individual and in the family.

Using the vast network of rural schools as a "portal of entry" to the community for preventive and promotive health programmes addressed to the entire school , community(and not just to the school children alone) was highlighted by Dr. C. Gopalan at the inaugural address at National Institute of Health Administration 1974, Swasth Hind 187 in 1974. "Such a programme would greatly reinforce conventional health services undertaken by the public health department. This vast ready made infrastructure of rural schools can form a '2nd front' in the campaign against ill health."

The Prime Minister while addressing the National Heart Institute had paid:

"Government agencies function under certain constraints and rules, regulations and also traditions. Voluntary organizations allow for experimentation with newer ideas and can break fresh ground." (e.g. Red Cross, Community Health Worker).

Hence the newer workable approaches to health care have to come from people like you.

Organization and Administrative Set Up

Success of the S.H.P. depends largely on sound effective and coordinated administration. Coordination between those who administer Health, Education, Food, Agriculture and Community Development departments from the national to the field levels is essential.

Such an organizational set up would aim at recognizing and mobilizing voluntary efforts of the community. It would be able to facilitate maximum utilization of limited resources of every department.

It is important that the S.H.P. should be the joint responsibility of the departments mentioned above, the voluntary organizations, panchayats and community.

Health agencies, Govt. of voluntary, taking care of a particular area should also take care of the school health services in the area.

According to the Expert Committee on School Health Services WHO, 1950, following should be the guiding principles:

1. Form of administration can vary, depending upon the existing circumstances.

2. Manner in which responsibilities are discharged and cooperation obtained from all concerned by health teams influences efficacy more than merely a good administrative framework.

3. Integration of school and community health services in advantageous to both.

4. The school health incharge must have a definite assignment which will place him in a position of responsibility towards the maintenance of health in the school and not an occasional visitor with no community responsibility.

5. For school and community's sound relationship the PHN or the ANM has to play an important role regarding follow up, treating and referring emergency cases were concepts started by pioneers in the voluntary sector.

6. School health services should serve all children of school age in a defined community - children in private schools, non formal education and even drop outs should be cared for.

7. Health services and community health care should go side by side.

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8. School health committees should bring together personnel interested in school health - parents, philanthropists, social workers and professionals. Village health committee may function S.H. Committee in small villages where schools are centres of community activity.

9. Each child must be provided with uninterrupted continuity in supervision so that his health guidance is not fractionized and save medical administration for school and community. there

School Health Administration

Administrative and organizational set up recommended by the School Health Committee at National, State and local levels is given in their report published by Ministry of Health in 1965.

The Government set up recommended for at district, block and local is as follows:

	Advisory Bodies	Executives
District:	District School Health Committees as sub committee to the Dist. Development Council. Chairman: Chairman of the Dist. Development Council Joint Secretaries: Dist. Education Officer and Dist. Health Officer.	1. Dist. Education Officer 2. Dist. Health Officer 3. Dist. Agriculture Officer
Block:	Block School Health Committee as sub committee to the Block Development Council. Chairman: Chairman of the Block Dev. Council Jt. Secretaries : Medical Officer of the Primary Health Unit and Inspector of Schools of Education Dept.	i. Medical Officer of the Primary Health Unit. ii. Inspector of School iii. Agriculture Inspector
Local:	Local School Health Committee of the village pancha-	i. Health Team of the Primary Health Unit ii. Headmaster and Class-Teachers iii. Village Panchayat iv. Mukhya Sevika, Gram Sevikas and Gram Sevak of Community Dev. Dept. and Mahila Mandal.

CH 2-9

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SCHOOL HEALTH WORKSHOP REPORT
HYDERABAD, SEPTEMBER 1983.

Resource Personnel:

Dr Mira Shiva , VHAI
Ms Christina de Sa, VHAI
Mr D Rayanna , AP VHA.

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SCHOOL HEALTH WORKSHOP

JEEVAN JYOTHI RETREAT HOUSE
Hyderabad -500016
September 7-10, 1983.

PARTICIPANTS

Teachers, Headmasters, Headmistresses, Doctors, Administrators, Nurses and Health Workers involved in rural community health programme from different districts in Andhra Pradesh.

LANGUAGES

English (and Telegu)

OBJECTIVES

The learning objectives of the present workshop were to:

1. Motivate participants to take responsibility for organizing and planning a school health programme.
2. Introduce participants to different components of comprehensive school health programme.
3. Recognise the roles and responsibilities of health and educational personnel and facilitate a team approach among health and educational personnel inorder to understand health issues and take responsibility for the health care of school children.
4. Promote good health practices and attitudes among the students
5. Recognise defects and deviations in students from normal health-(physical, emotional and social)
6. Assist in carrying out regular medical examinations and immunizations
7. Help to provide first aid, emergency and basic health care in the school
8. Incorporate the health education component in the school curriculum
9. Organize and plan out activities related to health education needs and ensure active community participation.
10. Help ensure that school health is seen as an integral part of community health and that the neglected(unreached) non school going children are also reached.

The workshop participants constituted mainly of individuals who had voluntarily come to learn and share about organizing an ongoing need based school health programme in their respective schools.

Due to the focus on under fives, children at school going age have tended to be neglected. The responsibility for their health has neither been taken by the health nor the education authorities. For those children who have had no access to schools and have dropped out for economic reasons the situation is worse. For those of us believing strongly in the need for an alternative health care system, the role of Teachers Health Guides is as important as the already widely accepted concept of Community Health Guides.

The purpose of this workshop was to initiate the process of developing self reliance in understanding and dealing with the health problems in the schools.

The training methodologies used were essentially those which actively involved the participants right from the point of identifying common school health problems, to priority setting, to identifying different components of the school health programme and use of different methods of giving health education. Emphasis on a team approach, active collaboration and tapping of all available resources was placed throughout.

A list of the participants, their backgrounds and expectations are given in Appendix I. A summary of the expectations of the participants is given below:

1. To know and understand the fundamentals of a School Health programme
2. To understand the organizational and planning aspects of a school health programme.
3. To learn about practical steps to be taken to improve health conditions of school children in the following areas:
   a) personal and environmental hygiene
   b) common health problems
   c) food and nutrition
   d) first aid
   e) behaviour problems
4. To learn aspects of health education:
   a) Ideas for creating awareness and motivating of students and teaching community
   b) The approach and improved teaching methodology
5. To understand organizational aspects of rural based school health programme
6. To recognise and be able to handle common health problems of school children.

WORK METHODOLOGY

More than mere sharing of information, we saw our role in ensuring that each and every participant shared our enthusiasm about school health work and developed the attitude, and obtained the knowledge and skills to do so meaningfully. We knew that, the shortage of time would permit only the initiation of the process and hence investment of this time in motivation and dealing mainly with the how and why of school health was a very conscious decision. Efforts at sharing of the resource material already available and of the various experiences of the other school health programmes was aimed to inspire and to leave the responsibility of further initiatives with the participants.

The working methods used during the workshop were aimed at:

i) emphasising active involvement and participation of the learner
ii) providing opportunities to arise specific school health problems faced by them
iii) encouraging the participant to develop a critical and constructive attitude towards their own problem solving
iv) facilitating the proposal and elicitation of solutions to the selected need based problems, which seemed to be the most appropriate, but often needed to be tried.
v) creating and maintaining an optimum environment where participants felt free to contribute, question and draw their own conclusions.

The work methodology used has been classified in the present report as:

I. WORKING PROGRAMME
II. BACKGROUND INFORMATION
III. LEARNING EXCERCISES
IV. EVALUATION

1. WORKING PROGRAMME:

This was worked out in order to ensure that the objectives relevant to the needs of the participants were met in the limited duration of the workshop. In some instances therefore, the programme of work was organized on the basis of choices made by the participants themselves. When necessary choices were modified during the workshop. The schedule, outline and methodology of the work programme has been listed out in Appendix II-IV.

In retrospect - the first couple of sessions and introduction were very valuable in determining the working atmosphere. (The priority list of health problems drawn up by the group was not at all in keeping with out concept of priority school health problems, but since we believe and were involved in a participatory training workshop, we had to respect the groups views). The second and the third days were marked by productivity, the initiation of a thinking process and establishment of a common tempo. With the fourth day came the beginning of new approaches and future plans.

II. BACKGROUND INFORMATION:

A) A wide range of handouts were used to render knowledge and background information concerning objectives to be covered. They comprise of the following: (and have been included in Appendix V).

1. Introduction to School Health
2. Why do we need a School Health Programme?
3. Main components of a school health programme
4. Importance of Teachers Involvement in school health programme
5. Planning school health programmes
6. Recording system
7. Evaluation of the school health programme
8. Recommended reading.
   - Resource material for educational (students, teachers) and health personnel
   - School health programmes in the voluntary health sectors
   - Government school health programmes

B) EPI Folders:
To help, recognize the disease and know the facts about common diseases, but mainly to create an awareness about preventing these communicable diseases through immunization.

C) AKAP Booklets - Phillipines:
A set of beautifully illustrated booklets covering health education aspects of common health problems.

D) School Health Records:
A school health record was devised by Dr Mira Shiva on the basis of field experiences and extensive visits to the school health programmes, during the workshop held at RAHA in 1979. The draft of the compiled school health record was finalised after discussions with : Sr Angela, Sr Pratiti, Coordinator, RAHA, School Health Programme and Fr Van Besouw, Director, Community Health Department, Bishop's House, RAHA(Record enclosed in Appendix VIII).

Various school health records were also used to attain the participants feed back and evaluation in order to identify and understand the most relevant information required for this purpose, These included records from MGDM Hospital, Kangazha, Kerala, Institute of Child Health, Hyderabad, Municipal Corporation Delhi etc.

III. LEARNING EXCERCISES:

These excercises were carried out on the basis of the various aims of the work methodology. These included usage of :

1. Individual/Small group/Whole group Interactions
2. Group Discussion
3. Group Presentation
4. Role Play
5. Brainstorming
6. Lectures
7. Different communication media and techniques.

(A visit to a school health unit had been planned but due to the distance involved, transport difficulties and shortage of time and communal riots in the city the plan could not be carried out).

IV. EVALUATION:

The group evaluation excercise conducted at the end of the workshop was carried out in order to:

a) assess the extent to which the work methodology used had helped the participants in attaining their individual objectives.
b) propose any changes that could aid in the improved functioning of the workshop, selection of materials and course planning.

The participants were asked to list out the various sessions of the workshop from day to day with their personal evaluations. Guidelines for choices were given to be used with 1-10 grading level. The important criteria to be considered were:

a) Content
b) Presentation/Methodology
c) Practical utility

Questions used included the following:

1. What did you like most?
2. What did you dislike or not find useful?
3. Would you like to add or delete anything? What?
4. What is your future plan of action?
5. What do you expect from VHAI/AP VHA?

Thus an assessment of this type:

(1) is timely and attempts to assess the appropriate skills and attitudes that the participants should learn,
(2) it can be used as a guide about which topics and skills of the participants need to develop further; which parts of the course, techniques, aids and methodology were found most useful and which areas need to be improved, or changed,
(3) it can motivate the participants or the resource people to work hard together in order to attain short term goals set in during the evaluation process.
(4) it gives a tremendous sense of sharing and solidarity- when done with sincerity, no matter how critical it is a very valuable learning experience- as itself assessment as well as assessment of the training programme.

The major outline of the areas covered can be referred to in Appendix IV. This will now be dealt with individually as covered in the course of the workshop.

I. INTRODUCTION AND EXPECTATIONS

The objective of this initial introduction by the participants to the group was to convey information regarding their

- work
- name
- organization
- reason for interest in school health programmes
- expectations and interests

Method:

Individual participants were given a paper slip with ½ the name of a health problem on it. On finding their appropriate partners with the other appropriate half they shared with each other information stated above. Later, the partners introduced each other to the large group.

Materials used:

Paper slips with one part of the following health problems written on each; were used. These were:

A	B
Hair	lice
Dental	caries
Ear	discharge

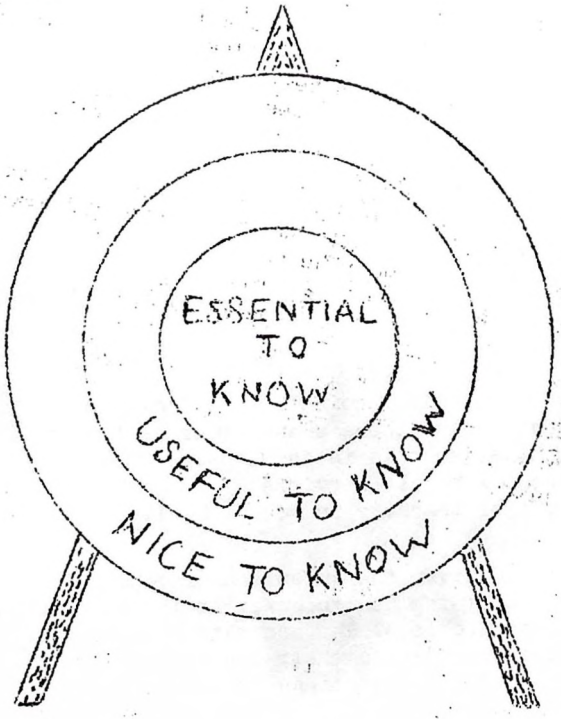
A	B
Sore	eyes
Joint	pain
Loose	stools
Nutritional	deficiency
Sore	throat
Skin	rash
Cough	and cold
Night	blindness
Poor	vision
Chest	pain
Ear	ache
Bad	breath
Intestinal	worms.

Learnings:

The exercise helped gauge :

1. the individual participants understanding of school health
2. their background and expectations
3. their interest and motivation
4. their social and cultural background
5. their objectives
6. the course content and suitable methodology which needed to be adopted and priorities to be stressed. (What the participant must learn, what would be useful to learn, what would be nice to learn).

Illustration:



Adapted from Werner and Bower - 'Helping Health Workers Learn' 1983.

From past experience we have realized there's a great need to visit the various schools and meet the school authorities and teaching staff. This is to introduce the concept of school health to a wider group that would later form the support group - for those involved in school health work. We have realized also the need to assess, understand and discuss the understanding of health and health education by the decision makers of the schools. This has helped us to realize the extent to which resources, personnel, time and energy they would eventually be willing to make available for the School Health Programme, so that the action programmes planned later at the workshop by the representatives of the school are within a realistic framework of that institution.

This also gives an opportunity to the school authorities to assess our motives, our convictions and ideas about the importance of school health work.

For this workshop we had not had the opportunity of knowing the participants earlier. Sharing about their institutions' involvement in school health work, did not always give a very clear idea about their specific involvement and role in it. Different levels of education and training and roles in the schools and hostels of the participants demanded that we function accordingly in an attempt to meet each group's needs. It was definitely not easy.

The programme schedule was drawn up based on the stated objectives and expectations expressed by the participants. An attempt to keep it need based and relevant was made through out.

> "Everyone who uses a word knows what he means by it. The problem is that everyone doesn't realize that other people may have different meanings for the same word".
>
> Mager R F

II. SCHOOL HEALTH PROGRAMMES:

1. Implications and Objectives:

The urgent needs of a School Health Programme were focussed on by using statistics quiz (Appendix VI). The objectives of thw quiz were to help the participants realise the :

a) health situation of the country
b) health situation of the school going population
c) prevalence of communicable diseases and other health statistics
d) need for involvement of schools in health work
e) structure of the school health services
f) need for involvement of teachers in school health work.

Method:

The participants were given the questionnaire and told to mark their own answers since the aim of the health quiz was to build awareness about the common preventable health problems. The accurate answers were then shared which the participants compared with their own themselves. Discussion of the data provided was then held. The questionnaire with its correct answers is provided in Appendix VI.*

2. Teacher's Involvement in School Health:

Objective: The need and importance of the teacher's involvement in school health programme.

Method: To assess the group's understanding of ideas, a group discussion was followed by a brainstorming session by the participants.

* Also James P Grant 'The state of the world's children' Report 1982-83,84

The theme: Why does the teacher have a pivotal role in school health programme (A handout was distributed after the group inputs).

Learnings:

The following points were listed in response to the question stated above:
1. Maximum contact with students at an impressionable age
2. Ability of teacher to study curriculum and have access to health educational material
3. Credibility with students and parents in community
4. Ability to spend time with students - opportunity for observation and guidance
5. Knowledge of individual students.

The 5 phases of organizing a school health programme as shared by the participants were as follows:
1. Orientation and motivation of school administration and teaching community
2. Setting up a school health Council- remuneration and adequate motivation for Teacher Health Guides
3. Selection and training of Teacher Health Guides depending on credibility in community
4. Selection and training of students health guides supportive to teachers, for inspection and detection of disease.
5. Involvement in child to child programmes and activities: eg. Immunization, detection of Vit A deficiencies, chlorination of wells.

3. Components of a school health programme:

Objectives:
a) To assess the group's understanding of the components of a school health programme.
b) To encourage mutual learning by participants of the various components of a school health programme
c) To encourage independent thinking regarding different potential components by the participants before our sharing of our concepts of a school health programme.

Method:

The participants were divided into 5 groups. Each group was given time for individual discussion and sharing. The group representatives then presented the ideas of the group, with the aid of posters. Participants in other groups asked for clarifications and contributed by their own suggestions, experience and ideas. The group then read and discussed the information provided in the handouts.

Learnings:

The participants shared the extent of their individual involvement in school health work if it was existing in their respective schools:
1. It appeared that medical check ups and immunization programmes are made available in urban based schools and those schools within range of the Primary Health Centre, only.
2. The existing recording system of 2 schools who shared it with the group was time consuming and too detailed. It was therefore, not fit to be used as models for others.
3. A more comprehensive, specific problem-oriented method of recording needed to be introduced.
4. A need for resource material for health education, (methodology approaches) and clinical inputs was expressed.

The following components were listed by the group:
1. Health Education:
   - Personal hygiene, Environmental sanitation
   - Nutrition
   - Kitchen gardens

- Sex education class VIII-IX
- Prevention of communicable diseases
- Incorporation into other disciplines of curriculum.

2. Healthful school living:
   - Safe and healthful environment (drinking water, playground, classroom)
   - Planning of a healthful school day
   - Establishment of healthy interpersonal relationships
   - Attention to removal of VENDOURS.

3. School Health Services:
   - Medical check up regularly and follow up of cases
   - Curative care
   - Immunization Programmes
   - Maintenance of records
   - Nutritional services
   - Parent Teacher Association meetings annually
   - Promotion of extra-curricular activities
   - Health exhibitions, fairs, talks, demonstrations, workshops
   - Kitchen gardens: allotment of responsibility to science teachers

4. Organizing and planning a school health programme:

Objectives:

1. To encourage sharing of the ideas of different participants about how to plan and organize a school health programme.
2. To aid the participants in understanding the roles and responsibilities of the various personnel in a school health programme.
3. To give an outline of how school health programme could be planned and organized based on existing and tried out workable replicable model of school health programme.

Methods:

Through a brainstorming session involving the whole group, the participants expressed their ideas and experiences about organizing a school health programme. Posters were used as aids in the explanation of the various roles and responsibilities of the (1) teacher health guide
(2) student health guide
(3) school health committee
(4) headmaster
(5) school health training team

The content of these has been compiled in Appendix VII.

Learnings:

Some ideas from the action plan suggested by the participants are:

1. Get administration involved in implementing the school health programme. This will include principals/Headmasters/Headmistresses, Parish Priest, Nursing Sisters, Mahila Sanghs etc.

The approach suggested was (a) the utilization of health promotors, volunteers from health organizations, the organizers of this workshop; (b) collection and utilization of available resource material and relevant literature.

2. Get teaching community ready: One method suggested was the organization of a one day workshop for teaching staff of neighbouring schools on a working day, with a simple, practical orientation to a school health programme.

The roles and responsibilities of the school health training team (Appendix VII) helped the participants to understand more clearly the importance of a team approach in a successful school health programme. The opportunity was used to put before the participants some highlights of existing school health programmes in various areas. These were:

(1) MGDM Hospital, Kangazha, Kerala
(2) Institute of Child Health, Madras
(3) Raigarh Ambikapur Health Association, Raigarh, M P.
(4) Holy Family Hospital, Mandar
(5) Fr Muller's Hospital, Kankanady, Mangalore
(6) Institute of Child Health, Hyderabad.

5. Record Keeping:

The school health record gives information about:

i) The growth and development of the child during school
ii) Immunization status
iii) Occurance of significant communicable diseases eg. TB lepro-
iv) Results of routine medical check up before entry, etc. and after leaving school
v) Medical history and treatment carried out
vi) Follow up of illnesses and referrals to hospitals if necessary.

Thus this system has the following advantages:

i) Screening of children allows early detection of health problems.
ii) Recognizing the existing morbidity patterns.
iii) Setting of accurate priorities for a school health program
iv) Appreciating overall changes in the individual's health status and preventing the onset of illness.
v) Giving follow up treatment to those with common illnesses.
vi) Making available a record of the child's health status on leaving school for use in the future.
vii) Giving importance to positive health not merely freedom from illness.
viii) Facilitating proper referral system in cases of major illness.

Objectives:

1. To encourage the formulation and maintainance of school health records
2. To understand the importance of the most essential information required for a relevant school health record.
3. To promote need based data collection through relevant health records
4. To develop analytic skills to be able to analyze and utilize the information appropriately.
5. To evaluate the existing school health records being used in various places.

Methods:

The participants were asked to share their ideas about the essential and most relevant criteria to be considered for a cumulative health record. Various existing school health records from numerous governmental and non-governmental sources collected over past few years were evaluated and discussed by the participants separately. This included a cumulative health record that evolved out of a extensive data collection during the RAHA visits. Dr Mira Shiva was involved for the formulation of the record which has been included in Appendix VIII.

Learnings:

On evaluating and sharing their views and suggestions about each record, the participants agreed that a useful school health record should be:

i) comprehensive with only relevant information depending on priorities in the area.
ii) simple in language structure and terminology
iii) durable and lasting
iv) problem oriented rather than system oriented
v) in English as well as vernacular
vi) appropriate to promote continuity in record filling
vii) accompanied by a master register to ensure a record of entries even if the record is lost.

viii) maintained on specific instructions as to the personnel involved in record filling
ix) obtained on payment of a nominal fee
x) periodically analysed to allow need based modifications.

III. HEALTH EDUCATION: (1,3,7)

> "The student body represents the largest untapped educational resource in most schools".
> G Miller 1977

Efforts made in Health Education must contribute towards a change in the attitudes and knwledge affecting changes in health practices of people. Thus it is a process involving a series of steps towards healthier living. It involves efforts by the people. Changes in behaviour include changes in thinking, feeling and acting and therefore an acquisition of ideas, habits, attitudes, interests, professional skills and ways of thinking anew. Thus teaching activities are marked by interactions between the organizer and the participant in order to bring about expected changes in the students' behaviour. The activities and inputs provided in the following sessions were planned in order to help participants:

(1) acquire, retain and develop their ability to use knowledge provided,
(2) inderstand, analyse, synthesize and evaluate existing problems
(3) achieve skills: (i) by describing and demonstrating the skill
(ii) allowing every participant to practice the skill
(iii) providing opportunities to do so, eg. Role playing, simulations, group presentations by providing theme.

The skills to be taught would thus include psychomotor skills (actually doing, using hands skilfully) and communication skills (of explaining and persuading). These will be dealt with in outline IV.

(4) share knowledge which is relevant and need based through planned activities resulting from priority setting. The participants were encouraged to gather information from each other and their own experiences, books, manual and other available literature. The list of material (VHAI) demonstrated and displayed can be referred to in Appendix V.
(5) develop attitudes- tendencies to behave in a certain way by providing-
i) numerous examples and models
ii) experiences
iii) in group discussions and sharing
iv) role playing exercises
v) adequate background information.

> "The student body represents the largest, untapped educational resource in most schools. How many teachers are really prepared to have students reach conclusions different from their own, giving first consideration to the logic of reasoning rather than the ability to arrive at a predetermined solution?".
> G Miller 1977

1. Abbatt F R 'Teaching for Better Learning' a guide for teachers of primary health care staff. WHO, Geneva 1980.
3. Guilbert JJ 'Educational Handbook for health personnel' WHO Offset publication No.35 1981.
7. Park J E and Park K 'Textbook of preventive and social Medicine' (A treatise on community health) 8th edition 1980.

The activities chosen during this workshop were aimed at enabling the participants to acquire the desired skills under conditions similar to those in which they will work later on. Thus these would be far from ideal learning situation where the participant will be deprived of the stimulus of having to fall realities and will have less opportunity to propose improvements with the help of fellow participants and resource personnel. They introduce the participants to team work and allow them to practise what they had learnt.

The sessions held in the course of the workshop are listed below:

1. Priority setting of health problems
2. Group presentation of a selected list of school health problems
3. Learning and Teaching Techniques
4. Nutrition game.

1. Priority setting of Health Problems :(2)

Objectives:

i) Identification and focussing on common health problems
ii) Understanding various criteria to be kept in mind when assessing significance of a problem
iii) Encouraging active participation in the group by drawing up their own priorities
iv) Introducing participants to the use of cut out symbols, flannelgraphs
v) Helping discussion, arguments, sharing and analyses with fellow participants.

Method:

The method used was based on the one suggested by David Werner and Bill Bower in 'Helping Health Workers Learn'(2) to make a community diagnosis. Criteria used were how common, how serious, how contagious, how serious. We used it to involve teachers and health personnel in diagnosing and assessing the school health problems prevalent in their areas. David Morley's priority setting criteria of how common, how serious, the degree of community concern, solvability of the problem were used. The grading used was: 0, +, ++, +++ and ++++. The various grades given were then multiplied to get the total figure for each problem.

Individual participants were given paper slips with the name of a health problem.(Problems listed in Appendix IX), in two groups. The commonest ones were listed in order of frequency. On regrouping and further discussion a final list was made out on the flannel boards after a general consensus. The cut out symbols were then used by group representatives in the manner suggested. A diagrammatic representation of these health problems can be used with younger children when dealing with illiterate health workers.

Learnings:

The list drawn up comprised of health problems in the following order:

1. Malnutrition
2. Loose stools
3. Behavioural problems
4. Worms
5. Fever
6. Scabies
7. Accidents

Although the exercise led to much discussion and arguments it made the participants aware of the common occurence of health problems in certain schools. This can be taken as an opportunity to work together in finding solutions to common areas of concern.

2. Group presentation of some school health problems:

Objectives:

i) To encourage participants to recognise difficulties related to health of some problems as compared to others.

*2. David Werner and Bill Bower'Helping health workers learn'-A book of methods, aids and ideas for instructions at the village level-1983.

ii) To clarify misconcepts of the arising health problems
iii) To learn and utilize various methods of communication
iv) To assess the degree of integration of the various learning and teaching methodologies dealt with in the course of the programme.
v) To discover one's own potential during actual use of methods and come to terms with practical difficulties that arise.
vi) To help participants get over the hesitation in adopting different and new teaching methods.
vii) To learn different methods and techniques used for health education from fellow participants.

Method:

AKAP booklets covering a host of common health problems and messages were distributed to participants. They were divided into 8 small groups and were allowed to select one problem each. The group representative then presented the chosen health problem to the whole group. Out of the problem given to the individual participants the following were chosen and dealth with:

1. Ascariasis
2. Malaria
3. Colds-flu
4. TB
5. Vomiting-Nausea
6. Typhoid
7. Head colds-Nasal Bleeding
8. Sore eyes

The participants used a variety of methods for their presentations: Some of these were role playing, use of puppets, posters, cutout symbols and illustrations.

Learnings:

The exercise gave the participants an

1. opportunity to explore and devise their own teaching methodology
2. experience practical difficulties during a health education lesson
3. emphasis, careful planning and implementation of new methods
4. exposure to groups interaction, sharing of ideas, and a critical evaluation by other group members.

Modifications possible:

The exercise could be followed up by an extensive clinical input for dealing with practical solution for the required health problem. A visit to a school health unit to observe functioning, and dealing of the actual problem would be very valuable. A limited time bound schedule did not permit this.

3. Learning and teaching techniques :(3,6,8)

Teaching is not a stationery process and its main purpose is to facilitate the learning process. Such a process lays more stress on what the student learns (receives, perceives and assimilates) than on what the teacher presents. Thus rather than the manner of transmission of material, the focus is on the student- and a close investigation of what was learned, at what speed and manner and for what purpose. The teacher becomes a learner himself and the student undertakes some part of the teaching role. The process of learning aims at some modification in the way of thinking, feeling and doing and is both an emotional and intellectual process. The purpose of teaching as mentioned earlier is to help students to

a) acquire, retain and be able to use knowledge
b) understand, analyze, synthesize and evaluate it
c) achieve skills, establish habits and develop attitudes.

The learning process produces a behavioural change in the learner which is gradual, and selective. It results from practice, repetitions and experience and is not directly observable.

Teaching aids used for the learning process serve to:

1. simplify teaching and illustrate explanation of points not easily achieved by lecturing.
2. provide a variety and thus make teaching more interesting
3. provide an opportunity to practise skills required to meet appropriate objectives
4. summarise the main points and improve the overall efficiency of a lesson.

The advantages and disadvantages of certain teaching methods and of different educational media has been listed in Appendix X.

viz.
1. Lectures
2. Practical work, field work
3. Real objects and specimens
4. Models and simulation devices
5. Books, handouts, programmed learning from books and simulation. Self learning packages
6. Small group activities
7. Graphics, posters, paintings, photographic prints
8. Blackboard/flip chart
9. Flannelgraph board
10. Projectable media (slides and filmstrips)

As teaching techniques/the role of workshop/ thus is very useful and efficient and the facilitator's role is to encourage the desire to learn rather than the desire to know.

> 'Assume always that a teaching activity is ineffective unless there is evidence to the contrary".
>
> A L Cochrane

4. Nutrition game: Cards

Introduction:

Teaching aids can be prepared by the instructor to help students to obtain information they need for learning independently. The student can take over some part of the training while the instructor remains available only when necessary. It is clear that group work and discussions stimulate motivation and on independent thinking process. The nutrition card game provides an example of such an aid.

Objectives: This learning game

1. promotes the use of self learning material
2. encourage adaptation and innovation of learning activities suitable to individual needs and creativity
3. enables the participants to learn food classification based on its function and nutrient content
4. allows adaptations to include locally available cheap foods
5. gives opportunities to exchange and learn about new receipes for various foods.

Material:

This material was conceived and arranged by Dr Uma. She was assisted by Christina De Sa in the preparation of the material. It consisted of:

(1) A pack of food cards :(6cm x 9 cm in size). Playing cards were converted to food cards. This forms an inexpensive traditional medium to teach aspects

* Page 12. 3. Guilbert JJ 'Educational Handbook for health personnel' WHO Offset publication No.35 1981.
6. Mackenzie Norman et al 'Teaching and learning' UNESCO 1970 pp 44-50
8. Pine G P and Honne P J 'Principles and conditions for learning in Adult Education' Adult Leadership October 1969.

of nutrition and also provide entertainment. Each card gives the food and the name of the food (English and Telugu). On the corner of the card the predominant group number representing the nutrient is given. Some cards have more than one number to indicate the different food groups. The four groups with the foods included are as follows: A sample of each group has been included, in the Appendix XI.

1. Energy foods: Rice,wheat,banana, sweet potato, ragi,jowar
2. Body building foods: Dals, groundnuts,fish, milk, chicken
3. Fats and sweet foods: Jaggery,honey,sugar,buttermilk,oil
4. Protective foods: Greens,tomato,orange,drumstick,tamarind,lemon,carrots

The numbers of food cards can be chosen depending on the participants who wish to play the game. (2,5,9)

2. An illustrated chart showing the various food cards. These were grouped appropriately in order to guide the participants to choose the correct food slips. The latter indicated the four groups and were detachable.

3. A Booklet: providing colourful illustrations and simplified information about the different foods, their classification and function. It is an aid to encourage participants toobtain the desired information from other sources.

Method:

Each participant was allowed to pick one food card from the pack at random. The various food cards were chosen so that they could be categorised to give a fair distribution in each group. The participants then grouped themselves according to the number indicated on the cards (groupl-4). A group discussion followed and consisted of an exchange of information, home remedies, recipes and other uses regarding the foods in the group. The booklet was passed around for further information. On completing the discussion each group representative placed the appropriate slip to label the food group. The group members then proceeded to describe their individual food cards sharing with the whole group the combined information of their group.

Learnings:

1. A variety of food cards can be used for this game but the pack should contain enough representatives from each group in order to portray a variety of foods.
2. Initially the participants could be introduced to familiar foods in order to catch their interest.
3. Raw food items are to be used without confusing them with distracting ready made foods.
4. The game opened out new avenues to allow the participants to create their own teaching methodology and games in a simple, inexpensive and interesting manner.
5. The participants were aware of nutrients (protein, carbohydrates,vitamins, minerals, fats) but could not relate the nutrients and their functions. The game helped them to clarify this classification.

Several adaptations were suggested by the participants after they had played the game. Some of the adaptations that emerged:

1. Cards could be used to constitute different types of balanced diets using food cards from different group.
2. Balanced diets for different groups could be planned according to their specific needs. Some of these condition could be:

Protein calorie malnutrition, Anaemia, Diarrhoea, Scurvy, Night Blindness.
Needs of : a child/convalescent/adult.

2. David Werner and Bill Bower 'Helping health workers learn'-A book of methods aids and ideas for instructions at the village level-1983.
5. Joshi K 'Playing cards for Nutrition Education' an experimental study' Lady Irwin College, New Delhi 1982.
9. Rau Parvathi'Visual aids for children'(available at VHAI)

Additional food cards (not supplied to participants) could be chosen from the pack. The group members can then provide a description of the problem and reasons for choice of cards.

3. Use of Clue cards(5)(Nutritional Diseases) Each clue card (suggested size: 25 cm x 30 cm) shows:

1. Name of disease
2. Symptoms
3. Deficient nutrients
4. Food sources
5. Instruction for number of cards to be collected to complete the game.

One clue card for each of the diseases: Kwashiorkor, Marasmus, Anaemia, Night Blindness, and Scurvy.

Method:

One card from the clue cards and ten cards from the food card pack will be given to each player. (Total number of players 2-4). Each player will arrange and collect the food cards according to instructions on clue cards as indicated below:

Kwashorkor:		
for Protein	Milk and milk products	-2 cards
	Pulses	- 4 "
	Nuts	- 2 "
	Meat groups	- 2 "
Anaemia:		
	Meat groups	- 2 "
	Green leafy vegetables	- 3 "
for Iron	Dry fruits dates, raisins	- 1 "
	Jaggery	- 1 "
	Any others in the pack	- 3 "
Marasmus:		
	Milk and milk products	- 1 "
for Protein	Pulses	- 1 "
	Nuts	- 1 "
	Meat group	- 1 "
for Carbohydrate	Cereals	- 2- "
	Starchy vegetables	- 1 "
	Sweet fruits	- 1 "
	Sugar and Jaggery	- 1 "
	Ghee and oil	- 1 "
Night Blindness:		
	Meat group	- 2 "
	Green leafy vegetables	- 3 "
for Vit A	Milk and milk products	- 2 "
	Yellow vegetables	- 2 "
	Yellow fruits	- 1 "
Scurvy:	Citrus fruits	- 3 "
	Sprouted pulses	- 3 "
Vit C	Green leafy vegetables	- 3 "
	Any others in pack	- 1 "

Thus the participant is able to:

1. relate the name of the disease to that of the deficient nutrient and foods
2. recognize symptoms of nutrition related diseases
3. be aware of the various foods to be supplemented in the daily diet in order to prevent and treat the disease.

* 5. Joshi K 'Playing cards for Nutrition Education' an experimental study' Lady Irwin College, New Delhi 1982.

4. Sequential Cards: Cards can be made for various health related problems prevalent in an area. For each problem card there will be 3 others in the pack which together in a sequence constitute the treatment or prevention of the disease. eg. 1. Sore eyes- 2 Water - 3. Clean towel - 4. Terramycin drops Cards are distributed to players; the game proceeds like in 'Rummy' and each collects the sequence necessary to solve one particular problem. The first player to collect the sequence wins the game.

5. *Mix 'N' Match Cards:

This card game consists of matching the correct pairs in a dispersed pack of cards. Each 'problem' card has its appropriate 'solution' card. Thus the participant having one of these must find his suitable partner and give reasons for choosing the particular card belonging to the other person.

6. Alphabet food cards: These are cards with alphabets and an illustration of a good item on them. Eg. Milk, Guava etc. grouping of participants would take place depending upon the kinds of health problems, posed. Eg. Those caused by contaminated water, those caused by unhygienic conditions, those prevented by immunization.

Board Games:(10,11)

The Board games require more work and can be drawn on heavy cardboard, cloth or other available material. One such game is the variation of the snakes and ladders game which was introduced to the participants. This comprised of the inclusion of cards with written messages that would either facilitate or hinder the progress. Landing on a square with a 'good' practice allows the player back a number of squares. To facilitate more active participation a clause can be introduced that no participant can go forward without the individual giving a reasonably satisfactory answer with regards to the appropriate move.

eg. Card: Measles immunization taken go forward 5 squares.
reason: Why this helps in nutrition. Similarly, Card: Bottle feeding introduced move back 6 squares. In the absence of a satisfactory reason no moves are permitted.

IV. COMMUNICATION METHODS:

It is important that the participants are able to communicate effectively during the workshop to enable them to work together for mutual beneficiation. Effective communication allows self expression and generated on openness and togetherness in the group. It thus creates an atmosphere which:

- encourages people to be active
- emphasizes the personal nature of learning
- accepts that difference is desirable
- recognizes and tolerates imperfection
- encourages an openness of mind and trust in self
- makes people feel respected and accepted
- facilitates discovery
- permits confrontation of ideas (8)

During the workshop two aspects were dealt with:

1. The importance of effective communication and factors that support it
2. Methods of communication

* (Courtesy N Hilda, Administrator, CSI Campell Hospital), Jammalamadugu, Cuddapah Dt 516434)

10. Ruth Harnar and A Zelmer 'Learning can be fun - VHAI
11. Ruth Harnar, A C Lynn Zelmer and A E Zelmer 'A Manual of learning Exercises for use in health training programmes in India. VHAI and ICI, Canada 1983.
8. Pine G P and Honne P J 'Principles and conditions for learning in Adult Education' Adult Leadership October 1969.

1. The participants were made aware of the various factors which give rise to ineffective communication, and allowed to gain an understanding of good communication. The following exercise was conducted during the initial sessions of the workshop so that the participants could utilise the opportunity to overcome communication problems during the workshop:

Rumour Chain :(11)

Objectives:

1. To demonstrate the shortcomings of one way communication
2. To enable the participants to realise how misunderstandings arise in communication.
3. To make participants aware of the importance of avoiding misunderstandings in order to facilitate effective communication.

Materials:

i) A copy of the original story or message that has been included in Appendix XII

ii) Six slips of paper for dividing the roles of each of the participants.

Methods:

The six participants were chosen and their roles determined as :
1. Raju(Subject) 2. Friend 3. Class Moniter 4. Teacher 5. Principal 6. Dispensary Sister-in-charge.

The story was read aloud to Raju(1) who was asked to convey the message to his friend(2) without help and without asking questions. The message was then repeated in the sequence listed above in a similar manner. The whole group was allowed to take part as observers nothing the message as it was transferred from one person to the next. The exercise was completed by a group discussion and this was linked up with real life situations.

Learnings:

1. It is impossible to remember and repeat a message with too many unfamiliar names and facts
2. Oral messages must be kept simple and short
3. If the listner repeats message the speaker can correct the errors made
4. Messages from original sources are easier to understand
5. Main points should be emphasised
6. A written message is more reliable. Underline or capitalize the main points.
7. Medical terminology should be simplified
8. More than one listener at a time can save time and error
9. Allow adequate opportunities for constant feedback(listner---Receiver) and encourage questioning for reconfirmation of message.

Many of these were noted by observers in the whole group as those hindering good communication. This brought the focus on to learnings for effective communication through an active experience.

2. Methods of Communication:

This aspect was covered by live demonstration by the Audio Visual Departmental Team from Amruthavani Communications Centre, Secunderabad. Since communication carried out depends on one's perception and frame of reference, a variety of methods are possible. Some of these were demonstrated to the group by active participation by group members. The objective of this session was (1) to expose the participants to the various methods of communication available
(2) to encourage the development and trial of new teaching methodologies
(3) to become aware of the advantages and disadvantages of the communication methods.

Method:

1. Visuals were demonstrated by group members. Each of the 4 groups were given a symbol which they depicted by body movements.(eg. Bridge, flower in bloom, water pump)

2. Audiovisuals: Eg. simple illustrations, flash cards, flip charts, puppets etc. used in order to reinforce teaching. The user and the language used is more important than the material.
3. Mimes can be performed individually or in groups and are entertaining and easily capture the audience to bring home the desired message.(eg. Dentist, Hotel owner).

The salient features of effective communication media can be summarised as:

1. Dialogical
2. Accessible(to touch and experience)
3. Creativity oriented
4. Participatory
5. Emancipatory-Liberating
6. Democratic.

Learnings:

The various media demonstrated can be easily adapted to teaching health related themes. The participants were exposed to these and this resulted in an increased motivation to Health education. It served as an encouragement to participants to use and experiment with different communication media to aid in making teaching interesting and innovative.

V. FUTURE PLANS:

A Central Team formed, comprised of the following participants:

1. K S Darshanan, Physical Training Instructor
   St Theresa's High School, Erragade 500018, Hyderabad, A P.
2. Prof G Baltha Raju, Convenor, Principal
   Montfort High School, Khammam, A P 507003.
3. Ms Girija Krishnamurthy, School Assistant
   Holy Family girl's High School, Trimalgiri, Secunderabad, A P 500015.
4. Ms N Hilda, administrator
   Nuton Education Unit and Public Health Project, CSI Campbell Hospital, Jammalamadugu, Cuddapal A P 516434.
5. Mr B Sudheer, Facilitator, Community Development
   Community Health Outreach Programme, B C Hospital, Nellore A P 526002.
6. Dr Prasad, In-charge ,Community Health Programme
   CROSS Office, Bhongir, Nalgonda Dist, A P 508116.

Team Functions:

The group will be meeting shortly to decide on the plan of actions to be adopted in order to initiate school health programmes. The above members were carefully chosen so as to include individuals from both the educational and community health fields.

Mr D Rayanna, Executive Secretary AP VHA will coordinate the activities of the group.

In order to keep the health groups and school authorities in the field enthusiastic, about school health programmes, it was decided to start a periodical with School Health Programme News . This periodical, will provide information about various activities undertaken and performed by those involved in school health programmes(Schools, AP VHA, VHAI).

The School Health Mirror will be printed as a poster sized Newspaper which can be displayed on bulletin boards. The language used will be English and Telugu each on opposite sides of the poster.

REFERENCES:

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2. David Werner and Bill Bower 'Helping health workers Learn' a book of methods, aids and ideas for instructions at the village level 1983.
3. Guilbert J J 'Educational Handbook for health Personnel' WHO Offset publication No.35 1981.
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   b. " " 1984 "
5. Joshi K 'Playing cards for Nutrition Education' an experimental study Lady Irwin College, New Delhi 1982.
6. Mackenzie Norman et al 'Teaching and learning' UNESCO 1970 pp 44-50
7. Park J E and Park K 'Textbook of preventive and social Medicine' (A treatise on community health)8th edition 1980.
8. Pine G P and Honne P J 'Principles and conditions for learning in Adult Education' Adult Leadership October 1969.
9. Rau Parvathi 'Visual aids for children'(available at VHAI)
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12. Wakeford R E 'Teaching for effective learning and chart guide for teachers of health auxilaries' Remaha pedagogicol booklet,WHO 1974.

Appendix	Content
I.	List of participants, their position, addresses, education experience, expectations.
II.	Schedule
III.	Methodology used
IV	Major outline of Areas Covered
V.	Handouts
VI.	Statistics quiz
VII.	Roles and responsibilities of school health training team.
VIII.	School Health Record.
IX.	List of health problems, for priority setting
X.	Advantages and disadvantages of Teaching Methods and Educational Media.
XI.	Food Cards, Illustrations.
XII.	Rumour story

APPENDIX I.I

Name	Age	Position	Address	Education	Experience	Expectation
1. Girija Krishnamurthy.	25	School Assistant	Holy Family High School Trimalgary P O Secunderabad 500015.	BSc MEd	5 yrs	Fundamentals of school health, ideas for creating an awarenes, improvisation first aid
2. Sr Raymond Medababini	34	Incharge CHP	Vijay Mary Convent Siripuram P O Guntur Dist 522401.	Gen.Nursing A grade, Midwifery P H N	8 yrs	Organization of rural community school health programme
3. Sr Stanislous	40	Headmistress	St Anne's Hospital Jaggayyapet	B A B Ed	4 yrs	Bring up school children in a healthy atmosphere, organize school on healthy grounds.
4. Mr Simon Peter		Facilitator, Comm. Devpt.	Community Health Outreach c/o BC Hospital Nellore, AP 524002.	BD+ 6mthsRUHSA (Comm.Devpt)	6moths CHOP Udnigim.	To learn how to organize, Ready to start.
5. Mr B Sudheer		"	"	B A + (6mths RUHSA Comm.Devpt)	6mths	CHOP Ramapatnam
6. Sr Elizebeth P		Assistant Co	"	RNRM+Public Health 6mths.	Experience in Com.Health	
7. Cecily Mahekal	28	Teacher	St Joseph's E M High School Dargamitta Nellore, A P.	BSc, BEd	10mths	Solving health problems, teaching techniques.
8. B Mothila	26	"	"	SSC	1 yr	"

APPENDIX I-2

Name	Age	Position	Address	Education	Experience	Expectation.
9. K S Darshanan		Physical Education Teacher	St Theresa's High School Erragadda Hyderabad 500018.	B A Dip.Ed	2 yrs	Personal hygiene and environmental hygiene, common diseases, foods, and nutrition, growth, safety and first aid family life education, health conditions in towns, socialization, Behaviour, spirit of equality.
10. Bro.G Baltha Raju	33	Principal	Montfort High School Khanmam, AP 507003.	B A BEd	1 yr	
11. Dr Bhaskar Naidu	35	Medical Superintendent	KLC Hospital Reniganta 517520 Chittor Dist, A P.	MBBS, DO	10yrs	
12. Channakistail and team	25		c/o Dr Prasad Health Coordinator CROSS, Bhongir 508116.	SSC	5 yrs	Problems of school children in rural areas.
13. Dr Kumura Ratnam Kota	27		Sompeta, Srikakulam Dist 532284.	BSc MBBS	Nil	
14. P Martha Margaret	40		CSI Campbell, Jammalamadugu Cudarah 516434	Dip Nursing Education (Comm. Health)	16 yrs	How a school health programme can be enriched.
15. N Hilda	23	Nutrition Education &Public health project(administrator)	"	MSc(Home science)	11 mths	starting preceding.

APPENDIX I-3

Name	Age	Position	Address	Education	Experience	Expectation
16. Theresa		Volunteer	C„S I	Nursing student		
17. Imaca Mary	36	Headmistress	RCM Elementary school Madigula, Vizag Dist 531027.	B A	15 yrs	
18. D Kondalra		Secretary 'REVALTES'	Creater Vikokhs, Leprosy Treatment & Health FDN Scheme, AVN College Rd Visakhapatanam 530001.			Early symptoms of leprosy in school children health education
19. Sr Mary V A	33	Headmistress	RCM Girl's High school Madugule, Visakhapatanam A P 531027.	BA, BEd	12 yrs	Practical steps to be taken to improve health conditions of children from labour class families whose income day- R_s.5/-
20. Sr Moksha Mary	42	Warden	Regeina Mundi Convent Fatima Nagar, Kazipet Warangal 506003.	Middle Training	8 yrs	
21. Sr Thomasamma Nettur	41	Warden	"	"	18 yrs	
22. Sr Bertilla	39	Medical Coordinator.	St Joseph Convent, Nallapadu, Gundur 522005.	RNRM		Organizing school health programme.

APPENDIX II

WORKSHOP : ORGANIZING SCHOOL HEALTH PROGRAMMES - SCHEDULE

Date	9.00-10.30 I	1100-12.30 II	2.00-3.30 III	4.00-5.30 IV
7.9.83	Introduction and Expectation.	Common school health problems Priority setting.	Excercise in effective communication-Rumour chain.	Main components of a school health programme,role of participant,role of others.
8.9.83	Health problems and health services in the country, statistics quiz.	Govt.Health Team:Niloufer Hospital, Institute of Child Health, Hyderabad. -Govt school health services -ENT problems, eye problems child to child programme.	Dental problems	Health education-objectives and approaches, sharing material,Nutrition game.
9.9.83	Organizing and planning a school health program approaches and experience.	Record keeping,Need based data collection and evaluation.	Available resources, materials, personnel.	Communication media and techniques.
10.9.83	Health education-Demonstration and groupp sharing.	Drawing up a school health curriculum.	Drawing up action plans for school health programs. Evaluation.	

APPENDIX III-I

METHODOLOGY

Subject/Session	Methods	Learning Experience	Led By	Materials Required
Day I- 7.9.83				
1. Introduction	Whole group partng and sharing.	Introduction to school health programme Introduction of partner, expectations Existing concept of shool health programme.	Mira	White chart paper slips Felt pens
2. Common Health problems.	small group then whole group	Listing common health problems, priority setting, schocl and community's Diagnosis.	Mira	Board, cut out symbols
3. Communication Methods.	whole group	Effective communication a) one and two way communication, b) rumour story.	Tina	Copy of rumour story, picture
4. Components of school health programme.	small groups then big groups.	Formulating main components of school health our specific roles and that of others	Mira	White chart paper, felt pens handouts.
Day 2- 8.9.83				
1. Why school health program	Individuals whole group	Statistics guessing, implications of statistics.	Mira	Statistics quiz
2. Health services common health problems	Whole group	Knowledge of health problems in school children Status of govt school health services ENT problem Eye problem Dental problem Child to child	Dr Mathur Dr Sathyanarayanan Dr Visramasimha Reddy Dr Narayana Dr Nagaraja Rao	Slides
3. Health Education	small group group sharing.	HE approaches, content and objectives, sharing material.	Tina	Nutrition game, chart booklet, cards

APPENDIX III - 2

Day -3, 9.9.83

Subject	Method	Learning Experience	Led By	Materials Required
1. School health program organizing, planning	group	approaches and experiences, roles and responsibilities	Mira	Handouts, manila paper, felt pens
2. Recording keeping	small groups group sharing.	sharing of record evaluation, and maintainance	Mira Rayanna	various school records, VHAI school health record
3. Communication media	small group	Demonstration of techniques, media skills	A V Department Amruthavani	Flannel graphs, flip charts, flash cards, puppets, etc.
4. Health education	whole group	Use of HE material, Demonstration and sharing.	Mira Tina	Appendix V, VHAI WHO folders, CDC

Day-4, 10.9.83

1. Health education	small groups presentation and group sharing.	Method and techniques used for teaching common health problems.	Mira	AKAP booklets, posters, flannel board, chart paper, felt pens
2. School health curriculum	whole group small group	Objectives approaches	Rayanna	White chart paper, felt pens
3. Evaluation	Individual sharing.	Responses to workshop content and relevance.	Mira Rayanna	Questionnaire(Appendix VI)

APPENDIX IV

Major outline of Areas Covered:

1. INTRODUCATION AND EXPECTATIONS
2. SCHOOL HEALTH PROGRAMMES:
   1. Implications and objectives
   2. Teachers involvement in school health
   3. Components of a school health programme
   4. Organizing and planning of school health programme
   5. Record keeping
   6. School health curriculum
3. HEALTH EDUCATION
   Approaches, Objectives, Resources
   1. Priority setting of common school health problems
   2. Health education methods of some school health problems-group presentation.
   3. Nutrition game.
4. COMMUNICATION METHODS
   Media and techniques.
5. FUTURE PLANNING AND IMPLEMENTATION

APPENDIX VI

Health Statistics Quiz

1. What percentage of India's population is under 15 years of age?
   20, 32, 42%
2. What percentage of the population is between 6 and 15 years of age?
   15, 25, 35%
3. What percentage of children leave school after the primary level of education? 50, 75, 80%
4. Number of children who become blind every year due to Vitamin A deficiency is 20,000, 40,000, 30,000
5. What percentage of health problems can be dealt with by a trained village health worker? 50, 60, 70%
6. What is the proportion of beds occupied by diarrhoea patients?
   1/3, 1/5, 1/10
7. What percentage of India's population lives in the rural areas?
   60, 70, 80%
8. What is the percentage of doctors in rural areas? 20, 30, 40%
9. What is the existing doctor Nurse ratio? 1:2, 1:3, 1:4
   (Recommended ratio; 1:3, 1:1, 1:4)

APPENDIX VII

Role of Teacher Health Guides

1. Health Appraisal and recording of Ht and Wt & vision of all pupils
2. Arrange Medical inspection of pupils with visiting school health teams
3. Dispensing medicines for minor ailments
4. First Aid, Primary care of common ailments & referrals
5. Promote Immunization
6. Prevent spread of common diseases by early case detection and application of quarantine regulations.
7. Health Education
8. Training Supervision of student health guides
9. Record keeping
10. Organise: Health Education seminars exhibitions, School Gardens
11. Working with Training Team, Dispensary Sister & community for health of pupils.

Criteria for Selection of Teacher Health Guide :

1. Interested & concerned about children's health
2. Teacher with creativity & ingenuity
3. Good support with the children
4. Good communication & teaching skills
5. Respected by the rest of the teaching community.

Role of student Health guides:

1. Help in Record keeping
2. Daily Appraisal of class children for cleanliness
3. Assist teacher health guides in dispensing drugs
4. Promote immunization
5. Help organize school garden, school meal programme
6. First Aid
7. Create Health awareness among classmates and other children in community through child-child programme
8. Help in organizing exhibitions films and medical check up or whenever help is needed.

Criteria for selection of student health guides

1. Believes in cleanliness.
2. Good manners & pleasant accepted by classmates
3. Has leadership Qualities
4. Good in studies
5. Enthusiastic about school health programme
6. School health guide would be involved in helping plan the course curriculum & training.

Functions of a school health Committee:

1. Survey and priority setting
2. Setting objectives Develop long range plans
3. Concurrent Evaluation
4. Setforth new objectives as and when needed
5. Mobilization of resources and their collection
6. Compiling & reporting of data
7. Organizing institution training for teachers & students
8. Organize health education programmes
9. Coordination of school & community health activities close inter relattionship between mahila mandals, panchayat, agricultural development officials .

Role of Headmaster:

1. Arrangement for periodic medical examination & health appraisal.
2. Good environmental sanitation/(water, ventilation, waste latrines etc)
3. Planned health instruction and motivating teachers for effective health teaching of students
4. Coordination of health activities involving health & educational personnel parents, teachers, community
5. Exclusion of common diseases laying down rules pertaining quarantine.
6. Helping school personnel meet their health needs.
7. Collection of school health funds- budgeting & maintainance of accounts (responsibility can be delegated to someone)
8. To work with school health committee
   -to identify & solve school health problems
   -to share responsibility & decentralize decision making.

Functions of a school health training team:

1. Training teachers in basic health care and in delivery of health education
2. Help with medical inspection
3. Immunization
4. Health education
5. Supply of eye chart, growth chart, weighing machine etc.
6. Inservice training of teachers & students & their follow up
7. Management of referral cases
8. Follow up visits to school health units
9. Meeting regularly to plan and execute school health programme
10. Motivation of school health personnel and helping them to solve health related problems.

APPENDIX - VIII

Immunization Record

If immunisation is done mark (✓) in the given space. Also write the year of immunisation.

	1st	2nd	3rd	Booster
DPT (Diphtheria Pertusis Tetanus)				
Tetanus Toxoid				
Polio				
BCG				
TABC				
Others				

Past history of	If so, frequency of episodes. Date of last occurance
Fits	
Discharging ears	
Asthma or chronic Cough	
Nocturnal enuresis (Bed wetting)	
Measles	
Chicken Pox	
Whooping cough	
Mumps	
Typhoid	
Malaria	
Dysentry	
Any other	

The above data is collected at the time of joining school ie. only once.

	Primary school (on joining)	Middle school	High school (on leaving)
Height			
Weight			
Chest(if easily possible			
Personal hygiene			
Regularity of attendence			
#satisfactory/unsatisfactory			
Educational attainments G /A/P			
Foo Habits G/A/P			
Posture G/A/P(stoops)			
Gait N/abnormal(Limps)			
Speech			
Behaviour			
Nutrition G/A/P			
Nutritional Deficiencies			
Protein-calorie			
Vitamins			
Iron			
Iodine(Goitre)			
Skin(Problems)			
Lymph nodes(enlarged)			
Sacly and Hair			
Eye problems			
Ears "			
Nose "			

	Primary school	Middle school	High school
Teeth and Gums			
Mouth			
Throat			
Neck			
*Chest -Heart			
-Lungs			
*Abdomen-Liver			
-Spleen			
-Hernia			
any other			
*Genitalia			
Spine			
Bones and joints			
Nervous system			

Remarks

Signature: Teacher .....

Nurse/Doctor .....

Health appraisal by Doctor/Nurse

Code: (✓) satisfactory

(X) needs observation

(XX) needs immediate attention

(C) correction of defects

(PD) permanent defect, correction not possible

(#) satisfactory/unsatisfactory

G/A/P Good/average/poor

(*) to be checked by nurse practitioner or Doctor.

APPENDIX VIII

SCHOOL HEALTH RECORD

Centre .....

Zone/Sector(Perish) .....

Name of school ....

Type of school

high middle uppler pri. lower pri. any other

Addresses of
School Village Panchayat Block

....

Name of child ..... sex .....

Date of birth .....caste/Religion ...

Father's/Guardian's name .....

Address ....

Occupation-father.....Education .....

mother ....

Annual gross income .....

Socio economic status . Good Fair Poor very poor

Health status of parents and siblings.

.....

(any communicable disease like leprosy, TB)

Home conditions

Type of house(Pukka/Kuchcha)

Total number of rooms

Total number of occupants

Drinking water facilities

Latrine facilities

Individual/public

Growth Record
(Standard Growth curve of the State/Region to be incorporated)

Height in centimeters

Date	Age	Height	Weight	Vaccination

Weight in kilograms

Note: Both the graphs to be plotted starting from the left hand side
Use full line for height curve and dotted line for weight curve.

Record of illness

Date	Problem	Treatment	Signature

Record of referrals

Date	Referred for	Diagnosis	Treatment given and results

APPENDIX IX

List of Health Problems - used for priority setting(Day 1 session 11)

1. Sore eyes
2. Ear Pain and discharge
3. Tooth ache
4. Chronic cough : TB
5. Lice
6. Chest pain
7. Joint pains
8. Fungal Infection: Skin
9. Head ache
10. Deafness
11. Burns
12. Breathing problem : Asthma
13. Bites -wasp,
    - Scorpion
    - snake
14. Dental caries/Bad teeth
15. Poor vision
16. Poisoning: Kerosene, DDT, Drugs
17. Disability: Polio, Fracture
18. Common cold, sore throat
19. Poor growth
20. Sore mouth
21. Aneamia
22. Stomach ache
23. Cuts and wounds
24. Loose stools
25. Behaviour problems
26. Worms
27. Accidents
28. Weakness- Malnutrition
29. Fever
30. Itchy skin (Scabies)

APPENDIX X

Advantages and Disadvantages of certain teaching methods and of different educational media (3)

I Lectures

Advantages	Disadvantages
1. Apparent saving of time(for teacher)and resources	1. Keeps the student in a passive situation
2. Presence of teacher	2. Does not facilitate learning how to solve problems
3. Covers a large group of students.	3. Offers hardly any possibility of checking learning progress.
4. Gives a feeling of security	4. Does not allow for individual pace of learning.
	5. Low receptivity.

II. Practical Work/ Field work:

Advantages	Disadvantages
1. Puts student in active situation.	1. High personnel, transport and material costs.
2. Covers a limited group of students	2. Poor standardisation.
3. Permits evaluation of degree to which objectives, practical and communication skills have been attained.	Narrow limits of utilization, therefore requires careful planning.
4. Develops qualities of observation and division taking.	
5. Ensures closer contact with reality (Professional, health situation of country, colleagues and teachers).	
6. Permits comparison between practice and theory.	
7. Enables student to develop selfconfidance.	
8. Increases variability.	

III. Books, Handouts, Programmed Learning from books and stimulation (self learning packages)

Advantages	Disadvantages
1. Enables student to work at his own pace.	1. Necessitated special educational competence.
2. Facilitates self evaluation.	2. High additional investment costs (in time and money)
3. Makes mass teaching possible with high efficiency.	3. No group dynamics
4. High availability	
5. Facilitates decision taking-promoting solution of complex problems	
6. Reduces risks for patient or society.	
7. Avoid bias transmitted by bad teachers	
8. Allows a good teacher to save time that can then be spent on more complex activities such as interpersonal reactions.	
9. Can be kept up to date with new scientific development and contain references to other documents.	

IV. Real Objects and specimens:

Advantages	Disadvantages
1. Present reality not substitutes.	1. May not be easily obtainable
2. Three dimensional	2. Inconvenience of size, danger in use
3. Permit use of all senses in study	3. Costly or not expendable
	4. Usually only usable in small groups
	5. Sometimes easily damaged
	6. Problems in storages.

V. Models and stimulation Device:

Advantages	Disadvantages
1. Three dimensional and concept of reality.	1. Craftsmanship required for local construction.
2. Size allows close examination.	2. Similar model often expensive
3. Good for magnified situation	3. Usable for small groups
4. Can be used to demonstrate function as well as construction.	4. Models often easily damaged
5. Can permit learning and practice of different technique.	5. Never same as performing technique on a patient. Beware of faulty learning.
6. Some can be made with local material .	

VI. Graphics (Charts, diagrams, schemator drawings) posters, paintings, photographic prints.

Advantages	Disadvantages
1. Promote corelation of information.	1. For small audiences only (unless projected with epidiascope)
2. Assist organization of material.	2. For effective use of good duplicating equipment and training staff needed.
3. Photographs nearer to reality than drawings, but association often duplicated	
4. Usually easily produced and duplicated.	
5. Easy to store, catalogue, and retrieve.	

VII Blackboard or Flip chart:

Advantages	Disadvantages
1. Inexpensive, can be made locally.	1. Back to audience
2. Usable for wide range of graphic representation.	2. Audience limited to 50 or so
3. Allows step by step build up or organization of structure or concept.	3. Careful drawings erased not preserved for future use, except in the case of flip charts
	4. Considerable skill required, for effective use.
	5. Rarely taught to teachers.

VII. Flannel Board (flannel graph)
(most of the comments apply also to magnitic board)

Advantages	Disadvantages
1. May be used repeatedly	1. For limited audience only
2. Usually preparable from locally available materials.	2. Difficult technique to use convincingly.
3. Good for showing changing relationships	
4. Holds attention if well used.	
5. Can be adopted for group participation.	

IX. Projectable Media:

a) Still pictures- Opagne projection (epidiascope)

Advantages	Disadvantages
1. Enlargement of drawn or printed materials for large audience.	1. Demands total darkness for clear projection (except with very expensive models)
2. Obviate need for producing slides and transparencies.	2. Bulky machine, difficult to transport
3. Enlarged images may be transferred to chart or blackboard for copying.	3. Electricity required
4. Small objects and specimens may be projected.	

b) Slides and Filmstrips:

Advantages	Disadvantages
1. Suitable for large audience	1. Fixed order of grames in filmstrip restrictive use.
2. Relatively easy production and (in black and white) reproduction.	2. Need partial darkness for viewing unless near screen or daylight screen used.
3. Cheapest current forms of visual medium.	3. Duplication of colour slides expensive.
4. Easily adoptable to self learning packages.	
5. Equipment available for viewing or projection without electricity source.	

c) Transparencies for overhead projection:

Advantages	Disadvantages
1. Projectable in full daylight to large audiences.	1. Electricity required
2. Presented facing audience	2. Equipment and materials for making sophisticated transparencies expensive
3. Relatively easy to prepare with local materials.	3. Not usually suitable for photographic material due to cost(although adeption available to take 35 mm slides).
4. Subjects can be drawn in advance or developed by stages with the group.	4. Usually restricted to teacher use, as it is not easy to adapt for the learner to use.

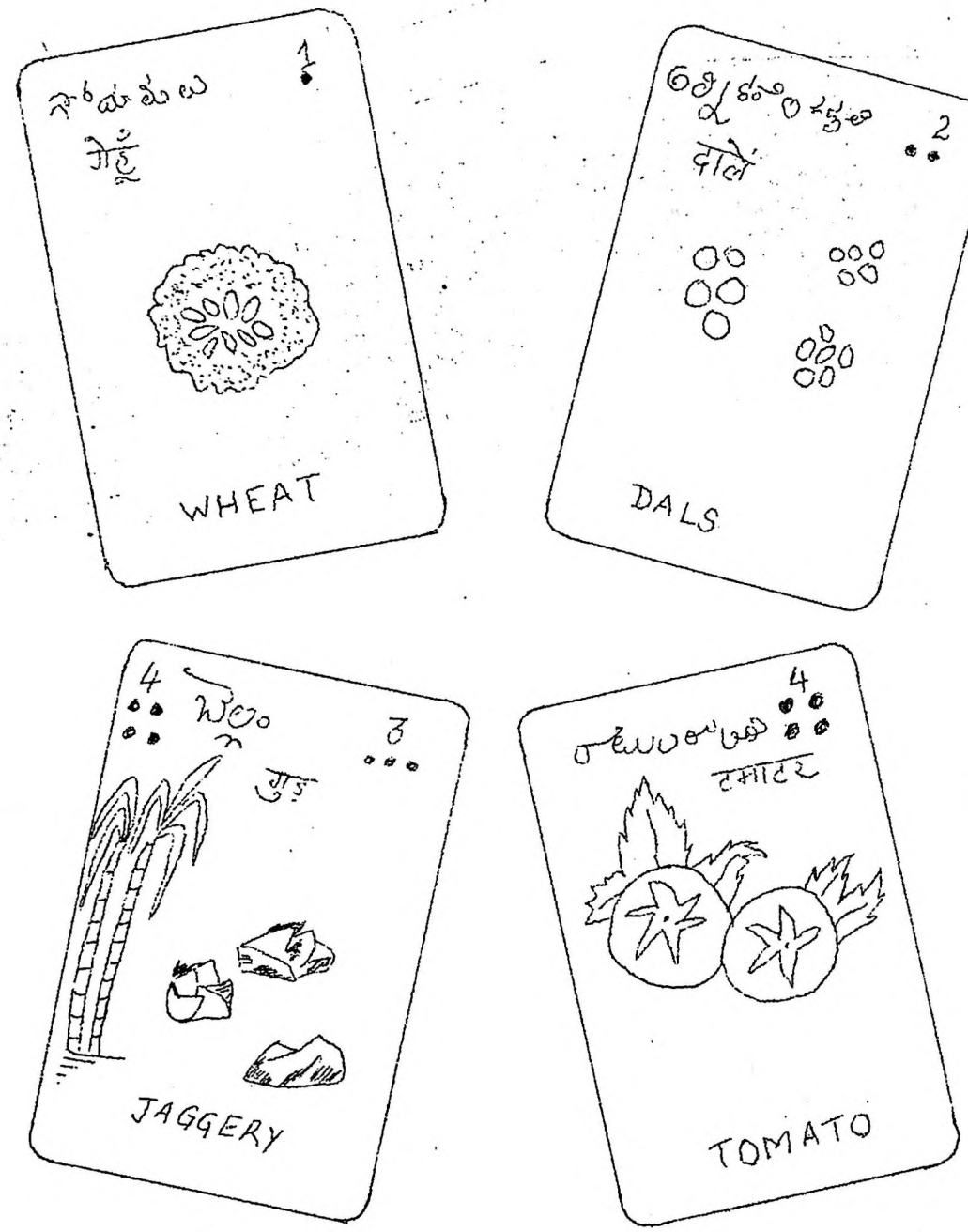
d) Films 8 mm and 16 mm:

Advantages	Disadvantages
1. Close to reality with movement and sound.	1. Does not permit small pacing
2. Suitable for large audiences(16mm) for small groups only (8 mm)	2. Films costly and difficult to produce.
3. Compression of time and space.	3. Individual films relatively expensive
4. Emotive, can develop attitudes pose problems demonstrate skills.	4. Electricity required.
5. Good learning source if proceeded by teachers introduction and followed by discussion.	5. Equipment difficult to transport
	6. Darkness needed for viewing
	7. Imported film may contain inappropriate information.

APPENDIX XI.

CARD SAMPLES FROM DIFFERENT GROUPS:

Card Illustration:



The actual foods was displayed on the cards wherever possible.(eg. Dals (Card 2) ,wheat, jowar etc.(Card 1). In other cases pictures could be pasted on to the cards for a more realistic effect.

APPENDIX XII

Rumour Story

Subject : Raju:

I have a pain in my stomach since yesterday afternoon. I stole and ate 3 raw guovas from Pyare's garden. My grandmother says Devi's mother has caste an evil eye on me because she is jealous . My father took me to the new doctor's dispensary and the doctor says I have a worm problem called ascariasis. I couldn't even pronounce it earlier, I requested him to write it down for me and repeat it 2-3 times. Devi's mother's evil eye has given me the worms problem. I am going to be eaten up by worms. I can feel them spreading all over. I think I will die in a few days with Ascariasis. What is the use of going to school-say goodbye to my friends. I think they will all miss me except Devi's mother.

PROVISION OF PRIMARY HEALTH CARE THROUGH REHBAR-i-SEHATS
A PROJECT IN KOT BHALWAL BLOCK, JAMMU (J and K STATE)

by

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Government Medical College, Jammu.

Shrivastav Committee [1975] emphasized that school teachers can play pivotal role in imparting health education and first aid service to the masses at village level. Arguments favouring involvement of school teachers in community health work are many.

In May, 1975, Govt. of Jammu and Kashmir decided to start pilot projects, one each in the region of Srinagar and Jammu. It was decided to designate these teachers as Rehbar-i-Sehats [Health guides]. Role of the teacher was visualized in the promotion of health, early detection, referral of cases, minor treatment and health education. The syllabus for the training of teachers was evolved to cover Environmental Sanitation, Nutrition, M.C.H. and F.P., common Communicable Diseases, School Health, Health Education and first aid treatment.

The duration of the training period was 3 months and it included theory and practical training. The training programme was conducted with the help of the staff from Medical College, Directorate of Health Services and related agencies. Periodic in-course assessment and an objective type end course evaluation were conducted. The results were extremely satisfactory.

...2...

The Rehbar-i-Sehats maintain a record of referral done, health education talks, first aid and minor treatment given, school health and an account of drugs and first-aid materials. As a Government policy, it has been decided that Rehbar-i-Sehats will be paid an allowance of Rs. 50/- per month for this work provided he/she reside in the village of his/her posting. Supervision and coordination of their work is being done by a Block Medical Officer. This is an experiment, the lessons learnt of which may prove useful for the extension this project to a wider population.

The Rehbar-i-Sehat scheme was studied and evaluated by a team appointed by the Government of India, in the Ministry of Health and Family Welfare in May, 1979.

T.N.-22

USE OF SCHOOL TEACHERS IN THE DELIVERY OF PRIMARY HEALTH CARE EXPERIENCES AND EVALUATION

by

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P.O. Ambathurai R.S. Madurai District, Tamil Nadu 624309.

Objectives

To study feasibility and effectiveness of resident school teachers for specific components of P.H.C.

To specify their roles and tasks

To assess their relative effectiveness under varying inputs

To identify problems and suggest a suitable methodology

Selection of Teachers, Training and Monitoring

18 teachers [15 male, 3 female] were selected, with 18 controls by stratified sampling from 2 Blocks.

All the selected teachers received an honorarium of Rs. 50/- p.m. as incentive.

Training was similar to that of CHWS - for 3 months. They received medicines, dressings and stationery.

For the experimental period of 2 years, a research team monitored the work every fortnight.

Evaluation

Baseline data was collected at the beginning of the project.

Terminal Evaluation is proposed to find out:

- Feasibility
- Effectiveness
- Roles and tasks
- Impact-based on morbidity

...2...

Roles Performed by the Teachers

Minor ailment treatment

Referral

MCH - idendification and registration of pregnat mothers

School Health - improvement of sanitation, health education.

Environmental Sanitation: Chlorination of wells, construction of soakage and compost pits

F.P. - To act as depot holders for condoms

Leprosy and Tuberculosis:identification and referral

Vital Statistics:importance of registration stressed

Health Education:Individual and informal contacts circulation of pamphlats, health meassages

Conclusions

Feasibility: Teachers could be relied up for the treatment of minor aiments and referral, registration of pregnancies, school health, sanitation, etc. They were willing to continue with this work. But they were hesitant about being Community organizers or change agents.

The Community were prepared to accept the services as long as the Govt. paid for it.

The PHC Staff found the teachers quite helpful in antenatal registration, immunizations, vital statistics and school health. The total cost of medicines worked out to Rs. 67/- per month per teacher.

Papers CH2-7

TEACHER PUPIL INTENSIVE STRATEGY.

A New Approach in Health Delivery.

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The perspective.

The existing health delivery systems, in particular the school health programme in the developing countries, are in general, blue-print models of the western systems where-in emphasis is placed on highly skilled professionals and advanced technology. Is this relevant in the context of a developing country with shortage in material and manpower resources? Can the community (Teachers and Pupils) be involved and pursue a system of 'Health by the pupil' for a more effective health delivery? Can the motivated teachers and pupils be used as community health promoters?

The strategy.

The Kangazha model of school health care delivery which was experimented on a 10,000 student population has identified two functionaries - that is the teachers and the pupils - who can play effective roles in a strategy of intensive and resourceful participation by motivating and training them and establishing school based health units.

Health problems in school children - a new look.

In an analytical frame-work relevant to this approach we find that over 80% of the morbidity in our school children is constituted by relatively simple ailments such as deficiency states and skin diseases which are manageable at the school level. Trained teachers are able to recognise them and institute remedial measures. Only less than 5% of the morbid group required base hospital follow-up. It is also seen that dental caries and other diseases are highly prevalent and therefore dental prophylaxis demand special attention.

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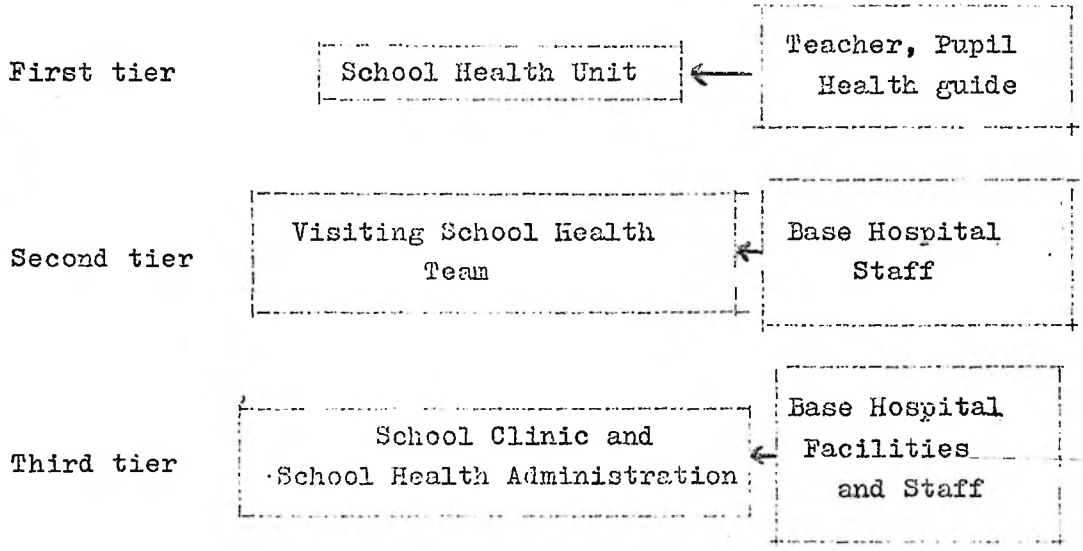
* Chief Pediatrician and Associate Director of Community Health and Development Project M.G.D.M. Hospital Kangazha. Paper presented at 15th National Conference of Indian Academy of Pediatrics at Madurai. Winner of James Flett endovement Award and gold medal for research in Social Pediatrics (1978).

TEACHER PUPIL INTENSIVE STRATEGY
A NEW APPROACH IN HEALTH DELIVERY

Programme profile.

A three tier organisation profile with the school-based health unit manned by teacher and pupil health guides as the first tier, a visiting team as the second tier and the base hospital as the third tier was adopted as represented below.



A phased approach and a strategy of grafting inputs was adopted as shown below. In the first two phases as shown here the services were confined to the school and in the third phase the school health guides were mobilised to the community.

Phase	Approach	Target
I	Training teachers	Pupils
II	Training pupils	Entire school community.
III	Extended training	General Community.

Extract from: The paper "Teacher pupil intensive Strategy". by Dr. M.V Joseph, Chief paediatrician and Associate Director, Community Health and development project, MGDM Hospital Kangazha.

The new functionaries and their functions.

A trained teacher is the hard core in this programme, and is skilled for the following functions through a training programme which commences as an institutional training and continues on an inservice basis. The trained teachers have the following functions. 1. Health appraisal and recording of Height, Weight and vision of all pupils. 2. Arranging medical inspection of pupils with visiting school health team. 3. Dispensing of medicines. 4. First aid, primary care of common ailments and referrals. 5. Promotion of immunisation. 6. Prevention of spread of communicable diseases by early case detection and application of quarantine regulations. 7. Health education and 8. Supervision of student health guides. The student health guides play an accessary role as follows. 1. Record keeping. 2. Daily appraisal of the health of pupils, and reporting. 3. Assist teacher health guides in dispensing. 4. Promote immunisation. 5. Organise school meals, and vegetable gardens. 6. First aid. 7. Create health awareness. 8. Organise health education seminars, exhibition, film shows. 9. Community education in nutrition and environmental hygiene.

Health guide training - the frame work.

The teachers and the pupils are enabled to perform the above functions through a skill oriented training, knowledge being limited to optimal levels. Informal education model through group discussions, role playing and demonstrations were found to be more useful than formal methods. The teacher health guide training is offered through a 4 days institutional training at the base hospital, or health centre followed by inservice training during the school visits of health team. The students' training consist of four half days at weekly intervels at the base hospital. Of late a 'built in' system for student training is adopted where the teachers themselves are enabled in their training to trains a batch of students to assist them and only the evaluation of school level training being alone at the institutional level. A primary health centre and health unit can be the site for training of these guides.

Priorities and inputs.

The programme inputs were decided, based on the local priorities. A school based primary curative care facility was considered the first among the priorities in view of the high prevelance of common ailments manageable at the school level. Dental health and prophylaxis, control of communicable diseases, promotion of nutrition and health education of pupils were considered important among the priorities. Finally there was felt a need for a newer and a simpler system which is primarly school based. A package of services consisting of 1. Primary curative care through school based dispensaries manned by teacher and student health guides. 2. Dental health and prophylaxis. 3. Monitoring of growth and development. 4. Vision and hearing screening. 5. Immunisation of school children. 6. Nutrition education. 7. Special care for scholastically backward or handicapped. 8. Health education and school sanitation are offered through the programme.

Mobilised to the community.

In the third phase the health guides are mobilised for general community service through a seven point action programme. This programme was launched as a summer scheme with the following targets for each health guide. 1. Immunise ten underfives. 2. Vit.A prophylaxis for ten underfives. 3. Compost and soakage pits for five houses. 4. Chlorinate five wells. 5. Kitchen gardens for five houses. 6. Five simple nutrition messages to reach ten families. 7. A simple lesson in dental hygiene for ten families.

Cost and evaluation.

The programme is designed as a community supported one in that part of the cost is met by the beneficiaries by contributions to a special fund formed in the school for the purpose. Fig.I depicts the cost analysis under the various heads. It can be noted that a contribution of 50 Ps. by a student and equal contribution of 50 Ps. by the institution or government per student per year would suffice to run this programme.

A concurrent evaluation using evaluation models of Goal Effectiveness (GE) realised efficiency (cost benefit analysis) and potency efficiency (PE) revealed very satisfactory results. Fig.II shows the percent reduction of common ailments. As shown here, there was a significant reduction of common ailments like Anaemia and other deficiencies, Scabies and so on. An improvement in the school attendance was observed. This was attributable to the availability of first aid and minimal medical care at the school level. Improvement in scholastic performance, probably related to correction of Anaemia and other deficiency states was also noticed.

Appropriate technology and Methodology.

A low cost protable dental unit locally fabricated and tthe school dental service grafted to the school dental programme is a contribution which comes through this programme. A new device for the screening of hearing called cassette record audiometer is another low costs appropriate technology developed. The resourceful participation of the school community make this programme low cost, but of high quality and hence appropriate for a developing country like ours.

Self reliance in Health.

In conclusion a grass root approach of motivating and training teachers and pupils as health guides and establishing school based health units can be an effective method of health care in the school community. The trained teachers and pupils can also play an effective role in other community health action programmes and thereby extend the philosophy of community self reliance in health.

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as routine screening at the pre-school level.[9] As a measure of telling us what we want to know—i.e., whether children can hear the spoken word—the VASC audiometer for pre-school children (used in the Burlington screening programme) and the pure-tone audiometer (used in the present study) are more appropriate. Tympanometry is mentioned because it is in great vogue as a screening tool in North America. We did not use it because it is too sensitive.

The next possibility is lack of compliance with recommended therapeutic measures, but there is no reason why parents should comply with regard to vision problems (screened children have significantly fewer vision problems than unscreened, and 58% more screened children wear glasses) and yet not comply with regard to hearing problems.

The third and likeliest possibility is that medical and surgical therapies for the commonest cause of hearing deficit, namely, serous otitis media, are not effective. Olson et al.[7] found that children with serous otitis media did not improve when treated medically, and Brown et al.[8] found no improvement in hearing beyond the initial 3 months in ears in which tubes had been inserted. Similarly, there is no conclusive evidence[9] that tonsillectomy and adenoidectomy materially affect serous otitis media.

Hearing is important in language and development,[10] but deficits in hearing are thought to be more important in this regard in the first 2 years of life than at the immediate pre-school age.[10] In addition, one must balance the potential benefits of knowing a child has difficulty in hearing (appropriate classroom placement, &c.) against the risks of labelling a child with a transient self-limited hearing loss as being hard of hearing. Indeed, it is important to look at side-effects of screening as a recent editorial "The Menace of Mass Screening" has suggested."[11]

We thank Dr I. Cunningham and Dr J. Chamberlain, Medical Officers of Health, and their staffs for their help; the Boards of Education for their cooperation; Dr David Sackett for reviewing the paper; and Linda Teimi and Anne Glover for typing the manuscript.

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Community Health

TEACHERS AND PUPILS AS HEALTH WORKERS

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ALTHOUGH schools are an obvious target for health promotion, their potential is often neglected in developing countries. Health workers are scarce and expensive, and existing programmes tend to concentrate on curative care. Lately, however, there has been a recognition that schoolteachers and even pupils can become effective health educators.[1,2] In Kerala we have taken this concept further by training teachers and pupils to engage in curative, preventive, and promotive care.

As a primary step we reviewed the health problems in a few selected schools.[3] Simple ailments such as deficiency states and skin disease accounted for 85% of the morbidity—conditions amenable to prevention and treatment at school level.

THE PROGRAMME

Our target area was rural, situated in Central Kerala. Thirty schools were selected within 20 km of a hospital; the average number of pupils was 1000. In this community the literacy rate is 95% and schoolteachers are held in high esteem. The programme was implemented in four phases, each consisting of one school year.

Phase 1—Training of Teachers

The teacher attended a short course at the base hospital, then established a school health unit equipped with simple medicines and first-aid facilities. Continued training and administration was the responsibility of the base hospital and a visiting health worker formed the link between school health unit and hospital.

Teachers had four days' intensive training, ending in a practical test at one of the schools: they were required to identify scabies, skin sepsis, trachoma, vitamin A deficiency, nutritional anaemia, and dental caries. The training was modified according to the problems of particular areas—thus, some teachers had instruction in the recognition of, say, leprosy or malaria. In addition, all had to acquire the following skills: (1) screening for growth failure; (2) screening of vision and hearing; (3) first-aid and symptomatic treatment; (4) identification of common, infectious disease and application of their quarantine regulations; and (5) imparting health education.

In our experience this training is adequate, provided that continuing training is offered and the work is supervised periodically.

To start a school unit, a stock of medicines and simple equipment such as a weighing machine and vision chart are acquired. A register is maintained in which the teacher carefully notes the cases, the symptoms, the treatment offered, and follow-up results, need for referral, and so on. A special register is maintained for children who need follow-up treatment. The teacher administers simple medicines according to standing instructions. The programme is now being extended to other schools: a school with an established unit and a trained teacher functions as the new training centre.

Phase 2—Pupils as Participants and Beneficiaries

Between 6 and 10 pupils from each school were put through an initial training. They were trained to perform the following functions: (1) assist the teacher in record-keeping; (2) appraise pupils' health with daily reporting to the teacher; (3) assist teacher in dispensing; (4) promote immunisation among pupils; (5) organise

school gardens and school meals; (6) give first-aid; (7) create health awareness in pupils; (8) organise health education seminars, exhibitions, film shows, &c; (9) promote dental hygiene; (10) participate in education of the community in nutrition and environmental hygiene.

Phase 3—Pupils in Community Action

A seven-point action scheme was formulated: (1) get 10 under-fives immunised; (2) organise vitamin-A prophylaxis for 10 under-fives; (3) organise compost and soakage pits for 5 houses; (4) chlorinate 5 wells; (5) organise kitchen gardens for 5 houses; (6) 5 simple nutrition messages to reach ten families; (7) give a simple lesson in dental hygiene for ten families. Most pupils over-shot their targets.

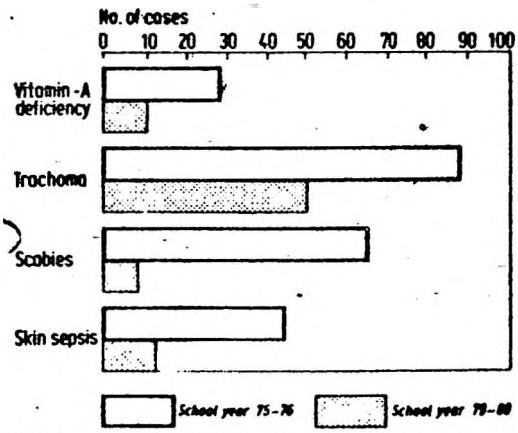
As the programme spread, institutional training for all the students was found to be impractical. Therefore, another model was tried in which the teachers' training was reoriented so as to enable them on their own to train a batch of students. The evaluation of the trained students is done in school by a member of the health team. The pupils are thus seen not merely as beneficiaries but also as participants in health action.

Phase 4—Child to Child

Most schoolchildren are involved in the care of a younger brother or sister. The CHILD-to-child programme[4] extends a school-based programme to the family unit through the young schoolgoing child. Involvement of children at this impressionable age promotes community self-reliance in health.

RESULTS AND CONCLUSIONS

A five-year evaluation revealed substantial reduction in common ailments (figure). A nominee of the Voluntary



Cases of disease reported per thousand student population.

Health Association of India who participated in the evaluation of the programme, found that several thousand school days had been saved in addition to other benefits. The improvement in attendance is attributed to an overall reduction in morbidity and correct application of quarantine regulations (the usual fault is to overestimate quarantine periods). The programme is inexpensive, costing less than 1 Indian rupee per student per year. The evaluator found the programme "simple and replicable". We conclude that a school-based scheme such as this, with participation of both teachers and pupils, can be the "second front" in the health care of a community.

I thank Dr S. Joseph, Dr Thomas Abraham, and many other colleagues for their participation in this programme and encouragement to write this paper. I also thank Dr Meera Shiva, of the Voluntary Health Association of India, for her help in evaluation, Prof. David Morley for his comments on the script, and the Indian Academy of Pediatrics for awarding the James Pirrt endowment award and gold medal for this work.

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Medical Education

MEDICAL STUDENTS AND THE JUVENILE COURT

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ALL doctors require some knowledge of the law. Child care is no exception. A recent survey of medical students in Manchester at the completion of their child health and paediatric course revealed ignorance of certain basic facts. The students, in a multiple choice examination, were asked about the meaning of a "place of safety order" and a "care order". The answers given by 120 medical students were:

PLACE OF SAFETY ORDER

Answer	*No*
It prevents those over 14 using playgrounds in public places	14
It insists that playgrounds in all primary schools be completely fenced in	10
It compels a parent to take a child for regular medical inspection	8
It forbids children under 12 years of age to handle fireworks except in a private garden	6
It is granted where a family with small children is homeless	28
It lasts for six months	11
It has to be signed by the chief constable or his assistant	3
It can only be made by a magistrate in a juvenile court	14
It prevents parental access to the child unless the order is revoked or the order specifically gave parents access	22
The place of safety was always a hospital if the child was under 12 months of age	8

CARE ORDER

The correct legal term for a borstal sentence	17
Lasts 28 days	27
Removes a child from his parents for a maximum of 6 months	11
Usually made by a judge at a hearing in chambers	21

Similar results were found when the same questions were put to doctors who had done paediatrics for a year and were due to take the D.C.H. examination.

CH 2-5

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S C H O O L H E A L T H

School Teachers and Students as Community Health Workers

The following proposal was submitted to these organisations.

1. The Christian Childrens Fund ,
   Delhi and Bangalore

2. Action Aid,
   Bangalore

In recent years, there has been, as is well-known, a greater appreciation of the fact that the health services available to the vast majority of our people are woefully inadequate. To rectify this, all kinds of projects and programmes and approaches have been adopted under the auspices of Voluntary bodies as well as the Government.

Considering the magnitude and complexity of the problems on the health front, the virtually unlimited scope for innovative measures to meet the situation can easily be appreciated. The present proposal visualises a project, on an experimental basis, which will attempt at motivating and equipping school teachers and students to play a useful role as community health workers. This idea too, no doubt, has been tried out. The point of departure in the proposed project is that the selection of the students (and the teachers) will be confined to those covered by the services of the Christian Childrens Fund (CCF) and Action Aid , two major sponsoring agencies in India.

It is hoped that the relationship between CCF, Action Aid and the school will afford a more satisfactory basis for trying out this idea. Apart from the obvious benefits the community, in great need of health services/health education, may get from the students and their teachers (eventually and hopefully leading to an appreciation on the part of the community of the need for standing on their own feet in this respect), the students and teachers themselves can be expected to be vastly enriched by the training/orientation and more importantly, by the involvement in helping the community in this critical area. This can indeed introduce a plus factor into CCF and Action Aid services to children.

The Voluntary Health Association of India (VHAI) will be glad to collaborate with the CCF and Action Aid in this project.

Below are given the salient features of the proposed project.

1. Sensitive students and teachers may be identified with the help of Action Aid and CCF staff closely associated with the schools.

2. Suitable training/orientation may be designed and organised for them.

..2/

3. Provision is to be made closely guide/supervise the students and teachers as they start working in the community.

4. In conducting training, in preparing health material, and in mobilising referral services, support and good will need to be enlisted from existing community health centres, local hospitals and other voluntary and government agencies engaged in health and allied spheres.

5. Wherever appropriate, maximum use may be made of innovative teaching aids and techniques, with the students and teachers to begin with, but eventually meant for use in the work with the community.

6. The project needs to be reviewed from time to time. The experience gained in working it out needs to be incorporated in the subsequent measures.

7. CCF will depute one person to work on this project, along with a VHAI representative.

8. VHAI will make available the services of its staff members for this.

9. The project will be, to begin with, for one year.

This proposal was well received.

The Christian Childrens Fund, Delhi was quite enthusiastic about the new venture and was willing to finance the project. They were willing to collaborate with other organisations also. It was suggested by them that this proposal be sent to the Christian Childrens Fund Bangalore

[The proposal was sent to CCF, Bangalore and Action Aid.]

..3/

The C.C.F-Delhi

requested for a final project proposal with financial implications, staff pattern etc. This is yet to be formulated.

The Christian Childrens Fund, Bangalore wanted sometime to think it over. Action Aid was very positive about the proposal. But they felt the need should evolve at the project level. This seems quite legitimate. Action Aid supports 7000 children in RDT, project in Anantapur and they felt to begin with teaching aids and common topics on health care be introduced among teachers and students at few workshops in this project with the help of project people. Since Anantapur was a Telugu speaking area it was felt the teaching aids be made in Telugu and the workshops be conducted in Telugu. The field officers of Action Aid at RDT felt nutritional deficiencies and vitamin deficiencies were the major problems in these areas and they requested that we deal with these subjects right away.

After observing the intitial reaction, Action Aid would be interested in implementing this program only at the request of the teachers, students and the project people. This way it would seem the funding organisation is not forcing anything on them.

Action Aid is willing to collaborate with other organisations.

..4

What needs to be done

1. A final project proposal with financial implications and staff pattern to be submitted to C.C.F.

2. Preparation for the visit to RDT Project Anantpur in June 1983. We plan to hold two or three workshops at three places in Telugu - Duration not more than 3 days each. Participants will be teachers and students - the number of students being more 1:2 or 1:3 ratio.

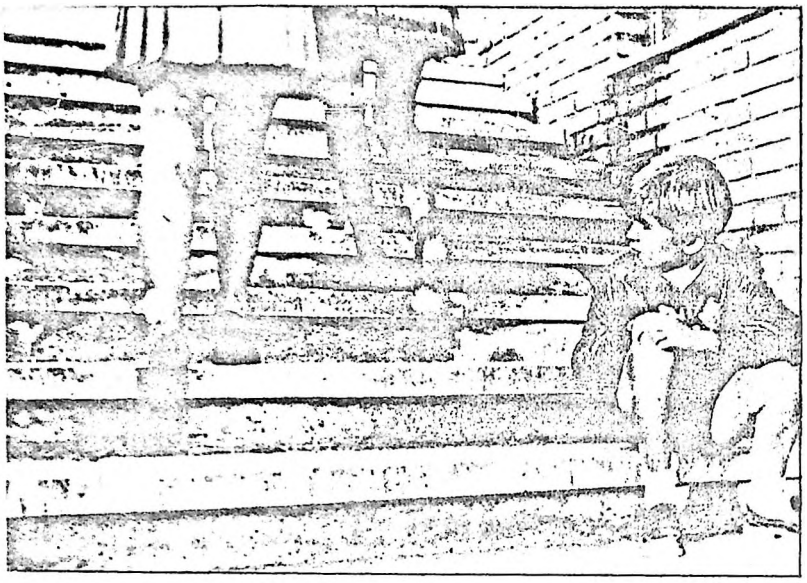
The whole procedure will be adapted in such a way that the participants will conduct the workshops on their own with the materials prepared.

Topics selected

1. Nutrition
2. Nutritional Deficiency
3. Vitamin Deficiency
4. Diarrhoea/Oral rehydration
5. Tuberculosis

For the preparation of booklets, teaching aids and games etc on the above topics, all financial help will be given by Action Aid. This includes extra staff also. This will be for a period of three months starting from March 15th 1983.
If we work hard, the materials should be ready by then.

CH-2



PLEASE MISS, HOW IS A BABY MADE?

TERESA VIJU JAMES observed the success of one of the few FP programmes that aim to impart correct and useful information about sex to teenagers in schools

THE school bell peals in the middle of an animated discussion which the students of standard IX are having about the film most of them have seen on television the evening before. Some of the boys imitate the sensual dance steps while others ask how the heroine suddenly says she is going to be a mother when there was no marriage in the sequence. Just discussing the blatant innuendos and filling in the blanks with whatever source material is available helps them quell the inexplicable feelings that had surged through mind and body long after the film had ended. The teacher enters and they return to Vernier's calipers and Chandragupta Maurya. This is a scene typical of thousands of classrooms in India. Suddenly confronted with an overdose of media fodder both boys and girls find themselves looking for answers wherever they can — among peers, from books and if exceedingly lucky, from parents themselves.

Sex education has been regarded by and large with suspicion, as if it is the sole prerogative of those who opt for a licentious and promiscuous existence. A few years ago, women teachers of an institution in Madurai walked out when a debate on whether sex education was necessary in schools was initiated. Fortunately their counterparts debated the issue and decided it was as important as prose, and plant biology. Sex education is not just a series of lessons in human physiology and the male and female reproductory organs. It is a comprehensive pattern of teaching that covers everything from the role of an individual in the family to the physical, emotional and social changes apparent during puberty as well as everything a naturally curious youngster would like to know about life.

In many families a set of rules are laid down for both boys and girls at pertinent periods in life. With the onset of the first period a packet of pads and a few cursory instructions are issued to the girls while boys are later gifted with a razor. Both incidents are treated as occasions for embarrassment in the family and no further explanations are given as to why one had to be 'padded' every month and shaved every morning. Eager for answers, teenagers turn to their friends for information or try to find answers in whatever books come their way. These friends who have themselves passed through this questioning stage, share such information as they have which often includes such outlandish beliefs as that masturbation leads to ugly pimples for boys and outsize breasts for girls.

Unfortunately, sex education in India is neither emphasised nor included in any of the syllabi for curricular or extra-curricular teaching. In this atmosphere, the few agencies that have ventured out into the field have to make careful progress.

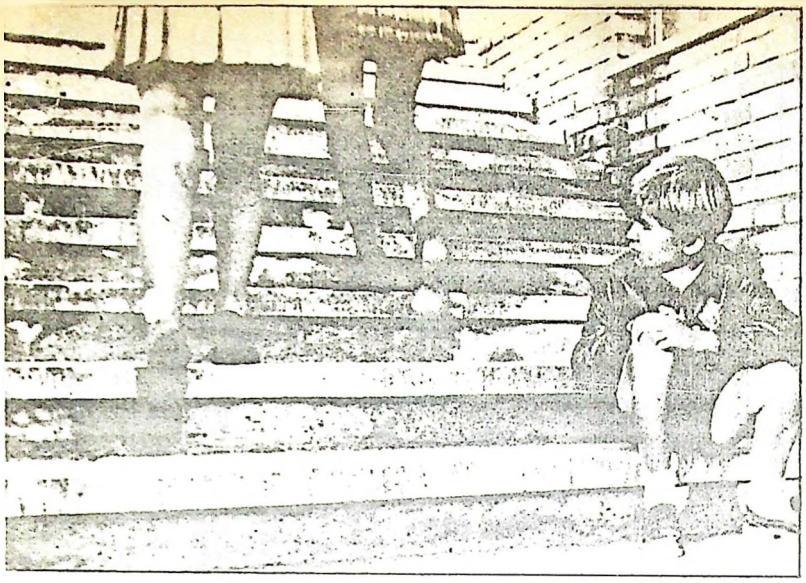
It is interesting to see how this programme works inside the classroom. The Family Planning Association of India, a non-political and non-sectarian organisation, has such a programme. Some of these programmes got under way with initial requests from parent-teacher bodies and later from managements of schools. Some schools provide time for the programme on a regular basis while the more hesitant ones provide time for just one session with no follow-up facility.

The educators who handle the programme are sensitive to the needs of the group and are from experience able to assess the needs of the children as well as their ability to absorb information. Audio-visual techniques are used to explain the human anatomy and myths and mysteries are dispelled once and for all. After an initial introduction to biology, one visual in a simple and uncomplicated way explains: "A sperm from the father must join with an egg from the mother...To do this the father places his penis in the mother's vagina."

At the end of the first tray of slides there is a relaxed air in the classroom as young adults with whom the facts of life have been shared, quickly jot down a host of questions that they have always wanted answers for. This anonymous question session brings out all the doubts youngsters have been growing up with. The moment rapport is established with the educator and credible replies received, anoymity is thrown to the winds and children stand up to clear their doubts. The questions are basic and representative of a society where changes are taking place rapidly. Answers are provided on the spot. Then the questions are filed and studied so that the educators are able to adapt the content of the programme to the changing needs and recurring areas of doubt.

Mrs Sarla Mukhi and Mrs Elsa Saldhana of the Family Planning Association of India who have been actively associated with these programmes had interesting observations to make.

CH-2



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PLEASE MISS, HOW IS A BABY MADE?

Primarily the pattern of questions, whether they come from the students of exclusive city schools or municipal schools are the same. Answers are sought for the same nagging doubts and fears and neither economic grouping nor social status had any impact on the question type. Boys are more uninhibited than girls when it comes to clearing doubts and putting questions. Girls are more restrained and in one school even objected to the presense of a male operator of the audio-visual equipment.

From the same analysis it was found that separate groups for boys and girls were more useful than joint sessions. From the questions it was evident that boys undergo more turmoil and stress during puberty though at a slightly later stage than do girls. The stage at which boys went through this often coincided with important public examinations and the emotional upsets seemed to affect even the boys' performance in the examinations. Parents were, by and large, aware of the emotional changes and understood the occasional bouts of rudeness and impulsive behaviour but were not able to communicate to the children or explain to them why this happened. This often led to a minor issue growing to giant proportions and affecting future family life. Young adults sought credibility in the teacher. This made it certain that they would be unwilling to accept information from a person who had a mere textbook knowledge of the subject and had never enjoyed a happy sexual relationship within the family.

Very often a question from the floor reveals the presence of a problem which, though not expressly stated, is obviously a great source of worry to the child. Such cases are followed up and the child placed in the hands of a counsellor. From the responses it is easy for the educator to judge that a group is not yet prepared for the second part of the programme and it is then scheduled for a future date, after the study of the feedback that is obtained through the teachers who are also present with the group.

When it comes to sex education the children in lower middle class schools are better off than those in sophisticated institutions. In the former the head of the school makes the decision on behalf of the schools as well as the parents of the children. In exclusive schools parents also play a role in deciding whether or not their children should receive sex education and one stubborn principal is easier to convince than a hundred well heeled parents with widely divergent views.

The educators place tremendous value on both the concept of the family and the values that are an integral part of a sexual relationship. In one school, in suburban Bombay, one boy stood up to admit to a relationship he was having with an older married woman. He felt he was doing right so long as he used prophylactics. Not wanting to argue the morality of the issue, the educator asked whether his relationship was an open one or a secret one. Admitting to the latter, the boy then realised why it called for secrecy and left the hall after the programme with a new insight into what had become a clandestine habit with him.

The Family Planning Association of India has branches in several cities in India but admits that the success of every programme depends on the rapport which the course leader is able to establish with the group, where communication barriers are completely broken down and a feeling of sympathetic trust established.

Several church agencies and other groups have also begun programmes of a similar type. One parent who attended a session conducted by a church agency for a mixed group admitted that she felt uncomfortable when the session commenced with a Christian devotional hymn. Tremendous emphasis was also laid on developing a "responsible informed conscience", with not much practical help on how to go about it. Family life education imparted by Christian agencies gets too satiated with doctrinal and theological concepts to be easily accepted by a general audience of children. Young adults in their early teens are sensitive to deliberate omission of information; when this happens the entire programme becomes a fruitless exercise. Christian agencies and educators are not overtly keen to provide replies to teenage queries on contraception, medical termination of pregnancy, homosexuality and such other subjects, and often request educators from other agencies also omit any reference to these.

Realising the importance of involving teachers on the spot, the Family Planning Association of India has special courses during the years for educators where they are trained how to handle the subject with the same ease as they would a lesson in grammar or a problem in algebra.

It is important for parents to accept the fact that children need answers. It is possible that a parent may not be able to explain very well how a pregnancy occurs or who a lesbian is but it is possible for all parents to see that through the school or some other agency such information is available to the children fully and freely and is combined with the values that are an integral part of such knowledge. ☐

CH 2-11

CH-45

Voluntary Health Association of India

C-14, Community Centre, S.D.A., New Delhi-110016

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Gram : "VOLHEALTH"
NEW DELHI-110016

SCHOOL HEALTH

Health care of students includes diagnossis, treatment and immunisations. An experienced doctor will involve teachers and the hostel staff. Some hostel staff and teachers are eager to learn.

DIAGNOSIS OF HEALTH PROBLEMS

The Medical Examination

Parts of the medical examination such as checking for lice and weighing the child can be done by school staff without any special training. Other screening tests for poor vision and hearing and pallor of the tongue, can be quickly learnt provided the doctor want to teach his skills. The more the school staff take interest, the easier their work of supervising school health becomes. The doctor can not do everything. When a child is shy or speechless, the school staff are often needed to tell the child's story. If the teacher does not notice a certain child can not read the blackboard, the child may drop out of school before the doctor can see him to check his vision.

The parent is brought into the picture as much as possible, through letters, through reports of child's height and weight, and the health record of the child.

Leprosy

In most parts of India every child must be checked every year for leprosy. Every child must be examined in minimum clothing to check for this disease. Big surveys in Bombay and Pune show that 6 per 1000 children have leprosy. The child with leprosy is examined for infectiousness. If not of the infective kind of child should continue his schooling. Leprosy is usually not highly infectious in children. Every leprosy can be treated in complete confidentaillity.

Anaemia

When the children are in line, the hostel warden can ask them to show their tongues in the sunlight. Some will be pale. Such children need iron tablets, one per day with their food. To treat this problem cost only 3 paise per day and the child will play and learn faster once treated. If it does not get better, in one month, or the child is very pale, show him/her to a doctor.

Poor vision

Teachers can diagnose poor vision. Children who can not read the blackboard from the back of the room, may be able to see it well if parents will pay for glasses and if the child will wear them.

Poor hearing

A child should be able to hear whispered numbers from 1 meter behind him. The teacher can help to diagnose this. Parents should be sent a note suggesting that an ear specialist see if anything can be done. Meantime he needs to sit close to the teacher.

Checks for poor vision and poor hearing can be made part of the entrance examination for new pupils. It costs almost nothing to check these things.

Tuberculosis

Children with constant moist cough who are thin or with recurrent fever and tiredness, may be suspected as having tuberclosis. A Mantoux skin test is suspicious of this disease, if the reading is over 15 mm in diameter. Children are not usually infectious for tuberculosis and so should stay in school if on treatment.

Scabies and Lice

These should be diagnosed when the children return to school. Staff can diagnose these infections.

Roundworms

A child can be questioned during the medical examinarion at the beginning of each school year, to find out if roundworms (15 to 30 cm long) have

been passed in the last three months. If so the child is dosed with piperazine. This will be foud cheaper than testing or deworming everyone. (Stool tests on hundreds of children cost money which may be needed for treatment). Threadworms are not very important. Hookworms cannot be seen by the child in the stool, but they cause anaemia, which can be diagnosed by looking at the tongue.

Drug Allergy

Each school year, the school must ask if the child is allergic or badly affected by any particular drug. Penicillin given to the wrong child by the school doctor or nurse, can be fatal in 15 minutes. So before every injection, we ask the child and look at his health record, and get a skin test done. Teachers and wardens in place of parents must ask question of the doctor and not assume he knows everything. In particular, they must ask what drug has been prescribed.

Weight

The child's weight is recorded on his health record twice or thrice a year. But bathroom scales are not accurate and strong enough for hundreds of children. Heavy scales, as used in markets for weighing grains are best. If the weight by these scales is not increasing three times a year, the child should see a doctor. Likely causes of loss of weight include tuberculosis, tapeworm, roundworm or unhappiness at home.

TREATING COMMON HOSTEL HEALTH PROBLEMS

Scabies

The treatment for scabies, is to scrubb off the scales with soap and water, then paint benzyl benzoate over the whole body, avoiding the eyes. Then wash the child's clothes. Treat every affected child. This process is repeated in a few days. To save expenses this disease must be treated straight after vacation, before it spreads. Termosol soap should be issued to everyone for the first days back at school for the purpose,

Boils

In the monsoon, boils, and in the dry not weather, heat rash, can be controlled to a large extent by using. Cinthol soap containing hexachlorophene. Daily showers with this soap will lower the bacterial count on the skin. It has to be used continuously for a few days to have this effect. So as it is expensive, it may be used for a week at a time, to control epidemics of boils and heat rash.

Head Lice

Combing and examination of hair should be done on the first weekend of the new term. Gammexane powder can be put in the hair at night. This should be done on all diagnosed cases on return from vacation, to stop the lice spreading.

Malaria

Persuade the authorities to spray the hostel at least twice a year, before the malaria season. The mosquitoes which are spreading the disease will usually be found on the ceiling of the dormitory. Contact the district health office. Fill in all stagnant water around the hostel. Ask parents to supply mosquito nets if poisible, and treat all children with shivering and fever promptly. If the situation is getting out of hand, ask for assistence early from the district health office.

Other pests

Use of rubbish tins with fitted lids and confining of all eating to the dinning room, will help to control *rats* and *flies*. Rats and *snakes* often get inside through drain holes from bathrooms. These can be covered with strong netting.

For *stray dogs* one can all the municipal dog catcher, or take the law into ones own hands by using some poison from the college chemical laboratory. Stray dogs spread rabies and rabies is a painful and fatal disease. The injections to prevent rabies after dog bite are painful and time consuming. A pet dog can be immunised against rabies with the help of the Government Veterinary Officer, for a few rupees.

Bedwetting

This is a common problem in hostels with young children. Although a medical checkup is useful in a few cases, the causes are mostly psychological, unless the child is having the same problem in the daytime.

Bedwetting is a nuisance to the hostel warden, but blaming the child in any way makes the problem worse. Small rewards, such as shiny stickers or stars on a calender, can be given, to encourage the child in succeeding. The child should be lifted out of bed, and woken up enough to pass urine, before the warden puts his/her own lights out. Tea, and lots of fluids after dark, may be restricted. If the child still wets the bed, it is best not to say anything. Punishing such children makes them feel even more 'not OK' when they are feeling very much 'not OK' already. In fact unhappiness at home or in school may be a cause of bedwetting. Bedwetting is miserable for the warden, but even worse for the child.

Health education

Better Health, a booklet at low cost in English, Hindi, Tamil, and Oriya, is a good text on basic health for primary school teachers. Children can be encouraged to make their own health posters, but watching their own seeds grow in the school garden, may cost less and teach more. If school toilets are clean and functioning, and soap and water are available for hand washing, then lessons on hygiene and the spread of disease are reinforced in daily practice.

IMMUNISATION

Immunisation needs to be done each year with special attention to the new students. It is no small job to immunise a whole school or hostel. It is better to contract out this work to a nearby charitable or mission hospital, or to a Government Primary Health Centre.

The contact should state that a freshly sterilised (boiled or autoclaved) needle should be used for each child. The request for this service should be sent to several hospitals asking them to state beforehand what everything will cost. The arrangements have to be made three or more months in advance. You must come to an agreement on what immunisations are to be done and the cost of each. This way the hospital has time to order the vacciness in advance at wholesale rates and you will have some control over the cost.

Tuberclosis A partial protection against tuberculosis can be provided with BCG vaccination. The small scar on the shoulder will show whether or not the children have been immunised with BCG previously. If they have not been protected, arrangements should be made through the District TB Officer or the Deputy Medical Officer for sending a BCG team. It is appropriate to offer the travelling expenses to the technician that comes with the vaccine. The BCG teams are supposed to visit every village every five years.

Smallpox Immunisation against smallpox will probably not be needed for school children after 1977.

Cholera It is best to give cholera vaccination just before the monsoon or the cholera season. The effects of the vaccine only lasts from 3 to 6 months. The vaccine is usually obtained free from the Civil Hospital. The best prevention of cholera however is sanitation. It would be well to put in more hand washing places and more toilets, and to protect wells and handpumps from surface seepage of waste water.

Typhiod TAB or typhoid causes fever and is best given just before the weekned, in a cool time of the year. If the hospital can be persuaded to order the newer acetone-killed and dried vaccine then after 2 injections in the first course, it will only need repeating once every 3 year and will give nearly 100% protection.

Tetanus is uncommon, but it kills 3 out of 4 children who get it. Tetanus toxoid is very safe and inexpensive and lasts 5 to 10 years, if 3 shots are given in the first year at school. If one is sure that the child had 2 shots or DPT or Triple when a child, than one shot of Tetanus Toxoid every 5 years will be enough.

Anti tetanus (ATS) which is not so safe, has to be given after injury to any child not protected with 3 shots of tetanus toxoid. Tetanus toxoid is much better and means that much time is saved taking children to the doctor for ATS. Also some children get tetanus through unnotice wasp stings and throns. Prevention is much better, with tetanus toxiod.

Polio is not common in school children, and the vaccine is expensive. But if one child in a family gets polio, there is a one in ten chance that someone else will get polio in that house. So if in a school or hostel, any child gets polio, everyone must be immunised with 3 doses at monthly intervals. This is how Government controls this disease in India. Normally about 1 in 10.000 children per year come down with the disease. 10% of those who get it die, and 15% are paralysed seriously and permanently, 90% of polio occurs in per school children. English medium school children have likely been immunised when they are smaller.

Note : These vaccines can be given together :

Polio and any other

Tetanus and typhoid vaccine

BCG and any other

NUTRITION IN HOSTELS

Children are not getting enough energy foods according to surveys by Indian Council for Medical Research. Few children are suffering from shortage of high protein foods alone. This means that more food mony should be spent on the cheaper energy foods such as the wheat, rice, jowar, ragi, etc. For grains also contain protein—about 7-12% of a cereal's weight is protein compared with around 20% for the high protein foods such as the dals.

Relative Nutritional Value of certain foods

Nutritional Value of Indian Foods is the title of a book available at low cost from VHAI to help you know which foods are nutritionally 'best', by laboratyry analysis. You can judge cereals from the calorie or energy column, dals from the protein column, green leafy vegetables from the iron and carotene column, and other vegetables mainly from calories and iron.

Relative cost of the best foods

Nutritional value is important, but cost decides how much and how otten the child is fed that food. The price of the vegetables affects how much iron and vitamin the child gets, much more than the milligrame of vitamin or iron in each gram of vegetable. For if one always buys what cost least one can buy more of it. The same principle applies to buying one of the cereals, or one of the protein foods.

Among the protein foods, it is much better to spend on cheaper vegetable protein food such as a dal and give it daily. This is much better than giving the children amounts of expensive meat, eggs, or fish, twice a week.

Good nutrition does not usually cost more

The biggest expense item in any hostel will be the food bill. Analysis of food expenses in hostles

shows that well run hostels with well fed children usually spend no more on food than others with poorly fed children. This is because they have overcome some or most of the following Problems :

— failure to check incoming supplies. This soon tempts the merchant to supply less food than paid for.

— buying at higher prices than tne market rates often, from one supplier only, out of ignorance or intent.

— use of volume measures instead of weight and lack of weighing scales. Grains can be measured 5% wrong if not levelled off. Volume measures for flour can be 30% wrong, compared with more accurate weight measures.

— failure to buy the cheapest food out of a particular food group. Prices keep changing, but if the hostel-in-charge has given instructions to buy a particular vegetable, the person buying for him her, has no freedom to buy something cheaper. Prices keep changing, and what was the best buy last week may no longer be the best buy this week.

— failure to adjust amount of food cooked when some children are absent. This is especially difficult if volume measures are used instead of weight.

Every child's diet should daily contain plenty of cereal, (wheat, rrce, jowar, ragi, etc.) some dal, channa soyabean or groundnut, and some green leafy vegetable. Within these groups, different food are chosen according to market price, availability and to avoid monotony.

Acknowledgements

The help of Joy Raghu, Anumamma Thomas and Robert Nave is designing this article is gratefully acknowledged.

Supplies and further information

Books mentioned in the article teaching aids, posters, booklets on health, disease and nutrition are available at low cost from Voluntary Health Association of India, C-14, Community Centre S.D.A., New Delhi-110016. A free catalogue is available on request.

Murray Laugeson

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COM H 22.6

MID-DAY SCHOOL MEAL.

Why school meals?

(1) Large + vulnerable section of pop".
(2) Nutritional needs great" bcos of rapid growth + development + physical activity
(3) Easily reached pop".
(4) Opportunity for nutrition education
(5) Imparts good dietary habits + helps children overcome prejudices about certain diets.
(6) long hours of school + in rural areas long distances to walk to school —∴ prevents hunger & malnutr".
(7) Better nutrition + health improves educational performance.

Principles of Mid-day meals

(1) Meals should be a supplement & not a substitute to home diet
(2) Meals should supply at least 1/3rd of daily calorie reqmt + ½ daily protein reqmt.
(3) Cost should be reasonable
(4) Preparations should not involve elaborate processing + cook.
(5) Cheap, nutritious locally available food should be used
(6) Should have variation in menus to avoid monotony

NIN, Hyderabad have model recipes for North + South which can be had gratis on request.

This progr: provides an excellent opportunity for community participation + education.

The no. of feeding days a year should be at least 250 to have the desired impact on the children.

A Midday school meal should have.

cereals	— 80-100 gms.	The use of Indian
Pulses	— 30 gms.	Multipurpose food 20-30 gm
leafy veg	— 30 gms.	is recommended in place
non leafy veg	— 30 "	of pulses.
milk or substitutes	— 150-200 ml.	

INTRODUCTION TO COMMUNICABLE DISEASE CONTROL

Communicable disease:- is an ~~disease~~ illness due to a specific infectious agent or its toxic products arising thru transmission of that agent or its products from reservoir to susceptible host, either directly as from an infected person or animal, or indirectly through the agency of an intermediate host, a vector, or the inanimate environment.

it includes both infectious + contagious diseases.

eg. malaria, cholera, typhoid, TB.

Non communicable diseases:- cancer, diabetes, CVS, nutritional + industrial diseases - some are preventable other are not.

Communicable diseases are preventable.

Epidemic - occurrence in a community of a group of illness of similar nature, clearly in excess of normal expectation.

Diseases prevalent in India - mainly communicable diseases

Gastrointestinal - diarrhoea, dysentry, cholera, typhoid, amoebias, infective hepatitis

TB, leprosy, V.D.

Polio, filariasis, helminthiasis, respiratory diseases.

Malaria had ↓ greatly, but is gradually ↑.

Plague has come down.

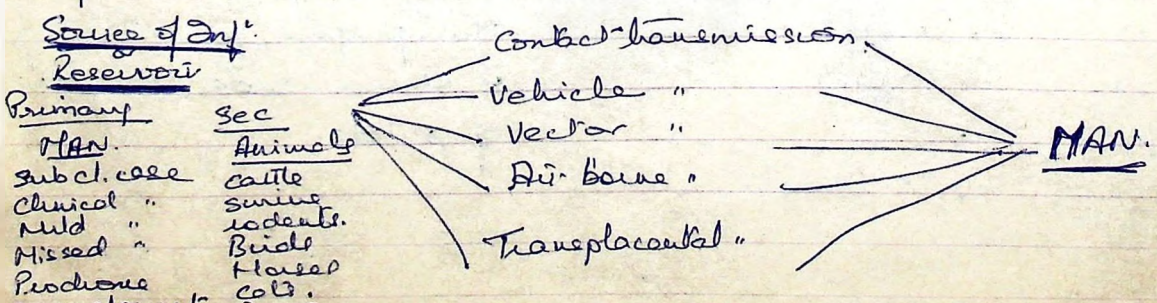
S. pox has been eradicated.

We also have cancer, heart diseases, occupational diseases.

Abroad they have controlled communicable diseases to a great extent but they have their own problems - cancer, heart disease, strokes, social problems - drugs, alcohol etc.

Transmission of communicable diseases:-

It is important to know about this because if we want to prevent these diseases we have to know where to act.



1) Contact - (i) Direct - VD, skin inf., neonatal inf. of eye, GI inf. thru soiled & human excreta. (b) Indirect - thru' fomites - spox, c pox, typhoid (b) Biological - malaria, filaria.
2) Vehicle - water, ice, milk, food, plasma etc.
3) Vector - (arthropod borne) - (a) Mechanical - diarrhoea, dysentry, typhoid (b) Biological - malaria, filaria.
4) Airborne - by coughing, sneezing, talking loudly - TB, diphtheria, whooping cough, flu, measles, mumps: overcrowding

General measures of communicable disease control :-
Disease is due to multifactorial causation. It results from the interaction of agent, host & environment. Control measures can be classified broadly as
(i) Controlling the source of infection.
(ii) Blocking the channels of transmission
(iii) Protecting the susceptible population.
Aim is to attack as many vulnerable points as possible.
1) controlling the source or reservoir - ie cases or carriers who constitute the primary source : (a) early diagnosis - stamping out the spark (b) Notification - inform the official health authorities ie PHC - eg cholera, spox, malaria
(c) Isolation - to limit the spread of the disease - cholera, spox diphtheria - home isolation - measles, ch.pox, wh.cough - sometimes whole villages may be isolated eg cholera.
d) Treatment - reduces communicability & prevents secondary cases. (e) quarantine - isolation of well persons who have come in contact with an infectious disease - spox 14 days cholera - 5 days (f) disinfection - concurrent disinf of all infectious dis. during the course of an illness & terminal
(2) Blocking the channels of transmission -
a) Disinfecting water, (b) milk - boiling or pasteurization
c) food - better food hygiene, exclusion of sick persons from food handling, personal hygiene, hand washing, protecting food against flies & rodents, safe disposal of excreta (d) Vector control - by environ. sanitation & insecticides - mosquitoes, flies, lice, ticks.
(e) Airborne & contact v. difficult.

3) Protecting the susceptible pop^{n}:-

a) Immuniz^{n} - some routinely to all children eg TB, spox, polio, diphtheria, whooping cough, tetanus
- some, only to those people exposed to risk - cholera, typhoid

b) Passive immuniz^{n} - against diphtheria & tetanus

c) chemoprophylaxis - antimalarials, DDS : leprosy, eye oint to newborns.

4 Health Education is an important element in a communicable disease control programme. Successful control of any disease involves enlistment of public cooperation

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SCHOOL HEALTH PROGRAMME

Introduction

School health service is an approach to the health of the community through the school.

It covers not only medical examination but has a broader concept of comprehensive preventive + social services with supervision of the health + wellbeing of children throughout the school years.

History

In India it started in 1909 in Baroda city, but was found to be practically non-existent in 1946 by the Bhore Committee.

In the 2nd 5 yr plan many state goals provided for school health + school feeding programmes

In 1960 the govt of India constituted a school health committee to assess present standards of health + nutrition + suggest ways + means to improve them.

Importance of school health service:-

1) Large pop^n - In India children between 5-14 yrs form 25% of the total pop^n. The socioeconomic development + prosperity of a nation depends upon the proper care + development of its children.

2) Period of growth - there are rapid physical, mental + emotional changes + therefore need for health supervision + guidance

3) Early detection of diseases - children are susceptible to many infectious diseases + early detection is possible - even of non infectious diseases + defects. Hazards of infection home → school

4) Group living - This is a new social + mental experience of group living outside the home as this puts a new strains on the children ∴ supervision + guidance are necessary.

5) Controlled pop^n - belong to a certain age group + are easily reached ∴ health programmes are easy to implement + assess

6) Educational opportunity - best place for health educ^n - for attitudes + practices to be moulded + guided.

Objectives of school health service.

1. Promotion of positive health
2. Prevention of diseases
3. Early diagnosis, treatment & follow up of defects
4. Awakening health consciousness in children.

Aspects of school health service:-

1. Medical checkup & follow up
2. Prevention of communicable diseases eg immunizⁿ etc.
3. Healthy school environment.
4. Nutrition
5. First aid.
6. Mental & Dental health
7. Health education.
8. Educⁿ of handicapped children
9. Maintenance & use of school health records.

Taking each one in detail:-

(1) Medical checkup

a) Should cover not only the students but also the teachers & other personnel, as they form part of the environment.

b) Periodical checkup at time of entry & thereafter every 4 yrs
More freq if possible.

c) Consists of history, physical examination of the child, tests for eyes, hearing & speech, nutritional status, examination of blood, urine & stools
Teachers should help by recording height & weight quarterly, annually testing vision & explaining to the children about health.

d) Daily morning inspection of children by the teacher - to detect changes in appearance or behaviours that suggest illness or improper growth & dev^n. - flushed face, rash or spots, cold, coughing & sneezing, sore throat, stiff neck, nausea & vomiting, red watery eyes, headache, chills & fever, listlessness, sleepiness, disinclination to play, diarrhoea, body pain, scabies, ringworm, lice.
These should be referred to the doctor for Rx + follow up.
- to the PHC

[2] Prevention of infectious diseases by immunization
S. pox, DPT + DT, OPV, BCG, typhoid, cholera.

[3] Healthy environment - necessary for social, emotional + personal health
a) location - centrally situated but away from busy places, properly fenced + away from hazards (b) site - on highland with suitable drainage - 10 acres for higher secondary schools, 5 acres for primary (c) structure - As far as possible single storied. exterior walls walls 10" + heat resistant
(d) class room - for 40 students + verandah. (e) furniture single desk + chairs + backrests (f) Doors + windows combined should be at least 25% of floor space, cross ventilation, ventilation not less than 2% of floor area
(g) colour - white (h) lighting - natural light preferably from the left. (i) water supply - safe, potable + continuous
(j) eating - separate room for mid-day meals
(k) lavatory - 1 urinal for 40 students + 1 latrine for 100. - separate for boys + girls.

[4] Nutrition - Nutritional disorders are widely prevalent in school children. - a physically weak child cannot take full advantage of schooling ∴ Midday school meal - schools can provide it on a no profit no loss basis - o contributions from all parents - should provide 1/3rd of daily calorie requirement + 1/2 of daily protein rqmt.
Applied nutri programme ANP - assisted by UNICEF - provide implements, seeds, manure + water supply equipment.
- should be used to start school gardens the produce of which can be used for mid-day meals.
Specific nutrients can be given where the foll. nutrient disorders are a problem - night blindness, anemia, PCM, endemic goitre, caries.

[5] First Aid + emergency care - all teachers should receive training in this.

[6] - Mental Health - This is the best place to shape the childs behaviour + promote mental health - so that they may develop

into mature, responsible, well adjusted adults - enough relaxation extracurricular activities, encouragement, sports, no distinction between the clever + dull, rich + poor or between race, religion caste, community

Dental health educ^{n}.

7. Health education - This is the most important element - it helps them to help themselves. The goal is to bring about desirable changes in health knowledge, attitudes + practices + not merely to read the children a set of rules. Should cover the following areas
i) personal hygiene - of skin, hair, teeth + clothing, posture
Should be - lively, practical + based on everyday needs + interests (ii) Environmental Health - encouraging them to take part + keep their environment clean, participation in community programmes eg vaccin^{n}, fly control, construction of sanitary wells + latrines (iii) Family life educ^{n} - includes sex education, helps build healthy attitudes towards human reproduction. — Children take back to their parents the health instruction they receive in schools + even more important when they become adults they apply this knowledge to their own families.

8. School Health Records:- a cumulative health record should be maintained - for follow ups + supervision. - useful in analysing. — record identifying data, history, physical ex^{n}, services provided

SHS in India - is a part of the general health services + is provided through the primary health centre — in a pop^{n} of 80,000 in 100 villages children between 6 + 11 years would be over 6000 + require a seperate doctor ∴ you could help + collaborate — If possible form school health committees