Evaluation of Special School Health Check-up Scheme for Primary Schools in Maharashtra

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Chapter 1

Special School Health Check-up Scheme for Primary Schools

Introduction

Although we have been successful in bringing down the levels of child mortality still they are higher than those in the developed countries and further the morbidity levels are significantly high. Large number of children die every year, many of them from preventable causes. Throughout the world, governments desire that the children of their country should grow up to be healthy productive adults to contribute to national income. However, children in developing countries often have higher morbidity and lower chances of child survival than in developed countries. To overcome this most countries have an explicit social goal - to bring basic health services to their entire population by the year 2000. As a part of this goal, government of India has implemented a campaign based special school health scheme to provide a health check-up for all the children in primary schools in the country for the first time in 1996. Young children need to be healthy in order to attend regularly and take full advantage of opportunities provided by schools. School-based efforts that improve health status of children which in turn, would help to improve the learning potential and school performance of young children.

Background of the special school health check-up scheme

Successful implementation of campaign based Pulse Polio Immunization (PPI) has shown to the government that the health programme can be extended efficiently far beyond the usual areas of operation. During the PPI more than five lakh immunization booths had been set up and successfully used for

immunizing more than 95 per cent of children aged 0-3 years in India (Department of Family Welfare, 1996). The success achieved in the implementation of the PPI made the Health Ministry to utilize this campaign approach to extend the services to the school children as well. Since the school children constitute a very large group, out of which the children of the primary level are the most vulnerable, the programme was decided to focus its attention only on the primary school children. Hence Ministry of Health & Family Welfare with the collaboration of Department of Education has decided to implement the health check-up scheme for primary school children. The scheme was developed to provide a health check-up by paramedics in all primary schools in the country for ailments which are most common and can be easily diagnosed. The medical check-up by the paramedics was expected by the Health Ministry to create an awareness among children and consequently of the parents about various health needs. Besides the basic health check-up for children in primary schools, the scheme intended to set up an effective referral system for cases requiring further treatment.

The specific objectives of the special health check-up scheme as stated by the Ministry are:

1. Detection of health related problems that are commonly occurring amongst primary school children;

2. Screening of children for appropriate referral;

3. Building up health awareness in the community through primary school children; and

4. Follow-up arrangements for detailed check-up and treatment of referral cases at PHC / CHC / district hospitals / private hospitals.

Justification:

The special school health check-up scheme was designed on the following grounds: 1. The earlier school health scheme did not reach most of the children of primary schools since it involved medical doctors at all stages, the persons available for undertaking medical check-up was also very limited. Hence it was decided that if a campaign approach is adopted, involving paramedical workers, the reach of the programme can be extensively expanded.

2. The experience of PPI campaign (on 9th December 1995) has clearly demonstrated the strength of the educational institutions in being very effective way for the spread of messages relating to development activities. The students in the primary schools and their teachers have been one of the most important groups who have through efforts in interpersonal communication spread the message of PPI. Keeping this in mind, the Ministry thought that the involvement of the primary school teachers would help the implementation of the health check-up scheme to a greater extent.

3. The then Prime Minister while launching the PPI campaign observed that this large effort of setting up more than 5 lakh PPI booths has increased the accessibility of health services to an unprecedented level. He further stated that this setting up of immunization booths should be more or less a semi-permanent nature and we can think of introducing some school health scheme in the same manner.

Operational strategy of the scheme

This scheme was implemented for all the primary schools of the country both in the rural and urban areas by the Department of Health & Family Welfare in collaboration with

the Department of Education in all the States/Union Territories. The scheme was implemented simultaneously throughout the country for about a period of two weeks. During the campaign days, teams constituted by the local administration had gone to the primary schools and carried out medical check-ups of the children of the primary schools. The check-up was done by the paramedical workers who checked the children for commonly occurring ailments. A record was kept of the check-up made to take appropriate action where there was a need for referral. A health card was maintained for each child and whenever a referral was made, a part of the card was detached and used as a referral card. A child carrying this referral card had been given preference by PHC doctors or a private doctor belonging to the various professional associations like the Indian Medical Association and Indian Academy of Paediatricians. These private doctors were requested not to charge a consultation fee. This scheme would also be implemented simultaneously throughout the country in certain days every year.

Personnel involved in the scheme

For implementing the scheme the local health administration had listed out the available ANMs, MPW (Male), Health Assistants (Male & Female), Staff Nurses and other Paramedical Workers in the districts. For the medical check-up in the primary school the team was comprised of one trained health worker and a volunteer who will assist the paramedics in conducting the medical check-up. From each school, teachers were involved to maintain records and to fill-up the individual cards. Wherever the physical examination was required, the girl student was examined by the female health worker or the female teacher. Teachers were also helped in organising the camp. These teams were constituted by the

District Health Authorities (CMO/DHO) in collaboration with the Education Department (Dy. Inspector of the School in the district).

Activities

The campaign was organised over a period of two weeks all over the country in which medical check-ups of school children was done by paramedics. Check-up was done for the following commonly occurring ailments:

1. Anaemia: detection of anaemia by paleness of nail, tongue, general weakness, etc.

2. Night blindness: detection of night blindness and suggested treatment (Mega dose of Vitamin A)

3. Intestinal worms: history of worm infestation and advice on personal hygiene and deforming

4. Iodine deficiency diseases: detection of goitre and advice of use of iodised salt

5. Scabies: skin problems

6. Pyoderma: boils/sores with pus

7. Vision defects: refractive errors in children
   Eye testing:
   Distant and near vision
   Conjunctivitis, Bitot spots

8. Ear problems: ear discharge

9. Dental problems: oral hygiene i.e, detection of carries and cavities for referral and advice on cleanliness

10. Any other complaints of the child

11. Personal hygiene, head lice detection, prevention and treatment

12. Counselling of parents for children having mental disorders or other disabilities

Referral services

Cases referred after scrutiny done by paramedical workers were given priority by the specialists of PHCs/CHCs or district hospitals. These referrals were given treatment within one month of time at the referral centres. The responsibility of taking children to the referral centre was left to the parents. The referred child was again given a full check-up as is done under the regular school health programme by the referral centres and the child was given specific treatment for the ailment for which the child was referred. Teachers who were involved in the programme were trained in organising the check-ups and maintenance of records. The health workers were trained in the screening of various ailments.

Objectives of the present study

The special health check-up scheme was implemented in all the primary schools in Maharashtra during 1st to 18th October, 1996. The Ministry of Health & Family Welfare has requested the Population Research Centre to undertake an evaluative study of the special school health check-up scheme in Maharashtra. According to the guidelines given by the Ministry the evaluation was to be done on the basis of 100 schools to be selected from two districts of the state. The main objective of the study is to assess the functioning of the various aspects of the school health scheme and to assess the parents' opinion about the health check-up. The present study focuses its attention on the performance of the programme in Maharashtra in general and in particular in the selected two districts.

Selection of districts, tehsils, schools and parents

For the purpose of the study Beed and Kolhapur districts have been selected on the basis of their performance in terms of percentage of students examined. Kolhapur represents the higher performance district with the examination of 96 per cent of its students and Beed represents the lower performance district with the examination of only 78 per cent of its students (see Table 2.2). Then two tehsils from each district have been selected again on the basis of higher and lower performance of health examination. In Beed district, Ashti tehsil represents the higher performance and Ambejogai represents the lower performance. In Kolhapur, Radhanagari represents the higher and Hatkanakale represents the lower performance (see Table 2.4). Selection of districts and tehsils was done by using the official information on percentage of students examined. This was obtained from the Directorate of Health Services, Maharashtra and District Health Office of the Beed and Kolhapur districts. After selecting the tehsils, 25 schools from each tehsil have been selected for the study using the official records of the Jilla Parishad's education department. First, all the primary schools from the selected four tehsils were arranged separately in ascending order according to the strength of the students. Then the schools were classified into different size strata. From each strata schools were selected proportionately. Thus 25 schools from each tehsil were selected. After selecting the schools, eight parents from each selected school were selected from all the 100 schools. To get eight parents from each school, equal weightage was given to all the four classes. Thus two parents of students from each class (class I to IV) were selected randomly. Only the parents of those children who attended the school at the time of health examination were selected.

Interview schedule and field-work.

For the purpose of the study a pre-designed interview schedule was used. This schedule was prepared at the Ministry of & Health and Family Welfare in English and this was translated to Marathi by the staff of Population Research Centre to administer in Maharashtra. The interview schedule contains four sections. Section I deals with the information to be collected from the primary schools. Section II deals with the opinion of parents regarding the scheme. Section III deals with the particulars to be obtained from the Medical Officers at the PHCs. Information to be obtained from the District Blindness Relief Society is given in section IV. Detailed information about number of students examined, defected, referred, follow-up care given to referrals etc. were collected from the schools and PHCs.

For collecting information from the field survey, eight investigators were selected and they were given two days training at the Population Research Centre. After the training they were made as four teams (2 each) and each team was sent to the selected four tehsils separately. The survey work was monitored by the periodic visit to the tehsils by the principal investigator. Field-work was conducted during 3rd March to 19th April 1997. The collected data were coded and entered in personal computer.

Chapter scheme

The present report is divided into six chapters. The first chapter presents the background for the study, the objectives and methodology. Performance of the school health programme in Maharashtra and in the selected districts (Beed and Kolhapur) using the information supplied by the Directorate of Health Services is analysed in chapter two.

Third chapter analyses the performance of the programme in terms of percentage of students examined, defected, treated, referred, treatment to referrals, referred but not treated and disease-wise distribution of students in the selected schools. This chapter also analyses the teachers opinion regarding the various aspects of the scheme. Fourth chapter assesses the role of PHCs in the health check-up scheme in the selected tehsils of the two district. Fifth chapter provides the awareness and opinion of parents about the health check-up scheme. Summary and conclusions emerged from the study are given in chapter six.

Reference

Department of Family Welfare, Government of India. 1996. Special School Health Check-up Scheme for All Primary Schools in India: Operational Guide. Department of Family Welfare, Government of India, New Delhi.

Chapter 2

Performance of the Special School Health Check-up Scheme in Maharashtra

Before evaluating the programme based on the information collected from the survey, the availability of the district and state level information on the performance of the special school health check-up scheme helps us, to some extent, to understand the overall performance of the scheme in Maharashtra. The district and state level data were obtained from the Directorate of Health Services. The performance of the special school health check-up scheme for all primary schools in Maharashtra is given in Table 1. In the state as a whole, 94.1 lakh students were enrolled in 65,208 primary schools during the academic year 1996-97. Out of 94 lakhs enrolled students, 83 lakhs students were examined under the special school health check-up scheme. The remaining 11 lakhs were absent during the health check-up. Hence the total coverage of students was 88.2 per cent of the enrolled students. Among the examined students, 43.5 per cent were found with at least one health problem. It clearly indicates that a large proportion of children in primary schools have preventable health problems. It also indicates the importance of the intervention strategies to cure such common health problems and the need for the inclusion of serious health education curriculum at the primary school level to build up the awareness in the community through primary school children.

Out of the 65,208 primary schools in Maharashtra, 84 per cent of the schools are located in rural areas and the remaining 16 per cent are located in urban areas. Among the total 94 lakhs students enrolled in primary schools in the

state during 1996-97, 66 per cent of them were in rural areas and the rest of the 34 per cent were in urban areas. In fact, the urban population amounts to about 50 per cent. In this case the question arises as to how come the proportion of enrolled students in urban areas is 34 per cent. On enquiry, it was understood that some private schools in urban areas had not participated in this programme. The proportion of students examined under the health check-up scheme was higher in rural areas (90 per cent) than in urban areas (85 per cent). It means that the programme was able to reach more students in rural areas than in urban areas. Further, both in rural and urban areas, the health check-up scheme did not reach the 100 per cent of the students. It is surprising to see that the proportion of students identified with health problems is considerably higher in urban areas (52.4 per cent) than in rural areas (39 per cent) of the state. This could be partly the result of better implementation resulting into a better diagnostic facility in urban areas.

District-wise performance of the health check-up scheme is presented in Table 2. It shows the wide variation between the districts in terms of percentage of students examined under the programme. Kolhapur circle tops the list with the examination of 97 per cent of students. Nearly universal coverage of students is reported in Sindhudurg district (98 per cent) of Kolhapur circle. Performance in Nagpur, Pune, and Nashik circles are also good with 90 or above per cent of students examined. Per cent of students examined in Aurangabad circle is lowest (81 per cent). This is expected because the Marathwada region (Aurangabad circle) of the state is considered to be backward in various respects. This backwardness is reflected in the implementation of the health check-up scheme also. Coverage is below 80 per cent in Beed,

Nanded and Parbhani districts of this region. It is surprising to see the performance of Mumbai circle with the examination of only 87 per cent of the students. This is the second lowest proportion of the students examined after Aurangabad circle. Absenteeism among the Mumbai circle primary school children is higher than the many other districts of Maharashtra and it is mainly due to the low proportion in Greater Bombay. Since the figures relate to primary schools, the slum children might be having a large proportion and the absenteeism is expected to be quite high among them.

District-wise percentage of students examined in rural and urban areas shows that, except Akola circle, higher proportion of students were examined in rural areas than in urban areas of the districts. Even in the Kolhapur circle, which has the near universal coverage of students, the percentage of students examined is higher in rural areas (98 per cent) than in urban areas (92 per cent). Coverage in urban areas of Aurangabad Circle is lowest (76 per cent) in the state: one-fourth of the students were not checked. In Beed and Nanded districts of this circle the coverage in urban areas is only 69 per cent. This information is surprising, because parents in urban areas can be easily informed about the health check-up than in rural areas. Also for the medical teams, urban schools are easily accessible than the rural ones. The main reason could be the higher absenteeism among the urban students.

Among the examined students, percentage of students with health problems is again surprisingly highest in Mumbai circle (66 per cent) and lowest in Aurangabad circle (36 per cent). Pune circle has the second higheat proportion of students identified with health problems (44 per cent). It seems that

the most urbanised western parts of the state has the higher proportion of students with health problems. Nashik, Aurangabad, Akola and Nagpur circles of the state have the less number of students with health problems than the Mumbai, Pune and Kolhapur circles. In other words, the developed/more urbanised regions of the state have the higher proportion of students with health problems than the not so developed/less urbanised parts of the state. Even within the circles, the better-off districts have the higher proportion of students with health problems than the other districts. For example, in Pune circle, the proportion of students with health problems is higher in Pune district than in Solapur and Satara districts. Aurangabad district, which is relatively better-off than the rest of the districts within in the backward Aurangabad circle, has the more number of students with health problems than the other districts of the circle. The lowest percentage of students with health problems (14 per cent) is recorded in Osmanabad district. In no way the students of this district have better health status than the students of Pune, Mumbai and Kolahapur circles. It clearly indicates difference in the quality of health check-up by the paramedical staffs in the different regions of the state. It seems that the quality of check-up was good in the better-off regions than the underdeveloped regions.

Though the percentage of students examined is higher in rural areas, the proportion of students with health problems is higher in urban areas (52 per cent) of the state than in rural areas (39 per cent). In half of the districts, proportion of students with health problems is higher in urban areas and lower in rural areas. Per cent of students with health problems in Mumbai urban circle is considerably higher (72 per cent) than its rural circle (55 per cent). This

pattern is also true for Pune, Kolhapur and Nagpur circles. These figures again indicate the better quality of health check-up by the medical teams in urban areas than in rural areas of the state.

The performance of the school health check-up scheme in the selected two districts (Beed and Kolhapur) is given in Table 3. As mentioned earlier, the percentage of students examined in Kolhapur district is much higher than the Beed district. The information supplied by the directorate of health services and district health officials show that proportion of students examined in Kolhapur district is 96.3 per cent, whereas it is only 77.6 per cent in Beed district. Absenteeism among the students is quite high in Beed district (22.3 per cent) than in Kolhapur district (3.7 per cent). Beed is one of the backward districts of the underdeveloped Marathwada region of the Maharashtra state. Out migration among the poor families of this district is common and this could be one of the reasons for higher absenteeism among children. When the families move to the city for a seasonal work they also take their family members along with them. Also poor families are enrolling their children in school for getting some additional benefits in Public Distribution System but they are not very serious in sending them to school. Because of these there is a large difference between enrollment and regular attendance of children in this district. This makes the health check-up programme impossible to reach all the children in primary schools in Beed district.

In both Kolhapur and Beed districts, higher proportion of students were examined in rural areas than in urban areas. For example, proportions of students examined in rural and urban areas of Beed district are 80 per cent and 69 per cent

respectively. In Kolhapur, almost all the primary school children in rural areas were examined (98 per cent). The coverage in urban areas is 92 per cent. Though there is a large difference between Beed and Kolhapur districts in terms of students examined, there is no difference in percentage of students with health problems in these districts (37.5 per cent and 37.1 per cent respectively). The pattern of percentage of students with health problems is quite different for the rural and urban areas of these two districts. In Beed, the proportion of students with health problems is higher in rural areas (39 per cent) than in urban areas (31 per cent) as one would normally expect. But in Kolhapur, the pattern is quite opposite: children with health problems are higher urban areas (41 per cent) than in rural areas (36 per cent). Students with health problems in the urban areas of Kolhapur (41 per cent) is much higher than the urban areas of Beed (31 per cent). In rural areas of these two districts, students with health problems are more or less same (36 per cent in Kolhapur and 39 per cent in Beed). Among the students identified with health problems, percentage of students referred for further treatment is higher in Kolhapur district (8.3 per cent) than in Beed district (3.4 per cent).

The information provided in these tables raises several issues. In urban areas or in relatively developed districts, more number of students are identified with health problems than in rural areas or in the less developed districts. It could mean that the health of children in urban/developed regions is poorer than the children of rural/less developed regions, which is not at all true. The reason for this anomaly could be, as stated earlier, the difference in the quality of medical check-up by the paramedical staffs. It seems the programme is efficiently administered in the urban areas than

in rural areas by the medical teams. Also the easy accessibility of the schools in urban areas could have made the medical teams to move from one school to another easily. This allows them to spend more time in schools as well as efficiency in checking the students. Also the enrollment in urban schools are normally higher so that large number of students can be checked in one place. The average number of students checked per school in rural and urban areas are 102 and 259 respectively (see Table 2.1). The situation is entirely different for rural medical teams. Mostly schools are not easily accessible and the teams have to travel more. This makes them to complete the check-up hurriedly and ultimately the efficiency of the health check-up goes down. This could be the reasons for the lower number of students with health problems in rural areas than in urban areas.

The quality of the administration of medical check-up is also clearly reflected in the information on percentage of students referred for further check-up. In the relatively better-off Kolhapur district, more percentage of students were referred for further treatment (8.3 per cent) than in Beed district (3.4 per cent). Under the normal circumstances the opposite would have been true. But this has not happened. In Kolhapur district students referred for further treatment is higher in rural areas (9 per cent) than in urban areas (6 per cent). The same is true for Beed but the difference is very small (3.5 and 2.4 respectively). The district differentials in per cent referred may be due to efficiency differentials. But rural-urban differentials in per cent referrals could be due to genuine differences in the proportion of cases that need referrals.

The performance of the programme within the two districts is given in Table 4. It shows that the variation is more between the tehsils in percentage of students checked in low performance Beed district. Whereas, the variation is very small between the tehsils in better performance Kolhapur district. It indicates that lower the performance higher the variation within the district. Further, as mentioned earlier, within the Beed district, higher proportion of students were checked in better-off tehsils than the others. For example, in the relatively better-off Ashti tehsil, which is closer to Ahmednagar city, 83 per cent of students were checked.

Percentage of students with health problems is same in Beed and Kolhapur districts (37.5 and 37 respectively). But there exists a large variation between the tehsils in the two districts. In Kolhapur it varies between 69 per cent in Ajara tehsil and 23 per cent in Kagal tehsil. In Beed it varies between 52 per cent in Georai and 32 per cent in Kej tehsil. An interesting observation is that the tehsils which have lower average number of students per school have found more students with health problems. For example, Ajara tehsil, which has 69 per cent of students with health problems has only 82 students per school whereas, Kagal tehsil which has 23 per cent of students with health problems has 180 students per school. The same is true in Beed district also. In Ambejogai the average number of students per school and per cent of students with health problems are 172 and 33.5 respectively. The corresponding figures for Ashti are 119 and 51. It is obvious that larger the school lower the students identified with the health problems and vice versa. It means that the quality of the health check-up by the medical teams in larger schools is lower than in the smaller schools. It happens when medical team has to cover more students in shorter time.

Disease-wise distribution of students with health problems is given in Table 5. It shows that the pattern of distribution of diseases among students is more or less similar in the two districts. Anaemia, intestinal worms and teeth problems are more common diseases among the students. More or less one-fourth of the students are identified with intestinal worms, 30-40 per cent with teeth related problems and about 13 per cent with anaemia. About 15 per cent of the students are with complaints like ear diseases, pyoderma and eye problems. Proportion of students with "other" diseases are more in Kolhapur (19 per cent) than in Beed (11.5 per cent). Proportion of students in "other" category suggests that the quality of programme was good in Kolhapur than in Beed. Because medical teams were able to identify more cases other than the usual eight diseases in Kolhapur. It is reflective of overall good performance in Kolhapur.

The ratio of students having health problems is higher in Kolhapur (1.2) than in Beed (1.0). Ratio of students with health problems in urban and rural areas of Beed is same whereas the ratio is higher among urban students than rural students in Kolhapur. Overall, it reflects the better quality of health check-up in Kolhapur than in Beed and within the district check-up was good in urban than in rural areas. These figures indicate that the reason for lower percentage of students with health problems in rural areas is the difference in the quality of health check-up.

Tehsil-wise distribution of diseases among students is presented in Table 6. The distribution of diseases is more or less similar in the tehsils of two districts except "other" diseases. Anaemia, intestinal worms and teeth problems are the more common health complaints among the students in most of

the tehsils in two districts. In almost all the tehsils, percentage of students with "other" diseases is more in Kolhapur than in Beed.

Conclusion

On the whole, the performance of the special school health check-up scheme in Maharashtra shows that, out of the 88 per cent of students examined 44 per cent of them are identified with at least one health problem. This clearly indicates the higher prevalence of easily preventable health problems among primary school children and the importance of intervention strategies. Health check-up scheme did not reach 100 per cent of students in the state but it reached the higher proportion of students in rural areas than in urban areas. Though the proportion of students examined is higher in rural areas, students identified with health complaints are considerably higher in urban areas than in rural areas suggesting the difference in quality of health check-up.

District-wise performance of the scheme shows the wide variation between districts in terms of students examined and students identified with health problems. Proportion of students examined is lowest in Marathwada region and highest in Kolhapur region. Students with health problems are higher in Mumbai and Pune region than the students in Nashik, Aurangabad, Akola and Nagpur regions. It seems that the developed/more urbanised regions have the higher proportion of students with health problems than the less developed/less urbanised regions of the state. Even within the regions, the better-off districts have higher proportion of students with health problems than the other districts.

Higher proportion of students with health problems in developed/urban areas of the state does not mean the poor health of students in these regions but it does indicate the better quality of health check-up. It seems that the programme is efficiently administered in these regions. Also easy accessibility and higher enrolment of urban schools could have made the medical teams to spend more time and efficiency in examination of students.

The performance of the programme in Beed and Kolhapur districts shows that higher proportion of students were examined in the latter than in the former. In both the districts higher proportion of students were examined in rural areas than in urban areas. Students identified with health problems are similar in the two districts, but proportion of students referred for further treatment is higher in Kolhapur than in Beed.

Proportion of students examined within the districts varies considerably between the tehsils. The variation in this respect between the tehsils is very high in poor performance Beed and it is low in good performance Kolhapur. It indicates that, lower the performance higher the variation within the district. An interesting observation in the two districts is that lower the number of children per school higher the students identified with health problems. In other words, smaller the school higher the students with health complaints. It means that the quality of medical check-up depends on the number of students in the school.

Anaemia, intestinal worms and teeth problems are identified as common health complaints among students in the two districts. Ear diseases, pyoderma and eye problems are

also affecting considerable proportion of students. Students with "other" diseases are higher in Kolhapur than in Beed. Further, ratio of students with health problems is higher for Kolhapur than for Beed. Students with health problems, students referred for further treatment, students with "other" diseases and ratio of students having health problems are higher for Kolhapur than for Beed. All these indicators clearly shows that the quality of health check-up was good in Kolhapur than in Beed.

Table 2.1.

Performance of the special school health check-up scheme in Maharashtra (from 1-10-1996 to 18-10-1996).

	Urban	Rural	Total
Total number of schools	10617	54591	65208
Total number of enrolled students	3222941	6187912	9410853
Total number of students examined	2748127	5553817	8301944
Average no.of students examined per school	259	102	127
Total number of students absent	474814	634095	1108909
Per cent of students examined	85.3	89.7	88.2
Per cent of students absent	14.7	10.3	11.8
Total number of students defective	1440794	2171346	3612140
Per cent of students defective	52.4	39.1	43.5

Source: Directorate of Health Services, Maharashtra.

Table 2.2.
District-wise performance of the special school health check-up scheme in Maharashtra.

District	Urban		Rural		Total	
	% of stud exam	% of stud defc	% of stud. exam	% of stud defc	% of stud exam	% of stud defe
Raigad	89	29	91	51	90	48
Ratnagiri	91	67	97	50	97	51
Thane	89	47	94	60	91	53
Mumbai	81	85	--	--	81	85
Mumbai Circle	83	72	94	55	87	66
Ahmednagar	91	17	93	42	92	39
Dhule	87	34	81	37	82	37
Jalgaon	94	24	96	21	95	22
Nashik	86	38	88	35	87	36
Nashik Circle	89	30	90	34	90	33
Pune	90	58	89	51	89	54
Solapur	83	35	89	36	87	36
Satara	98	40	94	35	94	35
Pune Circle	88	50	90	42	90	44
Kolhapur	92	41	98	36	96	37
Sangli	93	61	97	33	96	38
Sindudurg	96	51	98	67	98	66
Kolhapur Circle	92	48	98	39	97	41
Aurangabad	82	47	85	46	84	47
Beed	69	31	80	39	78	37
Jalna	79	38	90	42	88	41
Nanded	69	31	76	41	74	38
Latur	73	29	86	41	83	38
Osmanabad	88	20	95	13	93	14
Parbhani	74	26	80	30	78	29
Aurangabad Circle	76	34	83	37	81	36
Akola	98	32	86	42	89	40
Amravati	89	40	90	37	90	38
Buldhana	88	33	90	29	90	30
Yavatmal	95	33	86	50	87	47
Akola Circle	92	36	88	39	89	39
Bhandara	87	34	97	31	96	31
Chandrapur	93	35	94	38	94	38
Gadchiroli	95	30	98	33	97	33
Nagpur	94	47	92	37	93	43
Wardha	93	42	94	37	93	38
Nagpur Circle	93	43	95	35	94	38
State	85	52	90	39	88	44

Source: Directorate of Health Services, Maharashtra.

Table 2.3

Performance of the special school health check-up scheme in Beed and Kolhapur Districts

District	Urban	Rural	Total
BEED			
Total number of schools	172	1695	1867
Number of enrolled students	53736	206763	260499
Total number of students examined	37239	164932	202171
Total number of students absent	16497	41831	58328
Per cent of students examined	69.3	79.8	77.6
Per cent of students absent	30.7	20.2	22.3
Total number of students defective	11379	65053	75721
Per cent of students defective	30.6	39.0	37.5
Number of students referred	274	2272	2546
Per cent of students referred	2.4	3.5	3.4
KOLHAPUR			
Total number of schools	303	1761	2064
Number of enrolled students	82331	219352	301683
Total number of students examined	75566	214856	290422
Total number of students absent	6756	4443	11208
Per cent of students examined	91.8	98.0	96.3
Per cent of students absent	8.2	2.0	3.7
Total number of students defective	30649	77130	107779
Per cent of students defective	40.6	35.9	37.1
Number of students referred	1859	7076	8935
Per cent of students referred	6.1	9.2	8.3

Source: Directorate of Health Services, Maharashtra; and District Health Office, Beed and Kolhapur districts

Table 2.4.

Tehsil-wise performance of school health check-up scheme in Beed and Kolhapur districts

Name of tehsil	No. of Schools	No. of students	% of students checked	% of students defective	% of students referred
Beed	1867	260499	77.6	37.5	3.4
----					
1. Beed	-	49021	79.8	43.1	1.9
2. Georai	-	34127	74.9	51.6	3.7
3. Majalgaon	-	42159	76.0	30.6	2.1
4. Ambajogai	275	47330	72.5	33.5	3.6
5. Kej	-	38723	79.0	31.5	4.5
6. Ashti	213	25446	83.0	50.8	2.7
7. Patoda	-	23693	82.2	37.4	5.5
Beed Rural	1695	206763	80.0	39.0	3.5
Beed Urban	172	53736	69.3	30.6	2.4
Kolhapur	2064	301693	96.3	37.1	8.3
--------					
1. Ajara	119	9814	99.0	69.4	9.4
2. G. Bavada	52	2773	99.6	52.5	5.3
3. Bhodargad	151	11355	99.8	58.8	6.5
4. Vandgad	187	16412	97.3	30.8	14.1
5. Gadhinglaj	104	15093	97.2	24.1	13.8
6. Hatkanakale	150	37140	95.5	41.4	9.1
7. Kagal	101	18209	99.6	22.7	9.8
8. Karvir	183	32648	98.4	39.8	7.2
9. Radhanagari	180	15986	99.9	32.1	10.6
10.Sirole	118	25054	96.2	33.1	7.5
11.Shahawadi	233	15263	99.1	23.0	10.8
12.Panhala	183	19605	99.4	29.1	10.1
Kolhapur Rural	1761	219352	98.0	36.0	9.2
Kolhapur Urban	303	82331	91.8	40.6	6.1

Source: District Health Office: Beed & Kolhapur

Table 2.5.

Disease-wise percentage distribution of students ~~with~~ in Beed and Kolhapur districts: Special school health check-up scheme

	Urban		Rural		Total	
	No.	%	No.	%	No.	%
BEED						
Anaemia	--		--		9901	13.1
Intestinal worms	--		--		21340	28.2
Night Blindness	--		--		1701	2.2
Ear discharge	--		--		3312	4.4
Skin problems	--		--		478	0.6
Pyoderma	--		--		3847	5.1
Eye	--		--		3396	4.5
Teeth	--		--		26330	34.8
Others	--		--		8673	11.5
Total no. cases	--		--		78978	100.0
Total no. students	11379	30.6	64342	39.0	75721	37.5
% of studns treated	11105	97.6	62070	96.5	73175	96.6
No. of cases referred	274	2.4	2272	3.5	2546	3.4
Ratio of students with health problems	1.02	--	1.04	--	1.04	--
KOLHAPUR						
Anaemia	7902	25.8	6566	8.5	14468	13.4
Intestinal worms	6998	22.8	19733	25.6	26731	24.8
Night Blindness	66	0.2	470	0.6	536	0.5
Ear discharge	2572	8.4	3707	4.8	6279	5.8
Skin problems	202	0.7	2066	2.7	2268	2.1
Pyoderma	1850	6.0	3959	5.1	5809	5.4
Eye	1483	4.8	3324	4.3	4807	4.5
Teeth	20555	67.1	22258	28.9	42813	39.7
Others	5490	17.9	15028	19.5	20518	19.0
Total no. of cases	47118	100.0	77111	100.0	124229	100.0
Total no. of studns	30649	41.0	77130	35.9	107779	37.1
% of studns treated	28790	93.9	70054	90.8	98844	91.7
No. of cases referred	1859	6.1	7076	9.2	8935	8.3
Ratio of students with health problems	1.54	--	1.0	--	1.15	--

Source: District Health Office: Beed & Kolhapur

Table 2.6.

Tehsil-wise distribution of students with health problems in Beed and Kolhapur districts

Name of Tehsil	Anaemia	I.W.	N.B.	Ear	Skin	Pyod	Eye	Teeth	others
Kolhapur									
1. Ajara	9.3	25.0	0.1	2.9	1.9	6.8	4.1	29.5	20.4
2. G. Bavade	7.1	20.4	0.0	3.4	4.6	5.8	2.6	39.8	16.7
3. Bhodargad	9.9	34.1	0.3	3.6	3.5	2.4	1.9	29.6	14.6
4. Vangad	6.5	25.0	0.1	5.5	5.0	4.4	4.2	27.3	21.9
5. Gadhingalj	14.6	32.8	1.0	5.6	2.5	5.5	5.5	21.9	16.3
6. Hatkanankale	8.2	26.7	1.1	3.9	1.8	4.5	5.2	28.6	17.6
7. Kagta	4.4	28.9	0.5	9.6	2.2	9.0	6.9	20.2	18.4
8. Karvir	6.2	20.2	0.5	4.0	1.1	4.6	3.8	37.0	22.6
9. Radhanagari	6.8	27.2	0.1	7.2	3.9	6.0	3.3	24.3	21.4
10. Shirole	15.3	20.1	1.6	4.3	2.0	4.1	4.1	29.5	19.2
11. Shahawadi	7.3	28.7	0.4	7.7	6.9	8.7	5.0	18.3	19.3
12. Panhala	5.8	24.9	0.3	5.3	3.9	5.2	4.9	28.3	22.4
Total Rural	8.5	25.6	0.6	4.8	2.7	5.1	4.3	28.9	19.5
Total Urban	25.8	22.8	0.2	8.4	0.7	6.0	4.8	67.1	17.9
Beed									
1. Beed	9.7	32.6	1.3	2.8	0.7	4.9	4.2	25.0	18.8
2. Gevrai	15.0	24.7	2.7	4.1	0.2	6.7	6.3	30.6	9.6
3. Majalgaon	13.9	23.5	1.1	6.9	0.2	10.1	4.6	29.5	10.2
4. Kej	10.7	29.1	1.7	4.8	0.6	0.6	2.1	47.3	3.2
5. Patada	14.9	24.7	2.5	4.6	1.1	5.6	5.7	30.0	10.9
6. Ashti	9.7	24.9	2.6	3.9	1.3	5.4	4.2	38.9	9.0
7. Ambajogai	15.3	26.4	3.4	3.6	0.3	0.9	2.8	37.2	10.1

Source: District Health Office, Beed and Kolhapur

Chapter 3

Performance of the Special School Health Check-up Scheme in the Selected Schools in Beed and Kolhapur Districts.

As mentioned in the first chapter, Beed and Kolhapur districts have been purposively selected for this study on the basis of their performance in terms of percentage of students examined. Kolhapur represents the best performance and Beed represents the bad performance. Two tehsils from each district have been selected again on the basis of good and bad performance within the districts. In Beed district, Ashti tehsil represents the best and Ambejogai represents the bad. In Kolhapur, Radhanagari represents the best and Hatkanakale represents the relatively lower performance. In each district information from 50 primary schools (25 from each tehsil) have been collected. Thus, this chapter analyses the information collected from the 50 schools in Beed and 50 schools in Kolhapur districts. First section analyses the performance in terms of percentages of students checked, defective and referred in the two districts separately. It also analyses the performance within the district by comparing the information from two tehsils. Second section of this chapter provides the perception of primary school teachers regarding the health check-up scheme.

Performance of the scheme

Table 2.1 provides the number and percent of students checked, defective and referred in selected schools in Beed and Kolhapur districts. It shows that almost all the enrolled students in the selected primary schools have been examined in Kolhapur (98 per cent) whereas, only three-fourth have been examined in Beed (76 per cent). Absenteeism is highly

prevalent among the primary school students of Beed district and it has made the programme impossible to reach 100 per cent of the students. In Ambejogai tehsil of Beed 33 per cent of the students were not examined. This also reflects the inadequate communication strategies to bring all the students to schools during the health check-up in this tehsil. Within the districts variation is more between the tehsils in proportion of students checked in Beed (88 per cent in Ashti and 67 per cent in Ambejogai), whereas hardly any difference could be observed between the tehsils in Kolhapur (99 per cent in Radhanagari and 97 per cent in Hatkanakale).

In the selected schools, proportion of students identified with health problems among the examined students is considerably higher in Beed (41 per cent) than in Kolhapur (24 per cent). Students with health problems in sample schools in Kolhapur is lower than the proportion observed for district as a whole (37 per cent, see Table 2.2). But the figures for Beed are matching very closely for sample schools as well as district as a whole (41 per cent and 37 per cent respectively). Students with health problems in selected schools of Ambejogai (36 per cent) and Ashti (46 per cent) tehsils of Beed also compares closely to the figures for entire tehsils (34 per cent and 51 per cent respectively, see Table 2.4). But the figure for sample schools in Hatkanakale is (24 per cent) not matching with the figure for entire tehsil (41 per cent) whereas the figure for sample schools (27 per cent) in Radhanagari is matching closely with the figure for entire tehsil (32 per cent, see Table 2.4) in Kolhapur district. The reason for the difference in Hatkanakale is that the higher distribution of selected schools in areas with lower proportion of students with health problems. Out of 25 selected schools in this tehsil 10 schools were under Pargaon,

Shiroli and Kadoli PHCs. Schools coming under these PHCs have considerably lower proportion of students with health problems than the other PHCs. (see Table 4.2).

As observed in chapter two, proportion of students with health problems is higher in bigger schools and lower in smaller schools in the selected schools of the two districts. Among the selected schools, the average number of students checked per school is lower in Beed (103) than in Kolhapur (163). Higher percentage of students identified with health problems in Beed than in Kolhapur again confirm the earlier observation that larger the number of students examined per school lower the number of students identified with health problems. Average number of students per school is lower for Ashti (96) and higher for Ambejogai (110) correspondingly percentage of students with health problems is higher for Ashti (46 per cent) and lower for Ambejogai (36 per cent). The same pattern is observed for Kolhapur but the difference in percentage of students defective is less. It is clear that in smaller schools more percentage of students were identified with health problems by the medical teams. It again suggests the better quality of examination in smaller schools. Although the students found with health problems are less in Kolhapur than in Beed, students referred for further treatment are considerably higher in Kolhapur (15 per cent) than in Beed (3.2 per cent). In Hatkanakale tehsil of Kolhapur 19 per cent of the students are referred for further check-up. Again the percentage of students referred for further treatment in the sample schools for two tehsils of Beed are matching with the figures for whole tehsils, whereas these figures are not matching for Kolhapur (see Table 2.4).

Tables 3.2, 3.3 and 3.4 provide disease-wise distribution of students with health problems in the two districts and four tehsils separately in the selected schools. They show that anaemia, intestinal worms, teeth problems and "other" diseases are the major health problems among the students of selected schools in the two districts. Teeth problems, which mainly arise due to lack of brushing habits which could lead infection in gum, are observed to be higher in Beed (39 per cent) than in Kolhapur (27 per cent). Anaemia is related to nutritional deficiency and its prevalence is higher in Beed (11 per cent) than in Kolhapur (5 per cent). Ear discharge is higher among Kolhapur students (8 per cent) than among Beed students (4 per cent). Prevalence of "other" diseases, which is closely related to the quality of the health check-up, is considerably higher in Kolhapur (21 per cent) than in Beed (9 per cent). Night blindness, scabies, pyoderma, and eye problems are affecting a small proportions of students in both the districts. Diseases-wise distribution of students indicate that in backward Beed district diseases related to infections and nutritional deficiency are higher among the students than the relatively developed Kolhapur district. Further, quality of health check-up, as indicated by the proportions of students under "other" diseases, is better in Kolhapur than in Beed. Students with anaemia, intestinal worms, night blindness, scabies, pyoderma were mostly treated at the school and only very few cases were referred for further treatment. But a small percentages of students were referred for further treatment for ear discharge, eye problems, teeth problems and "other" diseases. In almost all the diseases proportion of students referred is higher in Kolhapur than in Beed. In both the districts students referred for eye problems are higher than for other diseases. Students referred for ear discharge is significantly higher in Kolhapur than in Beed.

Within the Beed district, distribution of students with health problems is different for the two tehsils. Infectious diseases like anaemia and intestinal worms are lower for better-off Ashti tehsil and higher for relatively backward Ambejogai tehsil. But the students with teeth problems are higher in Ashti than in Ambejogai. Disease-wise distribution of students in the two tehsils of Kolhapur is more or less identical. This is expected since Kolhapur is a developed district with less intra-district variations.

Among the 2091 students identified with health problems in the selected schools of Beed 66 (3.2 per cent) of them were referred for further treatment. In Kolhapur, out of 2002 students with problems, 298 (15 per cent) of them were referred. Most of the referred students are referred for ear, eye, teeth and "other" diseases in the two districts. Tables 3.5 and 3.6 provide the distribution of referred students by referral institutions. Beed district has a Government Medical College and a multidisciplinary hospital associated with it at Ambejogai. Hence, most of the students in selected schools were referred for further treatment in Beed to this medical college hospital. In Kolhapur almost all the referred students in selected schools were referred for their respective primary health centres. Even though the special health check-up scheme has the objective of involving the private hospitals in the scheme, only three students were referred for private hospitals in Kolhapur and none in Beed.

Quality and success of the programme also depend on the follow up of referral cases. Referred students were given a referral card to get a further treatment at the referral institutions. According to the programme objective, these referred students must get treatment within a month after the

health check-up. Information obtained from the schools regarding the number of students actually sought treatment at the referral institutions is presented in Table 3.7. It shows that the percentage of referred students sought treatment is, as expected, higher for Kolhapur (63 per cent) and lower for Beed (49 per cent). In any case, in both the districts, still a large proportion of referred students are not treated at the referral institutions. In Beed district, there is a large difference between tehsils in percentage of students sought treatment: 60 per cent in Ambejogai and only 29 per cent in Ashti. One of the reasons for this difference is that the referral institution (Ambejogai medical college hospital) is nearer to Ambejogai students than for Ashti students. Hence, nearness of referral centre made the higher proportion of students to get treatment in Ambejogai tehsil. In Kolhapur district 65 per cent of students sought treatment in Hatkanakale tehsil and 51 per cent in Radhanagari tehsil. Radhanagari is a hilly area with a poor transport facility and these might have been the reasons for half of the students not get treated. It is not worth to comment on the disease-wise percentages of students sought treatment since the figures for individual diseases are small in the two districts.

Opinion of the primary school teachers about the different aspects of the health scheme

Success of the programme also depends on the co-operation and perception of the primary school teachers about the programme. Since teachers in India are normally helping the government in many non academic activities like election related duties, census enumeration, house listing for PDS etc., these activities are increasing their work burden and whatever the additional schemes are implemented by the

government through teachers, will have a serious burden on their work. Health check-up scheme involves the teachers in a bigger way: educating the students about cleanliness, training for the programme, preparation for the check-up, mobilization of the community, maintenance of health cards, follow-up of referral cases etc. Certainly health check-up scheme increases their work-load considerably. To make the programme success it is necessary to elicit the teachers perception about the programme. One teacher from each selected school, normally a head of the school, was asked about the scheme. Tables 3.8 and 3.9 give the teachers' responses related to some of the operational strategies of the health check-up scheme.

When the teachers were asked about whether they received necessary help from various government departments to organize the scheme, their responses for the help from education and health departments are good. Since these two departments are directly involved in implementing the scheme, the teachers' positive responses about them is worth noting. All the teachers in Beed and 96 percent of the teachers in Kolhapur said that education department provided the necessary help for them. The response level is same for the help from health department. Teachers responses for the help of state public works department (PWD) is not encouraging: 30 per cent of teachers in Beed and only 12 per cent in Kolhapur recognized the PWD's help. Help from the non-governmental organizations (NGO) is low because not many NGO's are operating in the study areas of the two district.

Prior to health examination of students in the schools one teacher from each school was given one day training about the arrangement for the health check-up and how to examine and identify children with health problems. To ascertain the

opinion of the teachers about the training first they were asked whether the training was conducted as per schedule. All teachers in two districts agreed that they received the training as per scheduled time, and the duration of the training they had was one day. When the teachers were asked whether this one day training was adequate to conduct the health check-up, 96 per cent of the teachers in both the districts agreed that the training they had was sufficient to arrange the programme. The training programme also includes the demonstration on how to examine the children. Eighty four per cent of the teachers in Beed and 78 per cent of the teachers in Kolhapur said that there was a demonstration on examination of children in their training. The rest of the 16 per cent of teachers in Beed and 22 per cent in Kolhapur were not given any demonstration and thus their training was not complete in this respect.

For the health check-up scheme schools were given, in advance, the materials like manuals, operational guides, list of referral institutions, drugs and medicines and stationery. Teachers were asked whether their school received these materials on time. Except few, most of the schools received the operational guide on time in the two districts (94 per cent in Beed and 98 per cent in Kolhapur). Almost all the schools received the manual for teachers on time in Kolhapur but only 68 per cent of the schools received the manuals in Beed. Within Beed, all the schools in Ashti tehsil received the manual and operational guide but many schools in Ambejogai tehsil did not receive the manual for teachers.

Charts and IEC materials were received by many schools in Kolhapur but most of the schools in Beed did not receive them. In Beed, none of the schools in Ashti tehsil received charts

and IEC materials. In Ambejogai only half of the schools received charts and only one-fourth received IEC materials. Only 24 per cent of the schools in Beed and 36 per cent in Kolhapur were informed about the list of referral institutions in advance. Since referrals are coming under the purview of the paramedical staffs and not under the schools it is natural that schools were not given the prior information about the referral institutions by the health department.

Drugs and medicines are the most important components in this scheme. Sufficient availability of the medicines will make the medical teams to run the programme smoothly. The proportion of schools received adequate drugs and medicines is 92 per cent in Kolhapur and only 74 per cent in Beed. In Ambejogai tehsil of Beed only 48 per cent of the schools had received the sufficient medicines on time. During the interview medical officers in Ambejogai complained about this inadequate supply of medicines. They did receive the medicines but after completing the check-up in schools. This made them to distribute the medicines to the students several days after the examination. This clearly exposes the lack of supply mechanisms in the scheme.

Involvement of the community in health check-up scheme is essential because it helps to organize the programme effectively. Hence teachers were instructed to seek the help of community leaders, other responsible persons and parents at the village level to organize the programme. To know the actual participation of the community in the programme the teachers were asked whether the community was mobilised as planned. Teachers from almost all the schools in the two districts said that community was mobilised as planned. Further, all the teachers in both the districts agreed that all the preparation for check-up could be made as scheduled.

Health check-up scheme is a massive programme and thus the education department should start its operation well in time so that the scheme can be implemented effectively. Among its various preparations for the scheme the education department should give information and instruction to the schools well ahead of time. So that teachers can be prepared and can give prior information to the parents, students and to the community. This will also facilitate the schools efforts in successfully arranging the programme. When teachers were asked did they receive the instruction well in time from education department, 92 per cent of the teachers in Beed and 96 per cent in Kolhapur responded positively.

Maintenance of health cards is an important function of the school teachers. It gives the details about the health condition of the students at the time of health check-up. A question was asked in this regard to know whether the schools properly maintain the health cards. All the teachers in the two districts said that they are maintaining the health cards. But at the time of field-work we could find the health cards of students with health problems of some schools kept at PHCs. And also there is a confusion among teachers as well as Medical Officers over where to keep these health cards. Hence it is suggested that clear instructions should be given to the schools and Medical Officers about the place of health card being maintained.

Teachers were asked to rate the success of the health check-up scheme. Their opinion indicate that, in general, teachers in Kolhapur rated the success of the scheme very high than the teachers in Beed (Table 3.10). For example, 54 per cent of the teachers rated the success of the scheme as 75 per

cent or below in Beed whereas only 4 per cent in Kolhapur rated so. But eighty per cent of the teachers in Kolhapur rated the success of the programme between 75-100 per cent. Teachers rated so in Beed is only 40 per cent. Further, 100 per cent success rate is given by 58 per cent of the teachers in Kolhapur whereas only 16 per cent gave so in Beed. Within Beed district teachers in Ambejogai tehsil rated the success much lower than the teachers in Ashti tehsil. But there is no difference in the opinion of the success rate of the programme between tehsils in Kolhapur. The bad performance of the scheme in general in Beed district is clearly reflected from the opinion of teachers as well.

Teachers perception were obtained about the utility of the scheme and the role of officials in conducting the scheme. It shows that almost all the teachers in the two district found the scheme useful (Table 3.11). But those who perceived the scheme very much useful are higher in Kolhapur (46 per cent) than in Beed (32 per cent). It is surprising to see two teachers in Kolhapur opined that the programme is not at all useful. During the interview these two teachers complained much about the additional work-load imposed on them because of the health check-up scheme. They also refused to co-operate with the investigators in giving the information in the beginning. But such negative opinions are very small in number. To successfully implement the scheme, co-ordination from various departments and officials is necessary. Hence teachers were asked to rate the role of concerned officials in implementing the programme. In general, teachers in the two district opined that the role of officials was good. But more teachers in Kolhapur than in Beed opined that the role of officials was very good.

Opinion of teachers about school health scheme

Teachers were asked to give their opinion specifically about the health check-up scheme. Almost all the teachers in the two districts gave their opinion. This is presented in Table 3.12. Their opinion reveals that they are mostly appreciating the programme but their opinion also raises important shortcomings of the programme. Teachers feel that this scheme is very much useful and it helps to raise the health status of the students. Thus, many of them want this scheme to be repeated every year. Uniform health check-up of students, more time for examining the students, provision of sufficient medicines to the defected students immediately and more attention to the referral cases are some of the opinion given by the teachers. Though the number of teachers who have given these opinions is small in the two districts, these opinions clearly expose the shortcomings of the scheme like lack of uniformity and haste in the examination, insufficient medicines for defected cases and lack of proper attention to referral cases. Expanding the coverage of students up to 7th standard, sufficient medical staff and specialist doctors for check-up and proper information to parents about the health of child are some of the suggestions by some teachers. Some teachers seek the co-operation of parents to make this scheme more useful and some of them are also interested in undergoing a training in health education and in identifying the health problems of the students. First aid box to schools, treatment to referral cases at the school itself and free treatment to referral cases are some of the other opinions given by the few teachers. Certainly, teachers' opinions reveal their support to the scheme as well as their interest in making this programme really benefitting for the students.

Conclusions

This chapter analysed the information collected from the 50 schools each in Beed and Kolhapur districts. In terms of percentage of students examined Beed represents the lower performance and Kolhapur represents the higher performance. Two tehsils from each district had been selected again on the basis of higher and lower percentage of students examined. Ashti and Ambejogai tehsils represent the higher and lower performance respectively in Beed. Radhanagari and Hatkanakale tehsils represent the higher and lower performance respectively in Kolhapur.

The analysis showed that, in the selected schools, as expected, almost all the students enrolled in Kolhapur and only 76 per cent in Beed had been examined. This data from the selected schools confirm the data presented in chapter 2 for the whole districts. Absenteeism is highest among Beed students and it made the scheme impossible to reach one-forth of the students. It reflects the inadequate strategies adopted to make all the students present during the health check-up in Beed.

In the sample schools, proportion of students with health problems is higher in Beed than in Kolhapur. The analysis also confirms the observation in chapter 2 that bigger the school lower the number of students with health problems. Average number of students per selected school is 103 for Beed and 163 for Kolhapur. Students identified with health problems are higher in Beed and lower in Kolhapur. This observation again suggests the better quality of health examination in smaller schools than in larger schools. Less number of students in schools makes the paramedical teams to spend more time in school and efficiency in examining the students.

Though students with health problems are less in Kolhapur, students referred for further treatment are higher than in Beed. Disease-wise distribution of students with health problems shows that anaemia, intestinal worms, teeth problems and "other" diseases are the major health problems among the students of sample schools in the two districts. Teeth problems, which are related to improper brushing leading to infections, are observed to be higher in Beed than in Kolhapur. Anaemia is related to nutritional deficiency and its prevalence is higher in Beed than in Kolhapur. Prevalence of "other" diseases, which is related to quality of health check-up, to some extent, is considerably higher in Kolhapur than in Beed. Night blindness, scabies, pyoderma and eye problems are prevalent among the small proportions of students in the two districts. Disease-wise distribution indicate that diseases related to infections and nutritional deficiency are higher among the students of backward Beed district than the relatively better-off Kolhapur. Within the Beed district diseases related to infections and nutritional deficiency are lower in relatively better-off Ashti and higher in backward Ambejogai. In Kolhapur distribution of diseases among students is more or less same in the two tehsils. Further, quality of health examination as revealed by the prevalence of "other" diseases is better in Kolhapur than in Beed.

Though the percentage of students with problems is higher for Beed than for Kolhapur students referred for further treatment are higher for Kolhapur than for Beed. In the two districts students with anaemia, intestinal worms, night blindness, scabies and pyoderma were treated mostly at the school. Mainly referrals were made for the ear, eye, teeth and "other" problems in both the districts. In Beed majority of the students were referred for Ambejogai Medical College

Hospital whereas students in Kolhapur were referred for the respective PHCs. Among the referrals percentage of students sought treatment at the referral institutions is higher in Kolhapur than in Beed. Further, In Beed more students nearer to the referral centre (Ambejogai) sought treatment than the students far away from the referral centre (Ashti). In Kolhapur more students from Hatkanakale tehsil sought treatment than the Radhanagari tehsil which is hilly and with poor transport facility. Hence, good transport facility and nearness of the referral centre are the important factors for students seeking further treatment.

Perception of the primary school teachers about the various aspects of the scheme reveals that, on the whole, teachers from Kolhapur had good opinion about the scheme, while the teachers from Beed comparatively were less impressed. Since education and health departments are directly involved in implementing the scheme all the teachers from the two districts opined that they received the necessary help from these two departments. All of them in the two district also said that they received the information and instruction from education department well in time. Opinion regarding the help from PWD is not encouraging. All the teachers in the two district said that they received the one day training and it was as per scheduled time. Some of the teachers from both the district were not given the required demonstration on examining children.

Except few, all the schools received the operational guide on time in both the district but manual for teachers were received by all the schools in Kolhapur but only 68 per cent in Beed. Likewise charts and IEC materials were received by many schools in Kolhapur but most of the schools did not

receive them in Beed. Most of the schools in both the districts were not informed about the referral institutions in advance. Ninety two per cent of the schools in Kolhapur but only 74 per cent in Beed received the adequate medicines on time. Only half of the schools in Ambejogai tehsil of Beed received the drugs and medicines on time. Shortage of medicines during the health check-up in Beed district, particularly in Ambejogai tehsil made them to distribute the medicines to the students several days after the check-up. This exposes the poor arrangement made to distribute the drugs and medicines during the check-up.

Though the teachers from the two districts, in general, found this programme useful, teachers from Kolhapur rated the success and utility of the programme very high than the teachers from Beed. Similarly teachers from the two district opined that the role of officials was good. But, more teachers from Kolhapur than in Beed said that role of officials was very good.

In short, general lack of efficiency of implementing the programme in a backward district like Beed has reflected in conducting this special school health programme also. This lack of efficiency has percolated also to the tehsils. The tehsils with good performance in terms of students examined had shown better efficiency.

So far as the disease pattern is concerned, anaemia, worms and teeth problems have been found as the major problems. As expected, the students from Beed have higher rate of ailments arising out of nutritional deficiency and infections. Education about hygiene habits could reduce the morbidity to some extent.

Interestingly, it is observed that there are almost no referrals for anaemia and worms. Majority of the referrals are 'other ailments' followed by ear discharge, pyoderma and teeth problems. The treatment sought through referrals depends upon the seriousness of the ailments as perceived by the parents. The analysis of the responses of the parents will be done in the next chapter. However, the information on 'treatment' suggests that complaints regarding 'eyes' and 'ears' are better treated in comparison to other problems.

Table 3.1.

Performance of the school health check-up scheme in the selected schools in Beed and Kolhapur districts

	No.of schools	No. of students enrold	No.of students checked	% of students checked	No.of students defec.	% of students defec.	No.of students refered	% of students refered
Beed								
Ambejogai	25	4076	2734	67.1	979	35.8	42	4.3
Ashti	25	2723	2401	88.2	1112	46.3	24	2.2
Total	50	6799	5135	75.5	2091	40.7	66	3.2
Kolhapur								
Hatkanakale	25	5974	5792	97.0	1366	23.6	259	19.0
Radhanagari	25	2402	2380	99.1	636	26.7	39	6.1
Total	50	8376	8172	97.6	2002	24.2	298	14.9

Table 3.2

Distribution of students with health problems, students treated and students referred for further treatment in the selected schools in Beed and Kolhapur districts.

	Beed			Kolhapur			Total		
	No. of students			No. of students			No. of students		
	with health problm	treated at school	refer furthr treat.	with health problm	treated at school	refer furthr treat.	with health problm	treated at school	refer furthr treat.
Anaemia	236	234	2	107	107	0	343	341	2
Intestinal Worms	518	518	0	479	473	6	997	991	6
Night Blindness	67	67	0	17	17	0	84	84	0
Ear Discharge	83	79	4	161	98	63	244	177	67
Scabies	15	15	0	96	89	7	111	104	7
Pyoderma	47	46	1	91	73	18	138	79	19
Eye problems	112	87	25	91	54	37	203	141	62
Teeth problems	819	807	12	538	463	75	1357	1270	87
Others	194	172	22	422	330	92	616	502	114
Total	2091	2025	66	2002	1704	298	4093	3729	364

Table 3.3

Distribution of students with health problems, students treated and students referred for further treatment in the selected schools in the tehsils of Beed and Kolhapur districts.

	No. of students			No. of students		
	with health problm	treated at school	refer furthr treat.	with health problm	treated at school	refer furthr treat.
BEED	**Ambejogai**			**Ashti**		
Anaemia	139	139	0	97	95	2
Intestinal Worms	319	319	0	199	199	0
Night Blindness	14	14	0	53	53	0
Ear Discharge	35	34	1	48	45	3
Scabies	6	6	0	9	9	0
Pyoderma	7	6	1	40	40	0
Eye problems	53	40	13	59	47	12
Teeth problems	331	319	12	488	488	0
Others	75	60	15	119	112	7
Total	979	937	42	1112	1088	24
KOLHAPUR	**Hatkanakale**			**Radhanagari**		
Anaemia	72	72	0	35	35	0
Intestinal Worms	329	323	6	150	150	0
Night Blindness	10	10	0	7	7	0
Ear Discharge	116	58	58	45	40	5
Scabies	65	58	7	31	31	0
Pyoderma	43	26	17	48	47	1
Eye problems	70	40	30	21	14	7
Teeth problems	384	320	64	154	143	11
Others	277	200	77	145	130	15
Total	1366	1107	259	636	597	39

Table 3.4

Disease-wise percentage distribution of students in the selected schools in Beed and Kolhapur districts.

	BEED		
	Ambejogai	Ashti	Total
Anaemia	14.2	8.7	11.3
Itestinal Worms	32.6	17.9	24.8
Night Blindness	1.4	4.8	3.2
Ear Discharge	3.6	4.3	4.0
Scabies	0.6	0.8	0.7
Pyoderma	0.7	3.6	2.2
Eye problems	5.4	5.3	5.4
Teeth problems	33.8	43.9	39.2
Others	7.7	10.7	9.3
Total	100	100	100
	KOLHAPUR		
	Hatkanakale	Radhanagari	Total
Anaemia	5.3	5.5	5.3
Itestinal Worms	24.1	23.6	23.9
Night Blindness	0.7	1.1	0.8
Ear Discharge	8.5	7.1	8.0
Scabies	4.8	4.9	4.8
Pyoderma	3.1	7.5	4.6
Eye problems	5.1	3.3	4.6
Teeth problems	28.1	24.2	26.9
Others	20.3	22.8	21.1
Total	100	100	100

Table 3.5

Distribution of students referred for further treatment by disease and referral and institutions

Referral Institutions	Ana-mia	Intest. worms	Night blind	Ear disch.	Sca-bies	Pyo derma	Eye probs	Teeth probs	Other probs	Total
Beed										
Govt. hospital	-	-	-	1	-	1	24	12	22	60
PHC/SC/CHC	2	-	-	3	-	-	1	-	-	6
Pvt. hospital	-	-	-	-	-	-	-	-	-	-
Total	2	-	-	4	-	1	25	12	22	66
Kolhapur										
Govt. hospital	-	-	-	-	-	-	-	-	-	-
PHC/SC/CHC	-	3	-	63	7	18	37	75	92	295
Pvt. hospital	-	3	-	-	-	-	-	-	-	3
Total	-	6	-	63	7	18	37	75	92	298
Total										
Govt. hospital	-	1	-	1	-	1	24	12	22	61
PHC/SC/CHC	2	2	-	66	7	18	38	75	92	300
Pvt. hospital	-	3	-	-	-	-	-	-	-	3
Total	2	6	-	67	7	19	62	87	114	364

Table 3.6.

Distribution of students referred for further treatment in the selected schools by disease and referral institutions in tehsils.

Referral Institutions	Ana-mia	Intest. worms	Night blind	Ear disch.	Sca-bies	Pyo derma	Eye probs	Teeth probs	Other probs	Total
Beed				**Ambejogai**						
Govt. hospital	-	-	-	1	-	1	13	12	15	42
PHC/SC/CHC	-	-	-	-	-	-	-	-	-	-
Pvt. hospital	-	-	-	-	-	-	-	-	-	-
				Ashti						
Govt. hospital	-	-	-	-	-	-	11	-	7	18
PHC/SC/CHC	2	-	-	3	-	-	1	-	-	6
Pvt. hospital	-	-	-	-	-	-	-	-	-	-
Kolhapur				**Hatkanakale**						
Govt. hospital	-	-	-	-	-	-	-	-	-	-
PHC/SC/CHC	-	3	-	58	7	17	30	64	77	256
Pvt. hospital	-	3	-	-	-	-	-	-	-	3
				Radhanagari						
Govt. hospital	-	-	-	-	-	-	-	-	-	-
PHC/SC/CHC	-	-	-	5	-	1	7	11	15	39
Pvt. hospital	-	-	-	-	-	-	-	-	-	-
Total	2	6	-	67	7	19	62	87	114	364

Table 3.7

Tehsil-wise distribution of referred students went for further treatment by disease.

Name of Tehsil	Ana-mia	Intest. worms	Night blind	Ear disch.	Sca-bies	Pyo derma	Eye probs	Teeth probs	Other probs	Total
BEED										
Ambejogai	- (0)	- (0)	- (0)	1 (1)	0 (0)	1 (1)	5 (13)	10 (12)	8 (15)	25 (42)
Ashti	2 (2)	- (0)	- (0)	3 (3)	0 (0)	0 (0)	1 (12)	0 (0)	3 (7)	7 (24)
KOLHAPUR										
Hatkanakale	- (0)	- (6)	- (0)	48 (58)	7 (7)	8 (17)	28 (30)	36 (64)	41 (77)	168 (259)
Radhanagari	- (0)	- (0)	- (0)	2 (5)	0 (0)	0 (1)	1 (7)	8 (11)	9 (15)	20 (39)
Total	2 (2)	- (6)	- (0)	54 (67)	7 (7)	9 (19)	35 (62)	54 (87)	61 (114)	220 (364)

Note: Figures in parentheses refer to the actual number of students referred for the further treatment

Opinion of teachers about school health check-up scheme in Beed district: Number and per cent saying yes.

	Ambejogai		Ashti		Total	
	No.	%	No.	%	No.	%
Maintenance of health cards (yes)	25	100	25	100	25	100
Information/instruction from education department well in time (yes)	21	84	25	100	46	92
Did you get the necessary help to organize the health check-up?						
From education department (yes)	25	100	25	100	25	100
From state Public Works Department(yes)	14	56	1	4	15	30
From state health officials (yes)	25	100	25	100	50	100
From Non-Governmental Organizations(yes)	12	48	0	0	12	24
Was training imparted to teachers of the school as per schedule time? (yes)	25	100	25	100	50	100
Duration of training (one day)	25	100	25	100	50	100
Whether the training adequate (yes)	23	92	25	100	48	96
Was any demonstration on how to examine children (yes)	18	72	24	96	42	84
Did your school get necessary material in time?						
Manuals	9	36	25	100	34	68
Operational guide	22	88	25	100	47	94
Charts	13	52	0	0	13	26
IEC materials	7	28	0	0	7	14
List of referral institutions	12	48	0	0	12	24
Drugs and medicines	12	48	25	100	37	74
Stationery	5	20	25	100	30	60
Was the community mobilised as planned	24	96	25	100	49	98
Was all preparations for check-up could be made as scheduled	25	100	25	100	50	100

Opinion of teachers about special sechool health scheme in Kolhapur district: Number and per cent saying yes.

	Hatkanakale		Radhanagari		Total	
	No.	%	No.	%	No.	%
Maintenance of health cards (yes)	25	100	25	100	25	100
Information/instruction from education department well in time (yes)	25	100	23	92	48	96
Did you get the necessary help to organize the health check-up?						
From education department (yes)	25	100	23	92	48	96
From state Public Works Department(yes)	3	12	3	12	6	12
From state health officials (yes)	23	92	22	88	45	90
From Non-Governmental Organizations(yes)	4	16	2	8	6	12
Was training imparted to teachers of the school as per schedule time? (yes)	25	100	25	100	50	100
Duration of training (one day)	25	100	25	100	50	100
Whether the training adequate (yes)	23	92	25	100	48	96
Was any demonstration on how to examine children (yes)	21	84	18	72	39	78
Did your school get necessary material in time?						
Manuals	24	96	25	100	49	98
Operational guide	24	96	25	100	49	98
Charts	23	92	20	80	43	86
IEC materials	20	80	19	76	39	78
List of referral institutions	5	20	13	52	18	36
Drugs and medicines	25	100	21	84	46	92
Stationery	22	88	20	80	42	84
Was the community mobilised as planned	25	100	24	96	49	98
Was all preparations for check-up could be made as scheduled	25	100	25	100	50	100

Table 3.10

Teachers' opinion about the success of the school health check-up scheme

Schools comments regarding Degree of success	Beed			Kolhapur		
	Ambe-jogai	Ashti	Total	Hatka-nkale	Radha-nagari	Total
25 per cent success	1	-	1	-	-	-
30 per cent success	-	-	-	-	1	1
40 per cent success	1	-	1	-	-	-
50 per cent success	5	1	6	-	1	1
65 per cent success	3	-	3	-	-	-
70 per cent success	3	2	5	-	-	-
75 per cent success	4	7	11	1	-	1
80 per cent success	4	2	6	-	2	2
85 per cent success	-	-	-	1	-	1
90 per cent success	2	1	3	5	2	7
95 per cent success	-	3	3	1	-	1
100 per cent success	-	8	8	14	15	29
Gave satisfactory answer about success	2	1	3	3	2	5
Not given	-	-	-	-	2	2
Total	25	25	50	25	25	50

Table 3.11

Teachers' perception about the utility of the scheme and role of officials in the implemetation of the scheme.

Teachers perception about the health check-up scheme	Beed			Kolhapur		
	Ambe-jogai	Ashti	Total	Hatka-nkale	Radha-nagari	Tot-al
Utility of the scheme						
Very much useful	8	8	16	7	16	23
Useful	17	17	34	18	7	25
Not useful	-	-	-	-	2	2
Role of all concerned officials						
Very good	7	8	15	8	14	22
Good	18	17	35	16	9	25
Not good	-	-	-	1	2	3
Total	25	25	50	25	25	50

Table 3.12

Opinion of school teachers about the health check-up scheme

Opinions	Beed			Kolhapur		
	Ashti	Ambejgai	Total	Radhanagri	Hatkan	Total
1. Health check-up should be thorough and uniform	1	4	5	7	5	12
2. Defected students should get sufficient medicines immediately	6	4	10	11	9	20
3. Time spent for health check-up of each student should be more	3	2	5	3	2	5
4. Referred students should get sufficient care till the recovery	2	2	4	3	5	8
5. Students should not be referred but treated at the school itself	1	-	1	-	2	2
6. Sufficient medical staff should be there at the time of check-up	-	1	1	-	-	-
7. Specialist doctors are necessary	-	2	2	-	-	-
8. Parents should provide cooperation	-	-	-	2	-	2
9. Parents should be informed about the health of the students	2	2	4	2	-	2
10. Doctors should educate the parents about health	-	-	-	1	-	1
11. Referrals should be treated free of charge	-	-	-	1	1	2
12. Teachers should be given training to identify health problems	4	2	6	3	2	5
13. Coverage of students should be up to 7th standard	-	1	1	-	-	-
14. One-day per school for check-up is not sufficient	-	-	-	1	-	1
15. First-aid box should be given to schools	3	-	3	2	2	4
16. Health check-up scheme raises the health status of the students	1	5	6	-	-	-
17. This scheme is very much useful for the health of the students	5	6	11	2	3	5
18. This scheme should be repeated	14	19	33	9	7	16

Chapter 4

Primary Health Centres and Special School Health Check-up Scheme

Primary health centres (PHCs) are the major players in the implementation of the special school health check-up scheme. Paramedical workers associated with the PHCs were mainly involved in the scheme to increase the reach of the programme by adopting campaign approach. Every PHC is responsible for the health check-up of the schools coming under their jurisdiction. A questionnaire was administered to the medical officers at the PHCs to assess the performance of the PHCs. Information on number of students examined, defected, treated, referred and referred but not treated were collected for each school. There are 13 PHCs in Beed (5 in Ashti and 8 in Ambejogai) and 15 in Kolhapur (9 in Hatkanakale and 6 in Radhanagari) covered under the study area. Hence this chapter tries to analyse the information collected from all these 28 PHCs in the selected four tehsils of Beed and Kolhapur districts.

Number and per cent of students enrolled and examined under each PHC are given in Table 4.1 separately for four tehsils in the two districts. The average number of students examined per PHC in two tehsils together is 4257 students in Beed and 3424 students in Kolhapur. The difference between Beed and Kolhapur in average number of students examined per PHC is 833 students. Each PHC in Beed district examined on an average 830 students more than their counterparts in Kolhapur (this could be due to the difference in population coverage of the PHCs in Beed and Kolhapur). Higher number of students examined per PHC in Beed than in Kolhapur could have produced

some difference in the overall quality of the health examination between the districts. In Kolhapur district, PHCs in Hatkanakale tehsil covered more number of students (3939) than the PHCs in Radhanagari (2652). Though the PHCs covered large number of students in Beed than in Kolhapur difference in average number of students examined between tehsils is less in Beed (4226 students in Ambejogai and 4299 students in Ashti).

Percentage of students examined in each PHC shows that variation between the PHCs is higher in Beed and lower in Kolhapur. It supports our earlier observation based on the students examined in tehsils and schools that lower the performance higher the variation in examination of students. In Kolhapur all the enrolled students were examined by the PHCs in Radhanagari tehsil, and more than 90 per cent of them were examined by the PHCs in Hatkanakale tehsil. In Beed, PHCs in Ashti tehsil covered more students (83 per cent) than the PHCs in Ambejogai (72 per cent). Within the Beed district, coverage in the better-off Ashti tehsil is more (83 per cent) than in the backward Ambejogai (72 per cent). Parali PHC in Ambejogai examined only 60 per cent of the students. Higher absenteeism among the students in backward Beed district is a major hurdle for achieving 100 per cent coverage of students.

Number of students identified with health problems by the PHCs are given in Table 4.2. As observed in earlier chapters, number of students identified with health problems by the PHCs are similar for the two districts (38.7 per cent for Beed and 38.6 per cent for Kolhapur). But there exists a variation in students with health problems between the tehsils in the two districts. In Beed, number of students with health problems are higher for Ashti (48 per cent) than for Ambejogai (33 per

cent). Likewise, in Kolhapur, it is higher for Hatkanakale (41.5 per cent) than for Radhanagari (32 per cent). Percentage of students with problems between the PHCs in the same tehsil is varying considerably. It varies between 25-59 per cent in Hatkanakale, 14-55 per cent in Radhanagari, 36-74 per cent in Ashti and 8-86 per cent in Ambejogai. Large variation within the tehsil would not happen under the normal circumstances. Because it is least likely that the two PHCs closer to each other have distinctly different pattern of disease prevalence. This variation clearly implies that there was a considerable difference between the paramedical teams in the examination of children.

In the earlier chapters we have observed that smaller number of students examined per school increases the students identified with problems. But this is not appearing to be strong in case of average number of students examined per PHC and students identified with health problems. But in Ambejogai tehsil, Ambejogai PHC identified health problems only among 8 per cent of the students (lowest in the district). In this PHC average number of students examined per school (222) is highest among the 13 PHCs of the two tehsils in Beed district. Among the four tehsils, PHCs in Hatkanakale examined more students on an average than the PHCs in other tehsils.

Though the students with problems are similar in the two districts, only very few cases were referred for further treatment in the tehsils of Beed (2 per cent in Ashti and 3 per cent in Ambejogai) but 10 per cent of the students were referred in the tehsils of Kolhapur (9.4 in Hatkanakale and 10.6 in Radhanagari). Higher referrals in Kolhapur than in Beed does not mean that medical teams in Kolhapur were not equipped to treat the students at school, it does indicate the

better quality of health check-up. There is a large variation in referrals between the PHCs in Kolhapur district. Shiroli PHC referred 32 per cent of students whereas Bhodole PHC referred only 2 per cent of students. The variation in the referrals in tehsils of Beed range between 0 per cent in Kuntephal PHC to 9 per cent in Dhanora PHC. The last column of Table 4.3 gives the percentage of referrals treated at the referral institutions. In general higher proportion of referred students sought treatment at the referral centres in the tehsils of Kolhapur than in Beed. On an average about 67 per cent of the students in Kolhapur and 40 per cent in Beed were treated at the referral centres. It also indicates that still a large proportion of referred students were not treated in the two district, and particularly in Beed.

Percentage of referrals treated at the referral centres in the two tehsils of Kolhapur is almost same (65 per cent each) but in Beed it is 29 per cent in Ashti and 46 per cent in Ambejogai. Lower proportion of referrals treated in Beed means that the follow-up of referrals were not done properly in Beed. Lower proportion of referrals treated in Beed is an indicator of poor programme performance also. But, it seems that the non-programme factors also play a role in this. In Beed almost all the referrals were made to the Ambejogai medical college hospital. This referral hospital is nearer to the students of Ambejogai tehsil and far away for Ashti tehsil. Hence more students in Ambejogai tehsil sought treatment in the referral centre than the students in the far away Ashti tehsil. Further, within the Ambejogai tehsil 100 per cent of the referred students were treated in Ambejogai and Bardapur PHCs. These two PHCs are very closer to the referral hospital. It is clear that nearness of the referral centre matters a lot for the treatment of referred cases.

Disease-wise percentage distribution of students with health problems is given for tehsils in the two districts in Table 4.5. It shows that almost all the PHCs identified anaemia, intestinal worms, teeth and "other" diseases as the major health complaints among the students in the two districts. Ear problems, night blindness, skin diseases, pyoderma and eye problems are also identified by the paramedical staffs among a small proportion of students. As observed in the earlier chapter, anaemia and teeth problems are higher among the students of Beed tehsils than the students of Kolhapur tehsils. This depicts clearly the higher prevalence of nutritional deficiency and infectious diseases among students from the underdeveloped district of Beed. Higher proportion of students are identified with "other" diseases in Kolhapur PHCs than in Beed PHCs. Higher proportion of "other" diseases is an indicator of better quality of health check-up and it is higher in Kolhapur PHCs than in Beed PHCs.

Prevalence of different diseases among students shows that their distribution is not uniform and they vary considerably between the PHCs in the two district. For example anaemia is identified among only 2 percent of students in Radhanagri PHC whereas it is observed to be as high as 67 per cent among the students of Ambejogai PHC. Likewise intestinal worms is ranging between 0-46 per cent, teeth problems between 2-50 per cent and "others" between 1-28 per cent. This pattern is true for other diseases also. Variation is also observed to be considerable between the PHCs within tehsils. For example, in Ashti PHCs intestinal worms ranges between 5-35 per cent and teeth problems between 2-50 per cent. This pattern is observed in all the tehsils of two districts. Higher variation among PHCs within the tehsil clearly indicates that the

examination done by the paramedical teams is not uniform. Variation can be expected between the PHCs but the extent of it should not be as high as we observed if the pattern of examination is uniform. Hence, higher variation between the PHCs clearly suggests the difference in the health check-up by the paramedical staffs. Appropriate training and guidelines to the paramedical teams are necessary to overcome this problem.

Disease-wise distribution of students referred for further treatment is provided for tehsils in Table 4.6. It shows that, in Kolhapur, students are mostly referred for ear, eye, teeth and "other" problems. In Beed referrals are made mainly for eye and "other" cases. These diseases should be treated by the special treatment thus more students were referred than the students with other diseases. Though the percentage of students referred is less, in terms of number it is quite high: 1925 in Kolhapur and 555 in Beed. These referrals were further classified to know how many of them were really sought treatment at the referral institutions (Table 4.7). This helps to know the extent of follow-up care taken by the PHCs to get these students treated. Further, this also depends on the awareness of the parents. Out of 1925 students referred in Kolhapur 1283 got the treatment (67 per cent). In Beed out of 555 referrals 217 got the treatment (40 per cent). As expected, higher proportion of referrals got treatment within a month in Kolhapur than in Beed. But the remaining untreated proportion is not small in both the district and particularly in Beed (33 percent in Kolhapur and 60 percent in Beed). And within the Beed district proportion not treated is higher for Ashti (71 per cent) than for Ambejogai tehsil (54 per cent). As mentioned earlier one of the reasons for the lesser number of students treated in Ashti is the longer distance to the referral centre. The referral

centre, Ambejogai Medical College Hospital, is about 100 kms away from Ashti. By state transport it works out to be 60 rupees for up and down travel to Ambejogai. This is not a small amount for parents and also the opportunity cost for them will be quite high. This indicates the lack of concern on the part of the authorities while suggesting the referral institution.

Disease-wise distribution of students treated at referral centres in Kolhapur shows that more than 75 per cent of the referred students with ear and eye problems got treatment and 50-70 per cent of students got treatment for skin, pyoderma, teeth and "other" diseases. In Beed 66 per cent of the referrals for eye problems got treatment at referral centre. Higher proportion of students sought treatment for eye and ear problems indicate that parents might have perceived that these diseases have higher complications and should be attended quickly than the other ones.

Opinion of Medical Officers

In the selected tehsils of the two districts all the medical officers of the 28 PHCs were asked what percentage of medicines were available for the treatment of students. Medical officers response to this question clearly reflects the performance of the programme in the two districts. Table 4.8 shows that the PHCs (or tehsils) which identified more number of students with health problem had good stock of medicine than the PHCs which were in short of the required medicine. In Kolhapur district, PHCs in Hatkanakale tehsil had higher stock of medicines than the PHCs in Radhanagari. Though the Radhanagari PHCs examined 100 per cent of the students, the percentage of students identified with health problems is lower than the Hatkanakale PHCs. Likewise, in Beed, PHCs in

Ashti had relatively higher stock of medicines and identified higher proportion of students with health problems than the PHCs in Ambejogai. It is thus clear that the availability of the medicines also indicates the efficiency of implementation of the programme, which is demonstrated by the differences in the proportion of students identified with health problems.

Problems of Ambejogai PHCs

PHCs in Ambejogai tehsil of Beed district suffered more due to the insufficient availability of the medicines than the PHCs in other tehsils. When we asked the Medical Officers (MOs) at Ambejogai PHCs about the problems that they have faced they reported several hurdles in the implementation of the scheme. Five out of eight medical officers did not get the adequate medicines to their PHCs. One medical officer (Nagapur PHC) said that he did not receive the required medicines under the "school health" scheme and he had to manage the programme with the medicines available from PHC and the sub-centres. Two medical officers (Ambejogai and Bardapur PHCs) said that they did receive the medicines but only after the health examination was over. This made them to distribute the medicines only after receiving them. Non-availability of vehicles, shortage of man power and shorter time to cover larger number of students are some of the other problems mentioned by the MOs in Ambejogai PHCs. Problems faced by the MOs in Ambejogai PHCs reveal that not only the backwardness of the area but also the failure in supply of medicines on time, non-availability of vehicles, shortage of man-power etc. are also the reasons for the poor performance in Beed district.

District Blindness Control Society (DBCS) and School Health Check-up Scheme

Under the school health check-up scheme children with vision defects should be referred for further treatment to DBCSs, particularly for corrective glasses. Hence we approached the DBCSs at Beed and Kolhapur to get the details about the treatment given to the eye referrals. It is found that in both the districts DBCS was not at all participated in the school health scheme. In Beed we were told by the DBCS authorities that the funds were not released for the society to assist the school health scheme. However, in both the districts, students with eye defects were referred for the district civil hospitals. We obtained the information about the treatment to the eye referrals from the district civil hospitals of Beed and Kolhapur. Paramedical Ophthalmic Assistant and District Ophthalmic Surgeon at the district hospitals treated the students of eye defects. Seventy-eight students in Kolhapur district and 74 students in Beed got the treatment for vision defects in the district hospitals. The role of DBCS in the health check-up scheme in the selected districts is nil.

Conclusions

This chapter assessed the role of PHCs in the special school health check-up scheme in the selected two districts. It is observed that the PHCs in the two tehsils of Beed district examined, on an average, 830 students more than the PHCs in the two tehsils of Kolhapur district. Higher number of students examined per PHC in Beed district might have produced some difference in the overall programme performance between the districts. Proportion of students identified with the health problems by the paramedical teams is similar for the two districts whereas it varies to a greater extent within the

district and also within the tehsil. Larger variation between the PHCs in the same tehsil suggests that there is a greater variation in the health examination of students by the medical teams.

Proportion of students referred by the medical teams for further treatment is higher for Kolhapur than for Beed. Proportion of students sought treatment at the referral centres is also higher in Kolhapur than in Beed. Higher proportion of students referred in Kolhapur indicate the better quality of health check-up. Higher proportion of referrals treated at the referral centres in Kolhapur further indicate the better follow-up care given to the students by the medical teams. It is observed that nearer the referral centre higher the proportion to seek treatment and longer the distance lower the proportion to seek treatment.

Distribution of different diseases indicate the higher prevalence of infectious diseases and nutritional deficiency in Beed than in Kolhapur. Higher proportion of students identified with "other" diseases in Kolhapur indicate the better quality of health check-up by the medical teams in Kolhapur than in Beed. Prevalence of different diseases among students is varying considerably between the PHCs in the same tehsil. Higher variation in disease prevalence within the tehsil indicates that the examination done by the paramedical teams is not uniform.

In both the districts District Blindness Control Societies were not at all involved in the school health scheme. Neither the treatment nor the spectacles were issued by them to the students. Children with vision defects were referred for the district civil hospitals in Beed & Kolhapur.

Table 4.1

Percent of students examined by the PHCs in Kolhapur & Beed districts

Name of PHC	No.of Schools	Number of students			% of students	
		Enroled	Examined	Absent	Examined	Absent
BEED			**Ashti**			
Ashti	46	6576	5616	960	85.4	14.6
Dhamangaon	54	5808	3835	1973	66.1	33.9
Kada	34	4615	4246	369	92.0	8.0
Kuntephal	34	4001	3475	526	86.9	13.1
Suleman Deola	45	4426	3957	469	89.4	10.6
Total	213	25426	21129	4297	83.1	16.9
			Ambejogai			
Parali	46	12376	7302	5074	59.0	41.0
Bardapur	25	3594	3039	555	84.6	15.4
Nagapur	41	4996	3505	1491	70.2	29.8
Ambejogai	32	9929	7090	2839	71.4	28.6
Ghatnandur	43	4893	3797	1096	77.6	22.4
Dhanora	22	3451	3101	350	89.9	10.1
Bhavthana	31	3414	2646	768	77.5	22.5
Dharmapuri	35	4667	3737	930	80.1	19.9
Total	275	47320	34217	13103	72.3	27.7
KOLHAPUR			**Hatkanakale**			
Herle	16	3510	3416	94	97.3	2.7
Sawarde	22	4319	4159	160	96.3	3.7
Bhadole	17	3195	2956	239	92.5	7.5
Pargaon	12	3172	2986	186	94.1	5.9
Shiroli	21	3901	3901	0	100.0	0.0
Kadoli	14	4172	4051	121	97.1	2.9
Hupari	14	4966	4768	198	96.0	4.0
Sajani	16	5612	5140	472	91.6	8.4
Hatkanakale	18	4390	4077	313	92.3	7.7
Total	150	37237	35454	1783	95.2	4.8
			Radhanagari			
Valva	20	3052	2995	57	98.1	1.9
Rashiwade	21	3263	3259	04	99.1	0.1
Radhanagari	32	2166	2165	01	100.0	0.0
Dhamod	34	1978	1975	03	99.8	0.2
Tarale	37	2693	2692	01	100.0	0.0
Solankur	37	2834	2825	09	99.7	0.3
Total	181	15986	15911	75	99.5	0.5

Table 4.2.
Per cent of students identified with the health problems by the PHCs in Beed and Kolhapur districts.

Name of PHC	Number of students			% of students	
	Examined	with health problms	treated at school	with health problems	treated at school
BEED			**Ashti**		
Ashti	5616	2022	1986	36.0	98.2
Dhamangaon	3835	1812	1726	47.2	95.3
Kada	4246	3175	3132	74.8	98.6
Kuntephal	3475	1496	1496	43.1	100.0
Suleman Deola	3957	1696	1668	42.9	98.3
Total	21129	10201	10008	48.3	98.1
			Ambejogai		
Parali	7302	2529	2507	34.6	99.1
Bardapur	3039	716	699	23.2	97.6
Nagapur	3505	3003	2907	85.7	96.8
Ambejogai	7090	522	486	8.3	93.1
Ghatnandur	3797	798	771	20.7	96.6
Dhanora	3101	1098	997	35.4	90.8
Bhavthana	2646	938	908	35.4	96.8
Dharmapuri	3737	1587	1554	42.5	97.9
Total	34217	11191	10829	32.8	96.8
KOLHAPUR			**Hatkanakale**		
Herle	3416	1895	1740	46.5	91.8
Sawarde	4159	1986	1894	45.5	95.4
Bhadole	2956	1746	1717	59.1	98.3
Pargaon	2986	909	788	30.4	84.0
Shiroli	3901	937	633	24.1	67.6
Kadoli	4051	1256	1086	31.0	86.5
Hupari	4768	1710	1609	35.8	94.1
Sajani	5140	2071	1821	40.3	87.9
Hatkanakale	4077	2188	2028	53.7	92.7
Total	35454	14698	10196	41.5	90.6
			Radhanagari		
Valva	2995	1155	1043	38.6	90.3
Rashiwade	3259	1796	1573	55.1	87.6
Radhanagari	2165	296	253	13.7	85.5
Dhamod	1975	751	698	38.0	92.9
Tarale	2692	386	326	14.3	84.5
Solankur	2825	745	693	26.4	93.0
Total	15911	5129	4586	32.2	89.4

Table 4.3

Per cent of students referred for further treatment and students treated at referral institutions in Beed and Kolhapur districts.

Name of PHC	Number of students with health problms	referred	treated at refrl. instn.	not tretd at refrl instn.	% of students referred	% of students treated at refrl instn.
BEED			**Ashti**			
Ashti	2022	36	06	30	1.8	16.7
Dhamangaon	1812	86	01	85	4.7	1.2
Kada	3175	43	43	0	1.4	100.0
Kuntephal	1496	00	0	0	0.0	-
Suleman Deola	1696	28	05	23	1.7	17.9
Total	10201	193	55	138	1.9	28.5
			Ambejogai			
Parali	2529	22	13	9	0.9	59.1
Bardapur	705	17	17	0	2.4	100.0
Nagapur	3003	96	27	69	3.2	28.1
Ambejogai	592	36	36	0	6.9	100.0
Ghatnandur	786	27	22	5	3.4	81.5
Dhanora	1098	101	18	83	9.2	17.8
Bhavthana	938	30	15	15	3.2	50.0
Dharmapuri	1587	33	20	13	2.1	60.6
Total	11191	362	168	194	3.2	46.4
KOLHAPUR			**Hatkanakale**			
Herle	1895	155	113	42	8.2	72.9
Sawarde	1986	92	69	23	4.6	75.0
Bhadole	1746	29	20	9	1.7	70.0
Pargaon	903	121	86	35	13.3	71.1
Shiroli	937	304	79	225	32.4	26.0
Kadoli	1256	170	102	68	13.5	60.0
Hupari	1710	101	101	0	5.9	100.0
Sajani	2071	250	250	0	12.1	100.0
Hatkanakale	2188	160	110	50	7.3	68.8
Total	14698	1382	930	452	9.4	67.3
			Radhanagari			
Valva	1155	112	107	05	9.7	95.5
Rashiwade	1796	223	133	90	12.4	59.6
Radhanagari	296	43	26	17	14.5	60.5
Dhamod	751	53	42	11	7.1	79.2
Tarale	386	60	30	30	15.5	50.0
Solankur	745	52	15	37	7.0	28.8
Total	5129	543	353	190	10.6	65.0

Table 4.4
PHC-wise distribution of students by disease

Name of Tehsil	Anae-mia	I.W.	N.B.	Ear	Skin	Pyod	Eye	Teeth	Othrs	Total*
BEED					Ashti					
Ashti	155	315	28	112	17	153	81	1024	137	2022
Dhamangaon	111	639	44	67	28	46	37	601	239	1812
Kada	440	554	157	136	12	104	213	1280	279	3175
Kuntephal	234	70	40	38	270	74	720	035	015	1496
Suleman Deola	182	518	5	69	47	51	47	537	240	1696
Total	1122	2096	274	422	374	428	1098	3477	910	10201
					Ambejogai					
Parli	432	601	145	66	1	15	57	789	423	2529
Pardapur	101	31	96	17	13	24	22	239	162	716
Nagapur	132	1301	38	78	12	18	26	1301	97	3003
Ambejogai	347	0	0	21	6	14	37	96	70	522
Ghatnandur	27	150	23	31	6	4	44	361	140	798
Dhanora	87	386	58	129	4	10	62	342	20	1098
Bhavthana	62	311	3	40	1	0	72	266	183	938
Dharmapuri	347	332	23	41	0	10	29	765	40	1587
Total	1535	3112	386	423	43	95	349	4159	1135	11191
KOLHAPUR					Radhanagari					
Valva	79	250	0	77	11	49	44	399	246	1155
Rashiwade	39	515	0	138	15	109	45	443	492	1796
Radhanagari	5	74	0	27	52	23	12	57	46	296
Dhamod	109	210	1	48	18	42	22	210	91	751
Tarale	83	60	2	56	56	45	17	7	60	386
Solakur	33	285	2	23	48	37	27	130	160	745
Total	348	1394	5	369	200	305	167	1246	1095	5129
					Hatkanakale					
Herle	161	555	113	32	33	14	153	148	381	1895
Sawarde	87	321	12	51	47	118	177	914	167	1986
Bhadole	209	236	13	37	7	28	47	859	310	1746
Pargaon	107	102	2	48	20	101	29	288	206	909
Shiroli	37	193	4	84	16	16	43	365	182	937
Kadoli	95	465	2	75	13	84	44	235	243	1256
Hupari	141	555	2	49	68	72	52	370	399	1710
Sajani	159	964	4	116	22	51	79	368	308	2071
Hatkanakale	211	517	4	81	30	174	144	650	377	2188
Total	1207	3908	156	573	256	658	768	4197	2573	14698

Note: * The total no. of students with the health problems also includes the students with multiple health problems. Therefore, in some cases the last column of table exceeds the total of all cases.

Table 4.5
PHC-wise percentage distribution of students by disease

Name of Tehsil	Anaemia	I.W.	N.B.	Ear	Skin	Pyod	Eye	Teeth	Others
BEED					**Ashti**				
Ashti	7.7	15.6	1.4	5.5	0.8	7.6	4.0	50.6	6.8
Dhamangaon	6.1	35.3	2.4	3.7	1.6	2.5	2.0	33.2	13.2
Kada	13.9	17.4	4.9	4.3	0.4	3.3	6.7	40.3	8.8
Kuntephal	15.7	4.7	2.7	2.5	18.0	4.9	48.2	2.3	1.0
Suleman Deola	10.7	30.5	0.3	4.1	2.8	3.0	2.8	31.7	14.1
Total	11.0	20.5	2.7	4.1	3.7	4.2	10.8	34.1	8.9
					Ambejogai				
Parli	17.1	23.8	5.7	2.6	0.4	0.6	2.3	31.2	16.7
Pardapur	14.1	4.3	13.3	2.4	1.8	3.1	3.1	33.4	22.6
Nagapur	4.4	43.3	1.3	2.6	0.4	0.6	0.9	43.3	3.2
Ambejogai	66.5	0.0	0.0	4.0	1.1	2.7	7.1	18.4	13.4
Ghatnandur	3.4	18.8	2.9	3.9	0.8	0.5	5.5	45.2	17.5
Dhanora	7.9	35.2	5.3	11.8	0.4	0.9	5.6	31.1	1.8
Bhavthana	6.6	33.1	0.3	4.3	0.1	0.0	7.7	28.4	19.5
Dharmapuri	21.9	20.9	1.4	2.6	0.0	0.6	1.8	48.2	2.5
Total	13.7	27.8	3.4	3.8	0.4	0.8	3.1	37.2	10.1
KOLHAPUR					**Radhanagari**				
Valva	6.8	21.6	0.0	6.7	1.0	4.2	3.8	34.6	21.3
Rashiwade	2.2	28.6	0.0	7.7	0.8	6.0	2.5	24.6	27.6
Radhanagari	1.7	25.0	0.0	9.1	17.6	7.8	4.0	19.3	15.5
Dhamod	14.5	28.0	0.1	6.4	2.4	5.6	2.9	28.0	12.1
Tarale	21.5	15.5	0.5	14.5	14.5	11.8	4.4	1.8	15.5
Solakur	4.4	38.3	0.3	3.1	6.4	5.0	3.6	17.4	21.5
Total	6.8	27.2	0.1	7.2	3.9	5.9	3.3	24.3	21.3
					Hatkanakale				
Herle	8.5	29.3	6.0	1.7	1.7	0.7	8.1	7.8	20.1
Sawarde	4.4	16.2	0.6	2.6	2.4	5.9	8.9	46.0	8.4
Bhadole	11.9	13.5	0.7	2.1	0.4	1.6	2.7	49.2	17.8
Pargaon	11.8	11.2	0.2	5.2	2.2	11.2	3.1	31.7	22.7
Shiroli	3.9	20.6	0.4	8.9	1.7	1.7	4.6	38.9	19.4
Kadoli	7.6	37.0	0.2	6.0	1.0	6.7	3.5	18.7	19.3
Hupari	8.2	32.5	0.1	2.9	4.0	4.2	3.0	21.6	23.3
Sajani	7.7	46.5	0.2	5.6	1.1	2.5	3.8	17.7	14.9
Hatkanakale	9.6	23.6	0.2	3.7	1.4	8.0	6.6	29.7	17.2
Total	8.2	26.6	1.1	3.9	1.7	4.5	5.2	28.6	17.5

Table 4.6

Disease-wise distribution of students referred for further treatment

Name of Tehsil	Anae-mia	I.W.	N.B.	Ear	Skin	Pyod	Eye	Teeth	Others	Total
Radhanagari	4	-	2	117	-	20	62	173	165	543
Hatkanakale	10	24	3	428	39	67	191	215	405	1382
Total	14	24	5	545	39	87	253	388	570	1925
Ashti	-	-	-	-	-	-	22	-	171	193
Ambejogai	-	9	21	13	5	8	110	-	196	362
Total	-	9	21	13	5	8	132	-	367	555

Table 4.7.

Disease-wise distribution of students treated at referral institutions

Name of Tehsil	Anae-mia	I.W.	N.B.	Ear	Skin	Pyod	Eye	Teeth	Others	Total
Radhanagari	1	-	2	89	-	5	31	124	101	353
Hatkanakale	7	9	3	332	26	41	185	73	254	930
Total	8	9	5	421	26	46	216	197	355	1283
Ashti	-	-	-	-	-	-	22	-	33	55
Ambejogai	-	9	19	2	5	3	65	-	65	168
Total	-	9	19	2	5	3	87	-	98	223

Table 4.8

Percentage of medicine available for the special school health scheme at the PHCs (as reported by the Medical Officers)

Name of PHC	Percent of medicine available	Name of PHC	Percent of medicine available
	BEED		
Ashti		**Ambejogai**	
Ashti	85	Parali	90
Dhamangaon	90	Bardapur	-
Kada	90	Nagapur	-
Kuntephal	85	Ambejogai	90
Suleman Deola	85	Ghatnandur	25
		Dhanora	100
		Bhavthana	-
		Dharmapuri	70
	KOLHAPUR		
Radhanagari		**Hatkanakale**	
Valva	90	Herle	90
Rashiwade	75	Sawarde	100
Radhanagari	80	Bhadole	100
Dhamod	80	Pargaon	100
Tarale	50	Shiroli	100
Solankur	100	Kadoli	100
		Hupari	100
		Sajani	90
		Hatkanakale	90

Chapter 5

Opinion of parents regarding health check-up scheme

Parents were informed about the health check-up scheme well in advance through the teachers and children. They were informed mainly to make sure that their child attends the school during the health examination. To know the extent of awareness of the parents about this scheme a separate interview schedule was administered to them. Eight parents of children from each school (2 from each class) were selected for all the 100 schools. Only the parents of those children who attended the school at the time of health examination were interviewed. Hence, this chapter analyses the responses of the parents regarding the scheme. Issues related to their child's health is discussed first and this is followed by their opinion regarding the scheme. Opinion about the scheme is also supplemented with the opinion from the village leaders who had shown some interest in the scheme.

Though the large percentage of the parents were informed about the scheme in the two districts, still as expected, the proportion of parents who were informed is higher in Kolhapur (97 per cent) than in Beed (80 per cent). Not only the programme was carried out efficiently by the medical teams in Kolhapur the prior information about the programme also had reached to larger number of parents in Kolhapur compared to those in Beed. It means that the teachers and students carried the message to the parents and ultimately to the community in a better way in Kolhapur compared to Beed. Prior information enables the parents to send their child to school during the health examination and this helps to increase the

coverage of students as well as the performance of the scheme. The observed difference in the performance of the scheme within the district is also reflected in the responses of the parents. In Beed, percentage of parents who had prior information about the programme is higher in Ashti (82 per cent) than in Ambejogai (77 per cent). In Kolhapur, all the parents in Radhanagari tehsil (99 per cent) and 96 per cent in Hatkanakale were informed about the scheme.

Since only the parents of children who attended the school during the health examination were interviewed, almost all the parents said that their child attended the class during the check-up and all of them agreed that the doctor diagnosed their child. Proportion of parents who said that their child was identified with health problem is higher in Kolhapur (25 per cent) than in Beed (17 per cent). Though the higher proportion of parents in Kolhapur than in Beed said that their child had a health problem, the figures for the two districts are lower than the figures observed in earlier chapters for districts, tehsils and PHCs. The reason for this discrepancy could be the result of the parents' inability to comprehend the health problems and also the inability of the child to explain their health problems to the parents. Also visualization of the health problem depends on the awareness and educational level of the parents. The educated people have a tendency to report even the minor health complaints as real health problems while the uneducated people may not treat it as a health problem. For the poor, health problem is looked at as the one which would affect their normal work and minor ailments will not be considered as diseases. Hence the health problems identified by the paramedical teams may not necessarily match with the parents responses on the health problems of their child.

Proportion of students with health problems as revealed by the parents (25 per cent) and selected schools (24 per cent) are nearly same for Kolhapur but it varies considerably for Beed (17 per cent and 41 per cent respectively). It may be due to the difference in the awareness level of the parents. Awareness level of the parents in the relatively developed districts (Kolhapur) is expected to be higher than in the backward districts (Beed) and the resultant difference in the reporting of diseases is reflected in their information on the health problems of their child.

Parents who said that their child had a health problem were further asked whether the child was treated at the school or referred further. More parents in Kolhapur (53 per cent) than in Beed (42 per cent) said that their child was treated at the school itself. Hence, the proportion of parents who said that their child was referred for further treatment is unexpectedly higher in the two districts (58 per cent in Beed and 47 per cent in Kolhapur). In both the districts the proportion of parents said that their child was referred is varying much between tehsils. Among the referrals, proportion of the parents said that they got their child treated at the referral centre is also higher for Beed (74 per cent) than for Kolhapur (49 per cent). These proportions are much higher than the proportions of referred students sought treatment at the referral centres from the selected schools (see Chapter 3, 48 per cent in Beed and 63 per cent in Kolhapur). Parents of children who said that they got treated their child at referral centre were further asked whether they received the treatment at free of charge. While all the parents got treated their child for free of charge in Beed, three of them in Kolhapur paid for the treatment. Almost all the parents who sought treatment for their child in the two districts agreed

that the health card was very much useful in getting the treatment at the referral centre.

Opinion of parents

Special school health check-up scheme involves parents at two stages. One is to send their children to school during health examination and another is to take the children to referral hospitals in case of referrals. To make the parents aware about the scheme they were informed in advance through teachers and students. Parents were asked to give their opinion about the health check-up scheme to assess their awareness and participation. When we asked about their opinion regarding the scheme, majority of them gave their opinion (88 per cent in Beed and 94 per cent in Kolhapur) and most of them gave a positive opinion about the scheme. Of course, there are negative responses, but they will be helpful in improving the programme in future. When we listed the reasons we found that there are about 20 different reasons and many of them have multiple opinions. Hence the opinions given in Table 5.2 may exceed the total number of parents interviewed.

Many of the parents in the two districts opined that this scheme should be repeated at least once in a year and they felt that this scheme increases the health of their child and cleanliness as well. Parents also appreciated the programme on the grounds that this scheme takes care of the health of the children, otherwise it would have been the responsibility of the parents. Another group of parents felt that the provision of treatment and medicine at the school saves their time and money. Particularly the benefits of the programme to the poor families was appreciated by many. If we combine the above reasons clearly a large majority of the parents appreciated the scheme for its benefits.

There are many suggestions in the form of opinion came from the parents to improve the quality of the scheme. Important among them are: proper information to the parents well in time about the health check-up; increase of the coverage up to 7th standard; provision of all the child health related services at the school (examination, treatment, medicine & referral services); uniform check-up of each and every student; establishment of mobile dispensary in stead of referrals; provision of medicines to the students till the complete recovery; health education training for the teachers; training for the teachers in identifying the health problems of the children; and keeping medicines for common ailments of the students at the school throughout the year.

Parents opinions indicate that they are very much interested to participate in the scheme and are also eager to know about this scheme well in advance. Some parents opined that parents themselves should tell to the doctor about their children's health at the time of check-up and after the check-up also they feel that they should be informed about the health status of the child.

There are several complaints about the implementation of the scheme in both the districts. The major complaints include: insufficiency in the availability of the medicines at the school; hurry in the health check-up by the medical teams; lack of seriousness in implementation of the scheme by the staff members; insufficient medicines for the referrals at the PHCs; and long distance to the referral centres. Though the proportion of parents gave these opinions are very less in the two districts these are the important opinions to be considered for increasing the performance of the scheme.

Opinion of village leaders

One of the objectives of the programme is to get the services from the village level leaders to organize the scheme. Although the community leaders were involved in this scheme, we could not get the opinion from many leaders since the investigators stayed in a village only for a day. Even then we could manage to get the opinions from 19 leaders in Beed and 14 in Kolhapur (since the number is so small, not presented in the table form). Their opinions reveal that the community leaders are in favour of conducting the health check-up every year. Most of them cited that this scheme is very much useful and particularly to the poor families. Leaders opined that the students must be educated about the clean health habits and health education curriculum should be a part of their education. They also spoke about the necessity of the health education training to the teachers so that teachers can impart it to the students. They advised the careful examination of the children by the doctors without hurry. They feel that the participation of parents in this scheme is very much essential and further they feel that the parents should come forward to tell the health problems of their children to the doctor. Village leaders opined that after the examination parents should be properly informed about their children's health. They feel that the schools should keep the necessary medicines for common ailments.

Conclusions

Performance of the health check-up scheme also depends on the co-operation from the parents particularly for sending the child to school during the check-up and in taking the child to the referral centre in case of referral. To create an awareness among parents they were informed about the scheme well in time through teachers and students. This chapter

analysed the awareness and opinion of the parents about the scheme. The analysis shows that though most of the parents were informed about the scheme in the two districts, the proportion informed in Kolhapur (nearly universal) is higher than in Beed. This implies that the message about the programme reached the community in a better way in Kolhapur than in Beed. This could also be one of the reasons for higher coverage of students in Kolhapur than in Beed.

All the parents in the two districts agreed that the doctors examined their child. Proportion of parents who said that their child was identified with the health problem is higher in Kolhapur than in Beed as expected. Proportion of students referred for further treatment as revealed by the parents is unexpectedly higher in the two districts. Proportion of parents sought treatment for their child at the referral centre is higher in Beed than in Kolhapur. Almost all the parents agreed that their children got the treatment at free of charge at the referral centre in both districts and all of them agreed that the referral card was useful in getting the treatment.

Most of the parents gave their opinion regarding the scheme in the two districts. Important opinions given by them are: this scheme has helped in improving the health of their child; health check-up and treatment at the school premises save their time and money; and schools instead of parents take care of the responsibility of the health of their children. There are many suggestions in the form of opinions: implementation of this scheme every year; prior information to the parents about the check-up; increasing the coverage up to 8th standard; provision of all health related services at the school itself; careful check-up by the doctors; mobile

dispensary; training of teachers in health education and identification of health problems; and keeping medicines in school for common complaints throughout the year. The complaints given by the parents include: shortage of medicines at the time of check-up; haste in examining the children; and insufficient medicines at the referral PHCs. Community leaders are in favour of conducting the programme every year since they feel that this scheme is very much useful for the poor. Their opinion includes: health education curriculum to the students; health education training for teachers; careful examination of students; and keeping medicines for common diseases at school.

Table 5.1.

Issues related to the health examination of children as given by the parents in Beed and Kolhapur districts.

	Beed			Kolhapur		
	Ambe-jogai	Ashti	Tot-al	Radha-ngari	Hatka-nakle	Tot-al
Number of schools	25	25	50	25	25	50
Type of school						
Government	18	25	43	25	25	50
Aided	5	-	5	-	-	-
Private	2	-	2	-	-	-
No. of parents interviewed	198	198	396	200	199	399
Had prior information about the programme - Yes	152	163	315	197	191	388
Child's attendance - Yes	198	198	396	200	199	399
Did doctor diagnose - Yes	198	198	396	200	199	399
Any health problems - Yes	50	17	67	56	45	101
No	148	181	329	144	155	299
Place of treatment						
School	27	1	28	18	36	54
Referred	23	16	39	38	9	47
If referred: was treatment given within a month's time						
Yes, within a month	20	9	29	14	9	23
No, not treated	3	7	10	24	-	24
Was treatment free of charge						
Yes, free of charge	20	9	29	14	6	20
No, charged	-	-	-	-	3	3
Use of health card in getting treatment: Useful	20	9	29	14	9	20
Not useful	-	-	-	-	3	3

Table 5.2

Opinion of parents about the health check-up scheme

Opinions	Beed	Kolhapur
1. Scheme should be repeated	267	136
2. This scheme raises the health status & cleanliness of the children	22	49
3. Scheme is very good and useful for the health of the children	8	15
4. Treatment and medicines at the school save our time & money	16	33
5. Information should be given to parents well in advance	8	12
6. Parents should inform the doctors & teachers about health of their children	18	7
7. Parents should be informed about the health of their children	6	10
8. Teachers should be trained to take care of the health of the children	8	2
9. Health check-up was done hurriedly	-	1
10. Sufficient medicines were not available at the school	35	15
11. Programme was not implemented properly	8	3
12. Programme should be improved with proper coordination	-	7
13. Till complete recovery student should be provided with medicine	7	14
14. Health examination should be done carefully	10	13
15. All the child health services should be made available at the school	16	33
16. Mobile dispensary should be made available instead of referrals	-	1
17. Coverage of students should be up to 7th standard	3	2
18. Permanent doctors should be posted in inaccessible areas	1	1
19. Referral services should be made available nearer to the schools	5	-
20. Sufficient medicines were not available at the PHCs for referrals	3	1
21. Medicines should be available in the school through out the year	1	3
22. Opinion not given	49	23

Chapter 6

Summary and Conclusions

This evaluation study of the special school health check-up scheme in Maharashtra was undertaken at the request of the Ministry of Health & Family Welfare. The objective of the study is to analyse the various aspects of the functioning of the scheme. For the study two districts were selected based on their performance. In terms of percentage of students examined, Kolhapur represents the higher performance and Beed represents the lower performance. Two tehsils from each district had been selected again on the basis of higher and lower percentage of students examined. Ashti and Ambejogai tehsils represent the higher and lower performance respectively in Beed. Radhanagari and Hatkanakale tehsils represent the higher and lower performance respectively in Kolhapur. Fifty schools from each district (25 schools from each tehsil) were selected to evaluate the scheme. Evaluation of the scheme based on the information collected from the schools was also supplemented from the information obtained from all the PHCs in the selected four tehsils regarding the check-up. Further, to know the extent of awareness among the parents about this scheme, eight parents from each school were selected from all the 100 schools. This chapter provides the summary of findings and conclusions emerged from the study.

Performance of the Special School Health Scheme in Maharashtra

Before analysing the survey data from the two districts for the evaluation of the scheme, the performance of the scheme in Maharashtra as a whole was analysed using the information obtained from the Directorate of Health Services. In the state as a whole 94 lakhs students were enrolled in

65,208 primary schools during the academic year 1996-97. The performance of the scheme in Maharashtra shows that, out of 94 lakhs enrolled students, 83 lakhs were examined under the scheme and the remaining 11 lakhs were absentees during the check-up. Hence, the overall percentage of students examined in the state was 88 per cent. Out of the 88 per cent of examined students, 44 per cent of them were identified with at least one health problem indicating the higher prevalence of easily preventable health problems among the primary school children and the importance of intervention strategies. The proportion of students examined is higher in the rural areas (90 per cent) of the state than in the urban areas (85 per cent). Though the proportion of students examined was higher in rural areas, proportion of students identified with health complaints is considerably higher in urban areas (52 per cent) than in rural areas (39 per cent) of the state suggesting the difference in the quality of health check-up between urban and rural areas.

District-wise performance of the scheme showed that there is a wide variation between the districts in terms of students examined and students identified with health problems. Proportion of students examined is lowest in Marathwada region and highest in Kolhapur region. Marathwada region of the state is considered to be backward in various aspects and this backwardness is reflected in the implementation of the health check-up scheme also. District-wise percentage of students examined in rural and urban areas showed that in most parts of the state, higher proportion of students were examined in rural areas than in urban areas. Students identified with health problems are proportionately more in Mumbai and Pune region than the students in Nashik, Aurangabad, Akola and Nagpur regions. The lowest percentage of students with health

problems in the state is recorded in the backward Osmanabad district (14 per cent). Under the normal circumstances, in no way the primary school children of this district would have been in better health status than the students of the districts in Pune, Mumbai and Kolhapur circles. Further, in half of the districts, proportion of students with health problems is higher in urban areas than in rural areas. It seems that the developed/more urbanised regions have the higher proportion of students with health problems than the less developed/less urbanised regions of the state. Even within the regions, the better-off districts have higher proportion of students with health problems than the other districts. Higher proportion of students with health problems in developed/urban areas of the state does not mean the poor health of students in these regions but it does indicate the better quality of health check-up. It seems that the programme was efficiently implemented in the urban/better-off regions. Also easy accessibility and higher enrolment of urban schools could have made possible for the medical teams to spend more time leading to a higher efficiency in the examination of students.

Performance of the Scheme in Beed and Kolhapur districts

The performance of the programme in the two districts selected for the study (as obtained from the Directorate of Health Services and District Health Offices) showed that the proportion of students examined is considerably higher in Kolhapur (96 per cent) than in Beed (78 per cent). In both the districts, higher proportion of students were examined in rural areas than in urban areas. But the proportion of students examined in rural and urban areas of Kolhapur is much higher than the rural and urban areas of Beed. Students identified with health problems are similar in the two

districts (37 per cent each), but proportion of students referred for further treatment is higher in Kolhapur (8 per cent) than in Beed (3.4 per cent).

The variation in the proportion of students examined between tehsils is higher in Beed with poor performance and it is lower in Kolhapur with good performance. It indicates that, lower the performance of the programme higher the variation within the district. It is found that the tehsils which have lower average number of students per school identified more number of students with health problems and vice versa. Higher proportion of students with health problems in smaller schools and lower proportion in bigger schools indicate that the quality of the scheme depends on the number of students the medical teams assigned to check-up.

Anaemia, intestinal worms and teeth problems are identified as common health complaints among the students in the two districts. Ear diseases, pyoderma and eye problems together affect a considerable proportion of students. Students with "other" diseases are relatively more in Kolhapur than in Beed. Further, the ratio of students with health problems is higher for Kolhapur than for Beed. Students with health problems, students referred for further treatment, students with "other" diseases and ratio of students having health problems are all higher for Kolhapur than for Beed. All these indicators clearly show that the quality of health check-up was good in Kolhapur than in Beed.

Performance of the Scheme in the Selected Schools

The analysis of the information collected from the 50 schools each in Beed and Kolhapur districts showed that, in the selected schools, as expected, almost all the students

enrolled in Kolhapur and only 76 per cent in Beed had been examined. This data from the sample schools confirm the district level data. Absenteeism is higher among the students of Beed district and it has made the scheme impossible to reach one-forth of the students. It reflects the inadequate strategies adopted to make all the students present during the health check-up in Beed.

In the sample schools, proportion of students with health problems is higher in Beed (41 per cent) than in Kolhapur (24 per cent). Students with health problems in sample schools in Kolhapur is lower than the proportion observed for district as a whole. The data from the sample schools also confirm the earlier observation from the district level data that bigger the school lower the number of students identified with health problems. Average number of students examined per selected school is 103 for Beed and 163 for Kolhapur, thus the medical teams examined 60 students more per school in Kolhapur than their counterparts in Beed. This difference is resulted in the quality of the health check-up of students: students identified with health problems are higher in Beed (41 per cent) and lower in Kolhapur (24 per cent). This observation again suggests the better quality of health examination in smaller schools than in larger schools. Less number of students in schools makes the paramedical teams to spend more time in school and it increases efficiency in examining the students.

Though students identified with health problems are less in Kolhapur schools students referred for further treatment are higher than in Beed. Disease-wise distribution of students with health problems shows that anaemia, intestinal worms, teeth problems and "other" diseases are the major health

problems among the students of sample schools in the two districts. Teeth problems, which could lead to gum infections, are observed to be more in Beed than in Kolhapur. Anaemia is related to nutritional deficiency and its prevalence is higher in Beed than in Kolhapur. Prevalence of "other" diseases, which is related to quality of health check-up, is considerably higher in Kolhapur than in Beed. Night blindness, scabies, pyoderma and eye problems are prevalent among small proportions of students in both the districts. Disease-wise distribution indicates that diseases related to infections and nutritional deficiency are relatively more prevalent among the students of backward Beed district than the relatively better-off Kolhapur. Within the Beed district diseases related to infections and nutritional deficiency are lower in relatively better-off Ashti and higher in backward Ambejogai. In Kolhapur distribution of diseases among students is more or less same in the two tehsils. This is expected since Kolhapur is a developed district with less intra-district variation.

Though the percentage of students with problems is higher for Beed than for Kolhapur students referred for further treatment are higher for Kolhapur than for Beed. In the two districts students with anaemia, intestinal worms, night blindness, scabies and pyoderma were treated mostly at the school. Mainly referrals were made for the ear, eye, teeth and "other" problems in both the districts. In Beed majority of the students were referred to Ambejogai Medical College Hospital whereas students in Kolhapur were referred for the respective PHCs. Among the referrals, percentage of students sought treatment at the referral institutions is higher in Kolhapur than in Beed. Further, in Beed more students nearer to the referral centre (Ambejogai) sought treatment than the students far away from the referral centre (Ashti). In

Kolhapur more students from Hatkanakale tehsil sought treatment than the Radhanagari tehsil which is hilly with poor transport facility. Hence, good transport facility and nearness of the referral centre are the important factors for students seeking further treatment. Referral for further treatment is an important component of the scheme and to successfully implement the treatment for the referrals, the centres for referral have to be properly located.

Opinion of School Teachers about the Scheme

Perception of the primary school teachers about the various aspects of the scheme reveals that, on the whole, teachers from Kolhapur have given a good opinion compared to the teachers from Beed. Since education and health departments are directly involved in implementing the scheme all the teachers from the two districts opined that they received the necessary help from these two departments. All of them in the two district also said that they received the information and instruction from education department well in time. Opinion regarding the help from PWD is not encouraging. All the teachers in the two district said that they received the one day training and it was as per scheduled time. Some of the teachers from both the district were not given the required demonstration on examining children.

Except few, all the schools received the operational guide on time in both the districts but manuals for teachers were received by all the schools in Kolhapur but only by 68 per cent of the schools in Beed. Likewise, charts and IEC materials were received by many schools in Kolhapur but most of the schools did not receive them in Beed. Most of the schools in both the districts were not informed about the referral institutions in advance. This is expected since the

schools are not involved in referral system. Ninety-two per cent of the schools in Kolhapur but only 74 per cent in Beed received the adequate medicines on time. Only half of the schools in Ambejogai tehsil of Beed district received the drugs and medicines on time. Shortage of medicines during the health check-up in Beed district, particularly in Ambejogai tehsil made them to distribute the medicines to the students several days after the check-up. This exposes the poor arrangement made to distribute the drugs and medicines during the check-up.

Though the teachers from the two districts, in general, found this programme useful, teachers from Kolhapur rated the success and utility of the programme very high than the teachers from Beed. Similarly teachers from the two district opined that the role of officials was good. But, more teachers from Kolhapur than in Beed said that the role of officials was very good.

When the teachers were specifically asked to give their opinion about the scheme, they opined that this scheme is useful and it helps to increase the health status of the students. Hence many of them want this scheme to be implemented every year. Uniform health check-up, more time for examination, provision of sufficient medicines to the defected students, more attention to the referral cases, expansion of coverage up to 7th standard, need for sufficient medical staffs for examination and information to parents about the health of their children are some of the important opinions given by them.

PHCs and the Special School Health Check-up Scheme

Assessment of the role of PHCs in the special school health check-up scheme in the selected two districts showed that the PHCs in the two tehsils of Beed district examined on an average, 830 students more than the PHCs in the two tehsils of Kolhapur. Higher number of students examined per PHC in Beed district might have produced some difference in the overall programme performance between the two districts. Proportion of students identified with the health problems by the paramedical teams is similar for the two districts whereas it varies to a greater extent within the district and also within the tehsil. Larger variation in students with health problems between the PHCs in the same tehsil suggests that there is a greater variation in the level of understanding regarding health examination of students by the medical teams.

Proportion of students referred by the medical teams for further treatment is higher for Kolhapur than for Beed. Proportion of students sought treatment at the referral centres is also higher for Kolhapur than for Beed. Higher proportion of students referred in Kolhapur indicate the better quality of health check-up. Higher proportion of referrals treated at the referral centres in Kolhapur further indicate the better follow-up care given to the referrals by the medical teams. It is observed that nearer the referral centre higher the proportion of students to seek treatment and longer the distance lower the proportion of students to seek treatment.

Distribution of different diseases indicate the higher prevalence of infectious diseases and nutritional deficiency in Beed than in Kolhapur. Higher proportion of students identified with "other" diseases in Kolhapur indicate the better quality of health check-up by the medical teams in

Kolhapur than in Beed. Prevalence of different diseases among students is varying considerably between the PHCs in the same tehsil. Higher intra-tehsil variation in disease prevalence clearly indicates that the examination done by the paramedical teams is not uniform.

Parents' Opinion about the Health Check-up Scheme

Performance of the health check-up scheme also depends on the co-operation from the parents particularly for sending the child to school during the check-up and in taking the child to the referral centre in case of referral. To create an awareness among parents they were informed about the scheme well in time through teachers and students. Analysis of the awareness and opinion of the parents about the scheme showed that though most of the parents were informed about the scheme in the two districts, the proportion informed in Kolhapur (nearly universal) is higher than in Beed. This implies that the message about the programme reached the community well in Kolhapur than in Beed. This could also be one of the reasons for higher coverage of students in Kolhapur than in Beed.

All the parents in the two district agreed that the doctors examined their child. Proportion of parents who said that their child was identified with the health problem is higher in Kolhapur than in Beed. Proportion of students referred for further treatment as revealed by the parents is unexpectedly higher in the two districts. Proportion of parents sought treatment for their child at the referral centre is higher in Beed than in Kolhapur. Almost all the parents got the treatment for their children at free of cost at the referral centres in both the districts and all of them agreed that the referral card was useful in getting the treatment.

Most of the parents have expressed their opinion specifically regarding the scheme in the two districts. Important opinions given by them are: this scheme increases the health of their child; health check-up and treatment at the school premises save their time and money; and schools instead of parents take care of the responsibility of the health of their children. There are many suggestions in the form of opinions: implementation of the scheme every year; prior information to the parents about the check-up; increasing the coverage up to 7th standard; provision of all health related services at the school itself; careful check-up by the doctors; mobile dispensary; training of teachers in health education and identification of health problems; and keeping medicines in school for common complaints throughout the year. The complaints given by the parents include: shortage of medicines at the time of check-up; haste in examining the children; and insufficient medicines at the referral PHCs. Community leaders are in favour of conducting the programme every year since they feel that this scheme is very much useful for the poor. Their opinion includes: health education curriculum to the students; health education training for teachers; careful examination of students; and keeping medicines for common diseases at school.

Implications

Evaluation of the special school health check-up scheme in Maharashtra raised several issues related to its functioning. Since the programme is going to be a regular feature of the Ministry the issues emerged from this evaluation survey would be useful in implementing the scheme in the future. The scheme covered 88 per cent of the students in Maharashtra and the coverage is still higher in rural than in urban areas. As such, the scheme at least partially,

succeeded in providing a protection to the large majority of the primary school children from the common diseases. Though the programme covered a large majority of the students in primary school the coverage was not 100 per cent. Hence, serious efforts should be taken to bring all the enrolled students to school during the health check-up. Poor coverage of students in the backward regions of the state indicates the need for special attention to the schools in these regions to increase the coverage. Absenteeism is observed to be higher in Beed and this reflects the inadequate communication strategies adopted to bring all the students to school during health check-up.

Large proportion of primary school children identified with health problems justifies the importance of the intervention strategies. Also it indicates the need for health education curriculum at the primary school level as well as health education training for teachers. Higher proportion of students with health problems in urban/developed areas indicates the better implementation of the scheme in the former than in the latter. Difference in the quality of the check-up is seriously affecting the performance of the programme. Hence efforts are necessary to increase the quality of health examination. Easy accessibility and larger enrollment of urban schools could have facilitated the medical teams to spend more time and to identify more students with health problems than their counterparts in rural areas. This implies that the adequate transport facilities are necessary for rural paramedical teams during the health examination to increase the efficiency of the programme.

Intra-district variation in the performance of the programme is observed to be more in the poor performance Beed

district than the good performance Kolhapur. Also the quality of the programme as revealed by the students examined, defected and referred is good in Kolhapur than in Beed. Hence it is suggested that efforts should be taken to make the quality of the programme uniform throughout the state.

It is found that the PHCs in Beed examined on an average 830 students more than their counterparts in Kolhapur. Coverage of large number of students could also one of the reasons for the poor performance of Beed. Further, higher proportion of students with health problems in smaller schools and vice versa indicates the better quality of health check-up in the smaller schools than in the larger schools. These suggest the inadequate man-power used in the scheme. This is also mentioned by the Medical Officers in Beed district. To overcome these, either the medical staffs or the duration of the scheme should be increased. But the latter should not affect the normal schedules of the PHCs.

Large variation in students identified with health problems between the PHCs in the same tehsil suggest that there is a greater variation in the health check-up by the medical teams. Prevalence of different diseases also vary considerably between the PHCs in the same tehsil. It is least likely that the two PHCs nearer to each other should have distinctly different disease prevalence. Appropriate training, guidelines and supply of medicines in correct proportion to different diseases on time would help to overcome these problem to some extent.

Large proportion of referrals were not treated at the referral centres. Efforts should be taken to motivate parents to take the children to referral centres. It is also found

that nearness of the referral institution increases the proportion of referrals getting treatment. Hence it is suggested that the referral services should be made available nearer to the students, or special camps for referrals should be arranged.

It is found that the PHCs which identified more number of students with health problems had sufficient medicine stock than the PHCs which were in short of the required medicine. Hence every effort should be taken to supply the sufficient quantity of medicines to the PHCs before starting the health check-up.

Manuals, charts and IEC materials were not distributed uniformly to the schools. Care should be taken to distribute these on time to schools. Opinion of teachers and parents reveal the lack of uniformity and haste in the health check-up, insufficient availability of the medicines in schools as well as in PHCs and poor follow-up of referral cases. These shortcomings should be addressed properly to increase the quality of the scheme.

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Interview Schedule

EVALUATION OF SPECIAL SCHOOL HEALTH CHECK-UP SCHEME

I. Format for Primary Schools

1. State/UT: .....
2. District: .....
3. School Name: .....
   Address: .....

4. Whether the school is a Govt/Aided/Private

5. Name of the school in-charge for the scheme

6. Profile of persons who examined

   (a) Name (c) Profession
   (b) Education (d) Training by PHC doctor

7. Number of students

   (1) enrolled
   (2) Present (on the day of check-up)
   (3) Examined

8. Number of children identified with health problems and cases referred disease-wise

Disease	No. of children with health problems	No. of cases referred
Anaemia		
Intestinal worms		
Night blindness		
Ear discharge		
Scabies		
Pyoderma		
Eye		
Teeth		
Others		

9. Number of referrals disease-wise and institution-wise

Name of referral institution	Anaemia	Intworms	Night blindness	Ear discharge	Scabies	Pyoderma	Eye	Teeth	Others
Govt. Hospital									
Subcentre/PHC/CHC									
Private Hospitals									
Private Clinics									
DBCS									
All Institutions									

10. How many referred cases were actually treated at the referred units identified within one month/ 2 months/ till the time of.....

Name of referral institition	Anaemia	Intworms	Night blindness	Ear discharge	Scabies	Pyoderma	Eye	Teeth	Others
Govt. Hospital									
Subcentre/PHC/CHC									
Private Hospitals									
Private Clinics									
DBCS									
All Institutions									

11. No. of children under treatment at referral units

S. No	Disease	No. of children under treatment
1.		
2.		
3.		
4.		
5.		

12. Health cards being maintained or not — Yes/No

13. Did you get information/instructions from education department well in time? — Yes/No

14. Did you get the necessary help to organise the health check-up?

    (i) From education department — Yes/No
    (ii) From state PWD — Yes/No
    (iii) From state health officials — Yes/No
    (iv) (a) From NGO — Yes/No
    (b) if yes, name of the NGO

15. (a) Was the training imparted to teachers of the school as per schedule time? — Yes/No

    (b) Duration of the training — No. of days

    (c) Whether training (a) adequate (b) non-adequate

    (d) Who imparted the training

    (e) Was any practise/demonstration on how to examine children included in the training? — Yes/No

16. Did your school get the necessary material in time?

    (i) Manuals — Yes/No
    (ii) Operational guide — Yes/No
    (iii) Charts — Yes/No
    (iv) IEC materials — Yes/No
    (v) List of referral institutions — Yes/No
    (vi) Drugs/medicines — Yes/No
    (vii) Stationery (cards, registers etc.) — Yes/No
    (viii) Other items (please specify) — Yes/No

17. Was the community mobilised as planned? — Yes/No

18. Whether all preparations for check-up could be made as scheduled. — Yes/No

19. Schools' comments regarding

    (i) Degree of success
    (ii) Utility of the scheme
    (iii) Role of concerned officials
    (iv) Role of NGOs/Community leaders

20. Schools suggestions for improvement

EVALUATION OF SPECIAL SCHOOL HEALTH CHECK-UP SCHEME

II. Format for parents

State/UT : .....
District : .....
PHC : .....
Sub-centre : .....
School : .....

1. Were you informed of the check-up programme and its scope?

2. Did your child attend the school that day:

   Yes: Diagnosis
   No : Reason

3. (a) Was your child referred to for further examination?
   (b) If so was it done within a months' time?
   (c) Nature of examination

4. Is the treatment (consultation and medicine) provided free of charge?

5. Did the health card help in further check-up and treatment?

6. Does your child get any supplementary food at school?

7. Your views on the programme in respect of heath care, essentiality etc.

Note: This may be supplemented with the discussion with village leaders.

EVALUATION OF SPECIAL SCHOOL HEALTH CHECK-UP SCHEME

III Format for Medical Officer (PHC/CHC)

Name of the doctor : .....
State/UT : .....
District : .....
PHC : .....
Sub-centre : .....
No. of Schools : .....

1. Were you associated with the programme from the beginning?

2. Did you receive IEC material in time?

3. How many students were checked in schools in your area?

S. No.	Name of school	No. of students
1.		
2.		
3.		
4.		
5.		

4. How many cases were referred to your PHC/CHC/Vl. Org./Other?

Name of school	Anaemia	Intworms	Night blindness	Ear discharge	Scabies	Pyoderma	Eye	Teeth	Others
1.									
2.									
3.									
4.									
5.									

5. How many cases treated out of total referrals (disease-wise number)?

Name of school	Anaemia	Intworms	Night blindness	Ear discharge	Scabies	Pyoderma	Eye	Teeth	Others
1.									
2.									
3.									
4.									
5.									

6. What percentage of necessary medicines were available for treatment of referrals?

EVALUATION OF SPECIAL SCHOOL HEALTH CHECK-UP SCHEME

IV. Format for District Blindness Relief Society

State/UT :.....
District :.....

1. Were you informed of the programme well in advance?

2. How many cases referred to your institution?
   Please give a break-up according to disease.

Name of school	Type of disease
1.	
2.	
3.	
4.	
5.	

3. Treatment given/spectacles issued

Name of school	Type of disease
1.	
2.	
3.	
4.	
5.	