

B. K. L Walawalkar Rural Medical College

WALAWALKAR DANT CHIKITSA YOJANA

The health issues associated with school children are unique and need special interventions. Oral hygiene is often poor which leads to dental caries and a host of other oral and dental problems.

Keeping in mind the above challenges B.K.L Walawalkar Rural Medical College proposes to hold a School Health Check-up cum treatment camp with special emphasis on oral and dental hygiene. This camp is held on periodic basis for school children so that adequate follow-up and monitoring can be maintained.

International faculty and student participation in School Dental Health Program-

In association with National University of Singapore we also developed an application for the dental school health project which was the replica of the school dental health Performa. The application had Ratnagiri district map. The application would help with various calculation regarding the carious teeth and the percentage of carious, oral functional capacity and the percentage for oral functional capacity was auto generated. Hence the calculation mistakes could be avoided. This application also provided us with the total summary of the school screened and the school referred.

In 2015 a dental student from UK Alexzandra Sarraha visited the dental department and was with us for 15 days

The project implementation plan (PIP) is as follows:

1. Screen school children for health and dental problems in all zillaparishad schools in Ratnagiri district and suggesting preventive measures for the same.
2. Promoting healthy living and oral health concept by ACSM activities (i.e. Advocacy, Communication and Social Mobilization)
3. Health education regarding oral dental hygiene and ill-effects of tobacco chewing/ meshri etc.
4. A kit containing tooth brush and tooth paste would be given to children with actual demonstration of brushing of teeth.
5. Referring children to BKL Walawalkar Hospital for further management of dental carious.
6. Sequential follow-up of children for keeping a track on their dental health & general health progress.
7. Each Taluka has 30-35 kendras and each kendras has 10-12 school.



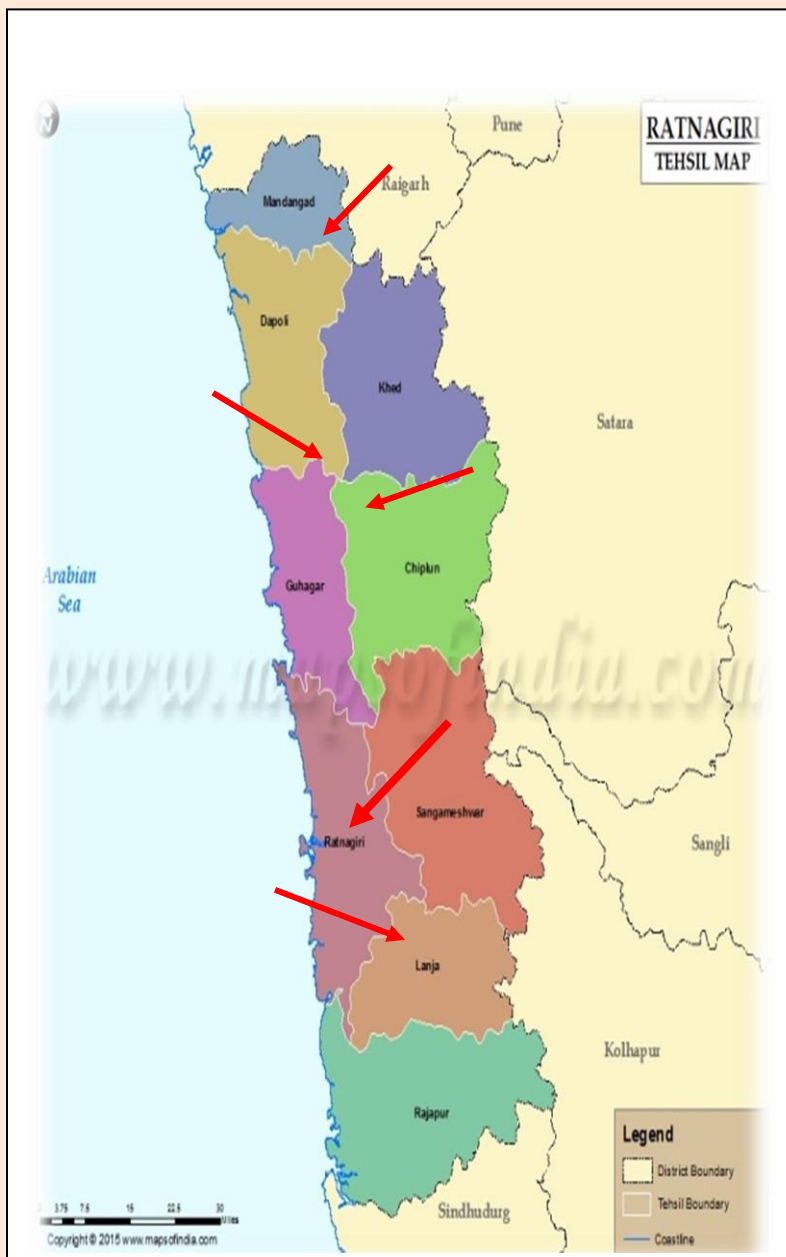
Geographic area covered -

Total 9 TEHILS in Ratnagiri districts

1. Mandangad
2. Dapoli
3. Khed
4. Guhagar
5. Chiplun
6. Sangmeshwar
7. Ratnagiri
8. Lanja
9. Rajapur

Area of coverage

1. Chiplun
2. Guhagar
3. Sangmeshwar
4. Rajapur
5. Khed



INTRODUCTION

School going children constitute an important fraction of the total population. School children are also having tremendous latent potential as future human resource of any country.

The health issues associated with school children are unique and need special interventions. Oral hygiene is often poor which leads to dental caries and a host of other oral and dental problems. Many children have Ear, Nose and Throat infections, which can be treated with antibiotics and ensuring clean environmental conditions.

Nutritional status in school children also needs attention and many of them require nutritional supplementation.

Keeping in mind the above challenges B.K.L Walawalkar Hospital proposes to hold a School Health Check-up cum treatment camp with special emphasis on oral and dental hygiene. This camp would be held on periodic basis for school children so that adequate follow-up and monitoring can be maintained.

It is a fact that school health children are periodically screened by government health machinery i.e. by Primary Health Centre Medical Officers, but our project would be unique in the following ways:

1. The approach used would be both preventive and curative. The children would not just be screened but also treated for any abnormalities that might be found.
2. The activity would be on a periodic basis that would include sequential follow-up. This would ensure that the children's health status would indeed be improved.

3. Special emphasis would be on oral and dental hygiene. Basic Information Education and Communication activities on things like regular brushing of teeth etc. would be provided to children. This would increase their awareness regarding dental hygiene and also make them aware of ill-effects of substances like gutka.
4. Referral services would be provided for children needing tertiary care. Children would be referred to BKL Walawalkar Hospital if the need arises and basic medical care would be provided free of cost. Special investigations and treatment would however be charged as per the institutions policies.

The project implementation plan (PIP) would be as follows:

Aim:

To promote healthy living in school children with special emphasis on preventive measures.

Objectives:

8. Screen school children for health and dental problems in Chiplun taluka and suggesting preventive measures for the same.
9. Promoting healthy living and oral health concept by ACSM activities (i.e. Advocacy, Communication and Social Mobilization)
10. Treatment of simple problems like mild dental caries, nutritional deficiencies and other issues that can be dealt at field level.
11. Referring children which need tertiary case to BKL Walawalkar Hospital for further management.
12. Sequential follow-up of children for keeping a track on their health progress.
13. Developing a public- private partnership (PPP) model between governments' educational, health department and BKL Walawalkar Hospital in order to make the programme sustainable.
14. Replicating this PPP model in other talukas of Ratnagiri District.

Target:

1. Cover 77 Zilla Parishad Primary Schools (1st standard to 7th standard) of Chiplun Taluka beginning from 1st November 2009 till 31st December 2010.
2. Follow-up of all children in these 77 schools from 1st January 2011 till 31st March 2011.
3. If the model becomes a success then include other taluka and repeat the same process from 15th June 2011 to 31st December 2011.
4. Evaluation of the project, conducting research and recommending policy protocols from 1st January 2012 to 31st December 2012.

Indicators:

1. Percentage of Schools covered in a particular area.
2. Percentage of school children screened.
3. Percentage of school children with dental caries.
4. Percentage of school children treated for dental caries at field level.
5. Percentage of children having some health morbidity.
6. Percentage of children treated for morbidities other than dental at field level.
7. Percentage of children treated for morbidities at BKL Walawalkar Hospital.

Calculation of indicators:

1. Percentage of Schools covered in a particular area
= Number of Schools Screened/ Total no of schools X 100
2. Percentage of school children screened
= Number of school children screened/ Total no of children enrolled in school X100
3. Percentage of school children with dental caries
= No of children having dental caries/No of children screened X100
4. Percentage of school children treated for dental caries at field level
= No of children treated for dental caries/ No of children having dental caries X100
5. Percentage of children having health morbidity other than dental caries
= (Total Children having morbidity – Children having dental caries)/ Total Children screened X 100
6. Percentage of children treated for morbidities other than dental at field level
= Total children treated for morbidities other than dental at field level/ (Total Children having morbidity – Children having dental caries) X 100
7. Percentage of children treated for morbidities at BKL Walawalkar Hospital
= Total Children treated at Walawalkar Hospital/ Total children having morbidity X 100

Performance Indicators:

1. Percentage of Schools covered in a particular area = 100%
2. Percentage of school children screened = 90 %
3. Percentage of school children with dental caries = As per the findings
4. Percentage of school children treated for dental caries at field level = 80%
5. Percentage of children having some health morbidity = As per the findings
6. Percentage of children treated for morbidities other than dental at field level = 80%
7. Percentage of children treated for morbidities at BKL Walawalkar Hospital = 20%

VISIT TO SCHOOLS FOR DENTAL SCREENING

GIFTING TOOTH PASTE & BRUSH





Hematinic distribution
Treatment of severe caries



International foreign students visit to schools



School Camp



Impact Of School Dental Health Project

| | Over all | 6yrs to10yrs | 11 to 15 yrs |
|----------------------------------|-----------------|---------------------|---------------------|
| Total | 7646 | 4778 | 2868 |
| Caries before treatment | 84.27% | 89.38% | 75.76% |
| Caries not found after treatment | 62.54% | 82.95% | 43.20% |
| Six month follow up | 2.61% | 2.84% | 2.23% |

Analysis Of Treatment Given To The Children

| | Over all | 6yrs to10yrs | 11yrs to 15yrs |
|---|-----------------|---------------------|-----------------------|
| Total | 6444 | 4778 | 2173 |
| %No. of children with loss of chewing ability | 6390(99.16%) | 4522(94.64%) | 1868(65.13%) |
| Treated molars with GIC filling cement Improved chewing ability | 4908(76.16%) | 3798(83.98%) | 1110(59.42%) |
| After six month follow up for loss of chewing ability | 187(2.44%) | 126(2.63%) | 61(12.12%) |

Methodology

Step 1:

Permission would be obtained from C.O Zilla Parishad, District Educational Officer, District Health Officer and Civil Surgeon.

Step 2: Once permission is obtained Block Educational Officer of Chiplun would be contacted and map of Chiplun Taluka, number and location of schools and number of school children would be obtained. Based on the data operational planning for the project would be done which would include the following:

- a. Time table for screening of school children of different schools.
- b. Logistics required for carrying out field activities.
- c. Planning of human resources including doctors, nurses and other staff.
- d. Setting up of referral mechanism to BKL Walawalkar Hospital for tertiary care.
- e. Monitoring and Evaluation methodology.

Step 3: Actual Screening of school children would include the following:

- a. Anthropometric measurements including age, weight, height, Head Circumference, Chest Circumference and Mid-arm circumference.
- b. General examination for Pallor, Icterus, Lymphadenopathy and any other obvious deformities/ malformation.
- c. Oral examination for dental hygiene and dental caries assessment including grading of caries tooth.
- d. Ear Nose and Throat (ENT) checkup.
- e. Systemic examination for CVS, CNS, RS and Abdominal System.

Step 4: Treatment

- a. Oral dental caries which can be treated at field level would be addressed.
- b. Other morbidities like nutritional deficiencies, minor problems like wax in ears would be treated at school level itself.

- c. Children needing referral services would be referred to BKL Walawalkar Hospital by giving a health note to them which the children would have to give to their parents. The health note will mention the problem found out, which department to visit and when at BKL Walawalkar Hospital.

Step 5: Preventive measures

- a. Health education would be provided to children regarding oral dental hygiene and ill-effects of tobacco chewing/ meshri etc.
- b. A kit containing tooth brush and tooth paste would be given to children with actual demonstration of brushing of teeth.
- c. IEC (Information, Education and Communication) would be given regarding various health morbidities and how effectively to prevent them.

Step 6: Follow-up:

- a. Sequential follow-up would be done every 3 months till 1 year to assess the progress of these children.

Step 7: Research

- a. Data collected would be systematically analyzed to generate useful information which would then be forwarded to respective schools and government machinery.

Human Resource Planning

The following doctors would be included in school health check-up

| Sr No | Name of the Doctor | Department |
|-------|------------------------------------|-----------------------------|
| 1. | Dr. Suvarna Patil | Medical Director |
| 2. | Dr. Wadke | Community Health Department |
| 3. | Dr. Konduskar | Dental Department |
| 4. | Dr. Mankame | ENT Department |
| 6. | Dr. Khedekar | Paediatric Department |
| 7. | Sister In Charge and Nursing Staff | Community Health Department |

Logistic and Financial Planning

1. All the logistics required including dental equipment's, materials and stationary for arranging screening and treatment camp would be provide by BKL Walawalkar Hospital.
2. Basic treatment and would be provided by hospital free of cost.
3. Tertiary treatment at hospital would be charged according to hospital policy. This would be prior informed to the parents and if parents are ready then advanced treatment would be given.
4. If approved then institution can be recognized under Sarva- Shiksha Abhiyan and cost of advanced treatment can be paid by government through this scheme for needy children.
5. Collaboration would be established with companies manufacturing tooth-paste etc. so as to ensure sustainability of the project.

Institutions involved

B.KL Walawalkar Rural Medical College and Hospital would implement the project in collaboration with educational and health department of government. Corporate companies would support it.

Overall Summary

| | |
|--|-------------------------|
| School dental health project | 2007-2021 |
| No. Of ratnagiri zilla parishad school | 996 |
| Total benefiariers screened | 39994 |
| Total benefiariers referred for treatment | 26407 |
| Total benefiariers received treatment at bklw hospital | 7646 |
| Departments | Dental, pediatrics, psm |

Year wise faculty and benefices

| | Faculty | Interns | Beneficiaries |
|------|----------------|----------------|----------------------|
| 2022 | 5 | 2 | 1917 |
| 2021 | 5 | 4 | 204 |
| 2020 | - | - | - |
| 2019 | 4 | - | 399 |
| 2018 | 5 | - | 143 |
| 2017 | 5 | - | 337 |
| 2016 | 6 | - | 779 |
| 2015 | 6 | - | 1318 |

Year Wise Screening Summary

| Year | Total School Covered For Screening | Total No Of Beneficiaries | Faculty |
|---|------------------------------------|---------------------------|---|
| 2022 Chiplun/ Sangmeshwar/ Guhagar/ Devrukh | 45 | 1917 | Dental- Dr. Sangeeta Wanjari, Dr.Dipak Patil, Dr.Pooja Jadhav, Dr.Ranjan Vikash Interns- Dr.Humera Hussain Clinal Psychologist –Swati Sonawane Staff- Geeta, Kashmira, Roshini , Sarika. |
| 2021 Chiplun /Rajapur | 4 | 204 | Dental –Dr.Wanjari, Dr. Amruta, Dr. Deepak, Dr. Ranjan Peaditric – Dr. Radhika Interns- Dr. Sagar Salavi, Dr. Satish, Dr. Ishani, Dr.Piyush Clinical Psychologist – Rupali Chavan, Swati Sonawane Staff- Kanchan, Priya, Sarika, Sanjana, Roshini, Kashmira, Geeta, Akshita Sister - Pradnya |
| 2019 Sangmeshwar | 9 | 399 | Dental – Dr. Modak, Dr. Deepak Peadiatric –Dr. Vinod Chowdhari, Dr. Rajnikant Latpate Staff -Kanchan |
| 2018 Sangmeshwar | 6 | 143 | Dental – Dr.Modak, Dr. Deepak Peadiatric- Dr. Vinod Chowdhari, Dr . Sonawane, Dr. Pallavi Karande Staff -Kanchan |
| 2017 Sangmeshwar | 10 | 337 | Dental -Dr. Modak, Dr. Patil Pediatician – Dr. Vinod Chowdhari, Dr. Vikas Patil, Dr. Mohammad Ansari Staff– Roshini ,Sankita |
| 2016 Sangmeshwar | 33 | 779 | Dental -Dr. Modak, Dr. Patil Dr. Kondejkar,Dr. Mugdha Pediatician – Dr. Deshmukh Community – Dr. Rahul Chowpade Staff– Praneeta, Sharmila,Kalyani,Rashiak |
| 2015 Chiplun Guhagar Sangmeshwar | 37 | 1318 | Dental-Dr.Modak,Dr.Patil,Dr.Kondejkar,Dr. Mugdha Pediatician – Dr. Deshmukh Community – Dr.Rahul Chowpade Staff-Praneeta,Sharmila,Kalyani,Sonal, Varsha,Rashika |

Year Wise Treatment Summary

| Year/Taluka | Total School Covered For Treatment | Total Beneficiaries | Faculty |
|---|------------------------------------|---------------------|--|
| 2019 Sangmeshwar | 8 | 240 | Dental – Dr. Modak, Dr. Deepak Peadiatric- Dr. Vinod Chowdhari, Dr. Rajnikant Latpate Staff - Kanchan |
| 2018 Sangmeshwar | 8 | 172 | Dental – Dr. Modak, Dr. Deepak Peadiatric - Dr. Vinod Chowdhari, Dr. Sonawane, Dr. Pallavi Karande Staff - Kanchan |
| 2017 Sangmeshwar | 7 | 149 | Dental – Dr. Modak, Dr. Deepak Peadiatric – Dr. Vinod Chowdhari ,Dr. Vikas Patil, Dr .Mohammad Ansari Staff - Roshini ,Sankita |
| 2016 Chiplun Sangmeshwar | 14 | 238 | Dental –Dr. Modak, Dr. Deepak Peadiatric –Dr. Deshmukh Community – Dr. Rahul Chowpade Staff - Roshini, Sunanda |
| 2015 Chiplun, Guhagar & Sangmeshwar | 7 | 183 | Dental-Dr. Mugdha, Dr . Khondajkar, Dr. Modak Peadiatric – Dr. Deshmukh Community – Dr. Rahul Chowpade Staff – Sonal , Varsha |
| Total | 45 | 982 | |