



Mobile Health Unit: Primary Health care at Doorstep

NAM India - Deepak Foundation

Assessing the impact on prime key parameter

January 2023

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Project Goals

- ❑ To provide doorstep healthcare services to vulnerable sections of society
- ❑ To address issues related to poor accessibility and knowledge for healthcare, malnutrition, anaemia & family planning.
- ❑ To create awareness on disease prevention and behavioral change

Total Beneficiaries:
26,749

Beneficiaries type	Achieved
Primary Healthcare	110
Anaemia Program	8
Community Mobilisers	5
Total	123

Accessing diagnostic tests/consultation

80%

of the participants attribute the credit to MHU for preventive health measures taken by them

73%

respondents availed the diagnostic tests provided by MHU

97%

respondents who received support were satisfied with doctor consultation

Accessing Medicines & Immunisation

85%

respondents received medication after consultation

100%

respondents who received medicines got-it for free

100%

respondents who received medicines reported relief due to them

Referral & Awareness Generation

59%

of respondents who were referred for higher treatment availed the services

93%

respondents were referred for immunisation camps of which **96%** participated in them

68%

respondents participated in awareness generation & family planning camps

Beneficiaries reported the following reasons for **satisfaction** –

- ✓ Free medicines
- ✓ Effective medicines
- ✓ Accessibility of the medical services
- ✓ Good consultation services

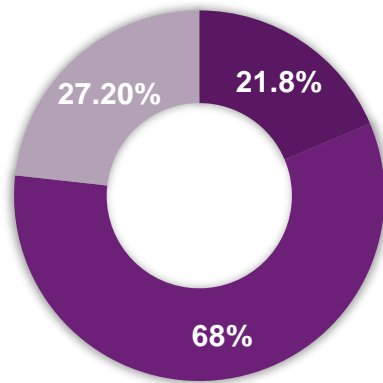
Key Recommendations

- Continuance of the programme requested by the community
- Inclusion of health educational initiatives eg: on free of cost insurance schemes available by Government of India/ State government etc. may be included

Global Statistics

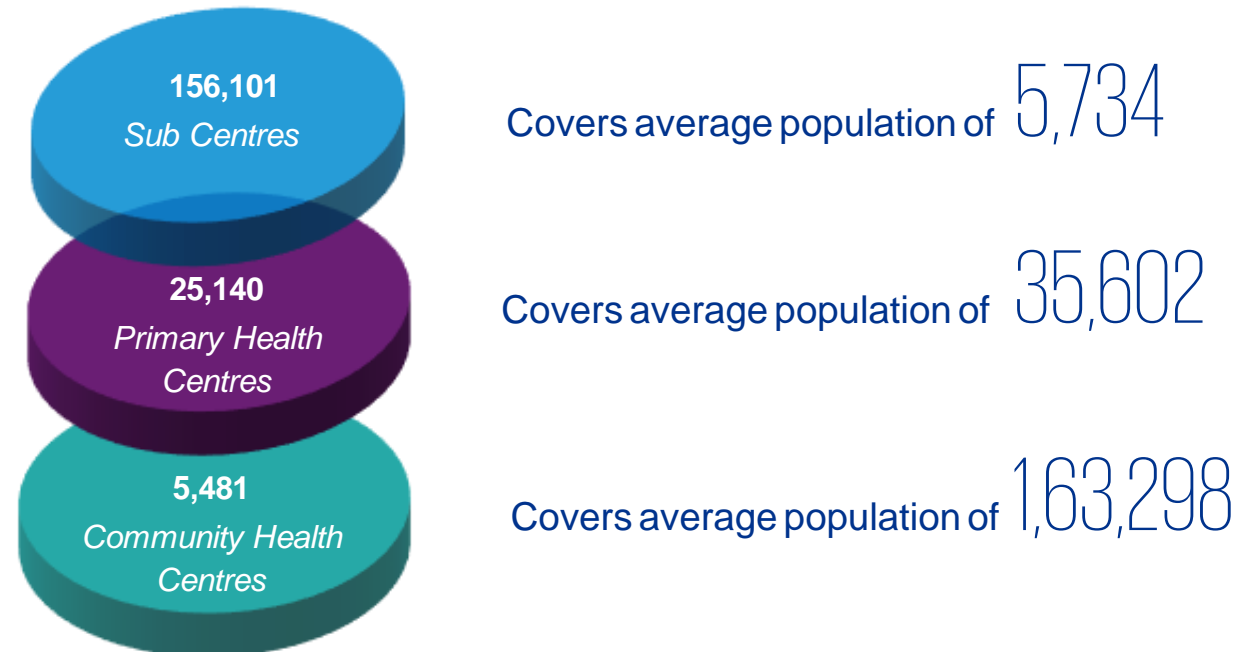
- ❑ **30%** of the world's population does not have access to essential health services
- ❑ Approximately **25 million** children under 5 years missed out on routine immunisation
- ❑ Among the Top 10 causes of death, **7** were caused due to non-communicable diseases
- ❑ In 2019, **74%** of deaths were due to non-communicable diseases

Shortage of Medical Staff across Rural Healthcare centres



- % of PHCs and SCs functioning without doctors
- % of CHCs devoid of Specialist doctors
- % of PHCs and SCs operating without Auxiliary Nursing Midwives (ANMs)

Rural Health Infrastructure



Global Statistics

- Globally, 462 million adults are underweight
- Around 45% of deaths among children under 5 years of age is linked to undernutrition

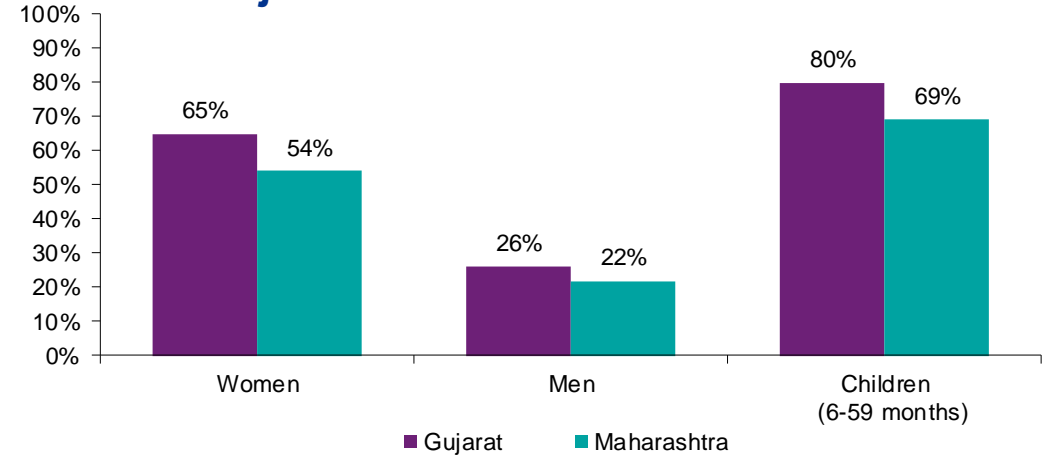
- According to the Global Hunger Index, 828 million were undernourished in 2021



- According to the National Family Health Survey, anaemia is particularly high among rural women, women age 15-19

- Maharashtra has 25.6% wasted children (weight for height) — the highest — followed by Gujarat (25.1%).

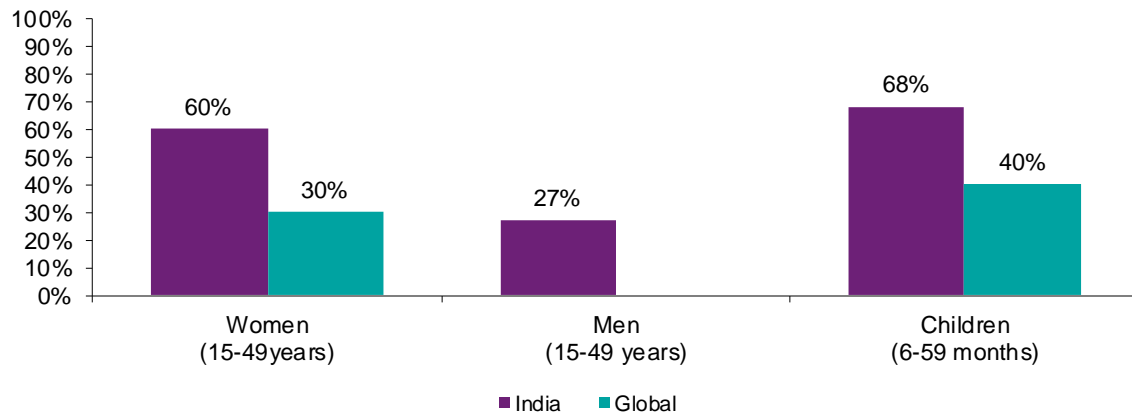
Prevalence of Anaemia (mild to severe) in Gujarat and Maharashtra



Interventions by government of India

- The government of India has launched the **Anaemia Mukht Bharat** programme under which Iron and Folic acid (IFA) supplements are given to children, adolescents and women of reproductive age and pregnant women irrespective of anemia.
- The government of India has implemented several schemes to improve nutritional outcomes in children such as **Scheme for Adolescent Girls** and **Pradhan Mantri Matru Vandana Yojana (PMMVY), POSHAN Abhiyaan**.

Anaemia Rate: India and Global



Introduction to Mobile Health Unit: Primary Health care at Doorstep 03

Project Goals



To provide doorstep healthcare services to vulnerable sections of society



To address issues related to poor accessibility to healthcare, malnutrition and anaemia.



To create awareness on disease prevention and behavioural change

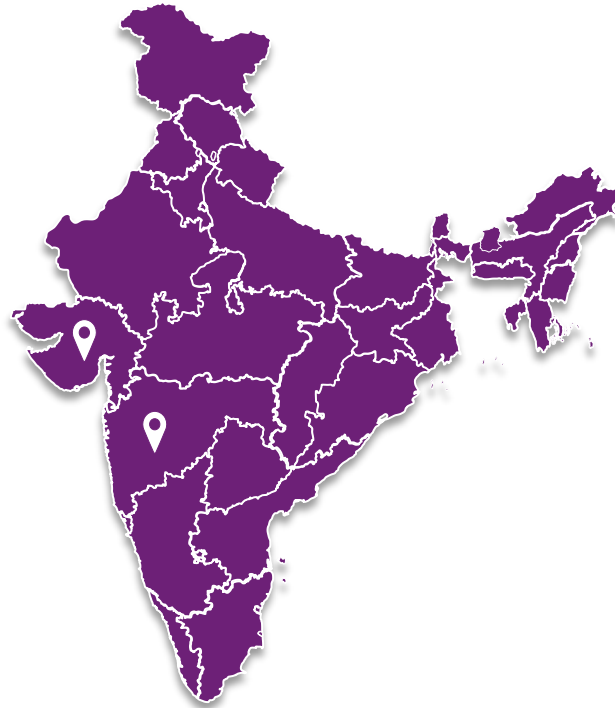


Duration:

Maharashtra: FY 2019-2022

Gujarat: FY 2016- 2022

Project Location



Beneficiaries

1,46,841

OPD (Outpatient Department)

80,270

Counselling Sessions

1,206

Adolescent Anaemia Program

1,139

Underweight Children Program

Mobile Health Unit (MHU) operates from 9 am to 5 pm for 5 days a week covering 30 - 35 villages in a month. The MHU staff has a Medical Officer, nurse, counsellor, data entry operator and a driver. Each day the MHU covered 2-3 villages in the blocks Kawant and Paithan in Gujarat and Maharashtra respectively.

The project on healthcare was implemented by the partner organisation with funding by NAM India. The impact assessment study aims to capture the overall impact of the programme on beneficiaries in the targeted geographies.

Consultation & Scoping

Discussion with NAM India team was conducted to seek project related details, understand the scope and document the engagement's expectations
Information on NAM India CSR programs was requested

Phase

1



Phase

2



Review of existing Theory of Change

Stakeholder interactions were conducted to understand projects, geographies, mode of implementation, intended impacts and processes
An Impact Map of the program was developed and strengthened in consultation with partners

Phase

5

Analysis & Impact Assessment Report Preparation

Conducted data analysis and prepared reports on Impact Assessment basis information gathered through stakeholder interactions



Phase

3

Sampling and Tool Designing

Finalised the sample plan for stakeholders, designed tools for Impact Assessment for stakeholder interactions.
Interactions conducted were combination of one-on-one interviews and focused group discussions

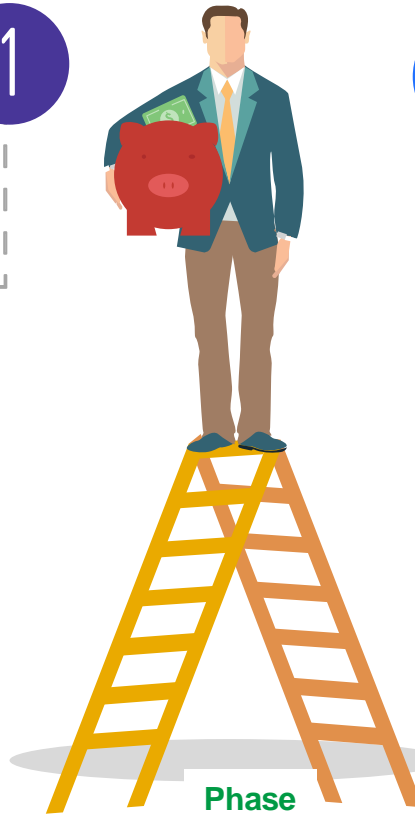


Phase

4

Stakeholder Interaction and data collection

Conducted stakeholder interactions (on a sample basis) through offline modes such as field visits to program locations, and telephonic interaction.



- Primary research was conducted through a qualitative and quantitative online survey with target beneficiaries.
- Stratified Random sampling was utilized to select treatment group respondents for the survey. The objective was to ensure 95% confidence level with 7% margin of error.
- This approach along with sampling methodology helped guarantee optimum possible representation of the universe across geographies. All responses were captured through one-on-one surveys which included multiple choice questions along with couple of qualitative questions designed specific to the intended outcomes of the program.
- 124 beneficiaries were covered in the study through one-on-one interaction. Thus, a confidence level of 90% and margin of error of ~7% was achieved for the study.
- An interaction was conducted with Deepak Foundation to understand the benefits and areas of improvement evidenced by them.

Beneficiary Interacted

Stakeholders	Interviews Completed
Beneficiaries – General	110
Beneficiaries – Anaemia	8
Beneficiaries – Underweight	2
Community Mobilisers	5

Location	Beneficiary Count
Bagaliya	8
Chanakwadi	10
Ismailpur	16
Khatiyavant	10
Naigaon	18
Natkarwadi	12
Saigaon	16
Nandar	22





Money & Physical Infrastructure under Mobile Health Center project	Outpatient Department (OPD)	Beneficiaries accessing diagnostic tests/consultation	Improved access to health services or diagnostic services	Improved Healthcare access to community
		Beneficiaries availing medicines		
		Reduction in 'wage losses due to poor health'		
		Borrowing Avoidance		
	Immunisation Camps	Improved immunisation among community		Improved health/ resistance of illness among beneficiaries
	Providing Referral services for health services	Beneficiaries approaching health centers for treatment		Improved Healthcare access to community
	Awareness generation: Information Education Communication	Improved knowledge among community	Improvement in attitude towards healthcare among beneficiaries	Improvement in practices towards healthcare among beneficiaries

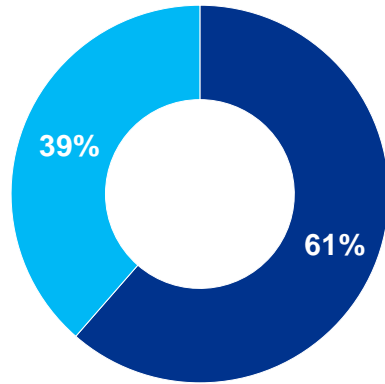
Note : The above impact map has been prepared by third-party in consultation with Deepak Foundation



Money & Physical Infrastructure under Mobile Health Center project	Family planning services	Improved knowledge among community	Improvement in attitude towards healthcare among beneficiaries	Improvement in practices among community regarding in family planning
	Adolescent Anaemia Program	Reduction in number of anaemic population		Improved health care practices among adolescent children
		Improved knowledge regarding anaemia in beneficiaries		
	Underweight Children Program (SMN Program)	Improved knowledge among community		Improvement in practices among community regarding in nutrition and diet
	Capacity building of community mobilisers	Enhancement of knowledge among community mobilisers	Improvement in attitude towards public health care among community mobilisers	Improvement in desired public healthcare practices among community mobilisers

Note : The above impact map has been prepared by third-party in consultation with Deepak Foundation

Gender- Respondents

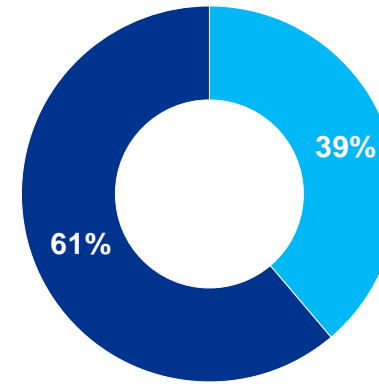


■ Male ■ Female

39%

respondents were female,
ensuring sample
representative of the
beneficiary universe of 39%
women

Respondent was Chief Wage Earner

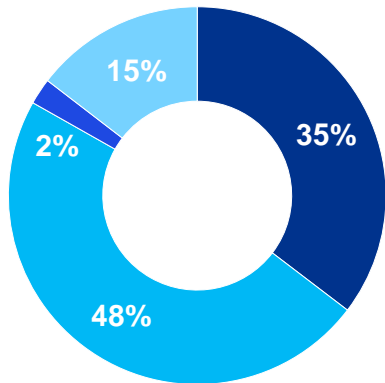


■ No ■ Yes

61%

respondents were chief
wage earner in their family

Annual Family Income

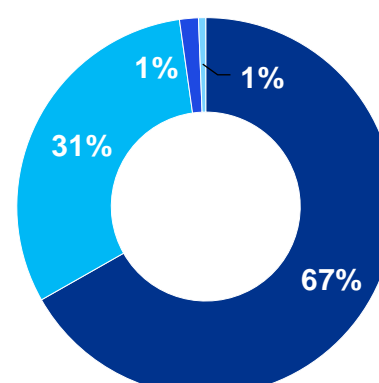


■ < 1 lakh ■ Between 1-3 lakhs
■ More than 3 lakhs ■ Not aware

83%

respondents had income
below **3 lakhs** per year

Number of Earning Members in family

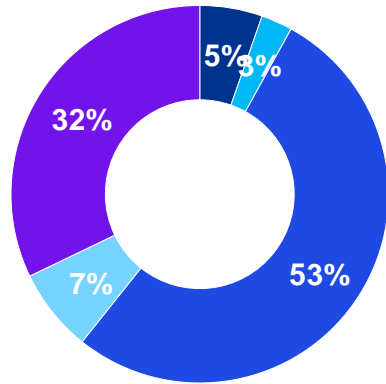


■ -1 ■ -2 ■ -3 ■ -5

67%

Families had only had 1
earning member

Educational background

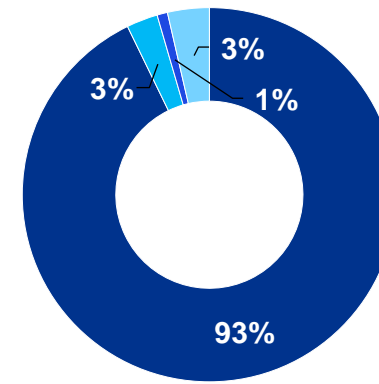


■ Grad/Post Grad (General) ■ Grad/Post Grad (Professional)
 ■ Literate ■ Some College but not graduate
 ■ SSC/HSC

100%

respondents were literate, but less than **53%** had completed HSC/SSC

Occupation background

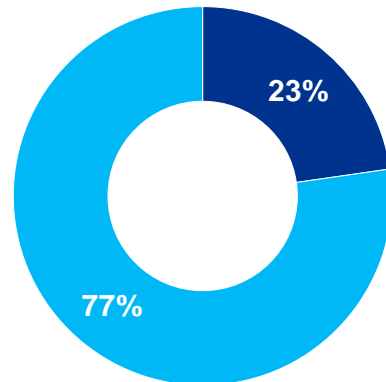


■ Farming ■ Self employed ■ Skilled worker ■ Unskilled worker

93%

respondents were employed in farming as a primary occupation

Sickness in Past 6 months

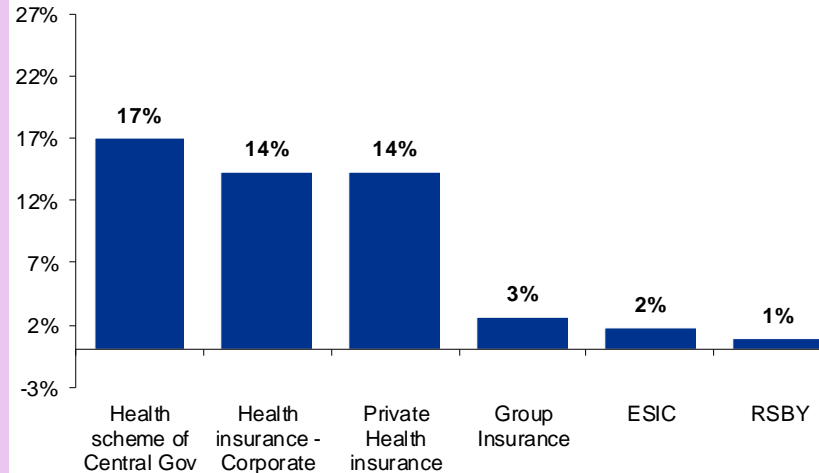


■ No ■ Yes

77%

respondents reported sickness in the past 6 months

Do you have Insurance Cover?



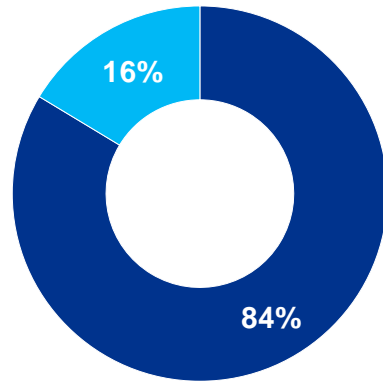
17%

respondents were aware regarding government insurance available to them

Respondent's Profile : Food Consumption Patterns

06

No of meals per day

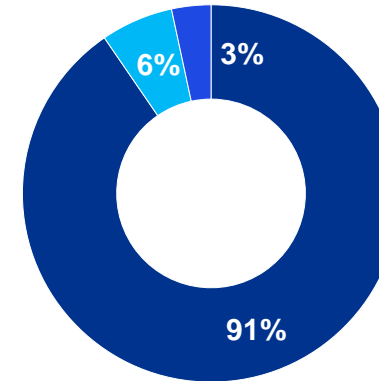


■ 2 Meals ■ 3 Meals

84%

respondents have frequency of two meals per day

Type of Meals Consumed

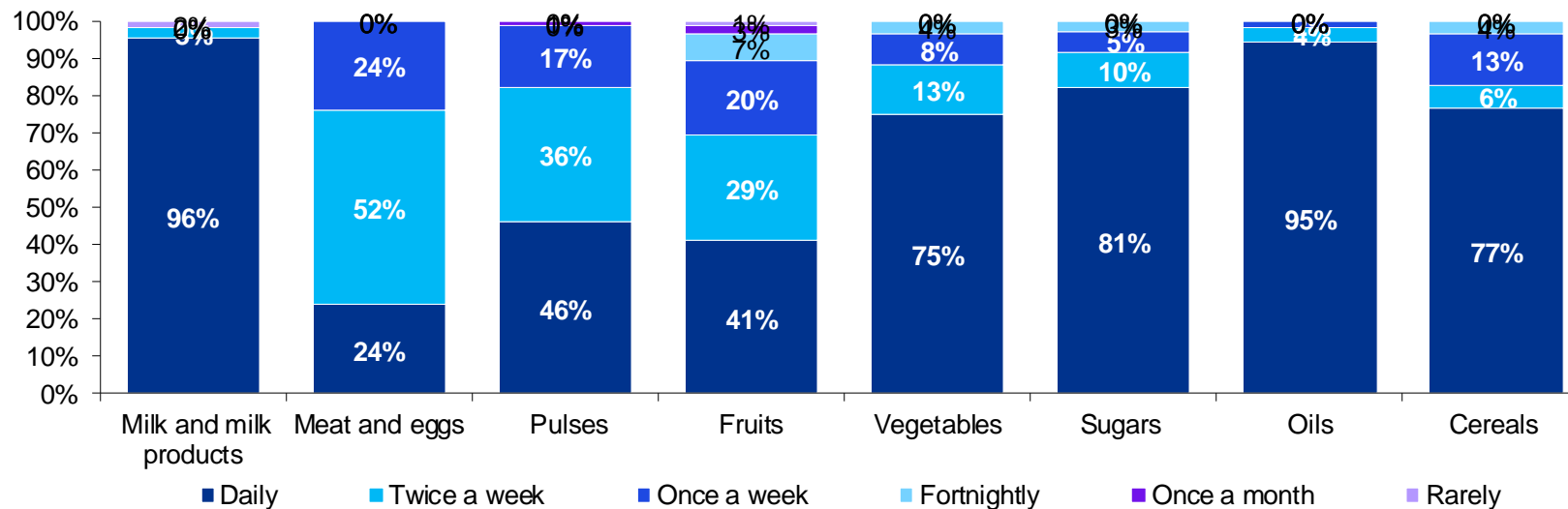


■ Completely vegetarian
■ Vegetarian including eggs
■ Vegetarian & non vegetarian

91%

respondents were completely vegetarian

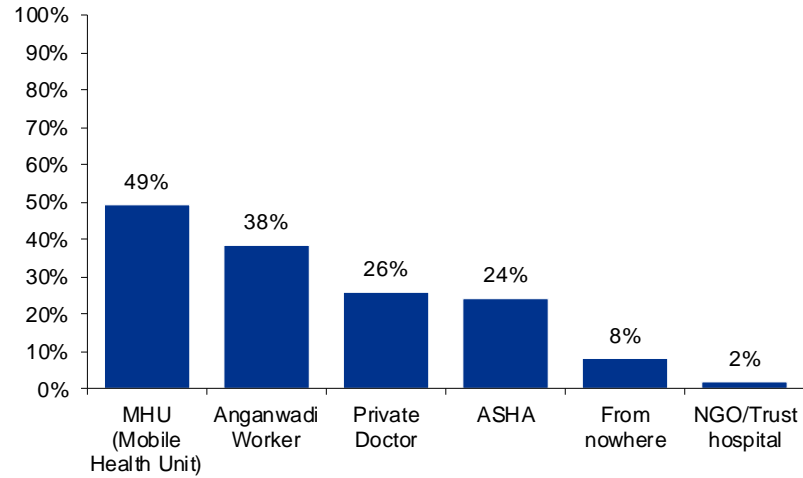
Food Consumption pattern among respondents



The following observations were observed among the beneficiaries:

- 79% of the respondents from Paithan, Maharashtra were vegetarian and 6.5% consumed eggs
- 99% of the respondents from Kawant, Gujarat were vegetarian
- 6% have eggs in their diet and 15 % have non-veg food in their diet.
- 82% respondents have pulse more than twice in their diet
- 96% have milk and its products daily in their diet

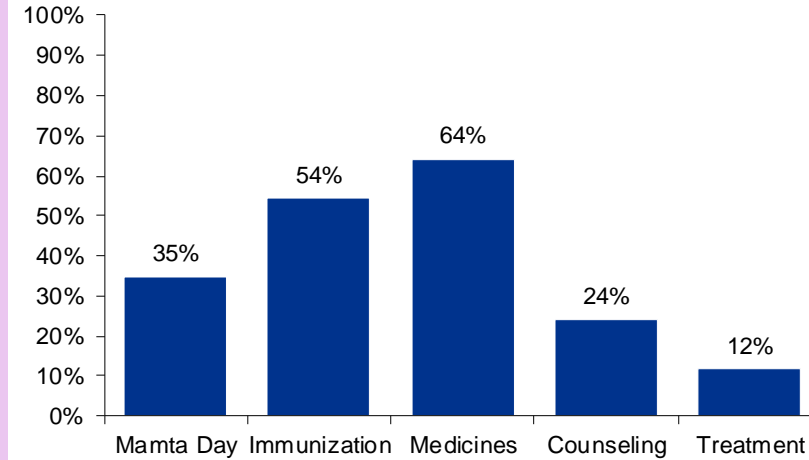
Source of Information – Health & Nutrition



49%

respondents had MHU as their source of information on health and nutrition

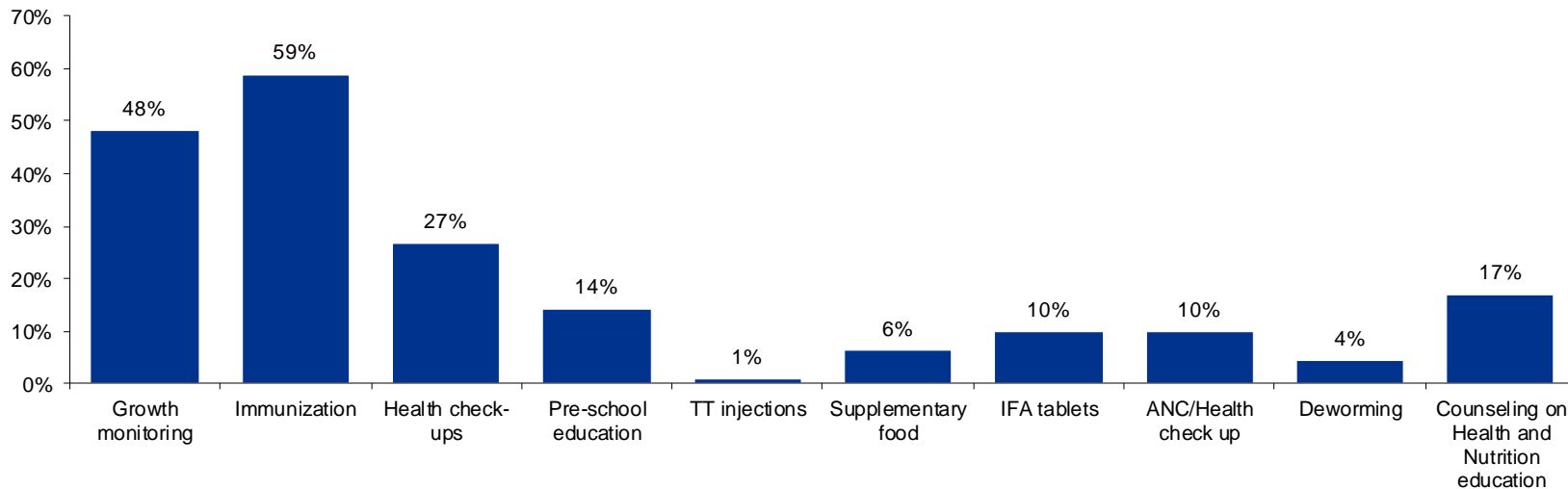
Services received from the MHU



64%

Respondents received medicines as a major service

Services received from Anganwadi or ICDS



Services received from Anganwadi or ICDS

Response suggest that following services were availed

Most availed

- Immunisation
- Growth monitoring
- Health check-ups

Least availed

- TT injections
- Deworming
- Supplementary food

85%

respondents received support from Deepak foundation MHU

100%

respondents received consultation for free

85%

respondents were satisfied with doctor consultation provided

98%

respondents received medicines after consultation

100%

respondents who received medicines reported relief

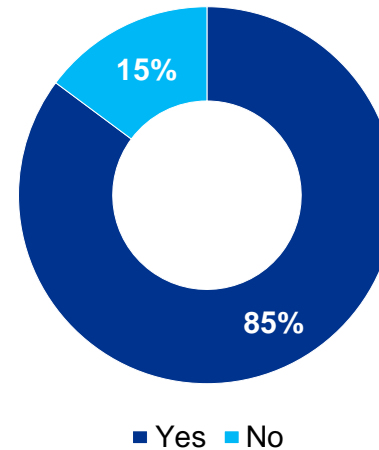
96%

respondents felt they received proper instructions for medicines consumption

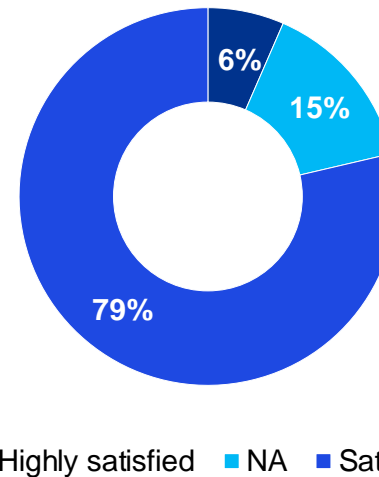
Beneficiaries reported the following reasons for satisfaction –

- ✓ Free medicines
- ✓ Effective medicines,
- ✓ Proximity to the medical services
- ✓ Good consultation services

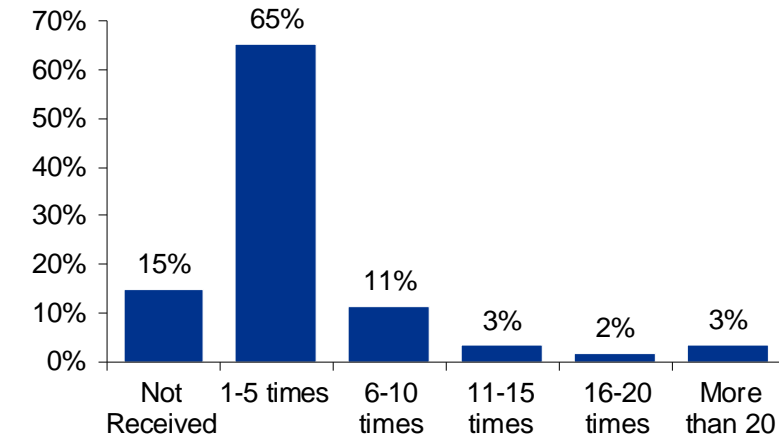
Have you availed MHU Support?



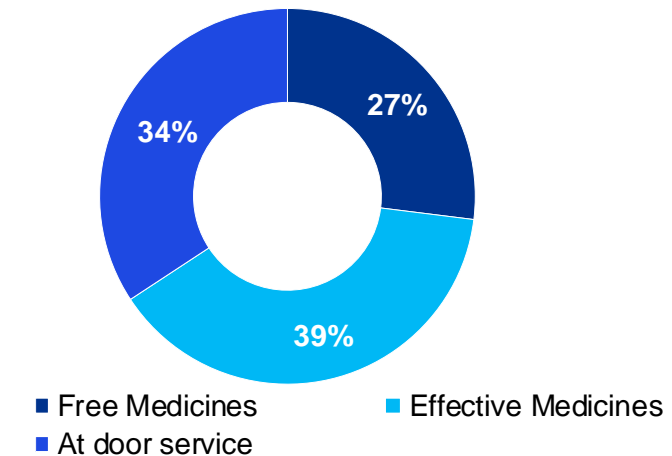
Satisfaction with Consultation



Number of time Services availed at MHU



Reason for Satisfaction



Outcome : Referral for Higher Medical Services

06

73%

respondents availed
diagnostic tests

99%

respondents received
tests for free

66%

respondents were
referred for higher
treatment

98%

respondents felt they
were properly
consulted

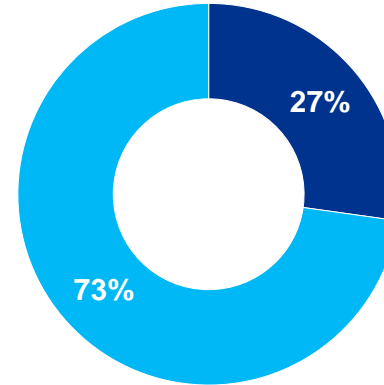
88%

referred respondents
approached the
suggested centre

94%

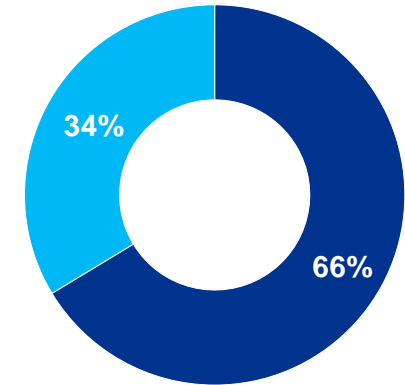
referred respondents
received follow ups by
MHU staff

Did you take diagnostics test provided by MHU ?



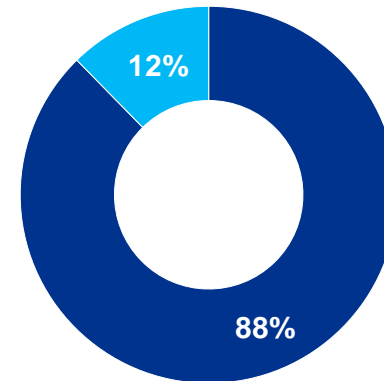
■ No ■ Yes

Were you referred for Higher treatment ?



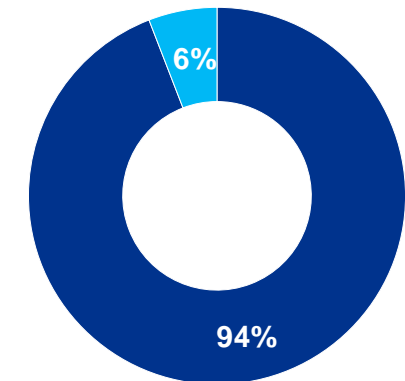
■ Yes ■ No

Did you approach the suggested centre ?



■ Yes ■ No

Follow-ups by MHU staff



■ Yes ■ No

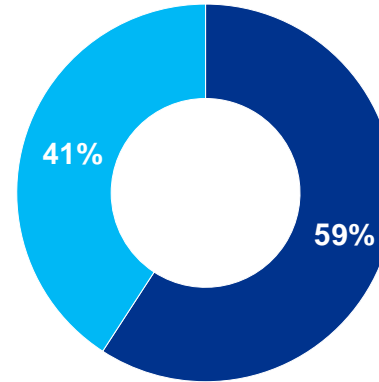
59%

respondents that were referred for higher treatment availed the services

87%

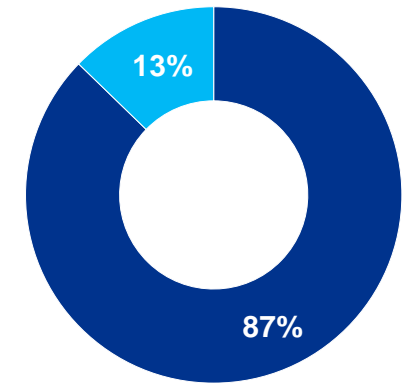
respondents that did not avail referral services sighted cost as the primary reason

Avail treatment at referred Centre



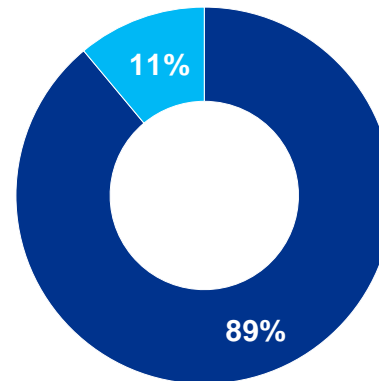
■ Yes ■ No

Reason for not availing treatment



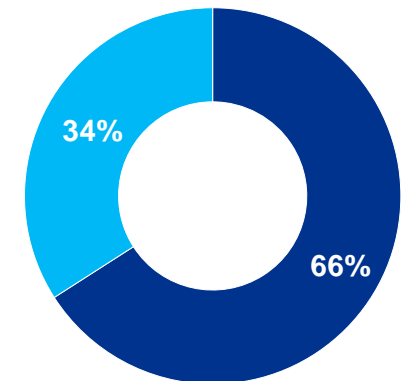
■ Cost ■ Distance

Satisfaction on ease of access



■ Satisfied ■ Highly satisfied

Were any external loan availed ?



■ Yes ■ No

100%

respondents were satisfied with the ease of access

66%

respondent's families have availed external loans for healthcare purpose

Outcome : Immunization Camps

06

93%

respondents were referred for immunisation camps

96%

respondents have participated in the immunisation camp

97%

respondents were satisfied with ease of access of immunisation at Manta Day

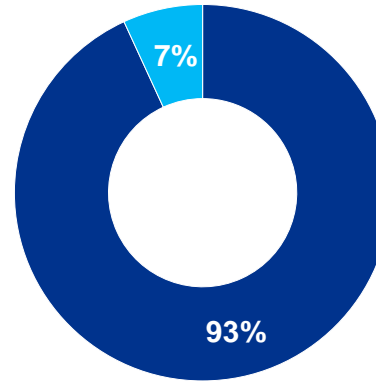
68%

respondents have participated in awareness generation camps & **84%** reported it to be helpful

Respondents recalled the following topics from the awareness generation camp;

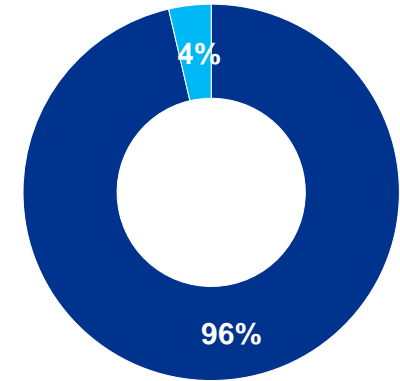
- COVID-19 safety
- ANC/PNC
- Maternal healthcare

Referred for Immunization camps



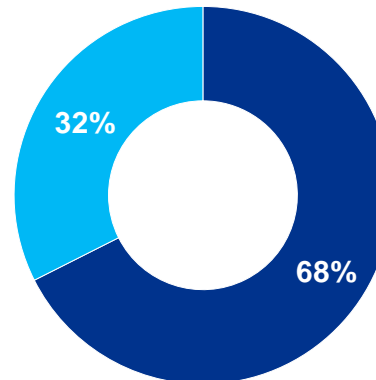
■ Yes ■ No

Participated in Immunization Camp



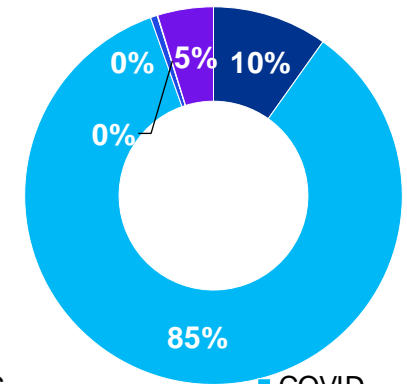
■ Yes ■ No

Participation in Awareness Generation



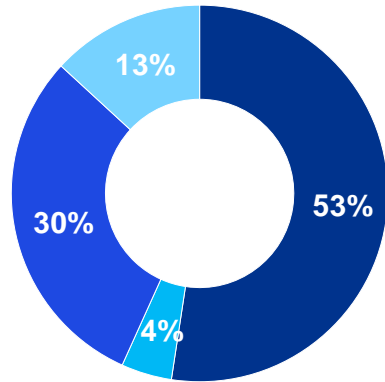
■ No ■ Yes

Awareness Generation Topics



■ ANC, PNC ■ COVID
■ Maternal healthcare ■ Social cleanliness
■ TB, HIV, ANC, PNC, Sikalsel

Hygiene

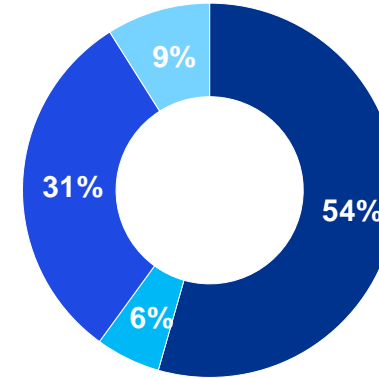


■ Correct ■ Don't Know ■ Incorrect ■ Partially Correct

"At what times do you wash your hands in a day?"

65%
of the participants were **aware** regarding maintaining basic hygiene

Social Distancing

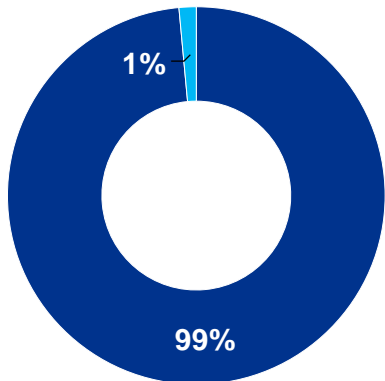


■ Correct ■ Don't Know ■ Incorrect ■ Partially Correct

"How much distance should be maintained during social distancing?"

63%
of the participants were **correct** regarding social distancing

Educational Initiatives Satisfaction

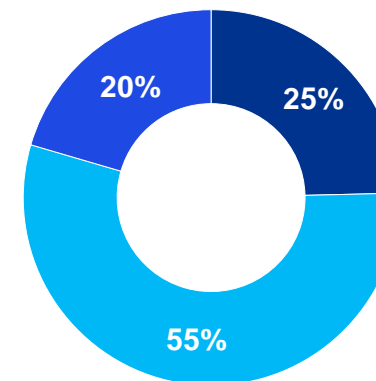


■ Satisfied ■ Neither satisfied nor dissatisfied

99%

Of the respondents were satisfied with the educational sessions conducted

Preventive Measures

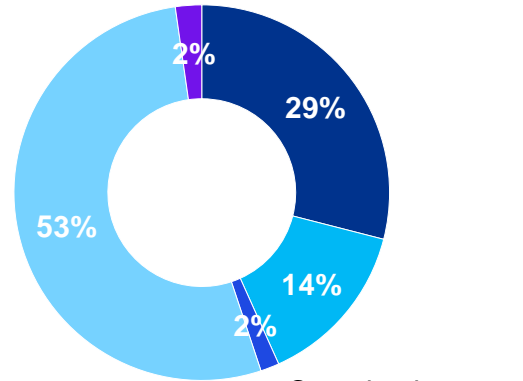


■ Maintain distance ■ Masks and Sanitizer ■ Wear masks

The respondents recalled the following measures against COVID-19 :

- Masks and Sanitizer
- Maintain distance
- Wear masks

Hygiene



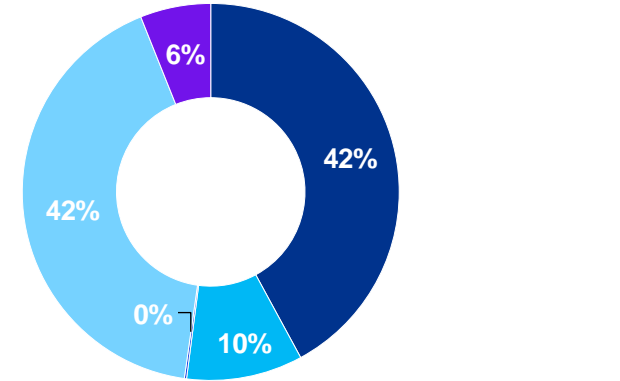
■ Agree
 ■ Completely disagree
 ■ Don't know
 ■ Completely agree
 ■ Disagree

“Lack of use of toilet or washing hands does not cause any serious medical challenges ”

53%

knew how to maintain hygiene after use of toilet

Medical Treatment



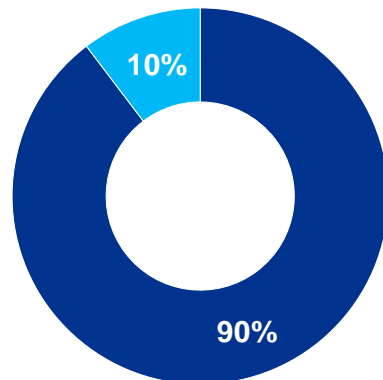
■ Agree
 ■ Completely agree
 ■ Don't know
 ■ Disagree
 ■ Completely disagree

“Medical treatment should be prioritized for family members who earn over those who don't.”

42%

disagree with the above statement

Health Standards



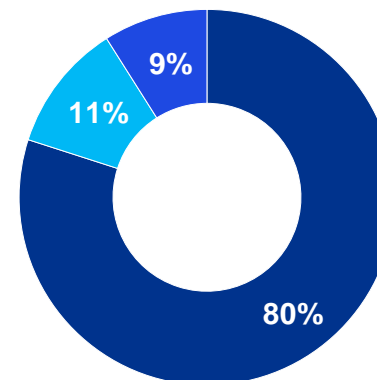
■ FALSE ■ TRUE

“Qualification of doctor does not matter much, as those people without qualification but significant experience in treating a medical condition can be consulted.”

90%

response suggests awareness among participants

Seeking Medical Treatment



■ FALSE ■ TRUE ■ Don't know

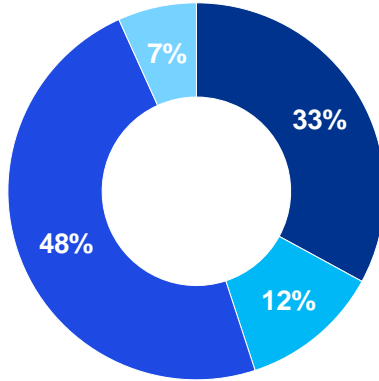
“One must go to visit doctor only after there is unbearable pain, as home remedies should be tried first?”

80%

of the respondents disagree with the above statement

Preventive Healthcare

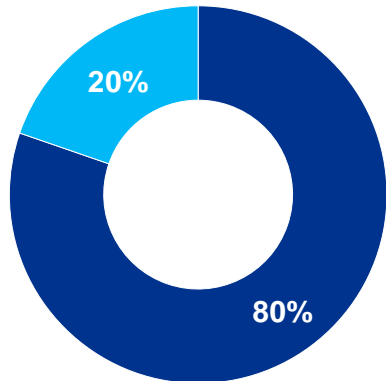
- Medical check up to be done after experiencing pain or illness
- Medical checkup after being recommended by doctor
- Medical checkup undertaken voluntarily to understand measures needed for disease prevention
- Don't know



“What is preventive health check up?”

48%
have awareness regarding maintaining basic hygiene

Attribution to MHU

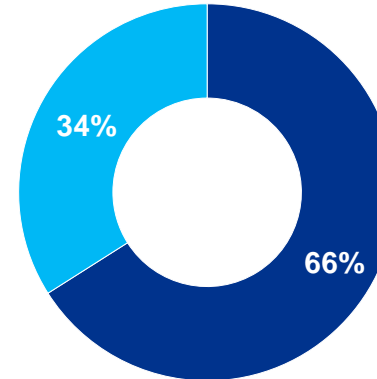


80%

Of the participants attribute the credit to MHU for preventive health measures taken by them

- Completely credit MHU
- Partly to MHU and remaining to other education drives

Preventive Healthcare



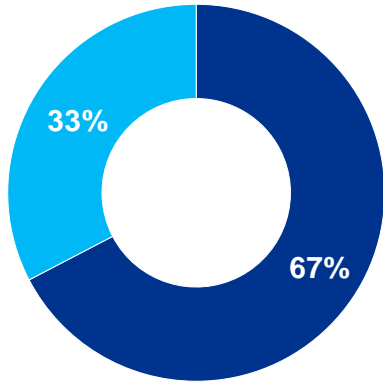
■ No ■ Yes, regularly

“Do you visit health centers for regular medical checkup as a preventive measure?”

33%

Of the respondents regularly visit the healthcare centre for preventive care

Family Planning

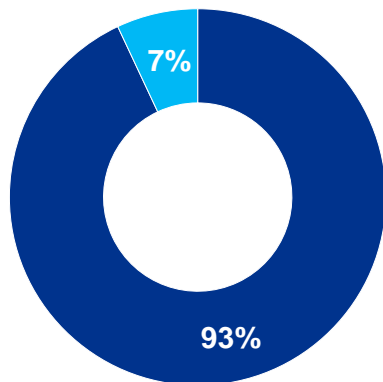


■ Yes ■ No

67%

Of the respondents participated in family planning sessions

Adoption of Contraceptives

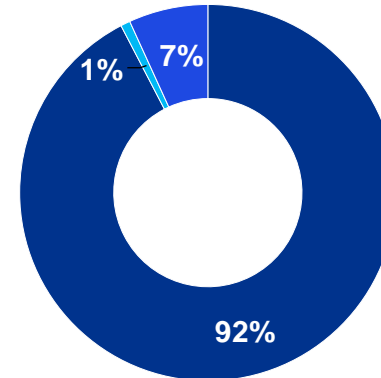


■ Yes ■ No

93%

Of the participants of family planning sessions started using contraceptives after family planning sessions

Satisfaction with Family Planning sessions



■ Satisfied ■ Neither satisfied nor dissatisfied ■ Highly satisfied

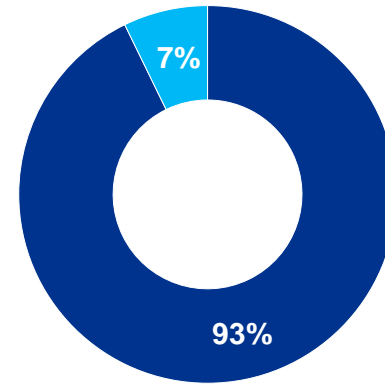
97%

Of the participants shared that they were satisfied with sessions conducted

93%

respondents have reported that the treatment was affordable

Were the treatments affordable ?

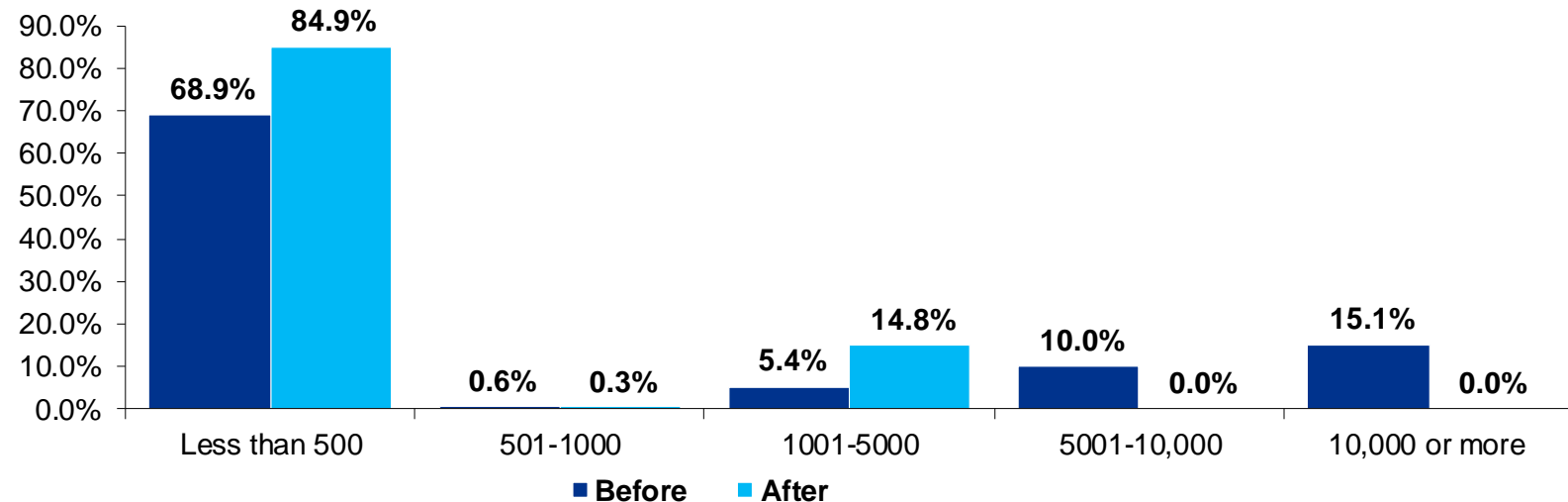


■ Yes ■ No

The Healthcare expenditure of respondents before and after the MHU has operationalised in the villages:

- Significant reduction in healthcare spending is observed
- Reduced spending by **25%** in INR 5000 or more category

Healthcare expenditure: Before & After MHU operationalised



100%

responded that the training sessions were conducted

100%

community mobilisers were satisfied with training sessions

80%

of community mobilisers had awareness about Anaemia

80%

community mobilisers wash hands regularly or 3-4 times a day

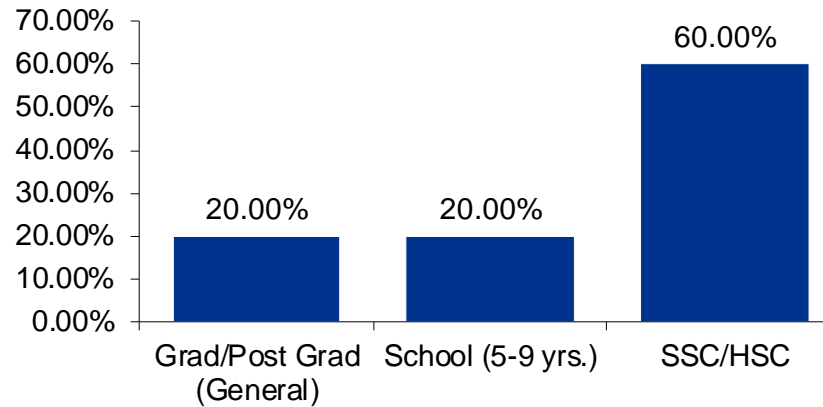
The following change in perception of community mobilisers was observed:

- 40% had recall and understanding on information shared

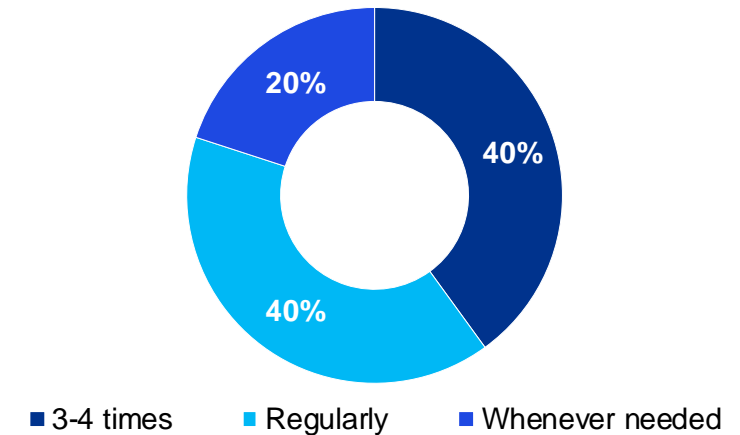
The following topics were recalled on which training was conducted on:

- Maternal care, ANC, PNC,
- COVID-19, Anemia, TB, HIV
- Sickle cell disease

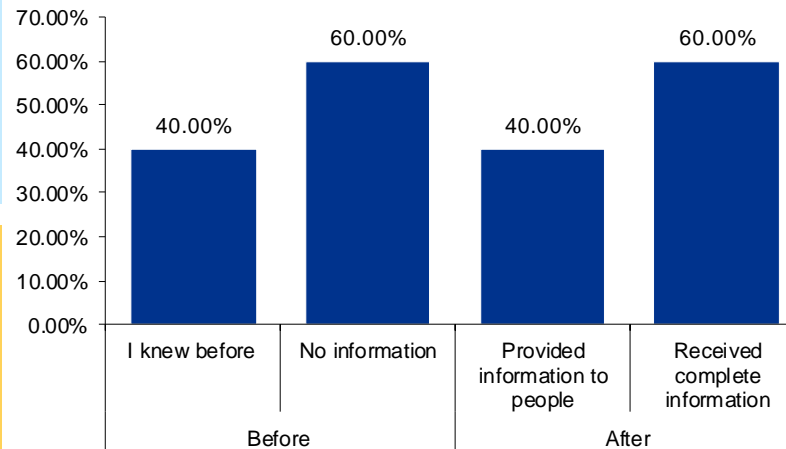
Education of Community Mobilisers



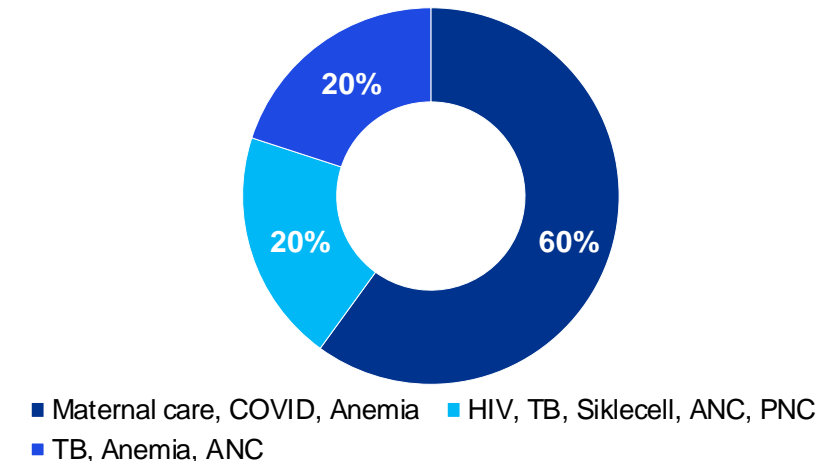
Hand Wash Frequency



Change in Perception regarding Family planning



How to improve iron status of our body?



59%

respondents that were referred for higher treatment availed the services

87%

respondents that did not avail services sighted cost as the primary reason

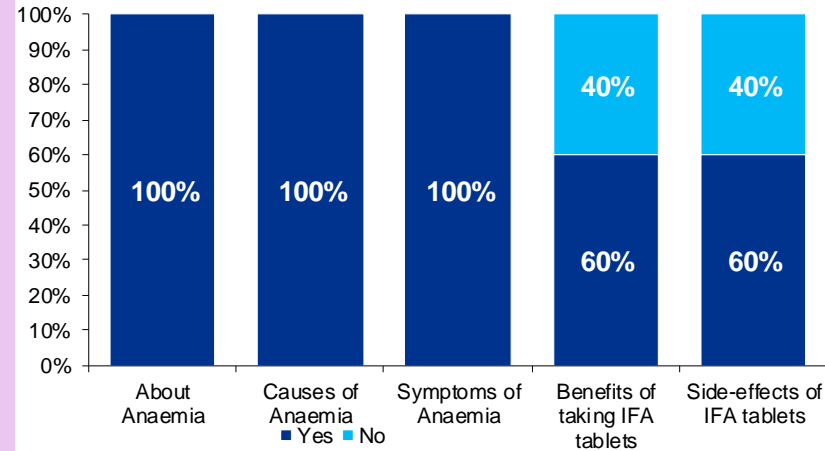
60%

respondents were able to identify symptoms of iron deficiency with high accuracy

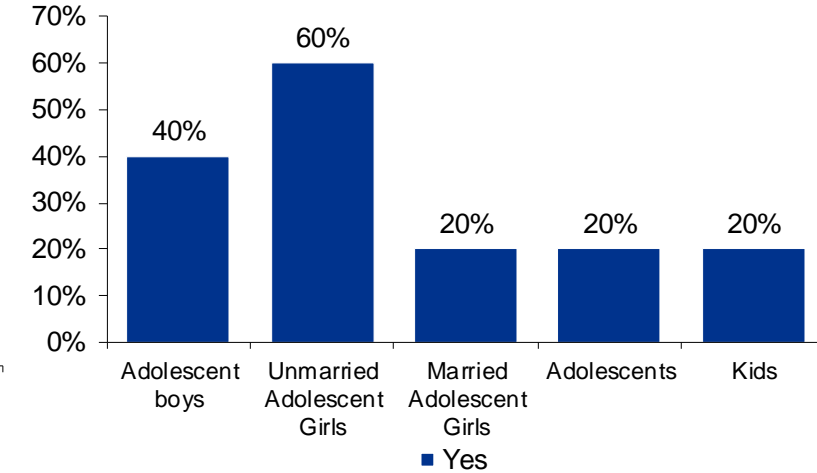
100%

respondents were able to recall ways to improve the iron status of the body

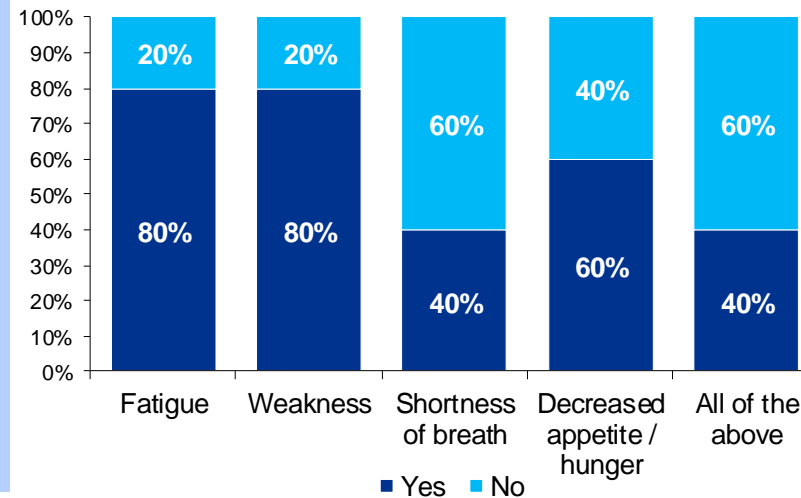
Anemia training



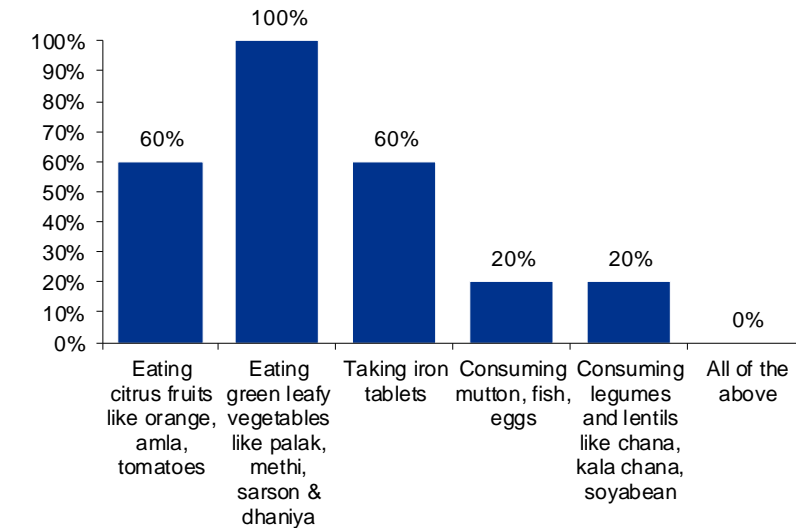
Who are at risk of iron deficiency?



Symptoms of Iron Deficiency








How to improve iron status of our body?





The following are the limitations of the study :

- The study is limited to the data of beneficiaries as shared by Deepak Foundation with respect to their privacy policy
- The study is limited to recall of the participants
- Some beneficiaries were reached with support of Deepak Foundation team

Component	Remark	Status
Inclusiveness	<ul style="list-style-type: none">•The programme covered all stakeholders critical for ensuring successful implementation community healthcare initiative in remote rural geographies	
Relevance	<ul style="list-style-type: none">•The programme has provided services to marginalized tribal community members, who have benefitted from village level healthcare services.	
Effectiveness	<ul style="list-style-type: none">•The feedback generated in consultation with multiple stakeholders have helped conclude that the programme has been effective in providing access to healthcare with consultation, medicines and follow-ups for secondary referral and awarnes of issues•Addition of health awareness sessions to the existing program would build preventive and promotive health activities, thereby adoption of good health practices by the community members.	
Convergence	<ul style="list-style-type: none">•The project team has been able converge with PHC, Asha and Anganwadi workers to provide primary health services to the community members•The project team needs to identify if there is an avenue to incorporate linkages to any government schemes, institutions or departments for scaling impact	
Sustainability	<ul style="list-style-type: none">•For the programme to be sustainable the programme needs to identify ways to implement and expand the program further by searching alternate ways of funding and implementation as requested by community members	

On track



Opportunities to Strengthen



Project Design

- **Impact Map** should be finalised by partner organisation before project implementation.
- **Frequency** of the MHU is highly requested to be increased
- Inclusion of **health educational initiatives** regarding free of cost insurance schemes available by Government of India/ State government etc.
- It is requested by beneficiaries to restart the program.



Project Scale-up

- Health awareness sessions and screening drives for NCDs, dental ailments, anemic status in the community for improvement in areas of service delivery of the program



Sustainability

- For the programme to be sustainable the programme needs to identify ways to implement and expand the programme further by searching alternate ways of funding and implementation



References



- *Malnutrition* (2021) *World Health Organisation* . Available at: [Link](#)
- *NFHS Maharashtra* (2021) *National Family Health Survey*. Available at: [Link](#)
- *Anemia Mukht Bharat* (no date) *Anemia Mukht Bharat 6 intervention*. Available at: [Link](#)
- *Health status in India: A study of urban slum and non-slum population* (2018) *PLUSUS*. Available at: [Link](#)
- *Government Initiatives to manage Slums* (no date) *Insight on India*. Available at: [Link](#)



Thank You!

Mobile Health Unit: Primary Health care at Doorstep

Deepak Foundation

Assessing the impact on prime key parameter