MASTER OF PUBLIC HEALTH

Johns Hopkins Bloomberg School of Public Health & IIHMR University

PRACTICUM REPORT

By

Dr Darshan Patel

Cohort-7

2019 - 21

Under the Guidance of

Dr Monika Chaudhary

Professor IIHMR University

&

Dr Gaurang Ranapurwala

Program director, Shroffs Foundation Trust

TO WHOMSOEVER MAY CONCERN

This is to certify that Dr Darshan Patel student of Master of Public Health Program offered by IIHMR University, Jaipur in cooperation with Johns Hopkins Bloomberg School of Public Health, Baltimore has undergone Practicum Training at Shroffs Foundation trust from date 1st March 2021 to 31st March 2021.

The Candidate has successfully carried out the study designated to her/his during practicum training and her approach to the study has been sincere, scientific and analytical.

The Practicum Training is in fulfilment of the course requirements.

I wish her/him success in all his future endeavours.

Dr Monika Chaudhary
Practicum Advisor

CERTIFICATE BY SCHOLAR

This is to certify that the Practicum Project titled submitted by me, Darshan Patel with Enrolment No. 0039 under the supervision of *Dr. Monika Chaudhary* for award of Master of Public Health carried out during the period 1st March 2021 to 31st March 2021 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Dr Darshan Patel

MPH Cohort 2019-21

CERTIFICATE FROM THE ORGANIZATION

Shroffs Foundation Trust
सेवा सद्भाव विकास

Shroffs Foundation Trust

Date: 16.04.21

TO WHOMSOEVER MAY CONCERN

This is to certify that Dr Darshan Patel student of Master of Public HealthProgram offered by IIHMR University, Jaipur in cooperation with JohnsHopkins Bloomberg School of Public Health, Baltimore has undergonePracticum Training at Shroffs Foundation trust from date 1st March 2021 to 31st March.

He has successfully carried out the study on 'Malnutrition and Anaemia in Tribal Villages of Chhota Udepur, Gujarat' during his practicum training and his approach to the study has been sincere,scientific and analytical.

We wish him success in all his future endeavours.

For Shroffs Foundation Trust

SHROFFS FOUNDATION TRUST Ta. Dist. Vadodara AT. KALALI

Manager - HR OD

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Acknowledgement

The practicum report was completed under the guidance of Dr. Monika Chaudhary, Professor at IIHMR University – Johns Hopkins University and Dr. Gaurang Ranapurwala, Program Director at Shroffs Foundation, Vadodara, Gujarat, India.

I would like to express sincere gratitude towards my faculty advisor Dr. Monika Chaudhary. I was able to prepare this project work under her proper guidance, suggestions, support and encouraging me throughout till the completion of my project. I heartly thank you madam for the efforts.

I would also thank my practicum preceptor Dr. Gaurang Ranapurwala for giving me the opportunity to work under this organization.

Table of Contents

Abbreviations

SMC : Sharda Medical Centre

WHO : World Health Organization

ICDS : Integrated Child Disease Surveillance

NFHS : National Family Health Survey

MoHFW : Ministry of Health and Family Welfare

CSR : Corporate Social Responsibility

ANM : Auxiliary Nurse Midwife

OPD : Out Patient Department

Practicum done at Shroffs Foundation Trust

Project Name/Title : Proposal prepared for a study done on malnutrition and anaemia in tribal villages of Chhotaudepur, Gujarat.

Project Location : Chhotaudepur, Gujarat.

Contact Person : Dr Gaurang Ranapurwala

Contact number : 9427118906

Email : healthedu@shroffsfoundation.org

Project Duration : 1 year

Total Project Budget: Approx. 30,00,000

1. About organization

The health center in Chhotaudepur is a major contribution of Shroff Foundation Trust in the Public Health Sector. With the development of the city and District seat of Chhotaudepur, a lot of private health providers have mushroomed in the area. Reliable and affordable health care services leading to an almost twofold increase in the utilization of SMC is the indicator of need in the area.

Lions Club has Donated a well-equipped Mobile Medical Unit (MMU) for SMC which is being utilized to provide mobile medical services to the 14 deprived tribal villages surrounding Chhotaudepur, with OPEX support from Transpek Industries Ltd.

The Shroff Foundation Trust has been providing national health programs and special reproductive and child health services in the Chhotaudepur area for the last two decades. When the Watershed program was launched by the organization Fara in 1995, government health services in the area were almost non-existent. The condition of the indicators of reproductive and child health services was pathetic. Hospitals in the area were short of doctors, health staff, equipment to provide services, and resources. People had to depend on the health facilities of Vadodara in case of any emergency.

Considering the condition of the Rath area, where the tribal population resides camp-based activities were initially conducted with mobile medical services, and day-care centers at Rangpur were

implemented to improve the index of national health programs. Awareness programs for personal hygiene, TB, anemia, and nutritious diet, and special reproductive and child health-related health services were conducted through capacity building of supplementary nutrition clinics, women's health organizations. Due to which the demand for government and private health services in the area increased.

The Shroffs Foundation Trust's medical services as well as other services including agriculture and cattle breeding development, drainage area development, clean drinking water, livelihood augmentation, and other programs were extended beyond the Rath area to villages across the taluka.

The "Sharda Medical Centre" was established in 2010 to meet the demand of the area and the need for health services as well as improve quality medical services at affordable rates and maximum coverage of reproductive and child health services.

The Sharda Medical Centre has a 16-bed indoor capacity, neonatal care unit, dialysis unit, operation theatre, labor room, blood storage unit, radiology, drugstore, a pathology laboratory, and ambulance services. At the same time, it is spreading awareness on primary medical services as well as reproductive health-related services, anemias including sickle cell anemia, nutritious food, TB, and sanitation related issues through the coordination of selected 25 to 30 taluka health officers of the Rath area.

2. Project Title: To reduce the prevalence of malnutrition and anemia in tribal villages of Chhotaudepur, Gujarat.

2.1 Competency based Learning Objectives of my Report.

Background

During my internship at the trust I had identified malnutrition and anaemia as a public health problem. Even though there was years of hard work by the foundation to teach the people about best agricultural practices and earn a healthy living, that was not reflected into the health of the adolescent girls and children. We identified the program goals and objectives, developed an intervention and monitoring and evaluation plan for the program.

Communication intervention:

The goal of the proposed communication in the program is to accurately identify stakeholders, highlight the importance of intervention, utilize feasible message delivery vehicles, provide a timeline for communication delivery, and identify the best tools for implementing the program. The communication strategy must engage all the key stakeholders. Relationships are key in the Rural health care; trust is a coin of expenditure of energy towards any health program. Therefore, strategies, such as inter-village roadshows, panchayat meetings, and private networking functions were employed. We adopted CDC advised communication strategy in the program which have determined six steps : first, planning and defining the strategy; second, selecting channels and materials for the social media campaign; third, developing materials and presentations; fourth, implementation; fifth, assessing effectiveness of communication strategy; and finally, feedback on the program

Leadership and Systems thinking:

We developed a working culture which has a theme of Change is Learning and Learning is a Change. I have personally trained a local health advocates whose part of a job is as a data entry operator. As a part of my team he had to facilitate our communication to tribal people there who spoke Gujarati tribal language. The local health advocates in visits to tribal villages in a mobile medical unit help teach health and hygiene habits which are one of the major contributing factor for increasing risks to malnutrition.

3. **To reduce the prevalence of malnutrition and anemia in tribal villages of Chhotaudepur, Gujarat**

The constitution has assigned statuses to the Schedules tribes, all adivasis and tribes. There are approximately 15 percent of Gujarat population as tribal population. Such population are scattered but mainly in the Rural areas and due to geographical isolation and low socioeconomic status and inadequate healthcare are more prone to undernutrition. Chhotaudepur is now separated from Vadodara district and functioning as an independent district. Within the district, under the direct supervision of the District Health Officer, the health indicators and infrastructure facilities in the area have been significantly improved through the primary health centres, sub-centres as well as the village level health network. There is also a proliferation of private hospitals at Chhotaudepur and Bodeli which are more interested in their own business than the health needs of the locals and which is likely

to exploit patients in the area. According to WHO malnutrition is irregular intake or excess intake of the nutrients and micronutrient deficiencies. Malnutrition is broadly categories into two undernutrition which includes stunting, wasting, underweight and lack of vitamins and minerals. Malnutrition can make a child more susceptible to infections. Without proper nutrition the child cannot achieve educational goals, has risk to morbidities, and can affect labor productivity in that local village[1]. Malnutrition along with nutritional anaemia is most prevalent in the tribal belts of the Gujarat. This Indicates that along with stunting and wasting in the malnutrition there is a hidden hunger for proper nutrition. Nutritional knowledge is the key to wellbeing and prosperity. Tribal population falls under the economically disadvantages population with poor income in the households.

Cash based spending at the outpatient offices by the families is moderately less dissected contrasted with the hospitalization costs in India

Out of pocket expense at the OPD by the families is relatively less studies compared to the expenses due to hospitalization in India. There is a dire need to provide the people with additional schemes to tackle the problem of out of pocket expense in drugs and diagnostics[2]. The per capita consumption expenditure of the individuals who are economically vulnerable is more on OPD. The switching of the healthcare providers is more and is more towards private providers. The following data represents the OPD expenditure of the households in Gujarat, Vadodara and Chhotaudepur. The sample size is 8872, percentage of the rural population is 85.4 percent, and monthly per capita expenditure is 1327 rupees.

Place	**In last 15 days reported illness in %**	**Mean OPD expenditure in last 15 days**	**OPD Expenditure per ill person**	**OPD expenditure as share of consumption expenditure for families with OPD visits (%)**
Gujarat	6.8	33	496	12.7
Vadodara	3.7	21	577	5.2
Chhota Udepur	**6.4**	**32**	**536**	**20.7**

Table 1: Out-of-pocket spending on out-patient care in India: Assessment and options based on results from a district level survey

3.1 Problem statement :

In general, child malnutrition is prevalent all over India and Gujarat holds a position in the top states with the highest child malnutrition cases.

In Chhotaudepur taluka, malnutrition is especially prevalent among children, adolescents, and pregnant women. Due to poor personal hygiene, the incidence of water-borne and vitamin deficiency-related diseases is particularly high. Food security problems are no longer due to changes in the practice of agriculture, animal husbandry. Livelihood options are also taken. The incidence of malaria, tuberculosis and animal diseases is low due to increasing mobility and awareness of people, but anemia and malnutrition are more common in women, adolescents, and children.

Lack of transparency in the implementation of mid-day meal programs in Anganwadi and Primary Schools has also resulted in low planning reach. If we look at the statistics of Gujarat, we will realize that the situation in Chhotaudepur may be worse.

According to the NFHS survey, after checking the Chhotaudepur district secondary data, In children under 5 years who are stunted 48.6 percent, wasted 28.4 percent and 48 percent are underweight. 87 percent are anemic, among women aged 15-44 years 31 percent are thin and 78 percent are anemic, and only 58 percent exclusively breastfed[3].

Considering the malnutrition index, the body mass index of 31 percent of Adolescent girls is lower than normal. 88 percent have anemia. Anemia is found in 80 percent of adolescents and 78 percent of ladies between the ages of 15 and 49.

Not only is their malnutrition in the area but there is also anemia and special genetic disease-sickle anemia. Awareness about the sickle cell is higher than before and if we check the secondary data, about 4000 people in this taluka will be suffering from sickle cell treatment and disease.

3.2 Situational Analysis

Government health infrastructure has improved but there is still a gap in gynecology, pediatrics, and specialist medical services. As a result, full screening and treatment services for pregnant women are not available at the village level. Institutional delivery is high but facilities for risky delivery as well as timely diagnosis and treatment of gynecology are irregular or non-existent in the area. The Shroff Foundation has so far been able to increase the production of agricultural products through agrarian schemes which have largely eliminated their food security problems but their habits need to be changed. Their daily diet appears to be an absence of green vegetables, beans, cereals.
The Shroff Foundation Trust has decided to work with the following objectives in a preliminary stage

in about 50 villages of the Rath area of Chhotaudepur area.

4. Project Goals and Objectives

SHANTI Initiative :

- To reduce the risk of malnutrition by providing quality primary health care services and referral services to children, sisters and elders of about 50 villages of Chhotaudepur taluka at concessional rates.

- To set up 2 primary medical day-care centres at cluster level and to set up a referral network with secondary medical services (Sharda Medical Centre) and tursari Medical Care (Ramakrishna Paramahansa, Kalali).
- To provide reproductive health services and maternity facilities for surrogates and midwives.
- Disseminate awareness for prevention of diseases through malnutrition, cancer, tuberculosis and diabetes-hypertension diseases in the first year for prevention and care of non-communicable and communicable diseases through mobile medical unit and enabled village level network.

5. Methodology :

Two clusters will be created, first in the Judavant area (12 villages) and second in the Lehwant crossing area (15 villages). The activities will be carried out in rented rooms in these prospective villages which will function as Shanti clinics. Ayush doctors and nurses are recruited for obstetrics care and nursing care to serve at these clinics. In the first year, Ayush doctors and nurses will stay with the team and determine the target groups or the beneficiaries by conducting a preliminary survey for the actual status of the disease in those villages. Incentive-based survey work and camp mobilization of patients in the camp as well as at the Shanti Clinic will be done. Also, indicators will be defined based on the surveys, and implementation of the program will be started based on the information obtained. Any patient who comes to Shanti Clinic will be delivered to Sharda Medical Centre free of cost by ambulance available between the two centers for the need of secondary medical intervention. Patients referred by the social sculptor will also be followed up. To determine 1 mobile medical unit and 1 social worker, 1 female health worker as well as 1 driver for an extension activity. No medical services will be provided on this mobile. Only extension activity and cluster level camp activity as required will be done. A disease screening camp will be conducted in the pocket every month based on the survey by the team of

hospital and the team of social sculptors for malnutrition and patients screened will be referred to a three-tier referral center set up under the Peace Program based on their disease intensity. And after examination by specialists, their treatment will start and then follow-up treatment will have to be taken at Shanti Clinic. Patients coming to Shanti Clinic will be given medicine with an actual charge of medicine only and good generic company drugs will have to be used. This society insists on giving sculptors certain fixed honors and incentives to maintain their interest in their work. Under the Shanti program, it has been decided to conduct awareness activities with about 5 schools in the same area on good health habits and menstrual health in special adolescents. For this, we will select 2-2 health educators per school in each school and it has been decided to conduct activities with the rest of the children through trained educators. Currently, in the first year, we will focus on 30 to 35 villages in the Rath area of Chhotaudepur taluka.

6. The Key Stakeholders

Our goal is to increase adherence to National Nutritional Strategy guidelines, making MoHFW a secondary stakeholder. The Current goal of Nitiayog is prevention and reduction of underweight new and existing cases in children aged 0 to 3 years by three percent points per year and decrease the prevalence of anaemia in children, adolescent girls, and women fifteen to forty nine years by one third of NFHS 4 levels by 2022.

The MoHFW is responsible for the, “Overall health policy, including Undernutrition” as well as NGO relations and rural health services. The financial responsibility of addressing malnutrition in India falls predominantly on the government. There are several smaller programs within MoHFW, notably the Poshan Abhiyan.

India’s Company Act (2013) requires companies worth more than Fifty lakh rupees to donate 2% of their earnings to Corporate Social Responsibility (CSR), which includes, “education, community services, health, or other socially relevant issues. Companies open to meeting their CSR obligations through funding the Task Force’s screening program would become stakeholders.

SPARSH Program is one of the similar programs running in Anand District.

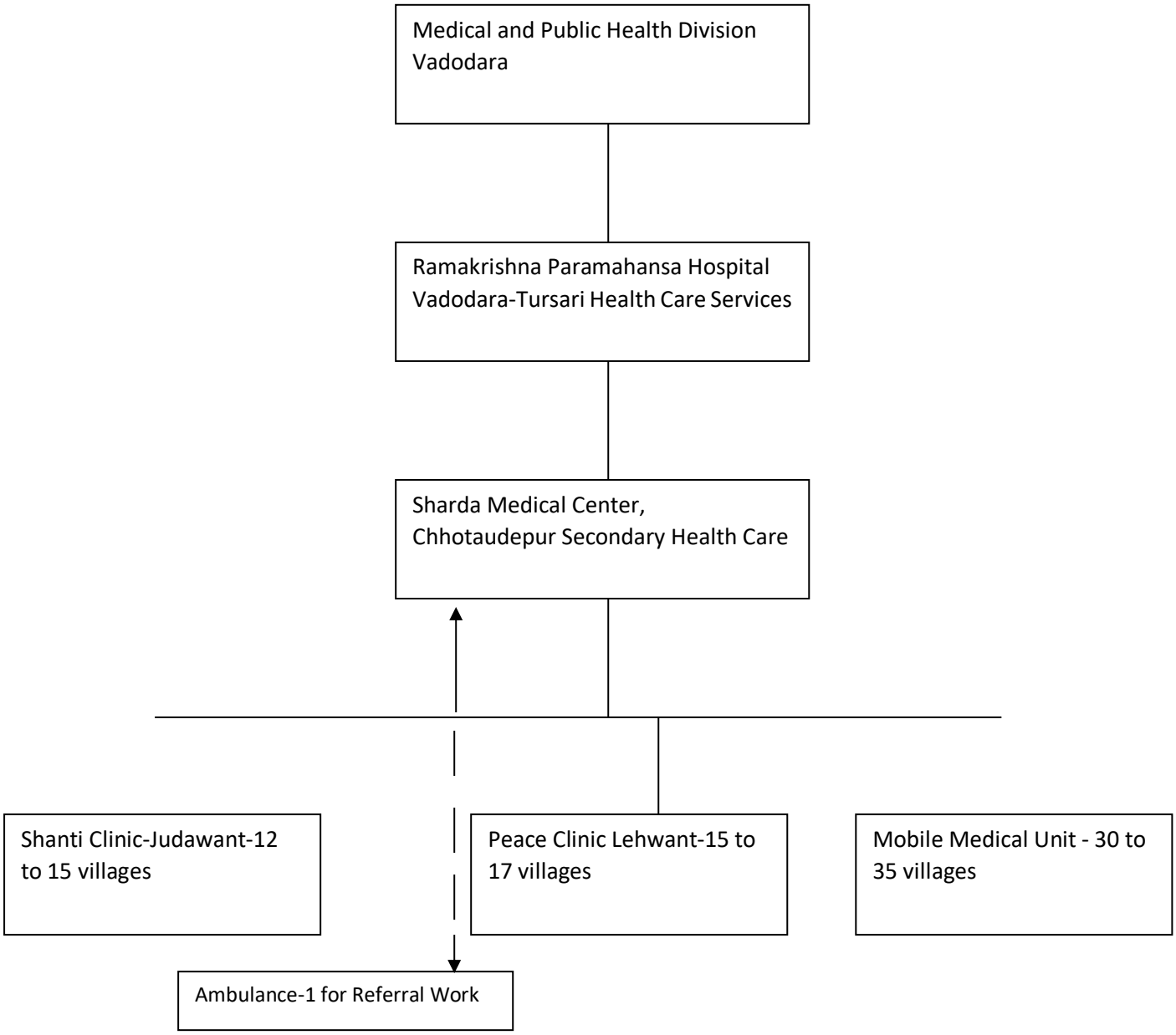
7. Manpower

Job title	Job description	Hiring criteria	Work specialization	Number
Program director	Planning, organizing, implementation of the strategy, building and maintain relations with all the stakeholders, coordination within teams.	MPH/ Experience in CSR projects and minimum of 3 years of experience in project management	General management/leadership/evaluation/monitoring, Presentations	1
Medical Officer	Executing the program in coordination with the ANMs and other health workers, Problem solving	Ayush medical officer or BHMS	Problem solving in Public health, Monitoring the activities	2
ANMs	Facilitation of the program	Public health experience of 1 year	Taking care of all logistics and IEC material	2
Female Health worker	Data collection and Awareness activities	Public health experience of 1 year	Collection of All data regarding nutritional status	1
Local health advocates or social workers	Data entry operators and Public advocacy	Tribal Language proficiency and well known	Facilitating communication	1
Driver		Driver with driving liscense and Adhar card.		2

8. Resources Required:

- Ambulance and a van
- Furniture and related items
- Medical instruments
- IEC material
- Kitchen Garden Kit
- Computers

9. Organizational Hierarchy


Medical and Public Health Division Vadodara
Ramakrishna Paramahansa Hospital Vadodara-Tursari Health Care Services
Sharda Medical Center, Chhotaudepur Secondary Health Care
Shanti Clinic-Judawant-12 to 15 villages
Peace Clinic Lehwant-15 to 17 villages
Mobile Medical Unit - 30 to 35 villages
Ambulance-1 for Referral Work

10. Monitoring and Evaluation

Monitoring will be done simultaneously with the programs to figure out the effectiveness and discover the barrier faced during the program. This will provide a good chance to improve. After the short-term goals are achieved, monitoring and evaluation will be done every month and to cross check the compliance of the beneficiaries with the survey conducted previously. With the help of the local health advocates and social marketing team, new ideas will be generated so that the interest of the target groups is maintained with the program. Program manager and is responsible for the easy flow of the data through-out the program.

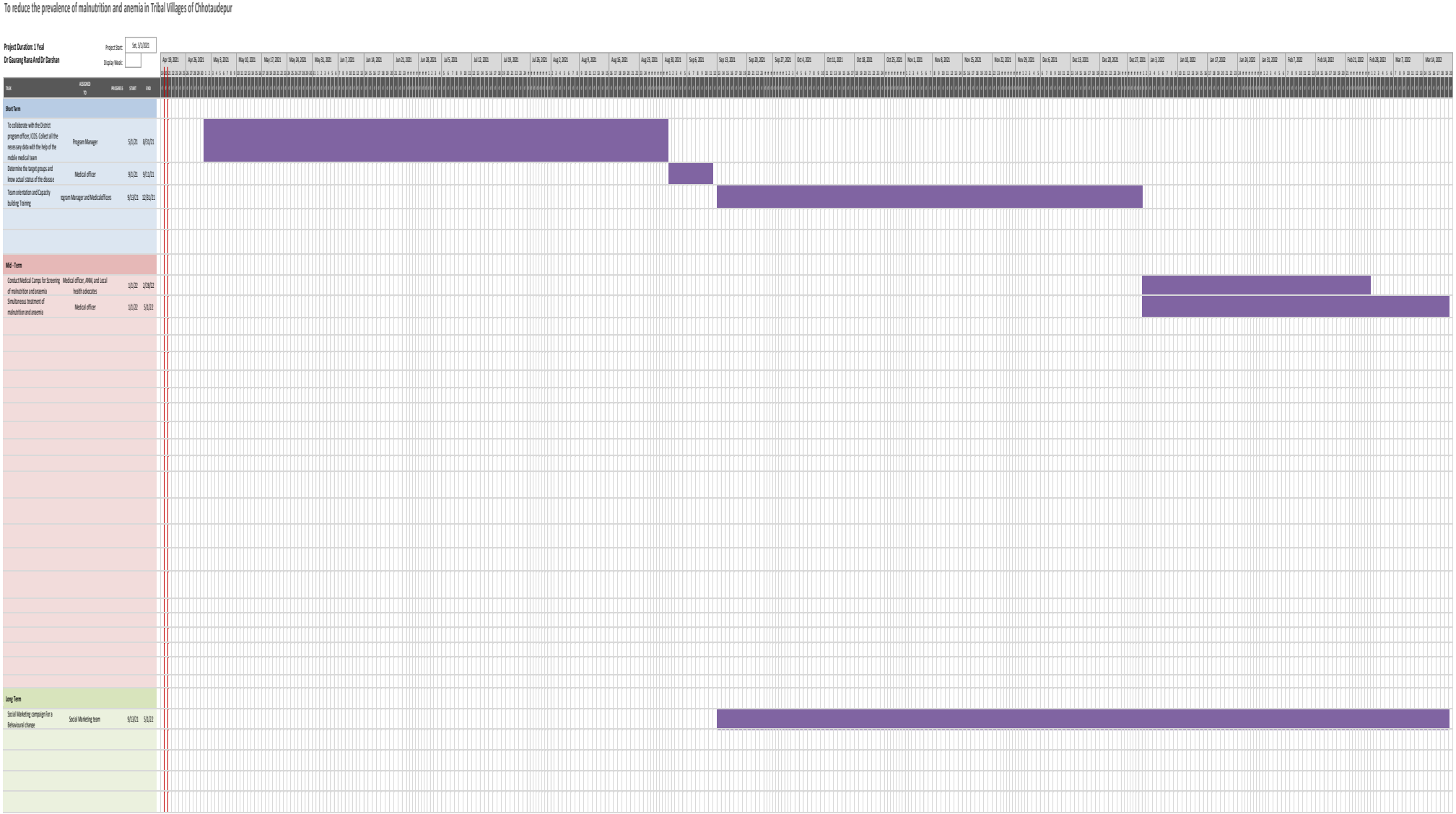
Output/ Activity	**Indicator**	**Source of data**	**Frequency of data collection**	**Who is responsible**	**Who will use data**
To collaborate with the District program officer, ICDS. Collect all the necessary data with the help of the mobile medical team	No of data sets acquired and	Government health program ICDS and Poshan Abhiyan	Every week	Program manager	District health officer and program manager
Determine the target groups and know actual status of the disease	Number of positive surveys	Via Surveys	Within two weeks	Program manager and medical Officer	Medical officer
Conduct Medical Camps for Screening of malnutrition and anaemia	Satisfactory number of patients comes to the clinics and camps		Within 4 weeks per weekly	Medical officer and Staff	Medical officers and Staff
Simultaneous treatment of malnutrition and anaemia	Patients free of the disease	Camps and household surveys	Within 20 weeks	Medical officer and Staff	Medical officers and Staff
Social Marketing campaign For a Behavioural change	Number of beneficiaries registered for the camps	Camps and Household surveys	Within 20 weeks	Social marketing group	Social marketing team

11. Budget :

		Expenditure				
Sr No	**Particulars**	**Unit**	**No. of Units**	**Unit cost**	**Month**	**Total**
	Capital Ependiture					
	Ambulance-ECO	No	1	55000		550000
	Mobile Medical Unit Van ECO	No	1	550000		550000
	Furniture and Fixture- Tables, Chair, Cupboard, examination table, Trolley, Apparatus- Delivery Table	Set	2	20000		40000
	Equipment Medical- BP Instrument, Stethoscope, toch etc	Set	2	5000		10000
	Curtain- Partition	Set	2	3000		6000
						1156000
	Operational Expense					
a	Fuel and Maintainence expenditure	No	2	2500	12	60000
b	Salary					
	Ayush Medical officer	No	2	20000	12	
	ANM/GNM nurse as skilledbirth attendent plus assistance to Medical officer	No	2	15000	12	360000
	Female Health Worker	No	1	10000	12	120000
	Social Worker/ Local health Advocate	No	1	10000	12	120000
	Drivers	No	2	9000	12	216000
c	Rent of clinics	No	2	35000	12	84000
d	Stationary, Telephone, housekeepng	No	1	1000	12	12000
						972000
	Project activities					
	Exposure to the team- Sparsh Program	No	9			7500
	Team orientation and capacity building training (Team+ Samaj Shilpi)	No	20	150	3	9000
	Refresher training	No	20	150	1	3000
	Develop/ Procure IEC material					15000
	Household surveys	HH	6000	10	1	60000
	Awarness programs on Malnutrition and Anaemia	No	60	150	1	9000
	Camps activities	No	6000	10	1	60000
	Kitchen Garden kit to pregnant and lactating women	No	250	150	1	37500
						201000
	Medical Rotation Fund					**150000**
	Incentive to Samaj Shilpi					
	Fix Honorarium	No	10	500	12	60000
	For Surveys- Complete Form Without error	HH	6000	10	1	60000
	Mobilization target group for awarness meeting	No	60	50	1	3000
	Organize and mobilize patients for camp at cluster level	No	4	500	1	2000
	Mobilizing patients at SHANTI Clinic for OPD	Patients	4000	5	1	20000
	Mobilization of pregnant women for ANC checkup and delivery at SHANTI clinic	Women	45	250	1	11250
	Counsel and mobilize patient for IPD to Sharda medical Clinic	Patients	250	100	1	25000
	Kitchen garden followup	HH	250	50	1	12500
	Follow up Patient for Malnutrition and Anaemia will get incentives	Patients	100	50	1	5000
	Project Monitoriing and Evaluation Cost					150000
						348750
	Total	**2827750**				

			Income			
Sr No	**Particulars**	**No. of Units**	**Unit cost**	**Month**	**Total**	
1	Patient Registration Fees	8500	10	1	85000	
2	Medical Charge	500	170	12	85000	
		300	50	12	180000	
3	Delivery Charge	45	5000	1	225000	
4	Sample collection Charge	300	10	1	3000	
5	Kitchen garden Kit Contribution	250	50	1	12500	
					590500	

12. Gantt Chart



13. Project sustainability

In the post assessment stage, we will follow up with the health department and find about the cases in the villages of Chhotaudepur where the intervention was carried out. The Sustainability of the intervention also relies upon the number of new cases of malnutrition and anemia and acceptability of the kitchen garden kits and its uses

Approx. 62 percent of children are anaemic and malnourished, and we will try to reduce the index to 40 percent in the first year. As well as post haemoglobin check-up will be done on every anaemic who is anaemic. And we will try to reduce the rate of anaemia in ladies from 78 percent to 60 percent.

References:

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