

Amrit Aahar, kitchen gardens and poultry: Supporting and enabling nutrition-centric action in tribal regions in southern Rajasthan, India

Grant received from Military Order of the Collar



Health worker explaining medicines to a TB patient at AMRIT Clinic Manpur

Progress Report (July'20-March'21)

Background

Basic Healthcare Services (BHS) is providing high quality and low cost health services to underserved communities in southern Rajasthan for over 7 years through a network of AMRIT clinics. From the beginning the focus has been on responsive services, which identify and respond to the major needs of the community including infectious diseases (especially Tuberculosis and Malaria), chronic conditions (Diabetes and hypertension), and malnutrition (especially among children). Entire spectrum of reproductive health conditions, from care during pregnancy, to institutional delivery, postnatal care; as well as contraception and safe abortions are also priority services. As nutrition is an important determinant of health, a comprehensive nutrition programme for young children is also integrated with the health services. Phulwaris (day care centres) for children 6 months- 5 years old are at the centre of these efforts, providing a secure and caring environment, nutritious energy-rich supplementary food, and learning and play to promote cognitive development of children.

In March 2020, as the Coronavirus pandemic spread throughout the country leading to multiple lockdowns, we saw thousands of migrants returning back home. Lockdown caused restricted mobility and loss of livelihoods and rural, tribal communities which were already living a precarious existence were pushed into ‘acute on chronic health emergency’. Loss of livelihoods has meant families have very little liquid cash for managing their day to day needs, have little to eat and face a worsening of their nutritional status. At the same time, there is some availability of workforce to take up initiatives such as kitchen gardens, and backyard poultry.

A large number of men and women suffer from Tuberculosis (TB) in these communities, which adversely affect their survival, health and financial situation. In the COVID times we have also seen the treatment for TB patients getting severely affected due to shrinking travel options to reach healthcare facilities, very little food and worsening of nutritional status, fear in going to hospitals and being “taken away” to isolation wards, as well as dilution of health facility’s efforts for TB. Along with a focus on early detection, management and rehabilitation of those suffering from TB, we saw a need for increased number of home visits to deliver medicines and nutrition package to ensure recovery from the diseases.

The support from MOC has helped strengthen the organization’s efforts for addressing food security of patients with tuberculosis in these difficult times. This report summarizes the progress made with the grant from July 2020 to March 2020.

Project details

Amrit Aahar-Nutritional supplement for TB patients

Two years ago, we initiated nutrition supplementation for TB patients, known as *Amrit Aahar* (meaning nutrition for longevity) to improve intake of protein and energy, and based on locally available and acceptable foods. Patients detected with TB and enrolled for treatment at the AMRIT Clinics are being offered *Amrit Aahar*. After the start of the pandemic, the number of TB patients presenting to the clinics has steadily grown, and the nutrition supplement has been provided to almost 300 patients.

Amrit Aahar has been very valuable in promoting weight gain and improvement in nutritional status. This helped reduce the levels of severe malnutrition (BMI<16) from 52% at the start of treatment, to 45% at the end of treatment. The proportion of TB patients who were normal (defined as BMI >18.5) also rose from 9% at the start of treatment to 24% at the end of treatment. Overall, almost 80% of the patients recovered from TB- this proportion is among the highest that has been achieved across the clinics. These findings are especially important when we consider that in these areas patients are under pressure to go back to cities to start work, and often stop treatment after few months as they start feeling better.

27 year old Nathu came to AMRIT Clinic Bedawal a year ago. He had symptoms of TB, had visited several traditional healers and taken treatment from private unqualified providers but found no relief, and was severely malnourished. He was not able to travel to the clinic as the buses and jeeps operating in the area had stopped plying, and police standing at various points also made travel difficult. Nathu was given Amrit ahar and medicines and for 2 months health workers visited him at home to deliver these. With continued counseling for treatment and consumption of nutritious items, Nathu steadily gained weight, which increased by 14 Kgs by the end of his treatment. In the photograph Nathu (right) and health worker (left) flash the V sign, as a sign of winning against the disease.



Kitchen garden, backyard poultry and goatery

Almost $\frac{3}{4}$ of the TB patients coming to clinics are severely underweight, most of them are also the primary earning member of their family who lost their jobs due to the disease or have insecure income which becomes an underlying cause of food insecurity at the household level. A recent study conducted in these areas during lockdown showed that while families had enough cereals for almost 5 months, they had very little nutritious foods and even these were amounts that would last not more than 1- 2 weeks. This situation highlights an urgent need to have interventions such as backyard poultry and kitchen gardens- to ensure food availability and also give them an opportunity to have some source of income.

With support from the grant, 6 week old poultry birds have been given to 150 families of patients with Tuberculosis, and other long standing conditions where improving nutrition would be very important- patients with diabetes, and families of severely malnourished children. Home visits are being made to build knowledge of patients on nutrition, and reinforce caring practices to grow these birds and prepare them for egg laying. During these visits the health workers obtain information regarding any deaths among the birds and reasons for the same. We saw 13% mortality, among a total of 1500 total birds given in 100 families till the end of 2020 (15 birds per family). More than half of these were caused by the predators, and almost a quarter were due

to illnesses. To address these increasing deaths, all the families was given education on building low cost night shelters for birds.

Meera, a young woman lived with her 2 kids in a remote village, 32 Km away from AMRIT Clinic Manpur. She was diagnosed with TB in January'20. During lockdown she was living with her two kids and her husband was stuck in Ahmedabad (300 kms away) due to shutdown in all states. She could not come to the clinic as public and also private transport were stopped during lockdown. For 2 months, our health workers visited Meera to deliver medicines and nutrition package. During the visits she shared- "There is no daal (pulses) and oil left at home. I am making food without any cooking oil since the supplies from the clinic are finished." Through the government ration shop she had received 5 kg wheat and 1 kg daal (per person) for a month, but had no money to get oil, pulses, or sugar.

In 5 different locations, we supported families by giving them construction material not available locally, to build night shelters. The families contributed through locally available material, and also by building the shelters themselves. This demonstration effect built confidence and gave idea to several other patients to build strong shelters to protect birds from prey. As a result 34 families created various types of shelters using bamboo, iron, cement, bricks and tin. 66 use traditional basket to keep them safe under it. To treat illnesses among birds a tele-counselling system was setup where the families were given phone numbers of a health worker trained in treating birds with common symptoms such as diarrhoea, and weakness. As soon as he received a call he would visit and check the birds within 24 hours. In some cases he connected the family with the local government veterinary provider for treating the condition.

Birds given in November have just started laying eggs which are being consumed by the family members. These birds have gained an average weight 1 kg after 5 month and can gain upto 3 kgs in next three month with better care and feeding practices. Few families reported that they have consumed their meat and also selling birds at a good price in the village. One of the challenges is educating these families to retain the birds till they start laying eggs and increase their egg consumption to receive more benefits.

A new initiative of goat farming has been initiated with the objective of improving goat breeds which also affects the quality and quantity of milk and meat consumed by the community. In the catchment area of the clinics, 40 male Sirohi bucks (a well known breed known for higher yield of milk and meat) were distributed in different villages. These bucks will be followed up for next 2 years and will help bring improvement in breed of the existing goats. This intervention is being supported by the regional institute for promoting nutrition and together with kitchen gardens and poultry, will help bring lasting improvement in availability of nutritious foods at household level.

Kalu, 17 year old girl was diagnosed with TB at AMRIT Clinic Manpur. She earlier took treatment from private and government providers one after another. Her parents also took her to traditional healers where she was asked to stop eating meat and other food items. She also stopped consuming oil as she was told that her cough would worsen. She came to the clinic with her relative who was also on treatment. She was diagnosed with TB, started on treatment and was given medicine along with Amrit Aahar. During one of the home visits the health worker



learnt that Kalu was not eating her medicines properly and would throw them away without letting anyone know about it. She shared that these medicine were causing nausea and vomiting. With regular counselling and home visits, she started taking her medicine regularly and improved her diet. During her treatment she was given 15 poultry birds and seeds for kitchen garden. She and her parents were very happy with the additional support. Now she spends much of her time in rearing these birds and has also started eating egg and meat. Her parents are very supportive and take good care of her. Her father shared that “ if her mother would’t have taken her to the clinic she might have died of the disease”. She with her father wants to expand their poultry farm for which they have also built a night shelter themselves, with support from the organisation. They have built a safe space for birds to hatch eggs and now they have 30 birds which will soon will start laying eggs.

Budget utilization

Details	Budget (in GBP)	Budget (in Rs.)	Expenditure (in GBP)	Expenditure (in Rs.)	Balance (in GBP)	Balance (in Rs.)
Nutrition support for patients	3608.00	350000.00	3818.00	360735.00	-210.00	-10735.00
Setting up kitchen garden & poultry	1546.00	137032.00	1342.00	126862.00	204.00	10170.00
Grand Total	5154.00	487032.00	5160.00	487597.00	-6.00	-565.00

Nurturing lives of tribal children in southern Rajasthan

In the lockdown period, we decided that though the phulwaris would have to be closed, the phulwari workers would continue to cook food for children and deliver it to their homes everyday in separate tiffins. We were able to purchase the required number of tiffins just in time before the market shut down completely. Though children were not coming to the phulwaris, hot cooked nutritious meals reached them everyday: every morning, the phulwari workers would come to the phulwari, prepare *sattu* (a porridge made from cereals, pulses, sugar with added oil) and *khichdi* (a semisolid gruel made from rice and dal) for the children, pack these in the tiffins and deliver to their homes. All through the lockdown, hot cooked meals were delivered to households of close to 300 children through the 13 Phulwaris. The workers maintain appropriate distance both between themselves as well as with the families during delivery of tiffins.

During the lockdown there was a lot of fear and mis-information in the community related to COVID. For example, many believe that the disease is spread through poultry and eggs: people stopped eating eggs and many who owned poultry actually killed all the birds. There was a strong belief that all who are affected by COVID will be taken away by the government and killed. There was a huge stigma regarding the migrant men who had returned from outside, who were labeled as the potential carriers of the disease. The phulwari workers played a big role in allaying anxiety about the disease, in addition to sharing about personal protection measures which all must follow. We saw that the Phulwari workers were very happy about continuing the nutrition services, and how appreciative the community has been of their work.

In the last few weeks, we are seeing a growing demand from the community to open up the phulwaris for children to stay here, so that the elders can go to work in the field (this being the time to harvest wheat), and elder siblings can rejoin the school. Seeing the demand of parents, we are cautiously reopening the phulwaris, also preparing the workers to follow all protocols for safety and hygiene. At the same time, those families who do not still want the children to come here have the option of getting the tiffins at home. To avoid having a big crowd, children are split into 2 groups asked to come on separate days.

The phulwari workers have also shown tremendous courage and leadership in these times. They have taken up this responsibility with zeal and have never shown any fear in reaching out to all the children day after day. We will continue to work closely with them, build up their knowledge and skills in the times to come, to support them to emerge as influential women in their village.

In the photograph three and half year old girl, Anju (in green frock) is seen eating satttu. Anju is our champion survivor. She was less than 1 year old when she first came to the clinic with her father in 2018 and was diagnosed with severe acute malnutrition along with Tuberculosis (2nd picture). Anju's mother died soon after her birth and her stepmother has been taking care of her. During home visits we found her left at home unattended by her parents, once she was found locked inside the house with her older sister and both her parents were out for work. After much counseling and followup she was then linked with the Phulwari which was a few meters away. Phulwari worker carried her everyday to centre since she was unable to walk. She has now gained weight and is also much more active. The continued care, food, and nurturing environment in the phulwari has helped pull Anju out from the severe condition,



Budget utilization

Details	Budget (in GBP)	Budget (in Rs.)	Expenditure (in GBP)	Expenditure (in Rs.)	Balance (in GBP)	Balance (in Rs.)
Food Cost for Children	3810.00	369456.00	1129.00	109561.00	2681.00	259895.00
Grand Total	3810.00	369456.00	1129.00	109561.00	2681.00	259895.00