Shining Eyes India

(Registration Under Section 60 And Rule 69)
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1 Background

Shining Eyes India was established in February 2013 to improve the health of tribal children especially in the rural area around Bolpur at Birbhum District, West Bengal.

Since **1994** the pediatrician Dr. Monika Golembiewski has been coming to India for providing medical help to Santal communities in the rural areas around Bolpur. Preventive medical care programs for children and mothers spread to the surrounding villages, moreover she initiated nutrition programs. Teaching sessions were hosted to raise awareness about hygiene or health aspects. Santals constitute the third largest tribe in India and account about half of the total tribal population in West Bengal. Santals live closely related to nature and away from the city regions, often reluctant to seek for medical care.

In 2011 the St. Mary's Child and Mother Health Care Centre was constructed as bottleneck between rural and urban site, where Santals feel accepted and secured. The charitable hospital has been established in collaboration with the Berhampore Teresian Carmelite Society. Since July 2016 the St. Mary Child & Mother Health Care Centre is run by Shining Eyes India.

The children hospital offers preventive checkups for newborns and pregnant women, supplementary food for malnourished children, as well as diagnostic and treatment for anemic, infectious, neurological, or TB suspected individuals. Patients in severe condition are referred to specialized health facilities but in accompaniment and continuous monitoring by staff members in order to track the process in treatment until full recovery.

Through the preventive medical work in the tribal villages the trust tries to eliminate the causes of severe infections and to reduce child and mother mortality.

Hygiene, prevention and treatment of undernutrition and anemia, along with the provision of health awareness are most important fields to work on, in order to strengthen child health at the earliest stage possible.











Today Shining Eyes India embraces three main pillars of action:

- <u>health</u> (to provide medical diagnostic, treatment and follow-up care to the Santals),
- <u>nutrition</u> (to raise awareness for the importance of balanced nutrition in order to break the intergenerational cycle of malnutrition and poverty),
- <u>agriculture</u> (to help every family to establish a kitchen garden with a variety of vegetables and fruits, further to start crop-rotation to increase dietary diversity).

These three main pillars are complemented by water, sanitation and hygiene activities (construction of community washing houses and tube wells) and income generating activities. Shining Eyes embraces three main pillars **agriculture**, **nutrition** and **health**, interrelated with **water**, **sanitation**, **hygiene**. This holistic network tries to encounter the intergenerational vicious circle of malnutrition.

Nowadays the Trust Shining Eyes India is active in 38 villages around Bolpur, (No 13.-38. **Bolpur Manab Jamin** guides patients to the St. Mary health care centre for preventive checkups and acutemedical care):

- 1. Ghosaldanga
- 2. Bishnubati (Santal, Hindu)
- 3. Baganpara
- 4. Monedanga
- 5. Panchabanpur
- 6. Bautijol
- 7. Bekajol
- 8. Kulbuni
- 9. Doltikuri
- 10. Tatpandi
- 11. Patharkata
- 12. Bonerpukurdanga (Khechurdanga)
- 13. Binodpur
- 14. Ramlakhandanga
- 15. Hetedanga
- 16. Itedanga
- 17. Katabagan
- 18. Ballavpurdanga
- **19.** Nurpur 1

- **20.** Nurpur 2
- 21. Borobagan
- 22. Borobagan Mitradanga
- 23. Ruppur Konrapara
- 24. Hatrasulganj 1
- 25. Hatrasulganj 2
- **26.** Amradanga
- **27.** Borodanga
- 28. Muluk Kalitala
- 29. Paruldanga
- 30. Kankutia 2
- 31. Charakdanga
- 32. Abhirampur
- 33. Chandanpur
- 34. Mirzapur
- 35. Tatijol
- **36.** Rintaladanga
- **37.** Benuria
- **38.** Bottaladanga



The following activities have been taken place from Apr '20 to Mar '21.

In Apr´ 20 the activities were very limited due to the recently announced lockdown. From May to Sep´ 20 we adapted our activities to the challenging situation and focused on the distribution of food packets, clothes, and self-tailored face masks in the surrounding villages. From October 2020 until March 2021, we could restart successfully with OPD and IPD in our health care Centre St. Mary. Hereby we focused on the admission and nutrition rehabilitation of malnourished children.

2 Village Activities

Distribution of Food Packets

In the Corona crisis some villagers came back as day-laborer who have lost their job.

In the village the fields were affected by drought and vegetables were scarcely growing. The income source of these workers stopped from that moment on. Some tried to cultivate their land but hunger was coming up. Beside the government distribution of ground food items, we also distributed food packets with vegetables (green beans & carrots), soya beans, egg, lentils, soap, and self-made masks for protection. On average per month, we provided 1239 food aid packages to children, pregnant women or helpless/handicapped individuals.

	No. Children	No. Preg- nant	No. Helpless/Handicapped
May 2020	328	25	30
June to July 2020	318	30	31
August to September 2020	190	24	19
December 2020 to January 2021	192	21	31
TOTAL 12 villages	1028	100	111











Tailoring of face masks for protection against Corona

Our staff members tailored masks for distribution to patients and villagers. Moreover, we bought additional masks and soap to distribute it in the villages.





Kitchen Garden and Crop-diversification

Besides we distributed seeds for kitchen gardens for growing of vegetables and fruits for these families. Our horticulturist guides and assists the installation of kitchen gardens and further cultivation. Amongst others all families received Amaranth seeds, as these plants contain high density of nutrients and were advised for Moringa tree cultivation/usage.









Number of kitchen gardens in four cultivation periods from Apr´20 to Mar´21

	April 2020 Kitchen Garden (KG)											
ID No.	Village name	Total families	Total KG		Garden Size		Kind of Seeds		Harvest Qu	ality	Comment	No land, No interest
ID No.	Village name	rotal families	Total KG	Small	Medium	Large	Kind of Seeds	Good	Medium	Bad	Comment	No land, No Interest
1	Ghoshaldanga	83	26	7	10	9	1) Pui, 2) Pumpkin, 3) Luffa, 4) Lau,	16	7	3	Watering problem (n=3)	57
2	Bishnubati	155	15	3	7	5	5) Ladyfinger, 6) Amaranth,	10	3	2	(-3WHZ) children (n=2), they go to labour work, too little time for child	140
3	Batijol	39	21	10	3	8	7) Kulmi, 8) Bittergourd, 9) Lalte,	17	3	1	Watering, fence broken (n=1)	18
4	Panchabanpur	32	9	3	2	4	10) Lalshak, 11) LalData	6	3	0	Nearby Pond => Good harvest	23
5	Khejurdanga	48	13	7	3	3		13	0	0	Public house watering. Fence is good	35
6	Baganpara	35	13	9	2	2		7	5	1	Cultivation of open area (n=1), plants not good	22
7	Monedanga	48	6	3	2	1		2	1	3		42
8	Bekajol	90	18	5	9	4		13	3	2	No good fence (n=2), watering is not timely	72
9	Patharghata	100	35	7	10	18		24	5	6	Plantation of open area (n=6), goat destroyed garden	65
10	Dholtikuri	80	22	14	5	3		18	2	2	Watering poblem	58
11	Kulboni	100	17	10	3	4		6	5	6	Plantation of open area (n=6), goat destroyed garden	83
12	Tantbandhi	50	33	6	13	14		28	5	0	All take well care, so harvest is good	17
		860	228	84	69	75		160	42	26		632
			27%	37%	30%	33%		70%	18%	11%		73%
		'	ofall		have a				have a	have an		Families with no land, no
			families	have a	medium	have a		have a good	medium	insufficient		nearby water source, low
			have a KG	small KG	sized KG	large KG		harvest	harvest	harvest		soil quality

	June, July 2020 Kitchen Garden (KG)											
					Garden Size				Harvest Qu	ality		
ID No.	Village name	Total families	Total KG	Small	Medium	Large	Kind of Seeds	Good	Medium	Bad	Comment	No land, No interest
1	Ghoshaldanga	83	26	7	10	9	1) Pui, 2) Pumpkin, 3) Luffa	16	7	3	Bad garden, water problem	57
2	Bishnubati	155	17	5	7	5	4) Lau, 5) Ladyfinger, 6) Amaranth,	10	4	3	No care, labour outside work	138
3	Batijol	39	24	10	5	9	7) Kulmi,8) Bittergourd,	16	6	2	Take care of problems	15
4	Panchabanpur	32	11	5	2	4	9) Lalshak	6	3	2	Good harvest, garden near pond	21
5	Khejurdanga	48	13	7	3	3		9	3	1	They are working public house, plants are there	35
6	Baganpara	35	13	9	2	2		7	5	1	Garden in open area (n=1). Destroyed by pig/cow.	22
7	Monedanga	48	8	4	3	1		4	1	3	Sandy soil is not good. Also watering problem.	40
8	Bekajol	90	18	5	9	4		10	6	2	Broken fence, no care (n=2).	72
9	Patharghata	100	35	7	10	18		24	5	6	Open area.	65
10	Dholtikuri	80	27	14	8	5		18	6	3	Watering problem.	53
11	Kulboni	100	17	10	3	4		6	5	6	Chicken & goat destroyed garden (n=6).	83
12	Tantbandhi	50	33	6	13	14		28	5	0	All KG good, harvest good.	17
		860	242	89	75	78		154	56	32		618
			28%	37%	31%	32%		64%	23%	13%		72%
		,	of all families have a KG	have a small sized KG	have a medium sized KG	have a large sized KG		have a good harvest	have a medium harvest	have an insufficient harvest		Families with no land, no nearby water source, low soil quality



					Novembe	r, Decem	ber 2020 Kitchen Gard		dia
					Garden Size				
ID No.	Village name	Total families	Total KG	Small	Medium	Large	Kind of Seeds	Comment	No land, No interest
1	Ghoshaldanga	84	33	5	11	10	1) Spinach, 2) Punka, 3) Pea		51
2	Bishnubati	155	24	2	8	7	4) Red Amaranth		131
3	Batijol	39	24	3	6	10	5) Coriander, 6) Seem	River area became garbage place	15
4	Panchabanpur	32	12	2	4	1	7) Red bit, 8) Carrot,		20
5	Khejurdanga	48	13	3	2	3	9) Radish	Open Area	35
6	Baganpara	40	22	7	5	6		Garden became garbage place	18
7	Monedanga	48	8	3	1	1			40
8	Bekajol	90	23	4	5	6		Good Care and watering	67
9	Patharghata	100	29	4	3	11		Harvest, others do garden work	71
10	Dholtikuri	80	26	4	7	7		All garden is good, fence good	54
11	Kulboni	100	4	0	1	3			96
12	Tantbandhi	50	21	2	5	8			29
		866	239	39	58	73			627
			28%	16%	24%	31%			72%
			ofall	have a	have a	have a			Families with no land, no nearby water
			families	small	medium	large			source, low soil quality
			have a KG	sized KG	sized KG	sized KG			

								Febru	ary, March 2021 Kitchen G	arden (KG	i)			
							Garden Size				Harvest Qu	ality		
ID No.	Village name	Total families	Total KG	Under Program Children (KG)	Others (KG)	Small	Medium	Large	Kind of Seeds	Good	Medium	Bad	Comment	No land, No interest
1	Ghoshaldanga	84	31	20	11	12	8	11	1) Pui, 2) Lau,	11	8	12	Some are not planted	53
2	Bishnubati	155	25	17	8	11	7	7	3) Ladyfinger, 4) Amaranth,	5	8	12	Watering problem, no care	130
3	Batijol	39	22	16	6	10	4	8	5) Kulmi, 6) Bittergourd, 7) Lalte,	11	5	6	Ponds area is not good	17
4	Panchabanpur	32	9	7	2	3	2	4	8) Lalshak, 9) Luffa,	7	2	0	Empty Waters	23
5	Khejurdanga	48	10	5	5	4	3	3	10) Cucumber	10	0	0	Good harvest	38
6	Baganpara	40	20	17	3	9	7	4		7	9	4	Watering problem, no care	20
7	Monedanga	48	5	5	0	3	2	0		3	2	0		43
8	Bekajol	90	19	15	4	6	9	4		10	3	6	Garden quality/harvest insufficient (n=4), Goat destroyed KG (n=6)	71
9	Patharghata	100	25	18	7	7	5	13		17	4	4		75
10	Dholtikuri	80	25	16	9	14	7	4		21	4	0		55
11	Kulboni	100	10	4	6	5	3	2		6	3	1	No care, broken fence	90
12	Tantbandhi	50	20	15	5	6	9	5		17	3	0	Good harvest, good care of KG	30
		866	221	155	66	90	66	65		125	51	45		645
			26%	70%	30%	41%	30%	29%		57%	23%	20%		74%
		'	ofall			have a	have a	have a		h	have a	have an		Families with no land, no
			families			small	medium	large		have a good	medium	insufficient		nearby water source, low
			have a KG			sized KG	sized KG	sized KG		harvest	harvest	harvest		soil quality

About a quarter of all families in the sphere of action of Shining Eyes cultivated a kitchen garden in the year '20/'21. There were four cultivation periods with distribution of different kind of seeds (with Amaranthus -a iron-rich green leafy vegetable, being present in every season). For Feb/Mar'21 aside the kitchen garden coverage of all families (26%), also the coverage for families with malnourished children was recorded, which was a satisfying achievement (70%). These families receive supplementary food (NutriMix) and are specially supported to grow a kitchen garden.

By promoting the installation of kitchen gardens and crop-diversification the availability of local plant resources is increased to enrich the supplementary meals for the beneficiaries to strive for sustainable solutions.

NutriMix and interactive cooking trainings in the villages

In 12 villages (a total of 38 villages including the cooperation with the NGO Manab Jamin) we distributed NutriMix for children under 2 years and those with wasting scores -3 on a weekly basis, thereby a total of n=99 children (in 12 villages) can be provided with supplementary food. NutriMix is a roasted instant mix of lentils and wheat with added milk powder, sugar and oil. The families are advised and trained by local health workers, themselves guided by our social workers, to further enrich the porridge with fruits and vegetables from the kitchen garden.



Pictures: Preparation of the supplementary food NutriMix in the St. Mary hospital by our health worker team





Pictures: Distribution of the supplementary food NutriMix in the villages

In the villages we have performed our community-cooking trainings on the adequate preparation of specialized infant foods: our wheat-lentil-milk porridge with fruits and vegetables (NutriMix). Beside the cooking process mothers see how hungry their children are and how urgent they need appropriate amount of high-quality food. Malnourished children often show reduced signs of hunger, however in the scope of this interactive cooking training mothers realize how important nutritious food is for proper development of their child.



Pictures: interactive cooking training



Iron therapy

For anemic children we have provided Tonoferon under the supervision of the health worker and social worker team, hereby all children below two years received the iron therapy. A total of n=99 newborns (<6months) (Bolpur Manab Jamin villages (n=87), SEI (n=12)) started iron therapy from November´20 onwards in terms of our preventive newborn checkup. An additional n=154 children (>6months) (SEI, n=12 villages) have continued/started iron therapy from Feb/Mar´21 onwards.



Pictures: iron drop application by mother or SW

Village anthropometric and Hb measurement

Also during lockdown we continued to visit 12 villages in order to measure all children aged below 2 years. Hereby malnourished and anemic children can be identified and brought for further investigation to our pediatrician in St. Mary's Health Care Centre. Moreover, these measurements allow us to better track progress of our iron therapy and supplementary feeding program.



Pictures: anthropometric measurement



Medical Check-ups in the villages -no child must be lost

In the scope of the awareness programs, regular medical check-ups are the focus as well. The programs have to be understood as holistic screening programs, seeking to find all vulnerable individuals in the villages and to refer them to proper diagnostic, treatment, long-term monitoring or preventive medical check-ups. The medical check-ups are guided by Dr. Monika Golembiewski who is a specialist for children, as well as by voluntary doctors joining for short-term assignments.

Hereby pregnant women are recorded and receive regular prenatal care supplementary to the ongoing government program (Asa-worker), neurological or handicapped children as well as children with a heart defect are guided inside the government schemes to receive the benefits or surgeries they are entitled for, Tb suspected patients are guided into the government schemes as well, anaemic patients receive iron drops/tablets, moderately and severely wasted children receive supplementary feeding (Nutri-Mix Instant powder, oil, milk powder, sugar) and mothers are instructed to enrich the porridge with vegetables and fruits of the kitchen garden. Mothers are trained and supported by village workers to administer the medication regularly and in the right dosage. This improved screening system shall further identify all emergency patients that need immediate treatment.









Pictures: medical checkup and household visits in the village Ghoshaldanga and Batijol

A total of 96 patients have been seen in the village during medical checkup in 2020/21.

The tables below illustrate the hematological and anthropometric measurements in Sep/Oct 2020 (total: n=161); Feb 2021 (total: n=197). **In the 12 villages** the following number of children receives respective interventions: Nutri-Mix (n=100; n=99), Tonoferon/Glycifer (n=126; n=154). This equals (in Sep/Oct´20; Feb´21) 84.0%; 80.2% receiving iron therapy (of all children with hematological checkup), and 67.6%; 51.8% receiving NutriMix, respectively. In Feb´21 8.9% (n=17) of children suffered from severe or very severe forms of wasting (WHZ<-3,-4SD).

Village checkup September/October 2020

	Village	Number of children	Mean Age	Mean Hb (g/dl) child	Mean Hb (g/dl)	NutriMix	Tonoferon/
		total in village	(months)		mother		Glycifer
1	Bautijol	11	15 (n=11)	9.1 (n=11)	10.6 (n=5)	7	10
2	Bishnubati	15	17 (n=15)	9.2 (n=15)	9.6 (n=3)	10	13
3	Ghoshaldanga	19	16 (n=19)	9.3 (n=19)	10.4 (n=5)	13	17
4	Monedanga	8	21 (n=8)	9.1 (n=8)	9.0 (n=4)	7	8
5	Pathorghata	17	20 (n=15)	9.6 (n=15)	9.8 (n=7)	10	12
6	Dholtikuri	16	19 (n=16)	9.3 (n=16)	10.4 (n=5)	12	12
7	Tantbandhi	9	22 (n=8)	9.8 (n=8)	9.6 (n=1)	6	6
8	Kulboni	9	19 (n=7)	9.9 (n=7)	10.8 (n=4)	3	2
9	Bekajol	19	16 (n=19)	9.4 (n=19)	10.6 (n=7)	9	15
10	Baganpara	16	16 (n=16)	8.8 (n=16)	10.0 (n=5)	11	15
11	Panchbanpur	12	11 (n=8)	9.4 (n=8)	9.8 (n=5)	6	7
12	Khechurdanga	10	17 (n=8)	9.3 (n=8)	9.3 (n=3)	6	9
						100	126
	Total	161	17 (n=150)	9.3 (n=150)	10.1 (n=54)	(67.6% of n=148 with	(84.0% of n=150 with
						WHZ measurement)	Hb measurement)

Village checkup February 2021

	Village Checkup (Feb/Apr´21)	Total number of chil- dren in village, pre- sent 2 nd checkup	Mean Hb (g/dl) child	-3/-4 WHZ	Hb<10g/dl	NutriMix	Iron drops	Intervention	No. per group
1	Bautijol (1 child thalessemia)	13	9.8 (n=12)	1	6	8	10	Glycifer + Mactotal	1) Glycifer, n=57
2	Bishnubati	19	10.0 (n=19)	2	8	9	14	Glycifer + Mactotal	
3	Ghoshaldanga (1 heart child)	24	10.3 (n=23)	5	9	15	18	Glycifer + Bifilac	2) Glycifer + Bifilac, n=51
4	Monedanga	8	10.3 (n=8)	1	3	4	4	Glycifer	a) al
5	Pathorghata	17	10.1 (n=17)	2	9	9	13	Glycifer + Mactotal	3) Glycifer +
6	Dholtikuri (1 heart child)	18	10.0 (n=17)	3	9	10	13	Glycifer + Bifilac	Mactotal,
7	Tantbandhi (1 handi- capped child)	13	10.0 (n=12)	1	6	6	9	Glycifer + Mactotal	n=46
8	Kulboni	12	10.0 (n=12)	0	5	3	10	Glycifer	
9	Bekajol (1 child long-term admission suppl. milk St. Mary)	24	9.9 (n=23)	0	14	12	20	Glycifer + Bifilac	
10	Baganpara	26	10.0 (n=26)	1		11	24	Glycifer	
11	Panchabanpur	10	9.8 (n=10)	1	4	8	9	Glycifer	
12	Khechurdanga	13	10.4 (n=13)	0	3	4	10	Glycifer	
	Total	197	10.1 (n=192)	17 (8.9%)	76 (39.6%)	99 (51.8% of n=191 children with WHZ measurement)	154 (80.2% of n=192 with Hb measure- ment)		

Moringa Cookies

The Moringa Cookie production started in March '21 again.

Our horticulturist Nilu conducts the seasonal Moringa leaf harvest autonomously. The fresh leaves are shadow-dried, subsequently processed to powder, and then stored in a cool dry place for no longer than six months. The leaf powder is used for the baking of Moringa cookies provided to severely malnourished/wasted children (WHZ<-3SD).

Due to the Corona crisis the two German horticulturists Anne and Rolf Bucher could not join our work in the past year.



Pictures: Moringa cookie baking by our horticulturist Nilu Das.

Community awareness trainings and interactive cooking trainings on household level

The social worker conducts interactive cooking trainings on household level. Hereby mothers are trained how to prepare the distributed supplementary roasted wheat-lentil mixture (NutriMix), and to enrich it with milk powder, sugar, oil and adequate amounts of fruits and vegetables. All ingredients except the vegetables and fruits are provided by Shining Eyes India. The vegetables and fruits mothers shall take from their kitchen garden. Altogether mothers are trained to offer five meals over the day to their child, of these five meals at least three shall be enriched with vegetables and fruits (rice meal, NutriMix-porridge, lentil-vegetable soup).

Interactive awareness materials for better visualization of exemplified improved meals and of adequate portion sizes of vegetables and fruits per meal is used and a food circle illustrates food groups needed to include in a balanced daily routine. Through visualization and practical cooking trainings counselled knowledge is reinforced.





Pictures: household visits by social worker Soni Roy, monitoring of preparation of infant and young child foods in the house, awareness training about how to recognize/prevent malnutrition of mothers by health worker in a community session.







Pictures: community cooking demonstration of a nutritious recipe "vegetable-omelette" with three types of spinach leaves, inspired by the NGO Manab Jamin by social worker and health worker in Ghoshaldanga.

Responsive feeding and stimulation, mother-child interaction, child caring

Another central issue during household trainings by social workers and the health worker team is the improvement of mother-child interaction during the day and foremost during eating occassions. Mothers are trained to sit next to their child, keep eye-to-eye contact and motivate the child to eat. Not only the food itself but the assistance during eating are both equally important to maintain a good health status. In particular a child that suffers from undernutrition or anemia may be likely to have a reduced appetite as well. Often due to the high work load of the mother, eating occassions are reduced to a simple necessity. Mostly the mother is even not sitting next to her child during eating but doing other things along. The child is not concentrating on eating and livestock that crosses the eating place contaminates or even steals the food. Moreover undernourished children do not feel that they are hungry, however many mothers wait until the child shows hunger. Counselling includes that the mother shall offer at least five times a day food to her child, hereof three meals have to be warm meals. Moreover she shall react to any signs of hunger immediately. Crying is a late sign of hunger, and in particular in small children food has to be offered much earlier. Only the regular serving of meals can improve the nutrition and health status of the child and thereby in turn increase appetite. After some weeks of iron therapy or supplementary feeding, mothers report their child becoming more active, being less sick and showing more appetite.



Pictures: Mother is feeding the child after the social worker counselled her, that assistance of the child during eating will promote health. Before the child was sitting alone at the eating place and flies were all over the food.



2.7 Awareness training and family planning

Central awareness topics are the 1000-day window of opportunity to prevent malnutrition, the intergenerational cycle of malnutrition and poverty, worm infestations, hygiene, healthy nutrition, recognition of sickness in the child, pregnancy and family planning. Mothers learn that taking action is decisive for their child's future. Through this awareness training for mothers of admitted children and patients coming to our OPD, women come more frequently to our Health Care Centre by themselves, as they become more sensible toward their own health condition and the one of their children. Mothers feel empowered to advocate the health of their children. Family planning sessions show mothers contraceptive methods and help to understand the female body and the process of becoming pregnant.





Picture: Family planning training session in St. Mary by our nurses and our social worker Soni Roy.





Picture: Social worker is providing family planning awareness in a village community.

2 Activities in the St. Mary's Child and Mother Health Care Centre

In pre-Corona times our team offered our services six days a week in order to provide medical treatment and health guidance to vulnerable people, in particular mothers and children. At the reception patients are welcomed and guided through anthropometric measurement, nutrition and health education and medical treatment by local or voluntary doctors.

During the pandemic our OPD was closed for some months, however from August 2020 onwards one pediatrician and one gynecologist came regularly so that we could restart with the preventive checkups for pregnant women, newborn children and malnourished children. We maintain all hygiene regulations, by that no direct contact with patients is taking place and medical services possible. In Jan-Apr´21 most of our doctors returned to their work place, and patient numbers in OPD increased drastically. Also the German pediatrician Dr. Golembiewski supported the administrative and medical work



personally on-site, and similarly our neurologist Dr. Swapan announced his return for Apr´21. This satisfying condition continued until mid of Apr´21 when the second wave of Corona burdened the Indian population.

Two ambulance cars are available for patient transport to transfer emergency patients to Sian/Bolpur Hospital, and if needed to the medical colleges in Badhwan and Kolkata. The guidance and assistance of patients is a main goal of our activities. Adivasi people often face difficulties in approaching medical services by themselves, they get more easily lost or rejected when being referred to a more distanced health facility as not knowing how to make appointments or deal with bureaucratic barriers. Thus, one staff member is specialized to guide patients to the right medical section and contact the doctors there. We remain in relation with the patient until he/she will be discharged and look for the follow up and provide the needed medicines. After discharge of the patient holistic follow-up on village level is performed.



Picture: OPD in St. Mary Child & Mother Health Care Centre with hygienic precautions.



Health worker training

The St. Mary's Child and Mother Health Care Centre engages a health worker team responsible for the screening of vulnerable patients in the villages, referring them to the hospital, as well as follow-up care in the village and performing awareness counselling and social assistance on household level. In detail, health workers are trained to routinely visit households and seek for sick patients, with subsequent organisation of the transport from the village to the hospital, they give advice in health topics, monitor prescribed medication by the DOTs center for TB patients and assist in applying iron drops for anaemic children, assure the compliance of pregnancy check-ups, or look after the kitchen garden if it is in a well-kept condition. The health workers also monitor the household cooking for malnourished children and instruct mothers how they properly enrich the distributed supplementary wheat-lentil instant powder with oil, sugar, milk and vegetables or fruits of the kitchen garden. The whole health worker team has the function to act like a safety net in the villages, they have to identify problems and seek for solutions.

On a weekly basis health workers come to the St. Mary's Child and Mother Health Care Centre to receive counselling for themselves by our social worker team. This counselling and the performance of the health workers in the villages is related to the common project of Shining Eyes India and Bolpur Manab Jamin. This weekly training is enriched by occasional courses given by volunteers (e.g. doctors, nurses, nutrition students).

Also during the pandemic our health worker team performs house visits to look after sick children and to organize the medical treatment within the local possibilities and supervise the recovery. Severe children were picked up by our ambulance car for referral to the higher medical centres.

Once a week from 12 villages the health worker come for reporting about their activities inside the villages and to provide overview of sick children. They themselves got training for malnutrition, anemia, hygiene and prevention of Corona infection. They also continued with the preparation of the weekly ration of NutriMix to be distributed in the villages.



Picture: Health worker training by social worker, nurses and Dr. Golembiewski.



Malnourished children

Children with wasting z-scores of -3/-4 were admitted for rehabilitation and therapy with five nutritious meals a day. Mothers received teaching about valuable nutritious food at low cost, the intergenerational circle about poverty/malnutrition, hygiene, and how to recognize emergency signs in the sick child.



Picture: Nutrition rehabilitation program at St. Mary Health Care Centre for severely malnourished children.

2.1 Outdoor patient numbers

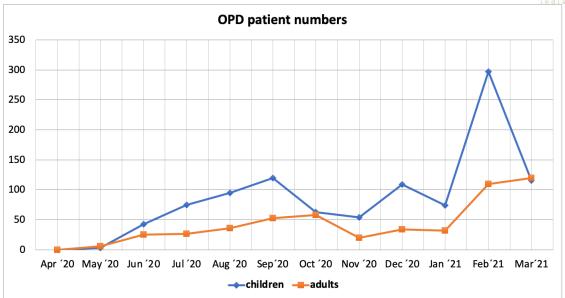
St. Mary's Child & Mother Health Care Centre April 2020-March 2021

Months	OPD Children	OPD Adults	Total OPD
Apr '20	0	0	0
May '20	3	6	9
Jun '20	43	25	68
Jul '20	75	27	102
Aug '20	95	36	131
Sep´20	120	53	173
Oct '20	63	58	121
Nov '20	54	20	74
Dec '20	109	34	143
Jan '21	74	32	106
Feb´21	297	110	407
Mar´21	116	120	236
Total	1049	521	1570

This year 1570 patients (1049 children, 521 adults) were investigated during OPD. The patient flow over the year is illustrated below. Due to the Corona crisis no OPD patients were coming in April 2020. The patient flow over the whole year remained reduced. When compared to the year Apr´19 to Mar´20 the patient numbers drastically decreased (6502 patients: 3054 children, 3448 adults).

Table: OPD patient numbers of children and adults Apr'20 to Mar'21.





Graph: OPD patient numbers from Apr'20 to Mar'21 for children and adults, respectively.

2.2 Indoor Patient numbers

St. Mary's Child & Mother Health Care Centre April 2020 - March 2021

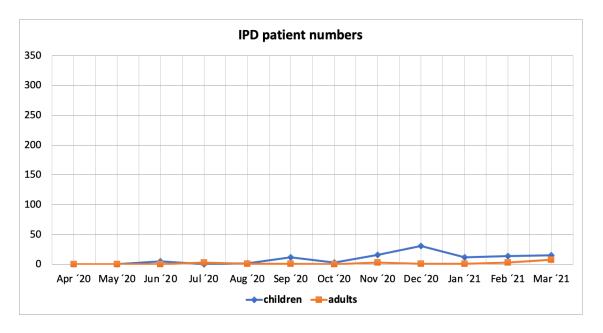
The St. Mary's Child and Mother Hospital has 10 beds to admit patients who need supplementary feeding, medical treatment or are waiting for referral to other health facilities. In this year 110 children, and 21 adults were admitted with an average time of admission of 10 days (children), and 18 days (adults), respectively. The table below illustrates the number of indoor patients admitted per month in our health care center. Again, compared to the previous year a remarkable decline is to be noticed (188 children, 66 adults).

Months	IPD Children	IPD Adults	Total IPD
Apr '20	0	0	0
May '20	0	0	0
Jun ´20	5	0	5
Jul '20	0	3	3
Aug '20	2	1	3
Sep '20	12	1	13
Oct '20	3	0	3
Nov '20	16	3	19
Dec '20	31	1	32
Jan '21	12	1	13
Feb '21	14	3	17
Mar '21	15	8	23
Total	110	21	131

Table: IPD patient numbers of admitted children and adults Apr'20 to Mar'21.



The number of patients having been admitted per month in the year '20/'21 can be seen in the figure below.





Picture: long-term admitted children as well as children from very poor living conditions can be taught five days a week in our hospital school.

2.3 Diagnostic

The Health Care Centre offers diagnostic pathology and diagnostic x-ray to patients in need.

• Laboratory and X-ray report April 2020-March 2021

	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Total No. of Lab tests	12	4	15	19	12	29	13	15	32	38	189	152	530
X-ray	5	3	22	23	4	15	2	6	18	19	28	38	183
Total Lab (incl. x-ray)	17	7	37	42	16	44	15	21	50	57	217	190	713











Picture: hematological tests performed by our laboratory assistant/village coordinator Jayanta Das and our hospital coordinator Debashis Roy Chowdhury who is also radiologist.

• Ultra-Sonography (USG) from Apr 2020 to Mar 2021

Once a week a general ultra-sonography by Dr. Gahu is taking place for adults, children and pregnant women. During Corona times USG investigations for gynecological checkups could be continued.

Month	USG
	Numbers of Patients
Apr '20	0
May ´20	6
June '20	25
July '20	28
Aug ´20	34
Sep '20	69
Oct '20	25
Nov '20	13
Dec ´20	31
Jan ´21	21
Feb ´21	53
Mar ´21	60
Total	365

Table: USG patient numbers Apr´20-Mar´21.

Prenatal care is an important segment of Shining Eyes India, of course without gender detection. In case of unwanted pregnancies, Shining Eyes India supports the woman to keep her child, or helps to bring the child to religious sisters for further care. The USG is taking place at least once a week for pregnant ladies but also all kinds of diseases.



EEG patients during last year '20/'21: 1 patient

ECHO and ECG

Usually, Dr. Nurul (cardiologist) assists us once in a month to screen heart-defect suspected children. Due to the Corona pandemic no screening for heart children as well as no surgery could be performed in the period Apr´20 to Mar´21.

Generally, we help to implement the government schemes like Shishu Shati scheme after detecting children in the villages with heart sound, then we guide them for the needed diagnostic, ECHO and ECG and registered them in Suri medical hospital. For the urgent cases we get appointments for operation in Durgapur mission hospital, which is free of cost.









Picture: Dr. Nurul investigates heart-defect suspected children and adults in beginning of Apr'21.

Gynecological screenings

Our gynecologist Dr. Udpal coordinated cancer screenings at the St. Mary's health care center. Dr. Udpal also organizes gynecological and surgical interventions in other health facilities (hernia, anal stenose etc.).

Date	Name	Disease
25.02.2021	55 Years, F	Hysterectomy
27.02.2021	10 Years, F	Plastic surgery
27.02.2021	12 Years, F	Tumor surgery
27.02.2021	8 Month	Hernia Surgery

Table: Surgeries organized after medical checkup with referral to specialized health facilities.

Ligation

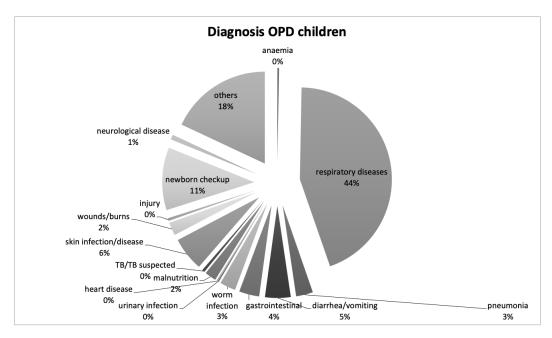
Apart from awareness in family planning, we assist women to receive ligation by Dr. Udpal in a nearby health facility. In particular, this service is offered to mothers already having three children. The program has recently started, in March'21 we completed 5 ligations.

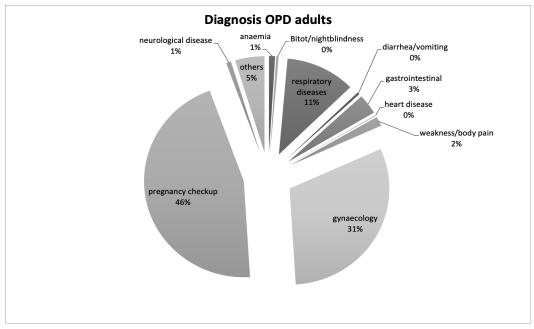


2.3.1 Number of diagnoses OPD and IPD

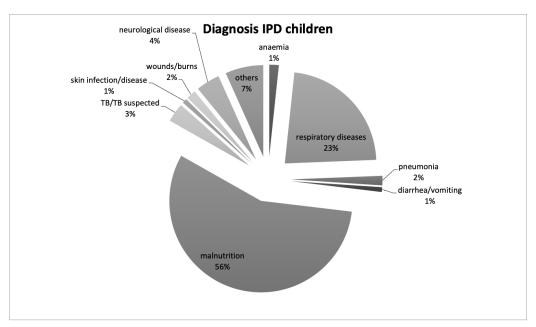
During OPD, among children respiratory diseases were most frequent diagnoses, secondly the preventive health checkup for newborns was a common reason to approach the St. Mary health Care Centre. Adults mostly similarly came for preventive pregnancy checkups in the first place, gynecological problems or suffered from respiratory diseases.

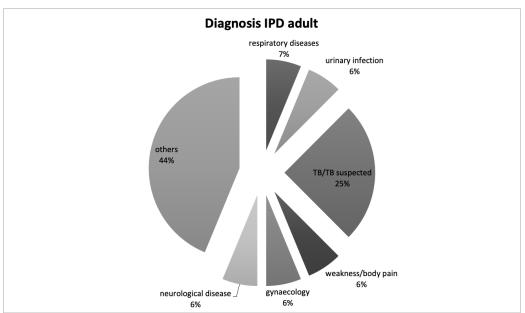
For children (IPD) malnutrition, and respiratory diseases, were the most frequent reasons for admission. For adults (IPD) extra-pulmonal TB, was the most frequent reason to be admitted, other reasons included respiratory disease, weakness, urinary infection, neurological problems or gynecological disease.











Figures: OPD and IPD diagnoses children and adults



2.4 TB screening and diagnostic

Children with bone TB are admitted and treated regularly with anti-TB-drugs and provided healthy food for their recovery.

In this year a total of n=6 patients were screened for TB (TB-suspected), and n=3 (50%) were confirmed with TB. The consequence of the pandemic was that less TB suspected patients were identified, as people remained more in the houses and were afraid to be stigmatized for a Corona infection.

Still, the target of the trust remains to identify TB suspected patients in order to bring them to the DOTs program. During village visits we screen for TB suspected patients who suffer from cough for a long time or have enlarged lymph nodes. Children are found especially with extra-pulmonary TB, like bone TB. We refer them to the Health Centre for diagnostic which is provided free of cost (x-ray and Mantoux, blood test is available, FNAC/biopsy is organized from an outside lab). St. Mary's social workers are trained to monitor the TB patients supplementary to the government workers (Asa workers). Awareness trainings are provided to the newly registered TB patients, who are included in the DOTS program and receive additional supplement food by us. Our social workers make house visit of the TB patients to emphasize them of a continuous treatment.



Pictures: admitted TB patient in St. Mary suffering from bone TB (left pictures). TB-suspected man in village identified by social worker (right picture), who is assisted to come for medical investigation.

Cancer patients

During Corona times some cancer patients had to interrupt their chemotherapy, as it was not possible to enter Kolkata. From Oct´20 onwards we could transport needy patients again regularly for their continuous interval treatment to Hope Hospital in Kolkata. The table below illustrates the referral to Hope Hospital.

Date	Name	Disease
08.10.2020	45 years F	CA Patients Chemotherapy
11.12.2020	48 years, F	CA Patients Chemotherapy
09.02.2021	12 years, F	Tumor in the eyelid, (need surgery)
27.02.2021	10 years, F	Old burn in the finger, (need surgery)
27.02.2021	8 months, M	Hernia, (need surgery)
27.02.2021	36 years, M	Old cut in the neck
27.02.2021	45 years, F	CA Patients Chemotherapy
31.03.2021	43 years, F	CA Patients Chemotherapy
31.03.2021	48 years, M	CA Patients Chemotherapy



2.5 Preventive Newborn Checkup Day

Despite the hurdles of the pandemic, our preventive Newborn Checkup has been restarted as well. Village-wise all children up to the 6th month of their life are invited and investigated. Hereby at an early stage development deficits and anemia can be detected and a healthy development of the child secured.

In September 2018 the "Newborn program" was launched in order to achieve "Improvement of the provision of health care for Adivasis, West Bengal, India". The checkup is inspired by the German U-examinations system (foremost U2-U6). Thereby sicknesses, anemia or heart defects can be detected at an early stage of life. Children receive proper treatment and care. Mothers themselves gain knowledge in topics like breastfeeding, appropriate complementary feeding, how to identify sickness in their children, or family planning methods. Also, here the focus is placed on raising awareness and early identification of vulnerable individuals through medical checkups.

The whole implementation has been successfully established during the last 2 years with 237 new-borns being investigated. From Nov'20 onwards until Mar'21 an additional 99 newborns were screened for their development milestones and their mothers received a preventive checkup and awareness training. Santal mothers are glad about that free-of-cost possibility for health checkup of their babies, and show high acceptance and positive feedback. Mothers who come for repeated checkups show an increase in awareness about healthy nutrition and recognize the importance of appropriate complementary foods from the sixth months of child's life on, and to treat sickness in time, foremost they come with "clean" babies even using diapers, and show that their understanding of hygiene has increased. They know that proper development of their child is decisive for a better school attainment in later life, thus understand determinants of the intergenerational cycle of malnutrition and poverty. They understand the term anemia and the need of iron drops and healthy nutrition, and now come frequently by themselves when their baby gets sick, as they gained trust and awareness for a timely medical treatment.

Health workers and social worker assist the medical checkup by guiding mothers. A consequence is that the social workers become more sensible towards vulnerable children. By themselves they are now able to recognize neurological movement disorders, or development deficits of children in the villages and bring them to the hospital, as also they became more aware about the milestones of proper child development.

Moreover, related to the program the SW and HW perform community awareness trainings or regular house visits in order to assist villagers in diverse issues (monitoring of kitchen garden keeping, monitoring of proper application of prescribed Tb medication or iron drops/tablets, counseling mothers in cooking with a variety of vegetables and use of Nutri-Mix for malnourished children etc.).





Pictures: Our social worker also identifies newborns in the village to come for preventive checkups to St. Mary. Moreover, the NGO Manab Jamin sends newborns from their sphere of activity, that from a total of 38 villages newborns can receive a preventive checkups for development milestones and hematological investigation in our centre.

Mothers receive counselling and nutritious food. Women are picked up in their villages and guided to our services.



2.6 Cloths for children

Also, in the winter season of '20/'21 we have distributed warm clothes and blankets for the children under 5 years and poor families. The children showed joy about the warm socks, pullovers, and caps.





Pictures: Cloth distribution in the St. Mary's Centre and the village Kulbuni

3 Trustees

The Trustees remained in the year of 2020/21 as per the starting point of this charitable trust three years earlier. Note: new board community was formed on the general annual meeting on 14/07/2019.

The following list presents the Trustees and their designations:

	Name	Designation	Profession
1	Prof. Dr. Swapan Mukhopadhyay	President	Medical practitioner
2	Debashis Roy Chowdhuri	Secretary	Service
3	Satyanarayan Roy	Treasurer/Settler	Social worker
4	Dr. Monika Golembiewski	Trustee	Medical practitioner

Only Satyanarayan Roy is working on a daily basis and getting a honorium from SEI, all other members are working on a voluntary basis. The overall goal of this charitable trust is to provide medical care and guidance to the needy children and mothers in the rural area. This includes curative measures with follow-up and village health checkups as well as preventive programs to improve nutrition and hygiene. The trust works for the poor and tribal families surrounding Bolpur at Birbhum District.

The focus is to give care for malnourished and anemic children, pregnant women, handicapped children and also TB patients for diagnostic and medical support. This is conducted in "St. Mary's Child and Mother Health Care Centre" at Makarampur, Bolpur.

The Trust enjoys 12 AA and 80G benefit.

Contact

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