International Journal of Social Science and Human Research

ISSN (print): 2644-0679, ISSN (online): 2644-0695

Volume 07 Issue 02 February 2024

DOI: 10.47191/ijsshr/v7-i02-65, Impact factor- 7.876

Page No: 1390-1399

Access to the Healthcare in Remote Areas is Support for Poverty Reduction

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ABSTRACT: In India, around 14.96% of the population lives in poverty despite implementation of a number of programmes to combat poverty. Most of the people who live in poverty have experienced some form of deprivation at some point of time in life although most of the poverty alleviation programmes to combat poverty aim to lessen the distress. A majority of the poor do not have access to poverty alleviation programmes for reasons ranging from backwardness, social deprivation, residing in remote areas, illiteracy, inaccessible healthcare etc. There is a lack of convergence between various programmes which is making it difficult to identify and meet the needs of targeted poor. If the poor have affordable or gratis access to healthcare, education and other services, they will be empowered to come out from the clutches of poverty and prevent it passing to the next generation. The contributions made by Akha Boat Clinics and Jan Swasthya Sahyog (JSS) are one such successful illustration that are supporting the poor to come out of poverty with access to reachable and affordable healthcare at doorstep. The health provisions made available to the poor by these two models of healthcare also in partnership with the governments on PPP model have improved the quality of life for those living in poverty in rural and remote areas.

KEYWORDS: Clinic, Creche, Covid-19, Malnutrition, Poverty

INTRODUCTION

The poverty fortify its roots when there is a deprivation of substantial individual income or family income to afford basic needs like food, clothing, shelter, healthcare, education, safe drinking water and sanitation facilities. The scanty incomes combined with incidence of shocks such as inflating basic food prices, natural disasters, crop failure, violence, displacement, market failures and inaccessibility to healthcare services can result in additional burden that push people deep into poverty. It is also not contested that poverty in rural and tribal areas is higher than the urban areas as there is a gap in availability of income and employment opportunities and access to basic amenities in rural areas in comparison to urban areas along with the socio-caste divide factors.

The rural and tribal poor people have greater burden of morbidity and mortality because of malnutrition, poor sanitation, non-availability of safe drinking water, and lack of affordable healthcare services and emergency medical treatment. In rural areas the agricultural labour households' faces the critical burden of the poverty and in tribal areas, as the tribal have little access to and little say over how their forest resources are managed, they, for the most of their life, continue to live in poverty. Additionally, the tribal have consistently endured hardships because of "development" projects, particularly those related to mining, irrigation, and infrastructure development. After the economic liberalisation, over 20 million people, primarily tribal people, have been estimated to have been displaced over the years because of various development projects.¹

The poor people's ability to perform the labour-intensive manual work that many employment-generating programmes provide may be severely constrained by malnourishment. The poor families affected by serious illness may experience years of financial hardship because of income loss and they sell assets to pay for medical expenses and become poorer. This has been revealed by analysis of the household expenditure on health from the NSSO 71st Round, which shows that on an average, about 8-9% of households in the population were pushed Below Poverty Line (BPL) due to healthcare payments. If one considers only affected households, the levels of impoverishment were about 17-20% before the pre-healthcare payments the rural BPL population was 35.61% and post-healthcare payments it had increased to 44.41%. The respective percentages for the urban BPL population were 19.97% and 28.35%.² And in 2020, the average Out-of-Pocket Medical Expenditure (OOPME) in rural areas was ₹4,072 per hospitalisation in government hospital and average OOPME was ₹4,408 in urban areas per hospitalisation in government hospital.³

In 2019-21, around 14.96% of the population in India was poor although this is a steep decline in the number of poor from 24.85% in 2015-16. The fastest reduction in poverty, from 32.59% to 19.28%, was seen in the rural areas and the poverty in urban areas had decreased from 8.65% to 5.27%⁴. This shows that though there has been reduction in the poverty percentage the poverty is much higher in rural areas in comparison to urban areas. Most of the people who live in poverty have experienced some form of

deprivation at some point in their life, and there is a high possibility that many of them will pass on the poverty to their next generation. The majority of the poverty alleviation programmes of Central Government and State Governments like provision of Microfinance, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), National Social Assistance Programme (NSAP) and Pradhan Mantri Gram Sadak Yojana (PMGSY) are to combat poverty with the aim to lessen suffering but many of these programmes do not offer individual persons or households a minimum standard of subsistence and also limitations of the poor to access these programmes for reasons ranging from backwardness, social marginalisation, illiteracy, health issues, ignorance etc. For instance, although programmes like the old age or widow pension aim to lessen suffering, the amounts of pension offered are insufficient and cannot help the elderly escape poverty. Similarly, in Chhattisgarh it was found that under the Public Distribution System (PDS) the food grain supply was insufficient to give the poor access to food security. A new populist initiative in the state of Chhattisgarh provided BPL families with 35 kg of subsidised rice each month (at ₹1 or ₹2 per kg). This was insufficient to feed a family of 5 for more than a period of 15 days. Therefore, food grains were being purchased by the BPL families from the open market, where prices were constantly rising. Anything less than 70 kg of food grain per month per household of 4 or 5 family members is insufficient to sustain good health and the other disturbing factor was withdrawal of food grain subsidies for individuals who were not considered officially poor...as per one of the State Government's order, families in Chhattisgarh who are not officially poor or do not possess a BPL card were not eligible for any subsidised rations. This implies that families were compelled to purchase rice at the higher rates from the market because even the rice that was given to them at the rate of ₹2 per kg was no longer would be given to them and this would probably have serious health consequences.⁵

The most critical policy issue related to the poverty alleviation programmes is the financial pattern of these programmes between the Central Government and the State Governments. If there is a delay in the contribution from one of the funding agencies, then there will be inevitable delay in reaching the benefits of the programme to the poor. There are also spatial administrative implementation issues along with lack of convergence between various programmes and schemes, making it difficult to identify and meet the needs of targeted individual poor, households or communities. In other words, it may be stated that there is a short of a direct, focused, and concentrated fight on poverty.

The present paper is focused on contributions made by Akha Boat Clinics in Assam and Jan Swasthya Sahyog (JSS) in Chhattisgarh and Madhya Pradesh in helping people to come out of poverty by providing them reachable and affordable healthcare services at doorstep. The health and nutritional provisions made available to the poor by these models of healthcare also in partnership with Central Government, State Governments and line agencies have improved the quality of life for those living in poverty in rural and remote areas which shows the success of the Public Private Partnership (PPP) to address the goals and objectives of the National Health Policy (NHP), 2017 as the policy recognises the crucial significance of the Sustainable Development Goals (SDGs), specifically the SDG1, SDG2, and SDG3 that are focused on health and poverty.

Akha Boat Clinics

The Brahmputra's 891 km path through Assam is marked by unique geographical characteristics with an enormous network of islands (known as Saporis) that serve as the most vulnerable people's homes. On over 2,500 of these islands live more than 2.5 million people that make up 8% of the total 30 million people of the state. The frequent floods are a problem in these islands that makes thousands of inhabitants homeless each year and there are not enough essential services like schools, hospitals, and availability of electricity. The water-borne diseases generally start to spread after a flood. An innovative method of providing healthcare to inhabitants of island populations is through outreach health clinics called 'Akha Boat Clinics' (Akha means 'hope' in Assamese). The boat clinics adopted innovative strategies for avoiding people from falling into poverty because of illness. The provisions of healthcare facilities using this unique model is an innovation of an NGO namely, Centre for North East Studies and Policy Research (CNES) which had developed this unique initiative with the support of the local administration on a Public private partnership (PPP) model. On a small ship that is stocked with medical equipment and other supplies, doctors and paramedics reside to provide medical care to people residing in remote backward islands. By use of the boat clinics to deliver healthcare services to the poor inhabitants' doors, they are able to use the river to reach the unreached in these islands and the first boat clinic was started in 2005 in Dibrugarh. The boat clinic healthcare services were started in five Assam districts during the initial phase of the partnership with National Rural Health Mission (NRHM) in Dibrugarh, Tinsukia, Dhemaji, Morigaon, and Dhubri. In the second phase, which began in March 2009, five more districts of Lakhimpur, Jorhat, Sonitpur, Nalbari, and Barpeta were covered for healthcare services by the boat clinics. Since August 2010, three new districts of Kamrup, Goalpara, and Bongaigaon have been covered under the boat clinic health initiatives as well as one extra unit each in Barpeta and Dhubri districts. The boat travels for four to six days (including night halts) to organise one or two camps each day. In the event when larger boats are unavailable, country boats are hired and adapted to offer the basic of healthcare, such as an OPD and a cabin for an ANC check-up.⁶ Recognising its potential, UNICEF also provided boat clinics a boost in 2006 by providing training and some finance to carry out its healthcare activities in the districts of Dibrugarh and later in Lakhimpur. The innovative healthcare concept aimed at bridging the rural gaps was also well recognised by the World Bank.⁷

CNES and NRHM have hired doctors and paramedics to provide healthcare and work with line departments. The medical team for a district comprises of one District Community Organiser (DCO), two Medical Officers, one General Nurse & Midwife, one Pharmacist, one Laboratory Technician, two ANMs, two Community workers, and four crew members. At the Guwahati office, there are five members of the Project Management Unit. There are 15 boat clinics and each clinic provides prenatal and postnatal treatment, child immunisation, referral for complex pregnancies, general check-ups for preventative and curative care, and transportation for situations that require acute healthcare services. All of the boat clinics offer basic laboratory tests such as hemoglobin, blood smear for malaria, urine for albumin and sugar, random blood sugar, and urine pregnancy test, among others. Venereal disease research laboratory (VDRL) test and HIV testing have also been provided by all boat clinics and inhabitants have been made aware about these diseases. Patients who are critically ill are transported to the nearest health center or hospital. All of the boat clinics provide family planning services, IEC activities, and health awareness services in addition to OPD healthcare services.⁸

The boat clinics also offer emergency preparedness and response in case of flooding, relief measures, immunisation for children including vaccination for Japanese encephalitis, antenatal and postnatal check-up/care. The boat contains accommodations for medical personnel and crew, as well as medicine storage space. It also features a kitchen, toilet and bathroom facilities, a general store, 120 truck horsepower engine, solar ice line refrigerator, a generator set, and 200 litre water tanks to ensure that the medical teams that travel to the islands have enough water and power supply.⁹

Even during the pandemic, when the nation was struggling to contain the Covid-19, the boat clinics geared-up their efforts in the remote river islands, the majority of which lack access to basic medical facilities. The boat clinics started campaigning about the Corona virus on the islands, promoting the necessity for social distancing, and conducting neighborhood surveillance in their designated islands.¹⁰ The different healthcare services delivered by the boat clinics during 2008-09 to 2019-20 are presented in Table 1.

Service	Number	No. of Patients	Routine	ANC	PNC	Vitamin A	Special	IPPI
Details	of Camps	treated under	Immunisation				Vaccination	
		General Health	l					
Year		Checkup						
2008-09	988	90422	7096	3124	1012	1889	1574	4883
2009-10	1867	141413	20389	6064	1206	7179	1317	1672
2010-11	2159	174160	22269	8893	2400	8017	2656	105
2011-12	2776	225141	24817	14679	3499	11037	6201	56
2012-13	2582	200679	21971	11576	3355	11407	669	708
2013-14	2894	200006	24703	15545	4223	10015	1663	1224
2014-15	3061	210807	25748	15756	4636	9570	4333	763
2015-16	3350	240199	27604	16792	4463	14543	3519	438
2016-17	3339	246684	28521	17954	4534	15873	892	2802
2017-18	3218	221083	27056	15247	3938	22411	7135	4031
2018-19	3470	233758	31023	19432	4745	26502	27470	926
2019-20	3280	203579	25610	17951	4415	16595	0	1679
Total	32,984	2,38,7931	2,86,807	1,63,013	42,426	1,55,038	57,429	19,287

 Table 1: Performance of Boat Clinics from 2008-09 to 2019-20

Source: https://nhm.assam.gov.in/schemes/boat-clinic

The Table 1 shows that during the period of 12 years from 2008-09 to 2019-20 a total number of 32,984 camps were organised by the boat clinics, 2,38,7931 inhabitants of islands were treated under the General Health Checkup, 2,86,807 number of routine immunisations were provided, 1,63,013 number of Ante Natal Care (ANC) and 42,426 number of Post Natal Care (PNC) were provided. A total number of 1,55,038 vitamin A drops were given, 57,429 special vaccinations were also provided along with 19,287 Intensified Pulse Polio Immunisation (IPPI). An average number of camps organised by the boat clinics per year were 2,748 and an average number of patients treated in these camps were 1,98,994 per year. The boat clinics also provided family planning services to the residents of these islands like IUCD adoption, laparoscopy sterilisation, family planning etc.

As per one of an earlier study of the healthcare services delivery by the boat clinics based on interviews with the 375 beneficiaries, women who came for prenatal checkups and child vaccinations were the primary users of the services. ASHA staff and community workers distributed information about the camps. The necessity for treatment was the most common reason for attending the health camps. Many beneficiaries (91.2%) were completely satisfied with the boat clinics' services. Long lines and a lack of all medicines were cited as reasons for merely moderate satisfaction by 6.7% of respondents. The 2.1% of unsatisfied

respondents with the boat clinics reported that they did not obtain the desired drug (most typically vitamin and liver support syrups). 4.3% of patients were referred for specialised care. While services were offered on a first come, first served basis, expectant mothers, children, and the elderly were given priority. The health camps were set up inside tents, providing seclusion for female patients. In terms of manpower availability, the study found the availability of doctors and paramedic staff. The majority of OPD cases were attended between November and January months as during these months, the water level is sufficient for boats to cruise smoothly. The only limitation was found that funding to all district units was sporadic, which prevented the holding of camps as planned. ¹¹ Initially, the doctors of the boat clinics faced many challenges in their attempts to persuade the people of the islands to vaccinate their children because the people did not at first support the practice of immunisation of children. The doctors through the intensive awareness workshops and counselling were able to convince them and as a result, over 80% of the children were fully immunised.¹²

The other initiative of CNES with effective use of ICT for addressing issues of ANC and PNC is e-SAATHI that can be well accessed by the people of river islands along with the healthcare services provided by boat clinics. The programme is in partnership of organisations like Population Council Consulting (PCC), Nivi India, Sitaram Bhartia Institute of Science and Research (SBISR) and Federation of Obstetric and Gynecological Societies of India (FOGSI). In Assam, a chat-based digital Maternal Health (MH) support system has been launched by e-SAATHI. To support women's autonomy over their reproductive health-seeking behaviours, enable self-care, and facilitate access to high-quality MH information and services throughout the pregnancy-postpartum continuum, e-SAATHI forms partnerships based on a tested digital solution. This helps to lower maternal and early neonatal mortality. The programme aims to give expectant mothers in Assam access to high-quality private and public MH services, as well as vital information on maternal health, to ensure a safe maternal health journey from early pregnancy to 15 weeks postpartum. Additionally, the programme seeks to enable local conventional and digital media outlets, as well as public and private providers, to increase public awareness on MH services that are offered locally.¹³

The healthcare services by boat clinics have primarily addressed the healthcare issues of poor people of islands as on average each month 18,000 to 20,000 people in the river islands receive treatment and these are the people who were previously not covered by any government health care programme because no doctors or paramedics would visit them on a regular basis. The island inhabitants claim that they would only see a doctor at doorstep in an emergency, such as a flood. Otherwise, to receive treatment, they would have had to travel far distances to get treatment.¹⁴

Jan Swasthya Sahyog (JSS): People's Health Support Group

Bilaspur is one of the rural districts in central India's state of Chhattisgarh and is known as the 'Dhan ka Katora' (rice bowl). Many people in rural areas lack access to affordable healthcare, and most of the villages lack access to all-weather roads connectivity. The modern medical treatment and amenities are limited to the district headquarters in Bilaspur and the rural population must travel long distances and bear high travel costs to access expensive medical care because of which they suffer earnings loss. Like, in the DLHS-3 survey, all the women who had institutional deliveries have been asked about the cost incurred on transportation and the mean transportation cost varies with background characteristics of women. The mean transportation cost was ₹414 in rural areas, ₹494 in tribal areas, and ₹274 in urban areas.¹⁵ To provide the rural population of Bilaspur and neighbouring districts of Chhattisgarh and Madhya Pradesh, Jan Swasthya Sahyog (JSS) a voluntary, non-profit, registered society of health professionals with its headquarters in Bilaspur has been running a low-cost, affordable, effective health services and nutritional programme for the period of over past 15 years. It is providing both preventive and curative services through community health programmes, rural health centers and a well-equipped hospital. The medical team of doctors of JSS comprises of specialists in Medicine, Paediatrics, Public Health, Gynecology, Surgery, ENT, Microbiology and Ayurvedic Medicine.¹⁶

The mission of the JSS is to create an efficient and affordable priced health programme that offers both preventive and curative care in the poverty-stricken rural and tribal areas. It firmly believes that no one should be refused access to healthcare or discriminated because of inability to pay or because of prejudice based on socio-economic status, caste, gender, religion, or any other such factor. The medical professionals of JSS diagnoses and treats both communicable and non-communicable diseases to lower mortality, morbidity, and indebtedness and keeps people away from falling into poverty trap by using low-cost public health-related technology.

The model of primary healthcare system established by JSS draws its strength and long-term viability from an ongoing, mutually enriching discussion with the local people and professionals in the medical field to provide comprehensive, reasonable, and affordable healthcare services at a reasonable price. In providing the healthcare services, it identifies issues in health service delivery that require scientific analysis and addressing them over long period of time. JSS being working in the rural and tribal areas also focus on contributing to the revitalisation and development of rural areas by supporting initiatives aimed at raising living standards of the rural people along with enhancing the environment and education.

In the forest villages, JSS provides an integrated community programme which includes a three-tiered health programme, nutrition intervention through creches, programme on agriculture, animal health, self-help groups, and livelihood that address the economic and social determinants of health. The three-tiered health service programme comprises of Village Health Workers (VHWs) at Tier-1 which is at the village level, a sub-center staffed by Senior Health Workers (SHWs) and nurses at the Tier-2 level,

and a 100-bed referral hospital at Ganiyari at the Tier-3 provides health services to the villagers especially the poor. At the first two tiers, a comprehensive community health programme is provided in 72 villages in the Bilaspur and forest areas of Mungeli districts of Chhattisgarh. This unique model of healthcare by JSS is primarily focused on to reduce the amount of time spent by rural people on travel and bringing healthcare closer to their homes in the deep forest. So far, JSS has trained 144 women from the rural community (two women each from the selected 72 villages) who are known as VHWs and are the foundation of the three-tiered model to provide door-to-door healthcare and closely monitor each family of respective villages. Although, the extensive community outreach programme is focused in 72 villages, each sub-center serves up to 30 hamlets. The services provided by the sub-centers include daily OPDs, diagnosis, and a doctor-led mobile clinic is also available to neighbouring villages.

VHWs are specifically trained by the JSS to identify in their respective local hamlets the expectant mothers and mobilise them for regular antenatal examinations. These take place once a month at a place that is well within the expectant mothers 30minute walking distance. The counselling services are also provided by VHWs for institutional delivery of expectant mothers. It is also advised that all pregnant women undergo at least one ultrasound examination, if at all feasible. Given the forest dominating topography of these districts with poor roads and lack of transport to access healthcare facilities, sometimes the pregnant women were unable to reach hospitals for deliveries. As a result, home deliveries continue to be their preferred option. Traditional Birth Attendants (TBAs) handle these cases and many of them have received training and well equipped by JSS for safe delivery practices. TBAs at all three sub-centers of JSS participate in monthly refresher training to improve their abilities in recognising and handling emergency postpartum problems, delivering a clean home delivery, and identifying risk factors during delivery for early referral. They also learn how to recognise the symptoms of a mother's postpartum infection and how to give critical newborn care.

During 2021-22, JSS hosted a total number of 180 ANC clinics (15 ANC clinics per month). A total number of 2,688 antenatal check-ups and 868 new registrations for pregnant women were completed in the ANC clinics. In these ANC clinics, while examining the patients, high-risk factors like high blood-pressure, critical obstetric history, and anomalous lab test results were also found in a total number of 26 women. IEC sessions were also held at the ANC clinics by using videos, discussions, and posters to raise awareness about the ANC clinics, pregnancy, and newborn care.

In the same year, VHWs addressed roughly 23 prevalent health issues at the village level which is the tier-1 and VHWs from the villages recommended a total of 1,939 patients to the Ganiyari referral center and sub-centers for additional care. Given the Covid-19 pandemic during the year, VHWs' primary focus was on providing Covid-19 care while the SHWs and the team were keeping an eye on high-risk cases with co-morbidities. VHWs in these 72 villages were also involved in the identification, monitoring, and treatment of fever. Another significant activity of VHWs for the year was raising awareness and mobilising villagers for the Covid-19 immunisation. With the active efforts of the VHWs, during the second wave of Covid-19 in April 2021 a total number of 4,367 patients were identified with Covid-19 infection.

The SHWs and nurses who work in sub-centers are a link between village-level VHWs and the medical staff at Ganiyari Hospital. In addition to managing patients referred by VHWs, managing emergencies, performing deliveries, conducting a monthly follow-up of all patients with chronic conditions, and managing a daily fever OPD, they also oversee the sub-center's weekly doctor's clinic. At the cluster level, they also assist in managing the operations of the other numerous programmes. Through telephone consultations, a doctor provides round-the-clock support to all SHWs and nurses. During 2021-22 a total number of 5,751 patients were attended at the sub-center by SHWs in daily OPD and out of total patients attended by SHWs at sub-centers, only 5.5% had to be referred to the Ganiyari hospital. A total number of 5,833 patients were also attended at the weekly mobile clinics at these sub-centers. At the sub-centers level a total number of 195 animal bites patients comprising of snake bites, dog bites and other animal biters were also treated.

For resuming the awareness services that have been discontinued during the pandemic, meetings for Participatory learning and action (PLA) have also been resumed with women's groups in villages from January 2022. Along with VHWs, a dedicated cadre of Maternity and Child Health Workers (MCHWs) provides routine home visits for high-risk cases as part of the MCH programme. They assist with the registration of new pregnancies in the village and offer postnatal care to expectant mothers and their newborn children. Every month, this cadre participates in a two-day residential training programme at Ganiyari covering subjects including ANC, INC, PNC, HBNC care, identifying high-risk pregnancies, etc. Of the 787 mothers who gave birth alive at that time, 458 went to four or more Antenatal clinics and 156 of the newborns were low birth weight among the 813 live births.

The state level and national level data on nutritional status of children along with other health indicators like mortality rates, fertility, quality and utilisation of family planning services is provided by different rounds of the National Family Health Survey (NFHS). The latest NFHS-5 shows that 33.8% of children under-5 in rural areas at all-India level and 32.7% of children under-5 in rural areas of Chhattisgarh were underweight (weight-for-age)¹⁷. To address the issue of child mortality and undernutrition prevalent in the backward districts, JSS is running creches for children under 3 years of age at the village level for nutrition services. The majority of the poor families in the catchment area where JSS works have both working parents (labour) who leave young children in the care of their older siblings, who are also children. Occasionally, the child care is entrusted to the elderly parents who are too old to work. Although there are a number of causes for malnutrition in young children under 3 years, it was believed that the absence of a caregiver to feed the child several times during the day was the main contributing factor in poor

households. It is insufficient for young children to eat twice a day and not to be undernourished, they require feedings at least five times a day.

The enrollment in these creches primarily fluctuates according to the number of children who turn 3 years of age and are exited from the nutrition programme, as well as the number of new children who enroll after becoming six months old. The other reason is low availability of employment opportunities in agriculture where families may relocate out of the village due to the seasonality of employment opportunities in the village. As a result, during the farming season, there are more children in the creches since families are returning to the village and require child care while the parents are out in the fields.

During the pandemic period when creches were closed, the food was provided to the children at their homes. The number of functional creches and number of children under 3 years attending creches during 2021-22 is given in Figure 1. At the creche level 85-90% of the children were weighed each month in 2021-22 and on an average 29.5% of the children weighed were found moderately malnourished and on an average 4.4% children were found severely malnourished during the year (Figure 2) because the creche serves children under 3 years of age only, who are more likely to become malnourished, particularly after six months of age. And as compared to older children, these children require more frequent feedings and food with a softer consistency. If JSS had not provided creches, the poor families' economic hardship may have had even worse effects on the nutritional status of the children.



Figure 1: Number of Functional Creches and Number of Children Attended Creches during 2021-22



Figure 2: Percentage Nutritional Status of Children enrolled in Creches during 2021-22

In one of NITI Aayog's aspirational districts with poor health indicators is Singrauli in Madhya Pradesh, JSS is actively operating 50 creches in 50 villages of Chitrangi Block since 2020 with the support of Northern Coalfields Limited (NCL) and district administration to address the issues of undernutrition, anemia among women and children along with reducing the incidence of Severe Acute Malnutrition (SAM). As per the NFHS-5 data for the district, there were 37.3% stunted children under the age of five (height for age), and 36% underweight children under the age of five (weight for age). The comparative figures in NFHS-4 were 33% and 37.5%, respectively. 60% of women between the ages of 15-19 years and 56.6% of children under the age of five were also anemic.

Ganiyari Hospital

JSS referral and base hospital in Ganiyari is at the final tier with the status of what AIIMS or big hospitals have in any metropolitan all-services accessible areas. The hospital's healthcare Departments include Medicine, Obstetrics and Gynecology, Surgery, Pediatrics, Ophthalmology, Dentistry, and Ayurveda. There is also a well-equipped pharmacy that is open round-the-clock, an in-house blood storage unit, three operation theaters, a newborn care unit, and a labour room. Apart from these specialised medical services, the hospital also runs a special diabetes and leprosy clinic. With active participation from renowned health specialists in India, abroad and institutions like CMC, Vellore, and AIIMS Delhi, the hospital offers telemedicine sessions that include consultations in Psychiatry, Infectious diseases, Cardiology, and Rheumatology. The primary objective of these healthcare services is to assist the patient in receiving healthcare regardless of their capacity to pay. JSS also arranges appropriate referrals for tertiary care as and when needed for the most vulnerable poor.

A total of 3,851 patients received inpatient care in nine wards of the hospital in 2021-22 for illnesses such as congenital malformations, sickle cell disease, severe anemia, tuberculosis meningitis, diabetic foot, renal calculus, urethral stricture, post burn contractures, cardiac care, complex connective tissue disorders, leprosy, and various cancers. Of these, 42% patients were admitted for medical reasons (including obstetrics and pediatrics), 37% patients were admitted for surgical reasons, and the remaining 21% patients who were suffering from cancer were given chemotherapy. The hospital started a dedicated Covid-19 ward as a result of the severe requirement to admit patients with acute Covid-19 symptoms during the second wave in April 2021 when Chhattisgarh witnessed a single day spike of 15,256 new cases of Covid-19. The month of May 2021 saw a minor decline in the number of inpatients, possibly because of the severity and intensity of Covid-19 cases that must have managed through the Covid-19 ward. During these moments of major crisis, the hospital specialist took on the additional responsibilities with optimism. Even after the severe consequences of Covid-19, the specialists at hospital were able to provide the most vulnerable patients with high-quality treatment in all the units. Out of these 3,851 patients, a total number of 3,338 patients who sought care through hospital admission were eligible to get benefits under the Government health programme PMJAY Ayushman Bharat scheme. Most of the Non-profit institutes and small but effective hospitals like JSS Hospital, which provide care to the underprivileged population at a very low cost, have benefited greatly from this scheme.

The hospital staff assisted patients in obtaining their Ayushman Bharat cards, frequently liaising directly with the district administration that helped in securing 87% coverage of the costs associated with inpatient and surgical care. In comparison to 2019-20, this is an improvement in the programme's 70% coverage of the hospital's inpatient services. The male to female ratio among all patients admitted in the hospital for different ailments was 4:5 which indicates that women's care-seeking behaviour had improved.

JSS provide special care for chronic diseases like Tuberculosis as TB is still a major public health crisis in rural India and the leading cause of death from a single infectious agent among the people of deprived socio-economic status. In 2020-21, the number of TB diagnosis decreased by 50% because of people being afraid to visit healthcare facilities for fear of getting Covid-19. Furthermore, the pandemic has been a nightmare for TB patients around the world since in certain cases, the symptoms of Covid-19 can be mistaken for those of TB. It has not only stopped all efforts to eradicate tuberculosis by the year 2025, but it has also caused panic and apprehension about being admitted to hospitals among TB patients in the JSS healthcare services' region. Even the Government's Nikshay portal for TB showed the steep decline in the number of TB diagnosis during the pandemic. The patients experiencing cough and respiratory distress have avoided hospitals out of fear of getting Covid-19 and being isolated/ locked-up if they test positive. This has ultimately led to a worse prognosis for the illness and a delay in TB diagnosis. Responding to the critical necessity to continue non-Covid care in general and TB care in particular, JSS intervened to monitor any patient who continued to cough or have a fever. According to JSS data, the numbers somewhat improved in 2021-2022. Ganiyari hospital made special arrangements for patients with cancer and tuberculosis to receive prompt treatment in spite of travel restrictions and lockdowns. A total number of 334 people had a tuberculosis diagnosis in 2021-2022 which is an increase over the sharply declining 274 cases during the past year. Furthermore, several of these patients had co-occurring diabetes, and a small percentage even had HIV, which significantly raises the risk of the illness.

The tribal and rural areas where JSS work is also affected by other chronic diseases like hypertension, diabetes, cancers, mental illnesses, heart diseases, chronic obstructive pulmonary diseases (COPDs), arthritis, sickle cell disease and epilepsy for the past few years. During 2021-22, the doctors at JSS treated 136 cancer patients, 82 thyroid patients and 154 asthma patients. The line

of treatment for chronic illness began with screening and followed by prevention and management of these diseases. Like, there is a routine screening of the population above the age of 30 years for hypertension and in women above the age of 30 years there is also screening for cancers and diabetes. The SHWs and VHWs also conduct spontaneous screenings for all the chronic diseases in different clinics in the field. Following a diagnosis of a chronic disease, SHWs monitor each patient in their daily OPD, at the weekly doctor-led mobile clinic at the sub-center, or in disease-based peer support groups that meet in the village. Home visits for treatment or follow-up medication are made for individuals who are unable to attend the sub-centre. In order to provide healthcare to the poor, JSS also makes use of ICT. Formats for an offline, user-friendly mobile app called Avni have been designed for monthly followups of diseases like hypertension, diabetes, epilepsy, TB, and sickle cell disease. At the sub-center or specialty community clinic, all patients with chronic illness are visited by a doctor on a regular basis, such as once a month, once or twice a year, or more frequently as needed, depending on the severity of their illness. In case more investigations are necessary, the patient is directed to the Ganiyari Hospital.

The hospital also works in partnership with Government of Madhya Pradesh on public private partnership (PPP) model. Many patients as far as travelling 300 km come to the hospital to seek medical care where there are no credible public healthcare facilities available in their respective areas and majority of these are poverty-stricken areas. Because of this, JSS is working to bridge the healthcare gap by bolstering the public health system. Additionally, this would lessen the social and financial costs associated with the patients having to travel so far to access quality healthcare. In Anuppur, Shahdol, Dindori, Mandla, Umaria, and Sidhi districts of Madhya Pradesh, JSS began a health system improvement programme since 2016 in partnership with the National Health Mission (NHM) and the National Health Systems Resource Centre (NHSRC). The work includes guiding and instructing various health worker cadres in the public health system. JSS doctors and VHWs also organised training programmes for the government team during the pandemic for mobilisation on vaccination and conducting vaccination camps in the villages.

The work of JSS for strengthening the public health system by providing diagnostic and counselling of patient with Sickle Cell Disease (SCD) in Anuppur, Shahdol, Dindori, Mandla, Umaria, and Sidhi districts of MP is given in Table 2, which shows the success of the partnership of JSS with government. Out of the total screening and diagnosing of 76,442 patients for SCD at PHC, CHC and DH levels, a total number of 19,408 (25%) screenings were conducted by JSS in two districts of Anuppur and Dindori. JSS also provided counselling for the patients by organising regular patient support group (PSG) meetings at the CHCs and DH level and follow-up with organising treatment camp for SCD patients.

District	Screening Conducted by	vity of sickle d alth Facilities a	of sickle during the year Facilities and JSS Teams		
		Total	Sol +ve	Disease	Center
Anuppur	Public health facilities	10955	1088	72	486
	JSS project teams	13695	3121	205	2701
Dindori	Public health facilities	14512	1983	141	1201
	JSS project teams	5713	1436	227	1216
Umaria	Public health facilities	6687	506	44	447
Mandla	Public health facilities	10882	1340	106	668
Sidhi	Public health facilities	6741	48	1	24
Shahdol	Public health facilities	7257	222	38	104
	Total	76442	9744	834	6847

Table 2: Total Screening and positivity of SCD during the year 2021-22

Source: Annual Report 2021-22 of JSS. Page 30.

JSS also provides preventive and curative Ayurveda treatment through its Ayurveda Department which organise the outpatient clinic (OPD) thrice a week at the hospital for ailments like common cold, sinusitis, digestive problems, jaundice, arthritis, skin itching, urinary tract stones anemia etc. The Ayurveda physician also teaches Ayurveda system of treatment to different cadres of health workers and the department also prepares in-house various formulations for the treatment of many of the ailments along with conducting sessions on Yoga for the patients and staff members for improving fitness.

The creditworthiness of JSS to provide affordable qualitative healthcare services has been well recognised as it is also one of the few institutions in Chhattisgarh that provides patients with morphine for pain treatment and palliative care. JSS can do so by adhering to strict regulations regarding narcotics licensing requirements and maintaining thorough records. During the year, the JSS hospital had administered 18,000 morphine tablets in different doses, including those that were being referred to it, and 145 vials of injectable morphine.

CONCLUSION

Poverty alleviation programmes enable people to come out of poverty as it is India's most critical development challenge, which requires enormous efforts to address. The two best practices on healthcare services delivery of Akha and JSS that have been briefly discussed in the paper provides insights that can assist the poor residing in the remote, forest and rural areas to move out of poverty and avoid entry into it by providing easy and affordable access to healthcare and nutritional services at doorstep. Akha provides healthcare facilities to people located in remote, deprived areas in Assam through clinics that function in boats. The clinics during the flood times also provide emergency preparedness and relief measures. Likewise, JSS provides accessible and emergency healthcare to the people living in remote tribal and rural areas of Chhattisgarh and Madhya Pradesh. JSS empower the poor through promotion of community participation in healthcare through healthcare skill development of VHWs who are selected from the community at the grass-root level. Both Akha and JSS were at war-footing during the time of pandemic to maintain the continuity of medical and nutritional services along with campaigning about the Corona virus, neighbourhood surveillance, promoting social distancing, keeping watch on high-risk Covid patients with co-morbidities and mobilising the poor for vaccination with taking all precautionary, preventive and safety-regulations.

The healthcare services provided by Akha, helped people living in remote islands in Assam to have access to health services and it has been also found that the immunisation rates have significantly improved after the Akha boat clinics intervention. The passion and devotion of the medical team on the boat clinics, as well as the coordination and support of the district administration, line departments, and NRHM staff at the district and state levels, have all contributed to the programme's success. The Akha boat clinic can be replicated to provide access to healthcare in remote islands communities like those in Andaman and Nicobar Islands. The boat clinics can potentially be upgraded by providing more diagnostic services and in-patient care. Similarly, JSS is essentially the narrative of a small group of doctors' dedication with efforts to deliver high-quality healthcare to poor living in rural and tribal areas. These teams of medical professionals are role models and sources of inspiration, but replication necessitates the sacrifice and dedication of skilled doctors to deliver care to the poor living in rural and tribal areas. The ideology of Akha and JSS is also to contribute to the sphere of public health with partnership of government and continue research to improve comprehension and identify workable ideas that other health service providers can subsequently adopt and implement especially in rural and tribal areas.

In conclusion both healthcare best practices cases provide vital lessons for addressing the dynamics of poverty through meeting the healthcare and nutritional needs of the poor in remote and interior areas so as to protect them from falling into debt and in poverty due to ill-health. The two PPP healthcare models help in achieving the Targets set under the SDG1 like: 1.1. Eradicate extreme poverty by 2030, 1.2. Reduce poverty by at least 50% by 2030 and so on. Similarly, these two models address the Targets set under the SDG3 like 3.1. Reduce maternal mortality, 3.2. End all preventable deaths under 5 years of age, and 3.3. Fight communicable diseases.

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