VIJAYPURA'S HEALTHCARE

TURNING POINT

Field notes from a multi-level intervention

The ***inspiring*** turn-around story of one district, its health system, and the lives and livelihoods of its citizens

Sambhav
by LabourNet

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Introduction

Amid the Covid pandemic, the need to bring more sustainable and holistic changes to India's healthcare industry was indisputable. To make the health infrastructure stronger and more resilient, we need solutions that penetrate every layer of the health industry. With this in mind, Sambhav Foundation started a program in the district of Vijayapura that would serve as a microcosm to learn about the shortcomings in India's healthcare systems, and a testbed for changes that can be replicated nation-wide. This report highlights the successes and learnings from this intervention.

Message from the Chief Impact Officer

India's vast healthcare system has been consistently falling short of providing accessible, affordable and quality healthcare services for a large part of the population. The existing infrastructure, especially in smaller towns and villages, is inadequate to meet the demands of the growing population. There is just one state-run hospital for every 90,343 Indians and 5 government hospital beds for every 1000 people. Less than 10% of the population is covered by health insurance. The COVID-19 pandemic has further disrupted healthcare and other critical systems like education and supply chains and some of the losses are expected to affect generations to come.

Our progress as a nation, now, depends on our ability to implement rapid solutions to the challenges we face. However, the complexity of the situation is such that, realistically, a single-point solution isn't going to work. We need multi-pronged solutions that address these problems at different levels.

The program in Vijayapura arose out of a similar ambition: to improve public healthcare for a particular geography through a long-term intervention, that targets issues at multiple levels and through multiple approaches.

For Sambhav Foundation, attempting such a task was made possible because of our vast on-ground network and our expertise in remote training, assessment, and performance tracking. The rationale of this bigger intervention was based on the many smaller projects and solutions that we had tried and tested over a period. And this first-of-its-kind exercise in Vijayapura has shown us how we should be responding to a health crisis. The program is highly scalable and can, and should be replicated across the country.

I am proud to share this field report of the intervention with you and I hope that it will inspire you and show you that change is possible.

Gayathri

Dr. Gayathri Vasudevan

Chief Impact Officer at Sambhav Foundation

The COVID-19 Era and India's Health Crisis

Under the burden of the COVID-19 pandemic, health systems across the world collapsed. In India, even with one of the strictest lockdowns imposed overnight on a population of 1.3 billion people, we struggled to contain the spread of infection. And in the summer of 2021, as the second wave peaked, an already stretched infrastructure started bursting at the seams.

This crisis has underscored the structural weaknesses of India's public healthcare system.

With or without a pandemic, providing equitable and quality healthcare to our growing population has been a challenge. Historically, our public health infrastructure has been underfunded and under-resourced.

But what if instead of providing symptomatic solutions to individual problems, as programmatic interventions do, we look at the system as a whole and simultaneously provide the necessary support to the system and the individuals in it? Could such an intervention improve the access and quality of healthcare delivery for a region and reduce the burden of disease on lives and livelihoods? And finally, if the intervention works in the microcosm, could its lessons and benefits be applied to the entire country?

Sambhav Foundation's work in Vijayapura was an attempt to answer some of these questions. By **connecting different stakeholders, enabling the existing workforce, bridging gaps in knowledge, skills and technology, and creating awareness in the community,** we have been able to achieve a **turnaround in healthcare** for the entire asustainable solutions for the challenges that healthcare is facing. In this field report, we bring to you the structure and details of the intervention, the impact it created in the lives of the people and some of our key learnings which can be scaled up to achieve huge gains in healthcare for India.

The Evolution of Public Health Infrastructure in India

India's healthcare system and infrastructure has evolved on the basis of the Report on the Health Survey and Development Committee, a landmark document, commonly known as the

'Bhore Committee Report, 1946'.

The report laid down the principles that are still followed by the public health sector.

01 It called for the **three-tiered** (primary, secondary, and tertiary) organization of healthcare.

02 It recommended that health workers be **employed by the government.**

03 To ensure that access to **healthcare isn't dependent on a person's socio-economic** status, it recommended limiting the need for private practitioners.

The first National Health Policy of India (NHP)

was formulated almost 40 years later in 1983, which aimed to provide primary healthcare to all by the year 2000.

NHP 2002 built on it further to increase access to healthcare. Firstly, by increasing public expenditure on health, and secondly by using the private sector, which had expanded as public healthcare, fell short of the demand.

The National Rural Health Mission (NRHM), launched in 2005, was the

turning point for the health sector in the country.

It articulated the government's commitment to **increase public expenditure** on health from

0.9% to **2-3%** **of the GDP.**

The mission also aimed to **increase decentralization, improve community participation,** and **decrease inequity in access.**
18 states with weak public health indicators and/or infrastructure were identified and provided **additional support, financially and technically.**

The mission has also focused in increasing the number of doctors, nurses, and auxiliary nurse midwives (ANMs)

and upgrading the existing infrastructure, along with creating new facilities. Special efforts were also made to use information technology to track delivery of services.

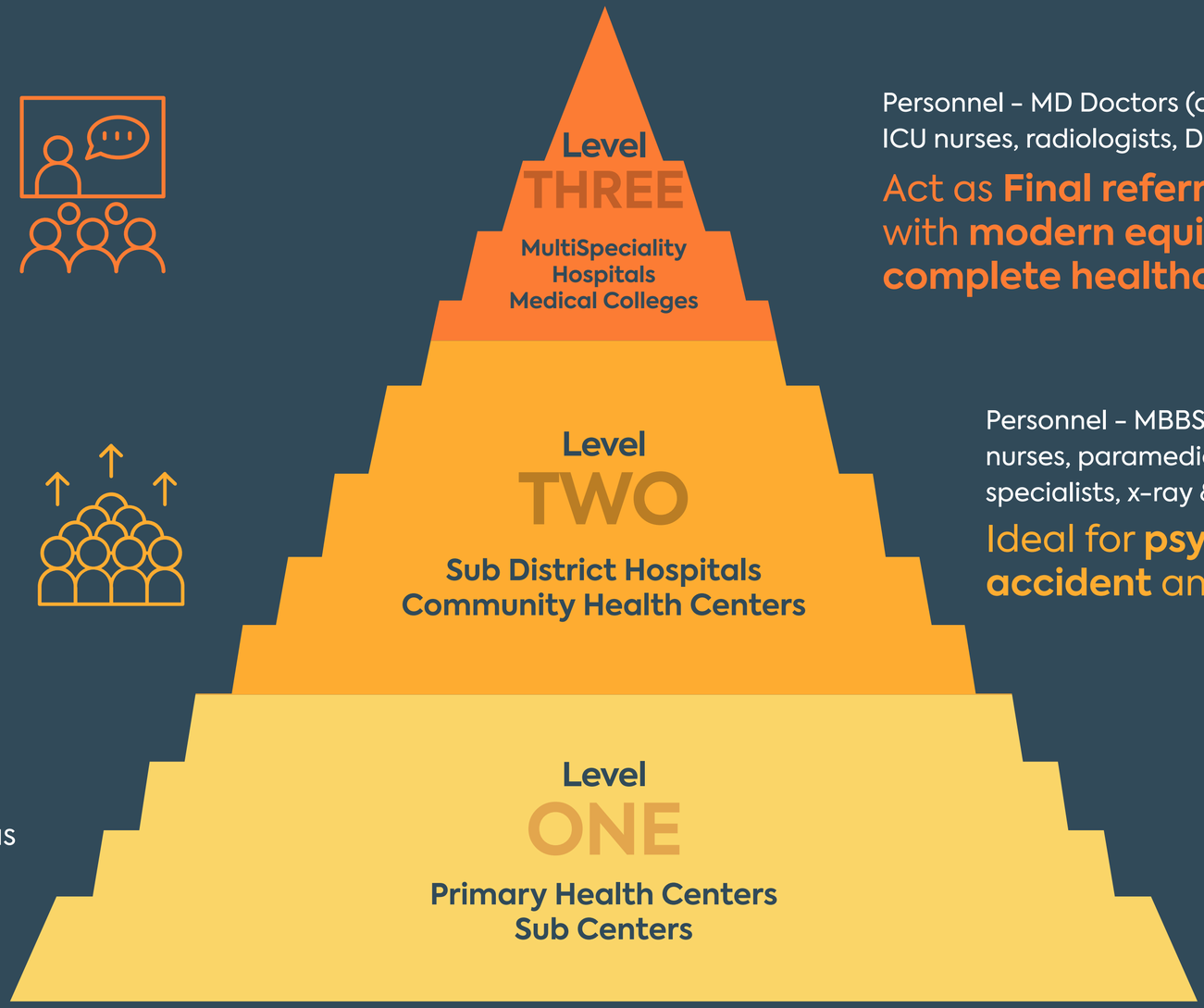
Despite these efforts over the years, India's **public health infrastructure** continues to be **plagued by inadequacies.** The quality of care provided **remains low.**

Healthcare centers, especially in rural areas, remain **understaffed,** without enough beds and other medical supplies. The gradual gains made have not kept up with our growing population.

India needs to urgently strengthen its public healthcare infrastructure through sustainable solutions

We need multiple interventions that work in parallel, creating impact at multiple levels for a complete turnaround of the public health sector.

The Three Tiers of Indian Healthcare



MultiSpeciality Hospitals Medical Colleges

Cater to populations greater than

5,00,000

and also act as teaching institutes

Personnel – MD Doctors (obstetric, psychiatric, nephrologists etc), ICU nurses, radiologists, Dialysis Technician etc

Act as **Final referral centres** with **modern equipment & complete healthcare services**

Sub District Hospitals Community Health Centers

Caters to population from

80,000 to **5,00,000**

Personnel – MBBS Doctors, nurses, paramedics, specialists, x-ray & lab technicians

Ideal for **psychiatric, rehabilitation, accident** and **trauma services.**

Primary Health Centers Sub Centers

Caters mainly to rural areas with population upto

30,000

Personnel – ASHA, AWW, ANM, CHW, Pharmacists

Improve **Health Awareness, preventive measures**

How the three tiers fell

India's first line of defence, the **primary healthcare system,** was the **first to fall.** Primary healthcare is tasked with educating the masses and raising awareness. The cadre of Community Health Workers like ASHAs was put in place specifically to break taboos and raise awareness about communicable diseases, among other things. But they were **over-worked, under-incentivised, and under-capacitised.**

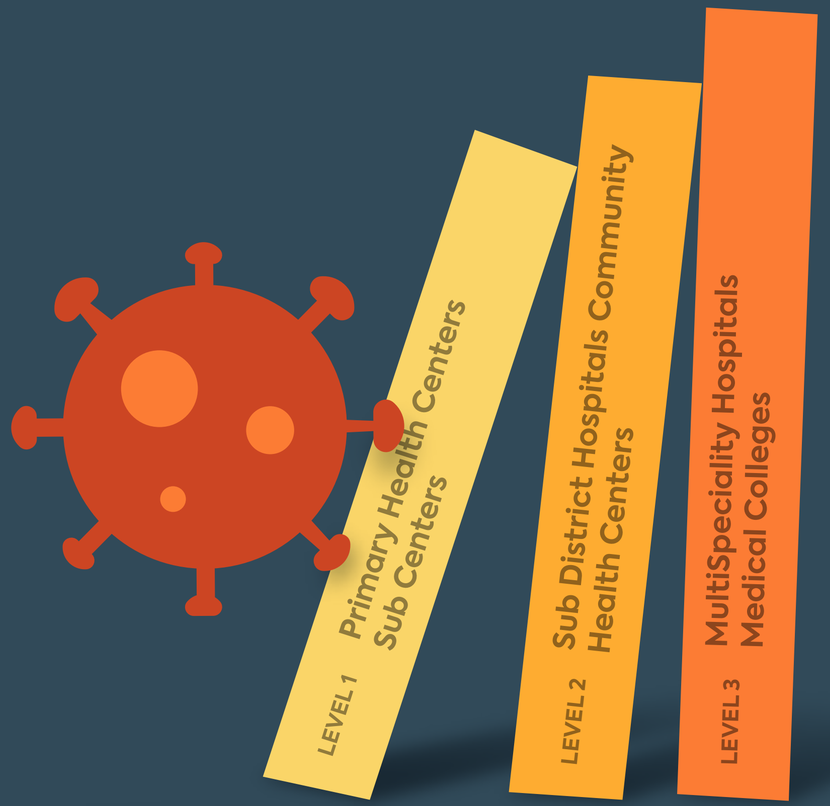
Primary Health Centers, usually staffed with just a single **Auxiliary Nursing Midwife (ANM)** and a limited range of medicines, are meant to cater to mild cases before they escalate. But they were **under-staffed, under-resourced, and not part of the disease triaging process.**

As **both these components** of the primary healthcare system **fell short, care, control, and containment** at the rural level became impossible.

The **second line of defence, sub-district hospitals** and community health centers, are meant to cater to moderate cases.

Sub-district hospitals **lacked the right infrastructure such as ventilators to arrest moderate cases before they became critical.** They also lacked the enough care personnel and community connect to properly manage the growing number of cases. Community health centers meant to quarantine patients **lacked the sanitation infrastructure, and eventually failed to gain social acceptance.**

As the **second line of defence fell, the flood of patients towards the tertiary care centres grew.** The condition of panic-stricken rural patients traveling to cities deteriorated when it didn't need to. **Avoidable deaths grew to unbearable proportions.**



Medical Personnel Shortfall in India

Comptroller and Auditor General (CAG) report in June

Clinical equipment

-27.21%

shortage

&

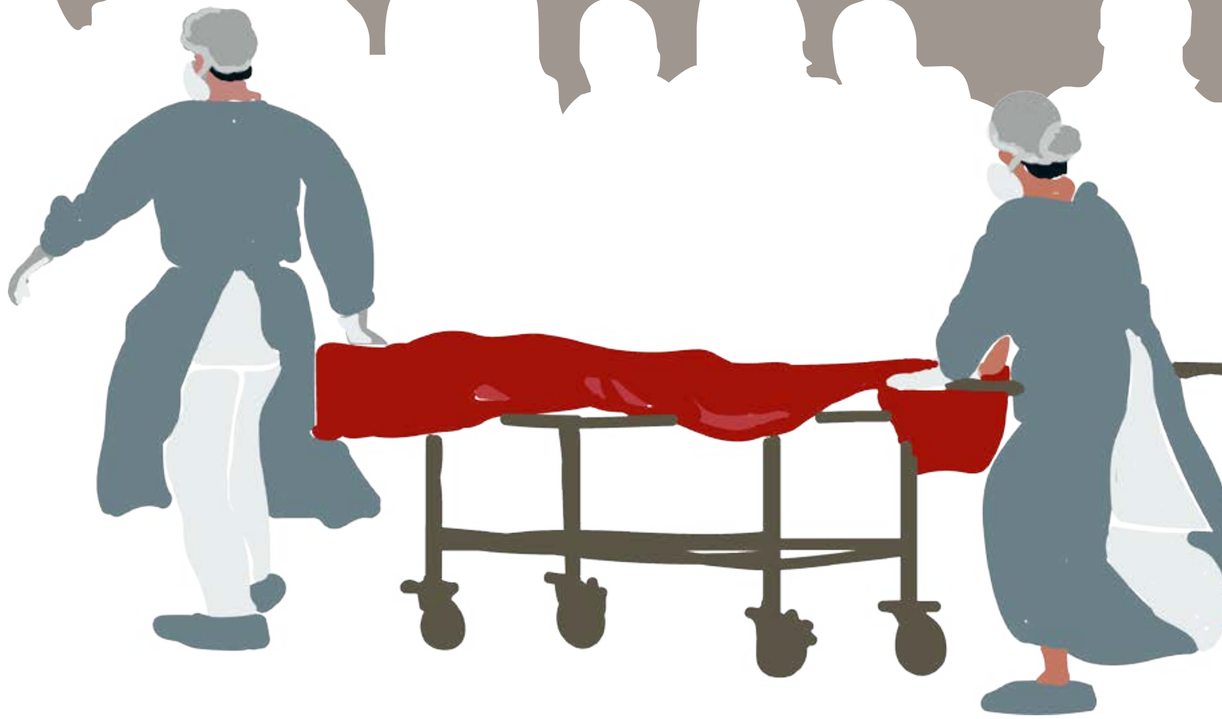
Non-clinical equipment

-56.33%

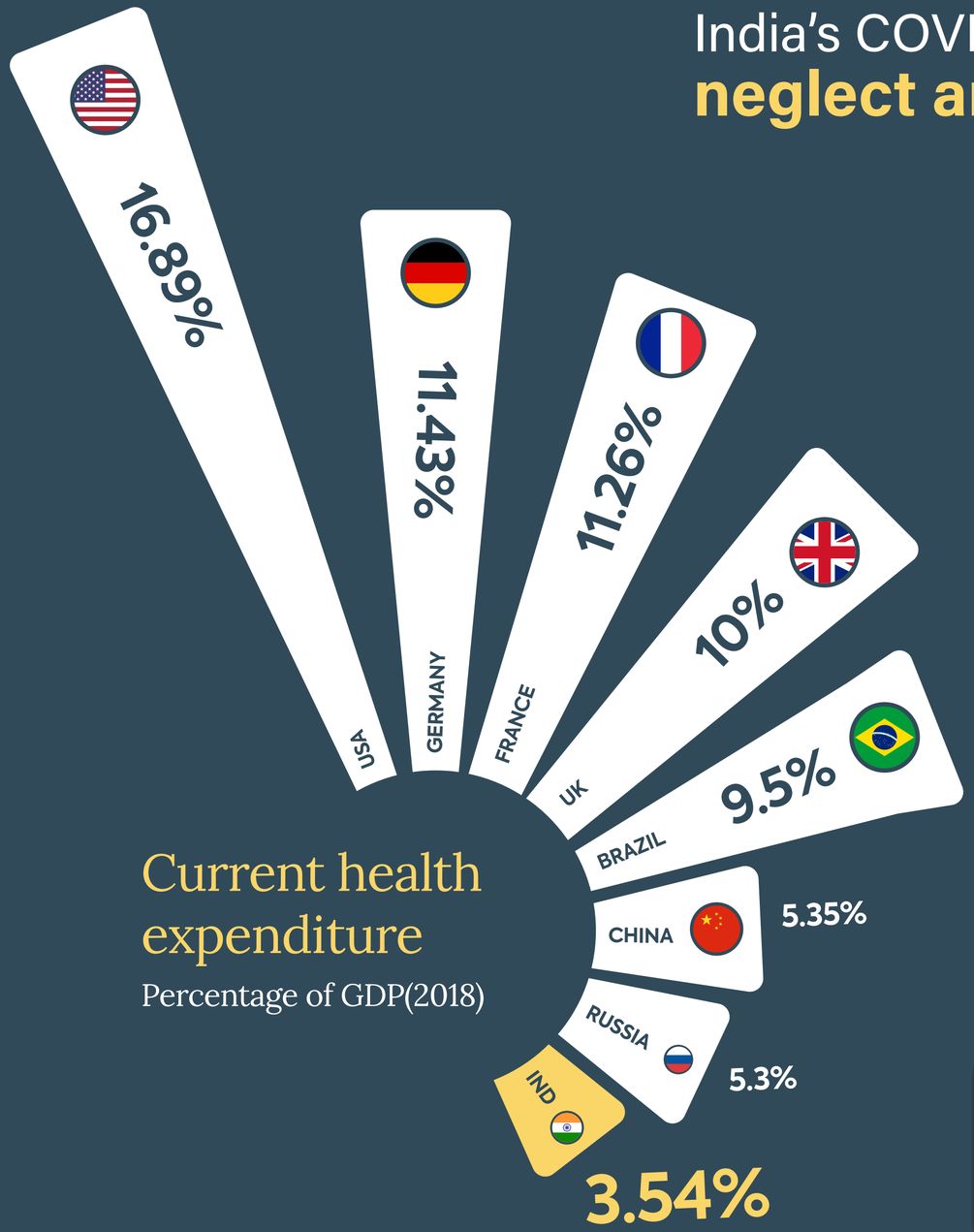
shortage

Shortfall at PHCs and CHCs in India

Surgeons	Gynaecologists & Obstetricians	Physicians	Pediatricians
-86.5%	**-74%**	**-84.6%**	**-81%**



India's COVID-19 crisis has exposed the **neglect and under-investment of the health sector**



Current health expenditure

Percentage of GDP(2018)

Rural India, where **71%** of the **country's population** is served by only **34%** of doctors fared **much worse,** accounting for **more than half the fatalities.**

India accounts for around **20.8%** of the **global burden of disease.**

There are only **8.5** **hospital beds** & **8** **physicians** per **10,000** **population.**

Critical medical equipment, too, is in **short supply** and of what is available, about **35%** is **faulty** and in **need of repair** at any given point in time.

With **50%** of the **global COVID-19 cases** & **30%** of **reported deaths**

Indicators of Poor Healthcare

Birth rate

2.22 **births** per woman (2018)

Death rate

7.19 **deaths** per **1,000** **population** (2020)

Infant mortality rate

29.7 **deaths** per **1,000** **live births** (2018)

Maternal mortality rate

113 **deaths** per **100,000** **live births** (2016-18)

Diabetes rate

more than

77 million **adults** **are living with diabetes;**

Its prevalence rate in urban areas is between **10.9% - 14.2%**

Obesity rate

Prevalence rate of obesity ranges from **11.8%** to **31.3%**

India ranks **3rd** in the global obesity index

Cardiovascular disease rate:

272 **deaths** per **100,000** **population**

against a global average of **235** per **100,000 population**

“For millions of Indians living in vulnerable rural and urban communities, Sambhav wishes to transform the way they access healthcare. Based on their support structure, preferences and needs, we take healthcare to their doorsteps. With comprehensive door to door screening, we are ensuring access to primary healthcare regardless of their limited economic resources. We offer treatments regardless of insurance status and levels of health literacy to ease the disproportionately high burden of disease on them.”

-Dr. Batool Fatima

Head of Healthcare Practice at Sambhav

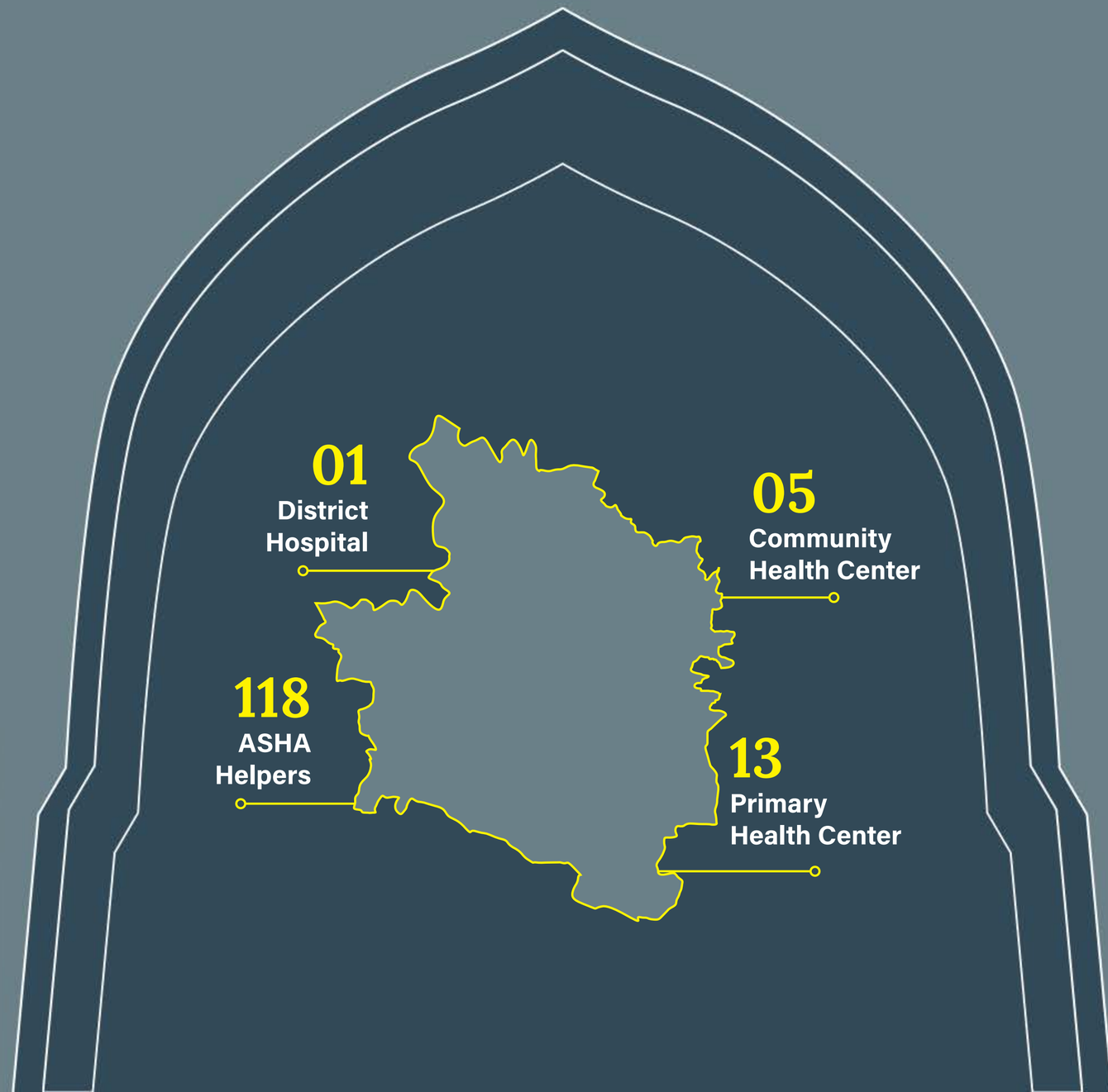
Vijayapura:
A District of Victory

Vijayapura district is **located in north Karnataka,** on the border with Maharashtra. Its administrative headquarters are located in Vijayapura, a historical city.

The foundation of the city was laid during the reign of the **Chalukyan dynasty of Kalyani** between the **10th** and the **11th century.**

The city is famous for its monuments like the **Gol Gumbadh,** the **Jama Masjid** and the **Gagan Mahal built** during the rule of the Adil Shahi dynasty and attracts scores of tourists.

It is one of the **top 10 most populated cities** in Karnataka and is well connected to major cities via road and rail networks. The Krishna River flows through the district and **agriculture is the main source of employment** and income in the district.



Battleground
Vijayapura

As COVID-19 cases started waning at the end of last year, people let their guard down. **Non-compliance to COVID appropriate behavior** (not using masks, crowding and lack of social distancing) created ideal conditions for

new variants of the coronavirus and a massive second wave left a trail of devastation in its wake.

In Karnataka, one-third of the total cases were recorded in the period between March and May 2021.

There were

20,837

Covid deaths

in just three months (April-June).

The **rate of infection in the younger population (<50 years)** jumped more than a

100%

and accounted for

24%

of the fatalities.

Before this surge, the **fatality rate for under-50 was**

18%

Vijayapura, too, was severely affected during the second wave. Because it is a border district (with Maharashtra), there were plenty of people who had migrated back during lockdowns. The majority of people who returned did not quarantine either because they lacked awareness or the knowledge of the right protocols. Multiple cases of infections were seen where there had been inter-state migration. Such spillover cases added to the numbers, straining the district health infrastructure.

Vijaypura district ~ from June 1 to June 15

167 Cases on an average identified every day

1289 Active cases

39 people lost their lives

445 fatalities in the second wave

Leading the healthcare frontline to battle

How the Battle was Fought:

Sambhav's Intervention

As the second wave of COVID-19 was making its way through the country, the government, civil society organizations and developmental aid, who came together to provide and donate medical equipment and other emergency supplies needed to combat the onslaught of infections. But that was just one part of the solution. At Sambhav Foundation, having been associated with the Vijayapura district over the past several years, we chose a ground-up approach through our grassroot network in the district. With the support of our corporate allies, we partnered with the local district administration team to develop a 360-degree plan to combat the second wave of COVID-19 infections.

Planning the Battle

The **first step of the intervention** was to form a **clear and deep understanding of what the nature of the problem was and where we were lacking.** Along with the district administration, we identified the key problem areas:

01 Extensive on-ground testing and triaging was required to avoid unnecessary crowding of hospitals. ASHA workers, who work at the community level, were well placed for such a task but were short-staffed and needed additional training.

02 Additional human resources were required to educate and support returning migrant labourers and people quarantining at home.

03 There was a need to spread awareness, battle hesitancy and dispel myths about the Covid vaccine.

04 Human resource to organize and manage vaccination camps was also needed. We needed trained people who could set up an ecosystem for following the correct vaccination protocols.

05 At PHCs and hospitals, there were shortages of medical and non-medical staff which was directly affecting patient care.

06 The existing workforce at hospitals lacked skill and training to manage patients and lifesaving medical equipment.

Understanding these gaps meant that we could now implement targeted solutions for them rapidly and efficiently.

THE FIGHT FOR Vijayapura

The Vijayapura model was not a single intervention. It was a series of input and support provided to both the system and individuals to positively impact the public health infrastructure of the district at every level. The inputs were designed to make healthcare more resilient not just against the current pandemic but to increase institutional capacity to withstand future medical emergencies as well.

Across **66 Gram Panchayats, 119 volunteers and four supervisors** were trained and deployed to **assist ASHA workers.** The trainings were carried out as a hybrid of face-to-face and online interactions, taking into account pandemic restrictions and the time sensitive nature of the intervention. Through customized modules, ASHA workers and volunteers were **trained on swab collection and door-to-door triaging.**

This trained force

surveyed **62,000** households

and **conducted** **25,000** swab tests.

By triaging, they ensured that only the severe cases were advised to go to the hospital.

This considerably reduced the pressure on the district level health facilities. Those with mild to moderate infections were educated on home quarantine protocols. They provided Quarantining patients and their families were also provided with logistical (food rations, medicines) and psychological support.

To support the government's vaccination efforts, 20 vaccinators, 20 CoWIN app entry operators, five data entry coordinators and one program manager were trained and deployed. This cadre provided the necessary support before, during and after visiting a vaccination camp. This included creating awareness about the vaccine, making sure people came for their vaccinations, managing the functioning of the camps, capturing patient data, and conducting follow-ups for people who need post-vaccination support.

At the **PHCs,**

3 doctors **20** nurses **10** coordinators

& **10** medical assistants

were trained to deal with patients and to correctly operate life saving medical equipment like SpO2 meters and oxygen concentrators. As a result, those who needed hospitalization, received the necessary critical care.

The planning and execution of these tasks was made possible with the support of the chief medical officer, doctors at the PHCs and the district administration. These efforts not just strengthened healthcare delivery for the district but also empowered the on-ground community workers, doctors, nurses and non-medical staff and gave them the confidence to handle health emergencies.

Towards a Healthy Vijayapura

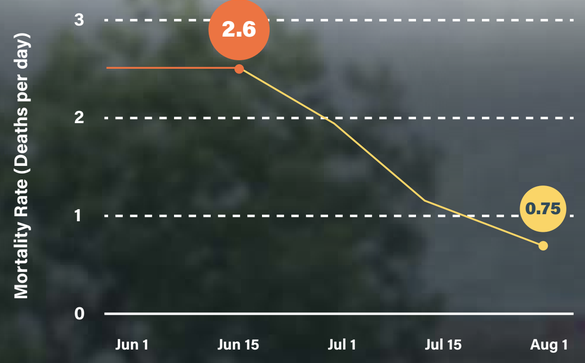
The coordinated efforts demonstrated a positive impact on controlling the spread of infection, as well as on the overall health of the district.

From **mid-June to August,** there was an almost

97%▼ reduction in active COVID-19 infections.

The number of fatalities for this period was **34** whereas, **39** had lost their lives from **June 1 to June 15.**

Mortality Rate (Deaths per day) Vs Dates



Multiple vaccination awareness programs were conducted to increase vaccine acceptance and coverage in the community.

Over a period of two months (June and July),

500,000 vaccinations

were administered in the district through multiple camps.

Routine immunization for infants and children was also carried out simultaneously.

25 children who had been orphaned or semi-orphaned, because of the pandemic, were identified and relevant government agencies were notified to ensure that they receive support.

Through collective action, focused solutions and community involvement, Vijayapura's public health infrastructure was transformed, saving lives and creating a more resilient system.

Active cases reduced from
1289 to 27▼

Fatalities reduced from
2.6 per day▼ to 0.56

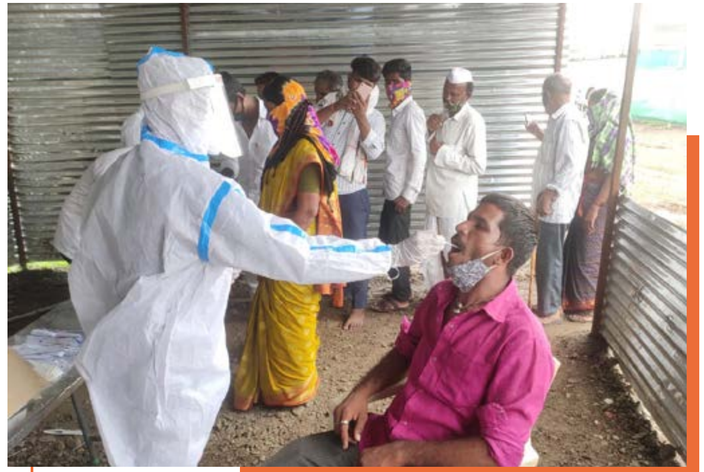
Over **500,000 vaccines administered**

The ultimate result

The capacity for resilience

The capacity to
Mobilize Communities
rapidly in the face of a resurgent pandemic, new variants, or any new epidemic disease.

The capacity to
Measure Health Indicators
such as blood pressure, respiratory rate, sugar levels, and numerous other vital signs.



The capacity to
Triage Conditions
such as Tuberculosis, Diabetes, Cataracts, Varicose Veins, and other treatable conditions.

The capacity to
Organize Camps
to immunize against diseases through vaccination, or cater to patients with treatable conditions.

The capacity to
provide care
through improved public health infrastructure that is on par with first class standards

The capacity to
provide treatment
by leveraging the strength of telemedicine, and improved capacity of PHCs and hospitals.

The People Speak:

Testimonials from the Field

"With the help of a well organised team of medical representatives - deployment of infrastructure & training organised by Sambhav Foundation & Labournet, the people of Vijayanagara have received invaluable support to win this battle against the COVID-19 Pandemic. Thanks to Sambhav Foundation, for their effective and rigorous implementation work on the field which has immensely helped in the transformation of the city's healthcare."

Bijapur District Collector

"I am responsible for collecting all data & making correct entries of people receiving the vaccinations in the system. Sambhav Foundation has trained us in this task to ensure we carry out our work without any mistakes."

Data Entry Reporter

"Sambhav Foundation enabled me with 2-day vaccination training thanks to which I can now administer vaccination shots with more clarity & perfection. "

Staff Nurse Vaccinator

"We are thankful to Sambhav Foundation for their training which allowed us to help the ASHA Sisters to properly communicate about the importance of vaccination in the society & organize vaccination camps for the local population."

ASHA Volunteer

It’s time to pass this torch of victory along and light a path to a brighter future

The Road Ahead: From Vijayapura to India

The intervention in Vijaypura saw a series of support, bolstering the public health infrastructure of the district at every level, especially at the primary healthcare level. The extensive triaging done at the community level ensured that only the most critical cases were referred to the district hospital, helping them with managing the patient load. Further, identification of symptoms at an early stage and subsequent quarantining helped prevent the spread of the infection.

All these were achieved by the existing ASHA volunteers and support from the local community representatives. A robust training programme devised by the Sambhav Team and District Administration enabled these health workers to lead the fight against CoVid-19 in Vijaypura, bringing down the rate of infection & mortality rates dramatically..

This model has the potential to be replicated across India - not just to manage pandemics like Covid, but also to strengthen primary healthcare services enough to combat other infectious diseases.

About Sambhav

Sambhav Foundation is a not-for-profit organisation striving towards social justice by empowering weaker sections of society. In their aim towards upliftment, Sambhav supports communities with the right infrastructure, education and means of livelihood for individuals to be able to stand up on their own feet. To foster independence in communities, the foundation also provides mentorship to individuals and groups for their entrepreneurial ventures.

sambhavfoundation.org

Acknowledgements

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