



Review Article

COVID-19 and the Resolute Response

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Abstract	Manuscript Information
<p>An empirical research aims to analyse the responses of getting vaccinated among the villagers of Kolachery Grama Panchayat in Kerala. At the time of fieldwork, systematic case studies were conducted according to the anticipated research design and it is revealed from the study that, in a time of COVID-19 related distress, villagers worked together and the Government had a successful history of experience during the vaccination drive among the village population. Above all, one's own thinking, feeling and choosing was important to make a decision, so most of them understood that every family was vaccinated at the earliest since people could still be the carriers of virus variants. The emergency was the same for everyone and most of the individuals in the Panchayat had tested positive after their first dose of vaccination.</p>	<ul style="list-style-type: none"> ▪ ISSN No: 2583-7397 ▪ Received: 25-11-2023 ▪ Accepted: 04-01-2024 ▪ Published: 05-01-2024 ▪ IJCRM:3(1);2024:20-26 ▪ ©2024, All Rights Reserved ▪ Plagiarism Checked: Yes ▪ Peer Review Process: Yes
	<p>How to Cite this Manuscript</p> <p>Arya, C. COVID-19 and the Resolute Response. International Journal of Contemporary Research in Multidisciplinary. 2024; 3(1):20-26</p>

Keyword: Empirical Research, Case Study, Vaccination Drive, Emergency

1. Introduction

The whole world was working on a battle footing to find a vaccine during COVID period. There was no substitute for testing, tracking, and treatment while directing all necessary measures. There were many pictures and videos where people were either lax or had stopped being careful. By and large, COVID-19 had led humanity into the successful experience in integrating technology. The CoWIN portal application was a key to vaccination efforts. Government had a successful history of experience in integrating with inclusive service delivery during the pandemic. The government had advanced the national injunctions for COVID-19 regulations included face masks, physical distancing, not spitting in open spaces, virtual work space at home, devastating of job or business time tables, sequestering and repeated sanitation. The arrangement to inflict or allay restrictions had to be on the basis of an examination of

the ground circumstances. The Government had likewise framed a “five-fold master plan for efficacious administration of COVID-19” measure, route, conduct, immunise and compliance with COVID-19 appropriate decorum. The master plan had emphasised that COVID-19 regulation could be successful exclusively across an entire preparedness of government and full blown of society approach. Stressing productive regulation of COVID-19 by following the five-fold strategy had observed dealings on negligence of COVID-19 treaties in different locations. Shaking hands, embracing each other and crowding were avoided and there was a need to prepare for the consecutive waves. In a time of COVID-19 related distress, it was the time for everyone to work as a team and the decision was taken by the LSG owing to the pandemic situation and the efforts of the government in tackling it. The police had been on the avant-garde in the combat against COVID-19 in Kerala. It was

important that every family be vaccinated at the earliest since people could still be the carriers of virus variants. People of Kolachery Panchayat have now resumed their work. The stamping out on life transportability, getting together, management of retail business outlets would be three-way confining. The neighbourhoods were witnessing an irremediable high rise of disease transmission. Populaces had to remain cloistered indoors and ventured out only to purchase edibles and medicines from local shops. The State government was strained to control public life rigorously to reduce deaths and hospitalisations. The frequent lockdown would overwhelm livelihoods. The LSG distributed complimentary food kits to the whole population in addition to migrant workers to make sure none starved. Community kitchens and reasonable price hotels would also provide food for needy people. The government would assist Anganwadi workers besides Kudumbasree units and also had hold on the last date for hand over land, tourism tax, and monthly rent for rental buildings and also fee for various licenses. Motorcycle monitoring would wipe locality to encounter pandemic code violations. The distribution of the first dose of vaccination ended in September 16, 2021 in the Panchayat had covered almost all those aged above 18 with at the minimum single dose of COVID-19 injection.

2. Review of Literature

A study carried out in Wuhan, China had disclosed that COVID-19 upsurges were correlated with a Wuhan seafood market that could sell variety of living creatures, where many of the COVID affected patients labored or come in contact and which was later shut for decontamination processes (WHO, 2020). The personal prompt spreading of SARS-COV-2 was intended to take place by and large, along with respiratory droplets, bear a resemblance to the proliferation akin to influenza. Along with droplet passage, viral strains were broken out in the respiratory discharge at the same time, individual with infectious illnesses such as coughs, sneezes or interactions could affect next individual if someone made direct exposure owing to mucous membranes. The contamination could also take place whether an individual come into contact with an infected area and then touching someone's eyes, nose or mouth. Normally, droplets would not move beyond six feet or about 2 meters wide, and would not remain in the air nevertheless SARS-COV-2 lingered within reach in aerosols under probing situations for not less than three hours (Van Doremalen, Bushmaker, Morris, & et.al, 2020). The third serology Survey by the ICMR had found that the percentage of infected children in the 10-17 age groups was around 25% which was similar to that of adults. Two factors that favour children, the academy statement suggested, are that they have fewer chemical receptors that facilitate viral entry and their immune systems are more primed. Other experts too had opined that children were not more susceptible and steps might be taken to get them vaccinated. As per the data collected in waves 1st and 2nd, even instances of severe disease in children had a chance to require admissions in ICUs. (www.ndtv.com) (Correspondent, 2021). Public health experts had called for a deeper epidemiological study and documentation of the Transmission of COVID-19 in two schools in Malappuram district and draw

lessons from the incident as schoolchildren might play a key role in augmenting disease transmission through the community. From the news report: "Many school transmission studies point to the fact that unlike adults, children remain largely asymptomatic even after contracting COVID-19. It is highlighted that only a small proportion of children have been identified as infected through testing, which was performed concurrently with the onset of symptoms," says JAMA editorial. In a report from Malappuram District, clusters were identified, only one child each was found to have symptoms; the rest were all asymptomatic (L.DeBiasi & Delaney, 2021). Large scale testing helped prevent many potential school and community clusters, says the report on 10th February 2021 (Maya, 2021). "The incubation period for COVID-19 is thought to be within 14 days following exposure, with most cases occurring approximately four to five days after exposure" (Guan LiQ, Wu, & et.al, 2020). "In a study of 1099 patients with confirmed symptomatic COVID-19, the median incubation period was four days (interquartile range two to seven days)" (Guan, Ni, Y, & et.al, 2020). "Individuals of any age can acquire COVID-19 infections, although adults of middle age and older are most commonly affected. In a study conducted with confirmed COVID-19, the median age ranged from 49 to 56 years." (Huang, Wang, Li, & et.al, 2020).

"In a report from the Chinese Center for Disease Control and Prevention that included approximately 44,500 confirmed infections, 87% of patients were between 30 and 79 years old. Older age was also associated with increased mortality, with a case fatality rate of 8 and 15% among those aged 70 to 79 years and 80 years or older, respectively. The findings from China shows that mortality was highest among older individuals, with 80% of deaths occurring in those aged less than or equal to 65 years" (Wu & McGoogan, 2020).

3. Material and Methods of Data Collection

The sample for this study was collected from Kolachery Panchayath, Kannur District of Kerala and initially, data was collected through the direct method of data collection. It was a time bounded study conducted in between 15th December 2021- 18th June 2022. Health sector personnel, community members of all age groups, and Panchayat administrative were the target groups for this study and it was finished within the stipulated period by employing Pen-paper Questionnaire (1500 respondents), telephonic conversation, direct interview, participant observation, and informal interview using video calls. Timeliness was the crucial factor since the study was conducted for six months and no other studies had done in this area related to COVID-19. Case studies were employed effectively with informed consent, as research ethics are crucial.

The Responses of Getting vaccinated

The COVID-19 pandemic furnished as a pattern of how rapidly people could access rapid diagnostic tests. All villagers of all age groups in the Panchayath would receive COVID-19 vaccination free of cost as and when the central government made vaccines available to all PHCs. It was a matter of huge relief that the COVID-19 active case pool in the Panchayath had been

declining slowly but steadily. In the peak of the pandemic in October 2020, the active cases had dropped in accordance with the available report of that time. However, whether this declining trend would continue was something that the Panchayath was quite anxious about. The declining trend was a positive indicator and the uncertainty cleared after 2021 December. There were deaths related COVID-19 complications among those who were fully and partially vaccinated. This was a spike expected by health authorities as mortality was known to go up with the immediate period after the peak. The vaccination was disposed first to health sector personnel and then to villagers over age of 50, with those over 60 having prime concern on the basis of their health conditions. A new digital platform in the COVID era, Co-WIN would be available for COVID-19 immunisation delivery. Government sought to dispel public confusion about vaccine efficacy and safety as they stepped up their vaccination campaign. The Panchayath still experiences vaccine hesitancy, particularly among the elderly, homemakers of all age groups and the Muslim community. The only way to deal with this was to be amenable and candid about repercussions and post-vaccination symptoms described by the medical experts via social media. Past vaccination campaigns have had temporary setbacks as a result of inaccurate information spread through the social media about severe side effects from vaccinations. In addition, it was crucial to conduct long term follow-up on everyone who received the immunisation. Due to hesitation roughly 11 to 12 villagers per ward missed their first vaccine shot despite the fact that there were no significant illnesses or other health related concerns among them. Some of the Muslim homemakers were not getting vaccinated and they would not be interested to do so. Some of the villagers said they have experienced adverse reactions after receiving the immunisation and were more reluctant to have the booster shot. They felt that they had lost faith in immunisation as a result of seeing deaths and confirmed cases of COVID-19 in their neighbourhood who had received their entire courses of vaccinations.

The exigency to commend on the vaccines, even in the defection of fruitful data would have been allowable if Coronavirus had been malignant with an extravagant feasibility of death in those who were infected, as in the condition of Ebola and Nipah Virus scepticism. The infection such as COVID-19 with low fatality rate and public at large vaccination plan of action made comprehension to hold fast and had a productive vaccine as a substitute for time-honoured immunisation that might not function. *Covishield* is the most popular vaccine among the village population and fewer people have chosen *Covaxin*. Adult population had a choice to select any of these vaccines for emergency use. From the beginning of vaccination drive, it was clearly evident in accordance with the news media that the assent was afforded to *Covaxin* even without potency data led to enlargement of vaccine hesitancy and some of them forced to choose at least *Covishield* to get vaccinated on time for various purposes such as education, migration, job and other necessities.

Photo 4.1 People wait for vaccination at PHC in July 2021



Source: Field Data

During the vaccination drive, vaccine insufficiency was extremely being sensed and when immunisation of the high risk group of senior citizens was near fulfilment had entangled the vaccination drive till August, 2021. On 27th September 2021, migrant workers had started immunisation at Kolachery PHC and free mobile COVID-19 RT-PCR tests made available on every Wednesday and Saturday until the COVID brigades were disbanded on 1st November, 2021. Misinformation grounded for larger concern and badly affected with vaccine hesitancy among of all age groups but their attitude had changed significantly due to the purposeful vaccination certificate, which was made mandatory for travelling, examination, migration, and also participation in various conferences. At the beginning of the second wave lessened faith in immunisation could give on to incapability to attain public health aims and had larger number of deaths. This was solved by the time when other COVID-19 vaccines from *Pfizer*, *Moderna* and *AstraZeneca* and others had been green lighted. However, the rapidity exhibited by the Indian regulator to accept *Covaxin*, in the exclusion of potency data had taken the edge off. The postulation that the *Covaxin* would be efficacious against virus mutants even in the exclusion of potency data was based upon the assertion that wielding the unabridged viruses that was killed might be provided enhanced protection. There was a confused state of affairs among the populace whether *Covaxin* was based on an old strain of virus and would it take up to work. This made people to wait and have *Covishield* vaccine instead of *Covaxin*. Once medical potency data made accessible through media have been examined by the Drug regulator official hence there were no issues pertaining to vaccine hesitancy at all with taking the immunisation in the better part of the population. The *CorBEVax* (“a recombinant protein sub-unit vaccine for the novel coronavirus” evolved by the Texas Children’s hospital and Baylor College of Medicine) vaccination slot could be booked through Co-WIN app or Co-

WIN portal for the age group of 12 to 17 and online registration started on 1st January, 2022 and also *Covaxin* was made available to the age group of 15 to 17 were vaccinated at Kolachery PHC, Pamburuthi PHC and Anganwadi Centres on January 4th, 2022. During December 2020 COVID-19 vaccine permission was restricted only to high risk population. Hence, emergency was the same for everyone and the high-risk groups reserved for vaccination on a priority basis once vaccines got emergency use approval had worked out to elderly population. As per the Knowledge of COVID-19 re-infection it is understood that after COVID-19 infection, antibodies stay in the body for anywhere between three to five months. If a person gets infected again after 90 days, it is called re-infection. Once COVID-19 tested positive, the person should not be vaccinated for three months. Most of the individuals in the Panchayat had tested positive after their first dose of vaccination. As a result of this, the second dose of vaccination was delayed and they had shown less interest in getting the booster dose. People would ask the question that the immunity conferred might not last for very long based on what they have read about the vaccines, which in other words meant that those who had been administered vaccines could still be vulnerable to COVID-19 even if the vaccination drive was increased manifold. They would think that it would take years even with accelerated vaccination and therefore vaccines were not infallible and a little bit of laxity on the part of those vaccinated would render them vulnerable again.

Photo: 4.2 People standing in front of Kolachery PHC to be vaccinated at night in July 2021



Source: Field Data

The State government stopped providing vaccines to the private healthcare sectors by 26 May 2021 and this was being utilised particularly for vaccinating the preferable groups with co-morbidities in the 18-44 age groups. Many who were aged 60 and above regarded as the most endangered to COVID had not given even a first dose of vaccination at that time. Many villagers in the 45 and above age groups who had received the initial dose of *Covaxin* and who were overdue for a second dose were

fastened then since the state had entirely given out of *Covaxin* stock. Meanwhile, the study regarding the vaccination had already shown that an initial dose of immunisation offers very little shielding against the emerging virus variants. The elderly were remaining vulnerable to infection. Several bedridden patients and their kin were unwilling to get them COVID-19 jab. At least some of the bed-ridden patients in the Panchayat were unwilling to take COVID-19 vaccination because they were scared that it would complicate their existing health conditions. Local body had directed ASHA workers to ensure that all bed-ridden patients were given both doses of vaccine. Even though consent of the patient was required for the purpose however, a few of the nurses providing palliative care in the Panchayat were not keen on taking the jab. All the bedridden patients in the Panchayat are still in such a condition that they cannot move around without the help of caregivers. They are in a weak mental and physical condition that restricts them from receiving the vaccine doses. The all-inclusive circumspection to assure swift access to COVID-19 immunisation for every villager by the local body was appreciable. The world's foremost-inscribed vaccine against COVID-19 was Sputnik- V available in the private hospitals. Persons aged 45 years and above for COVID-19 vaccination and had no need for a co-morbidity certificate for people aged 45-59 years on 1st April, 2021. The *CoWIN* software was also being suitably modified at the time of online registration and majority of the villagers relied on spot vaccination set up by the local body and had 150 slots per day at PHCs on every Tuesdays and Fridays. The efforts made by the local self-governance over the past two years in each ward had been successful and that only a small proportion of the population remained unvaccinated.

Reflection on the COVID-19 scenario from a Select Few Individuals

Case study-1

Photo 4.3 Reflection on the COVID-19 Scenario



Source: Field Data

A 50-year-old individual, Mrs. Prameela K presented with dizziness for one month and headache for three days in October, 2021 when she was tested COVID positive. She was a known case of RHD (Rheumatic Heart Disease), severe MS (Multiple Sclerosis), mild MR (Mitral Regurgitation), and TR (Tricuspid Regurgitation) who underwent OMV (Open Mitral Valvotomy) and TV repair at Manipal Hospital in 1998 and had Tricuspid Annuloplasty in December 2020. She has been on medical follow up since then. Due to COVID positive, she had dizziness and sustained a head injury on 13th October, 2021. The lady had a headache since then and was evaluated at a local hospital in the Panchayat and thereafter referred to *Sree Chithra Tirunal* Institute for Medical Sciences and Technology, Trivandrum. She was suspected to have *Tachybrady Syndrome* and *Cardiogenic Syncope*, hence admitted for further management. By that time Mrs. Prameela contracted COVID-19 and was hospitalized and medical experts monitored her closely as her cardiac condition put her at a greater peril of difficulties from COVID-19, eventually she made a full recovery and no post- COVID stress so far. She is having two sons and her husband was a gulf returnee. As a COVID-19 survivor, she opined that fears about COVID-19 had brought complications and people often avoided proper medical care.

Case Study-2

Photo: 4.4 Reflections on the COVID-19 Scenario



Source: Field Data

A 57 year old female, Mrs. Sathi T was diagnosed with Type 2 DM (Diabetic Patient), had hypertension presented with fever and multiple episodes of vomiting and Myalgia of one week duration in September, 2021. She was initially evaluated from Ashoka hospital, Kannur and referred to BMH (Baby Memorial hospital Ltd., Kozhikode) for further management. She had no chest pain or breathing difficulty and was diagnosed with Leptospirosis (it is a bacterial disease transmitted from animals like Rat). At the same time her husband tested COVID positive and she had a negative test result. Joint pain, back pain, stomach pain and vomiting were the other primary symptoms she had before feeling a fever. However, her husband had mild symptoms. After three days from the beginning, she was admitted to KOYILI Hospital, and the doctors reported that she had kidney failure and had a test for heart block and the result was negative then. Her relatives worried about her, then she had been shifted to Ashoka Hospital, she tested COVID, and got negative results two times. She gained her confidence to go back home.

Experts from BMH Hospital had laboratory investigations and her blood samples showed neutrophilic leukocytosis (too many neutrophils in the bloodstream or a high white blood cell count), thrombocytopenia (low platelet level in the bloodstream), hypocalcemia (vitamin D deficiency), elevated urea, Creatinine (a waste product that comes from the body muscles) and deranged LFT. Her *Leptospira IgM Card* test was positive. She recalled that she had a rat bite while sleeping that caused such a condition. She was treated with injection *Ceftriaxone*, *Doxycycline*, PPI, Calcium supplements and other supportive measures. Nephrology opinion was taken and suggested conservative management and then she gradually improved with the treatment, RFT, platelet counts and other parameters showed a normalising trend. At the time of discharge, she was asymptomatic and hemodynamically stable in her clinical records, which means stable heart and good blood circulation. She was being discharged with medical advice and her COVID test results were negative even if she had been exposed to her husband who tested positive. She is fully vaccinated and shows interest in Ayurvedic medical care more than any other systems of medicine. Her husband had insomnia as a post-COVID illness and he has gotten COVID shot, however got a breakthrough COVID-19 infection. None of them in their family tested positive except him. The lady Mrs. Sathi is still healthy and active and had a rare experience ever in the Panchayat.

Case Study-3

Mr. Govindan M, 69 year old individual was a banker in the Kolachery Co-Operative Bank belonging to Cheleri Central 13th ward, diagnosed with renal failure and has fought the disease. He was a heart patient with high blood pressure and high sugar levels. He was the first person in the Cheleri central, 13th ward tested positive for COVID on 7th March 2021 when he was hospitalized for heart disease treatment. His Kidney failure due to COVID and underwent dialysis since 16th November 2021 and it is still continuing. There were many heart patients in the Panchayat who had recovered totally from COVID infection and no serious COVID illnesses. This was an exceptional case.

Photo: 4.5 Reflections on the COVID-19 Scenario**Source:** Field Data

Mr. Govindan was referred to Pariyaram Medical College ICU after testing positive. Unfortunately the Co-morbidity complications with COVID medications made him a victim of sudden loss of Kidney function. As per doctors, who treated him, kidney transplant could not be possible because he is going through severe medications and the regular dialysis treatments is the only necessary way recommended for him, and this would have turned fatal, if not treated promptly. His health conditions worsened once he tested COVID positive. His wife is still in debt for a living and they did not receive any assistance from the Panchayat due to some political issues. His wife had a tea shop and their son was a gulf returnee and now working as a security personnel in the *Sree Chand Hospital*, Kannur. Mr. Govindan continues to have courage and mentally prepared in his health and medicine and seeks advice from medical professionals for a peaceful life as a result of severe post-COVID complications.

Case Study-4

Despite the fact that, direct sales had been growing year by year and the COVID-19 scenario had given many people direct sales as a strategic asset in the Panchayat. Their direct channel strategy improved the business during the lockdown period as well. Due to the pandemic, direct selling could be done over phone or online had seen a remarkable increase in their sales. Due to this significant increase, many hoteliers had started direct sales as a distribution strategy. Direct selling mostly includes food, sanitary products, medicine, dress materials and home appliances proved its strong sales potential and adaptability.

Photo 4.6 A direct selling sales representative**Source:** Field Data

During the lockdown, Mr. Abdul Salam, a 65-year-old direct seller from the 8th ward of the Panchayat, had done a great deal of business. He was a hotelier and began selling GLITTER company products directly in 2019. Products like hand wash, dishwashers, toilet cleaners, and comfort conditioners for washing clothes undertook well when the villagers preferred to buy almost all of them after the lockdown period happened to restrict travel. He claimed that COVID-19 and the lockdown had a positive response and impact on him and his family, and the post-COVID period had given him dull business.

He used to observe all the precautionary measures for virus transmission when selling products directly to every household at the time of the pandemic struck when direct selling firms had greatly improved. As a direct selling sales representative, he had his conveniences and particular experiences. The retailing of COVID-19 prevention products for instance, sanitizers, which were the new needs of the consumers, had improved the business. He had improved his relationships with the customers of Kolachery Panchayat over the 17 wards. According to him, the majority of the households accepted his selling and would not even worry about the possibility of viral transmission. He has not yet had an impact on the positive COVID test. During lockdown, he could establish a rapport with the customers and keep the business afloat.

4. The findings emerged from the study

The research has investigated to seek out the responses of getting vaccinated and it is understood from the study that, impact assessment of emerging COVID variants between those who are vaccinated and unvaccinated in the 17 wards of the Panchayat have been experienced common health symptoms and post-COVID illness. Moreover, the majority of the respondents felt

that effectiveness of vaccines significantly reduced transmission. However, COVID-19 mortality rate has seemed to be indistinguishable in both immunised and non-immunised individuals with pre-existing comorbidities regardless of age. Comparison of the results revealed that precaution dose hesitancy is higher in number among all age-groups. A small number of respondents who are special cases, those interviewed indicated that, the body reacts to the medication and heals itself, no pharmaceuticals can cure a sickness shows the harmony between conceiving and living.

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