

Analysis of Public Health Care Management in Dealing with Covid 19 Situations in India

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ABSTRACT

The COVID-19 pandemic will continue to have an impact on foundation projects worldwide in all sectors, as disruptions to supply chains, a decline in customer demand, and changes to health regulations force a reevaluation of how business is conducted. Public-private partnerships (PPPs) communicate foundation initiatives, which are more difficult to govern due to the long-term authoritative obligations imposed between counterparties, such as outside loan specialists and financial supporters. In addition to determining how the targeted population generally feels about the quality of services they receive, the study aims to gain a deeper understanding of Ayushman Bharat, a program that falls under the public-private partnership model in the healthcare sector and is necessary to support public-private partnership. The study aims to present recommendations to the government that explicitly encourage the expansion of public-private partnerships and the involvement of private and public firms in the development of healthcare. Nevertheless, there are few state-level studies that address the COVID-19 scenario. The studies on public opinion of the PPP model in the health sector have a gap that the researcher has identified. Therefore, this study aims to investigate practitioners' opinions regarding the implementation of the PPP model in the health sector as well as the public's perspective of the model's many aspects.

1. Introduction

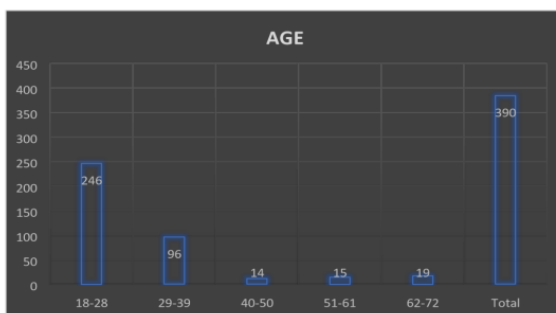
The COVID-19 pandemic will continue to have an impact on foundation projects worldwide in all sectors, as disruptions to supply chains, a decline in customer demand, and changes to health regulations force a reevaluation of how business is conducted. [1]. Legislators may independently decide to include increased costs or decreased revenues in their financial reports, alter administrative procedures, or reduce maintenance systems in fully funded projects. This is not the case with public-private partnerships, which are long-term agreements founded on fundamental business assumptions, explicit execution requirements, and the sharing of risks and costs between the general public and private groups under the supervision of authoritative relationships that weren't prepared for an extraordinary external shock such as the COVID-19 pandemic [2]. Therefore, parties to public-private partnership agreements must agree on the best way to handle the impact of COVID-19 in order to maintain client services and ensure that the project continues to provide financial incentives to the government. For state-run administrations, managing the COVID-19 impacts in public-private partnerships may provide data imbalance difficulties, particularly when it comes to hiring executives and weak disclosure rehearsals [13].

As we unwittingly enter the COVID-19 era—which is undoubtedly here to stay—public-private partnerships are once more being criticised by political, business, and healthcare leaders as the best ways to lessen this persistent pandemic, which has destroyed economies, infected over 8.5 million people in 188 countries, and resulted in over 450,000 deaths globally [4]. 2020; John Hopkins University, USA. Given that the pandemic claimed lives everywhere, it is critical that the government recognise its authority and duty. In order to reach as many people as possible and provide the facilities required to avoid the peak, the public and private sectors must join hands. The virus operates swiftly, so treatment must be given right away. In the long run, synchronising the public and private sectors to provide this kind of service would be valued and contribute to the development of a better system [5]. The study primarily examines the function of public-private partnerships in Indian healthcare during the COVID-19 pandemic. We will gain a deeper comprehension of the supply chain that ensures access

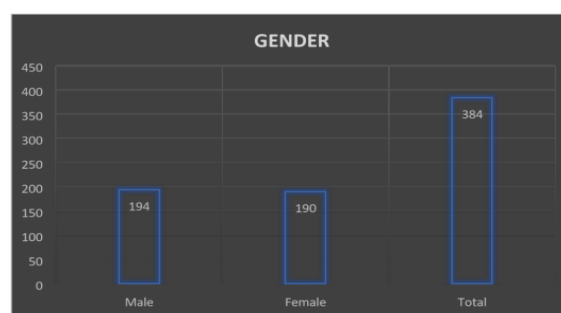
to healthcare during these difficult times with the aid of this study [6]. Research has previously brought up a number of problems and difficulties that could arise when Public Private Partnership initiatives are implemented, such as a lack of openness and disparate work ethics and attitudes. In order to choose a more promising public-private partnership model for India, this research can help us better understand the dynamics of the model [7].

2. Methodology

The IoT-23 dataset is a comprehensive resource specifically created for conducting research and One approach to methodically addressing the research challenge is through research technique. It is a methodical process to figure out how to solve a problem that is being studied. Research methodology involves selecting appropriate methods or procedures to test a research problem's hypothesis while also carrying out measures to verify it [11]. This research study has supplied a comprehensive view of the technique to evaluate the difficulties experienced by the healthcare sector under public-private partnerships and to evaluate the opinions of the public regarding the quality of healthcare services provided under public-private partnerships. The current study has an exploratory and descriptive focus. The cross-sectional research of the healthcare community is covered by the descriptive research in order to evaluate the degree of perception and to investigate the obstacles that they faced during the COVID-19 epidemic. [12].



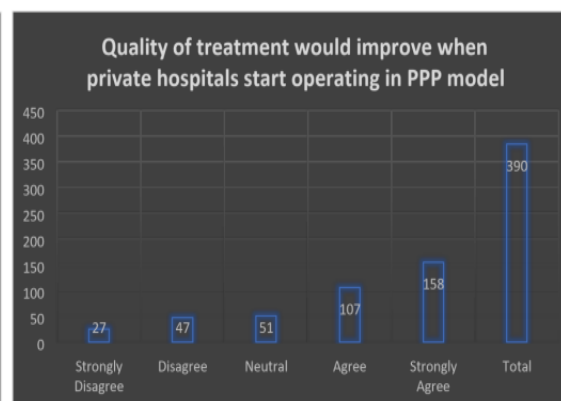
(a)



(b)



(c)



(d)

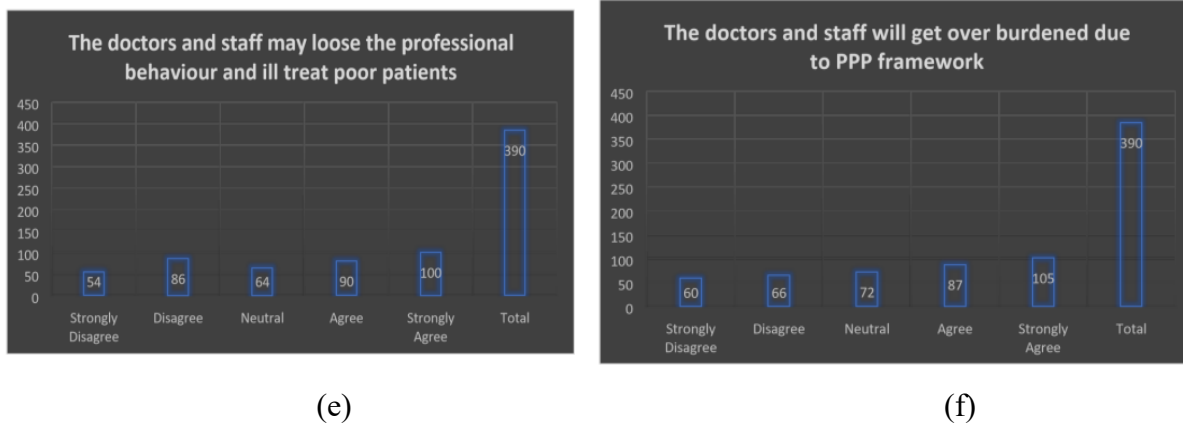


Figure: 1- Chart depicting percentage of (participation profile)

In order to determine the degree of perspective of PUBLIC PRIVATE PARTNERSHIP, the research study has recruited doctors in the study region for qualitative analysis as well as general people from various demographic backgrounds. Both primary and secondary data form the basis of the investigation. Since the data was taken during the epidemic, the primary data was obtained using a Google Form questionnaire. The investigator has performed phone conversations with physicians employed by both public and private healthcare facilities. [9–10].

Statistical Analysis

The collected data has been edited, structured in a sequential manner, and categorised into appropriate tables, graphs, and figures in accordance with the specifications. Descriptive statistics have been used for analysis, primarily for the purpose of calculating frequencies in conjunction with graphics. Additionally, inferential statistics have been used to extract the primary competencies from the collection of competencies and to test the hypothesis [14]. The Anova one-way test has been applied. Additionally, sentiment analysis has been done using Nvivo software to comprehend respondents' attitudes towards the categories in order to promote the public-private partnership of the research region. The ANOVA test enables the simultaneous comparison of more than two groups to ascertain whether a relationship between them is there. In order to achieve the goal of researching the difficulties faced by healthcare facilities using the public-private partnership model during COVID-19, a qualitative analysis was conducted [3]. A word cloud was created using 100 focused and precise terms in an attempt to identify the main themes that may be further investigated in order to better understand public-private partnerships in healthcare. The result was the word cloud that is shown below.



Figure 2: word cloud of perception of doctors about Ayushmann Bharat



Figure: 3word cloud of challenges faced by doctors during covid-19 pandemic

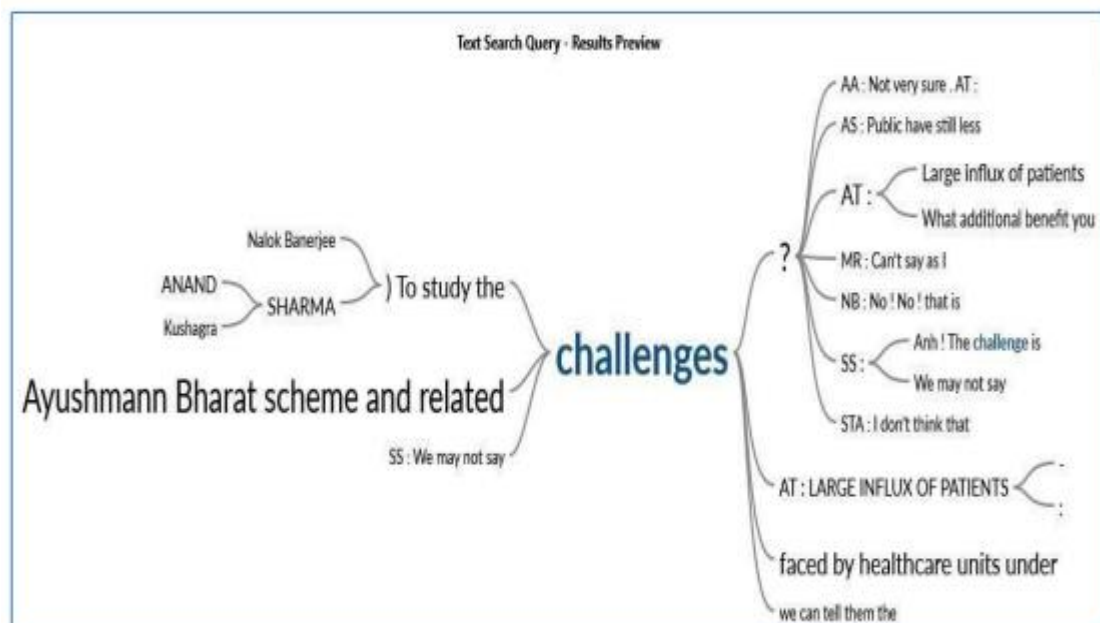


Figure 4: challenges related to Ayushmann Bharat Scheme

As a result, the themes that emerge indicate that there aren't many difficulties, with "pressure" emerging as the most significant and pertinent issue that hasn't been explored before. The remaining pertinent words and concepts have either been thoroughly examined earlier or have no bearing on the challenge theme [8]. The burden placed on hospitals and the health care system as a result of public-private partnerships is the sole major issue identified, as Figure 4 illustrates. The current study was conducted while COVID-19 was in effect, and the pressure felt and created was due to COVID-19's prevailing conditions as well as PUBLIC PRIVATE PARTNERSHIP.

The One-Way Anova Test was used to test the hypothesis. Given that the F value is 2.181 and the P value is 0.141, both of which are greater than 0.05, it can be concluded that there is no discernible variation in respondents' assessments of the calibre of healthcare facilities operating under public-private partnerships.

Table 1: One-Way ANOVA test on Age factor

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 2.286 | 1 | 2.286 | 2.181 | .141 |

| | | | | | |
|---------------|---------|-----|-------|--|--|
| Within Groups | 400.339 | 382 | 1.048 | | |
| Total | 402.625 | 383 | | | |

Since the P value is 0.141, which is higher than 0.05, as was previously established, the null hypothesis is accepted. Regarding the respondents' opinions of the quality of healthcare facilities under the public-private partnership model based on gender, there is no discernible difference.

3. Conclusion and future scope

Health-related public-private partnerships are having an impact. Without a doubt, the public has recognised the positive work that the public-private partnership has done in providing healthcare, particularly with regard to diseases like COVID, HIV/AIDS treatment, immunisations, malaria, and many others that were previously difficult to treat with only government facilities, particularly in developing nations like India. The government of India has built health facilities that are now life-saving resources for the broader population because everyone who comes in receives care under a public-private partnership structure at a discounted or free cost. The work presented the following results and suggestions based on the data. The suggestions are crucial for PUBLIC PRIVATE PARTNERSHIP stakeholders, especially for funders, patients who use these facilities for treatment, district health offices, and the MoH.

Reference

- [1] Kumar, Anil, and Rupali Roy. "Application of mathematical modeling in public health decision making pertaining to control of COVID-19 pandemic in India." *Epidemiology International (E-ISSN: 2455-7048)* 5, no. 2 (2020): 23-26.
- [2] Mishra, Anshuman, Srijita Basumallick, Albert Lu, Helen Chiu, Mohammad A. Shah, Yogesh Shukla, and Ashutosh Tiwari. "The healthier healthcare management models for COVID-19." *Journal of Infection and Public Health* 14, no. 7 (2021): 927-937.
- [3] Ahmad, A.S., Ahed, A., Al-smadi, M.K., & Al-smadi, A.M. (2024). Smart Medical Application of Deep Learning (MUNet) for Detection of COVID-19 from Chest Images. *Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA)*, 15(1), 133-153.
- [4] Nomani, Md Zafar Mahfooz, and Rehana Parveen. "Legal dimensions of public health with special reference to COVID-19 pandemic in India." *Systematic Reviews in Pharmacy* 11, no. 7 (2020): 131-134.
- [5] Gupta, Rajan, Saibal K. Pal, and Gaurav Pandey. "A comprehensive analysis of COVID-19 outbreak situation in India." *MedRxiv* (2020): 2020-04.
- [6] Gupta, Medhavi, Vikash Ranjan Keshri, Pompy Konwar, Katherine L. Cox, and, and Jagnoor Jagnoor. "Media coverage of COVID-19 health information in India: a content analysis." *Health promotion international* 37, no. 2 (2022): daab116.
- [7] Singh, A., P. Deedwania, K. Vinay, A. R. Chowdhury, and P. Khanna. "Is India's health care infrastructure sufficient for handling COVID 19 pandemic." *Int Arch Public Health Community Med* 4, no. 41 (2020): 10-23937.
- [8] Kutlu, Y., & Camgözlü, Y. (2021). Detection of coronavirus disease (COVID-19) from X-ray images using deep convolutional neural networks. *Natural and Engineering Sciences*, 6(1), 60-74.
- [9] Mohanta, Kshitish Kumar, Deena Sunil Sharanappa, and Abha Aggarwal. "Efficiency analysis in the management of COVID-19 pandemic in India based on data envelopment analysis." *Current Research in Behavioral Sciences* 2 (2021): 100063.
- [10] Garg, Suneela, Saurav Basu, Ruchir Rustagi, and Amod Borle. "Primary health care facility preparedness for outpatient service provision during the COVID-19 pandemic in India: cross-sectional study." *JMIR public health and surveillance* 6, no. 2 (2020): e19927.
- [11] Yunus Pasha Thoppalada, and Vijay Pujar. 2022. Green Synthesis Of Bioactive Molecules: A Review.. *International Journal of Pharmacy Research & Technology*, 12 (1), 1-11. [doi:10.31838/ijprt/12.01.01](https://doi.org/10.31838/ijprt/12.01.01)
- [12] Clifford Ishola, B., Ojokuku, Y., Akpobasah-Amugen, S., & Eluyemi, O. (2023). Library Services Amidst the COVID-19

Pandemic: Study of Remotely Exploitable Electronic Academic Databases in Selected University Libraries in Nigeria. *Indian Journal of Information Sources and Services*, 13(1), 49–54.

- [13] Assefa, Yibeltal, Charles F. Gilks, Simon Reid, Remco van de Pas, Dereje Gedle Gete, and Wim Van Damme. "Analysis of the COVID-19 pandemic: lessons towards a more effective response to public health emergencies." *Globalization and Health* 18, no. 1 (2022): 10.
- [14] Dwivedi, Laxmi Kant, Balram Rai, Anandi Shukla, Tapas Dey, Usha Ram, Chander Shekhar, Preeti Dhillon, Suryakant Yadav, and Sayeed Unisa. "Assessing the impact of complete lockdown on COVID-19 Infections in India and its burden on public health facilities." *IIPS, Mumbai* (2020).
- [15] Amiruzzaman, M., Islam, M. R., Islam, M. R., & Nor, R. M. (2022). Analysis of COVID-19: An infectious disease spread. *Journal of Internet Services and Information Security*, 12(3), 1-15.