

# Factors of Healthcare Infrastructure to withstand COVID-19 Patient Load in India: A TISM approach

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## Abstract

**Purpose** - Purpose of this paper is to understand the interrelationship among the factors that are critical in the treatment of COVID-19 patients. An attempt to comprehend the essential requirement of the medical facilities to deal with the pandemic load on healthcare sector. **Design/Methodology/Approach** - Total Interpretive Structural Modelling (TISM) technique has been used to develop the hierarchical interrelationship among various factors of healthcare related to COVID-19 medical facilities. Impact Matrix Cross-Reference Multiplication Applied to a Classification (MICMAC) examines dependent and driving power of the factors. **Findings** - Total ten factors have been identified through literature review, which are essential for the medical facilities to prepare to deal with the pandemic load. 'COVID-19 positive cases per day' and 'efficiency of covid-19 testing facility' are factors that drives two dependent factors, 'COVID-19 bed availability' and 'oxygen demand' while remaining factors as intermediate linkage factors. **Research Limitations/Implications** - Examination of the interrelationships among factors can support in decision making about capacity building for COVID-19 medical facilities in hospitals. The impact of these resources on the recovery rate of COVID-19 patients can be studied further. The factors identification has been done from the perspective of India and region specific factors can be added or deleted from the TISM model. **Originally/Value** - An analytic study of the literature review demonstrates the relationship among the factors for healthcare accessibility to every COVID-19 positive patient and TISM examines "why" and "what" factors need more consideration for the development of the healthcare infrastructure for COVID-19 patients.

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