"To Study Minimally Invasive Trends in Aortic Valve Replacement Procedures (SAVR to TAVR): Comparative Analysis in the USA and Parallels with the Indian Scenario"

Study Overview:

This study aims to analyze and compare the trends in minimally invasive aortic valve replacement (AVR) procedures, specifically Surgical Aortic Valve Replacement (SAVR) and Transcatheter Aortic Valve Replacement (TAVR), in the USA and India. By scrutinizing adoption rates, outcomes, and patient demographics, the research seeks to identify opportunities to increase TAVR adoption in India based on insights drawn from the USA.

Methodology:

- **Study Design:** Descriptive and comparative analysis.
- **Data Sources:** Academic journals, medical databases, government websites, and industry reports.
- **Keywords:** "minimally invasive AVR", "SAVR vs TAVR adoption rates", "TAVR outcomes data", "TAVR availability in India", "patient demographics for TAVR".
- **Data Analysis Tool:** Microsoft Excel.
- **Ethical Considerations:** Stringent data citation practices to ensure transparency and reproducibility.
- **Study Duration:** Three months.

Research Questions:

1. Evolution of SAVR and TAVR in the USA:

- How have adoption rates and timelines for SAVR and TAVR procedures evolved?

- Key factors influencing the shift towards minimally invasive techniques (patient demographics, technological advancements, surgeon preferences).
- Outcomes data associated with SAVR and TAVR (mortality rates, length of hospital stay, patient recovery time).

2. Parallels Between the USA and India:

- How does the availability and accessibility of TAVR technology in India compare to the USA?
- Current surgical practices and patient demographics in India indicating potential for TAVR adoption.
- Main drivers and barriers for TAVR adoption in India.

3. Indian TAVR Market Analysis:

- Identification of current and potential players in the Indian TAVR market.
- Roles of these players in the adoption and dissemination of TAVR technology.

Materials and Methods:

1. **Study Type:** Descriptive exploratory.

2. **Data Collection:** Secondary data gathered from research papers, publications, journals, government websites, news articles, and other relevant sources.

3. **Analysis Duration:** Three months.

4. **Data Analysis:** Conducted using Microsoft Excel.

Expected Outcomes:

The study is anticipated to yield insightful comparisons between the USA and India regarding minimally invasive AVR procedures. It will provide a clear understanding of the adoption rates,

patient demographics, and outcomes of TAVR and SAVR, as well as the challenges and opportunities for TAVR adoption in India. These insights could guide future measures to improve patient outcomes and enhance the adoption of TAVR by healthcare practitioners and policymakers in both countries.