# Identifying trials run in India that are registered in other clinical trial registries



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#### **ABSTRACT**

Clinical trial registries play a vital role in promoting transparency and accountability of clinical research. These repositories of information serve as essential resources for researchers, healthcare professionals, regulators, and the public. The World Health Organization recognizes almost two dozen registries as data providers to its International Clinical Trials Registry Platform.

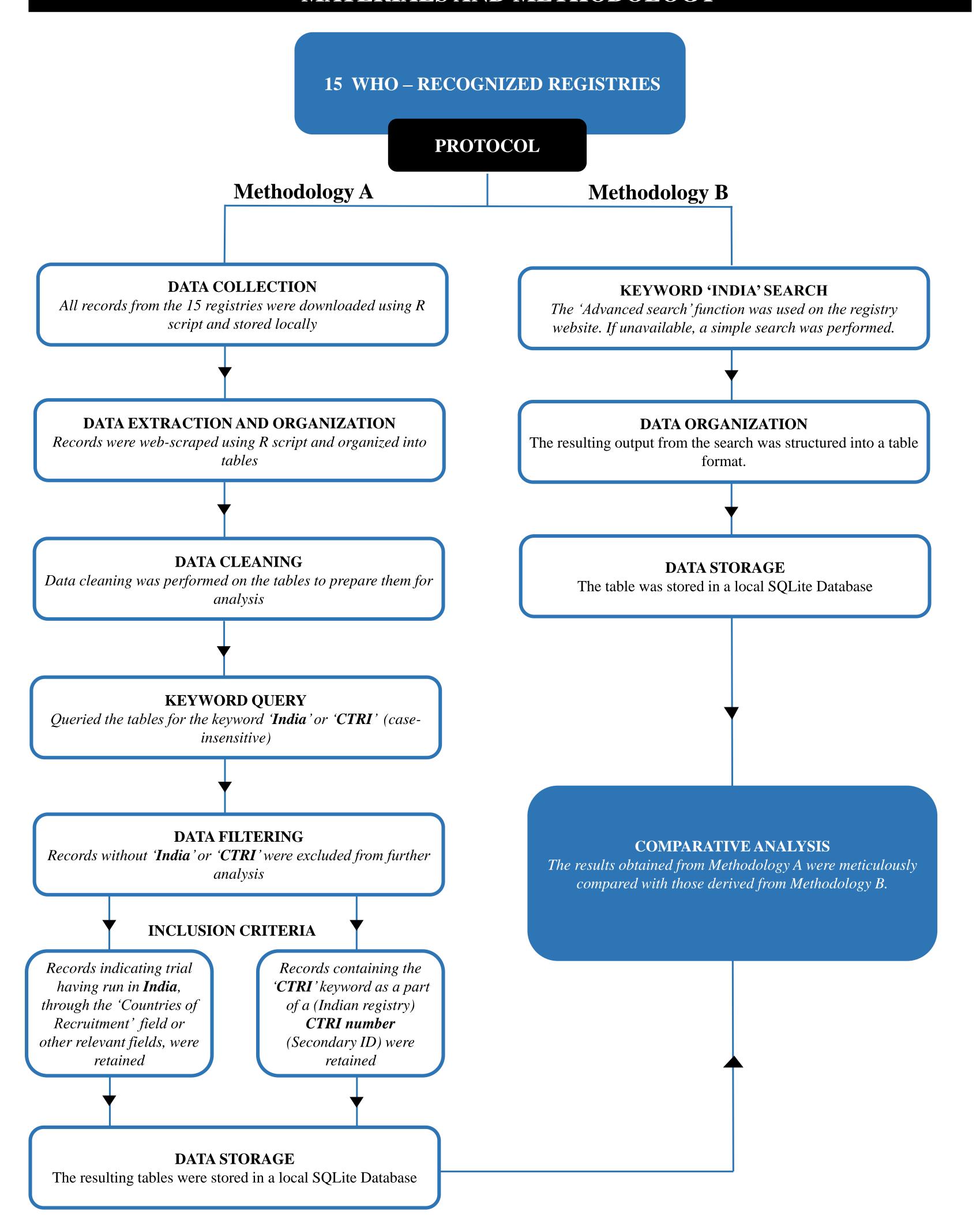
The timely, correct, and comprehensive recording of study details such as protocols and findings in a public register helps in the transparency of the clinical research enterprise. Despite the importance of trial registries, several deficiencies exist. Challenges include unregistered studies, false or incomplete data, non-reporting or delayed reporting of results, and discrepancies in the details of registered studies. This study aims to identify the steps required to locate all studies conducted in India registered in 15 of the (non-Indian) WHO-recognized registries which are, ANZCTR, ChiCTR, CRIS, DRKS, IRCT, ISRCTN, ITMCTR, jRCT, LBCTR, PACTR, ReBEC, REPEC, RPCEC, SLCTR, and TCTR. Two methodologies were employed for each registry, where applicable. Methodology A involved downloading all registry records and querying for the keywords 'India' and 'CTRI' to identify Indian studies. Methodology B involved searching the registry websites for the keyword 'India', preferably using advanced search options, and when unavailable, utilizing simple search functions. Not all registries facilitated the use of both methodologies.

The findings of this study provide insights into the limitations of the search options of various registries in identifying trials conducted in India. This study aims to contribute to the improvement of trial registry practices and enhance transparency in clinical research.

#### **OBJECTIVE**

To determine the number of trials in the above-mentioned registries, conducted in India

## MATERIALS AND METHODOLOGY



#### RESULTS

The results obtained by Methodology A and Methodology B (where feasible) are summarized in the table below:

|  | Methodology A, overall  ethodology A and Methodology B y  30  358  0  0 |  | From other fields  0 0 0  | 30<br>358<br>0   |
|--|---|--|---|--|
| nich Methodolo<br>DRKS<br>SRCTN<br>FMCTR | ogy A and Methodology B y<br>30<br>358<br>0                             | yielded the same result  30  358  0  | 0 0   | 358<br>0   |
| nich Methodolo<br>DRKS<br>SRCTN<br>FMCTR | ogy A and Methodology B y<br>30<br>358<br>0                             | yielded the same result  30  358  0  | 0 0   | 358<br>0   |
| SRCTN<br>FMCTR                           | 358<br>0  | 358<br>0   | 0 0   | 358<br>0   |
| ΓMCTR                                    | 0   | 0  | 0   | 0  |
|  | -   | -  |   |  |
| RPCEC                                    | 0   | <b>0</b>   | 0   | 0  |
|  |   | U  | 0   | 0  |
|  |   |  |   |  |
| hich Methodol                            | ogy A and Methodology B   | did not yield the same res   | sult  |  |
| NZCTR                                    | 123   | 121  | 2   | 121  |
| ChiCTR                                   | 17  | 16   | 1   | 16   |
| CRIS                                     | 2   | 2 (from Study site)  | 0   | 0  |
| IRCT                                     | 1   | 0  | 1   | 2  |
| jRCT                                     | 111   | 111  | 0   | 78   |
| PACTR                                    | 7   | 4  | 3   | 4  |
| ReBEC                                    | 13  | 13   | 0   | 1  |
|  | hiCTR<br>CRIS<br>IRCT<br>jRCT<br>ACTR                                   | ChiCTR       17         CRIS       2         IRCT       1         jRCT       111         PACTR       7 | ChiCTR       17       16         CRIS       2       2 (from Study site)         IRCT       1       0         jRCT       111       111         PACTR       7       4 | ChiCTR       17       16       1         CRIS       2       2 (from Study site)       0         IRCT       1       0       1         jRCT       111       111       0         ACTR       7       4       3 |

(a) Those for which the field Countries of recruitment yielded all the trials that had run in India LBCTR

(b) Those for which the field Countries of recruitment did not yield all the trials that had run in India **REPEC** Not feasible **SLCTR** Not feasible 29

III Registry for which only Methodology B could be used Not feasible **TCTR** 

\* Expansions of the acronyms of the registries listed above: . ANZCTR: Australian New Zealand Clinical Trials Registry

. ChiCTR: Chinese Clinical Trial Registry 3. CRIS: Clinical Research Information Service, Republic of Korea 10. PACTR: Pan African Clinical Trials Registry

4. **DRKS**: German Clinical Trials Register

Registry

5. **IRCT**: Iranian Registry of Clinical Trials 6. ISRCTN: (ISRCTN is not an acronym any more) 7. ITMCTR: International Traditional Medicine Clinical Trial

11. **ReBEC**: Brazilian Registry of Clinical Trials 12. **REPEC**: Peruvian Clinical Trials Registry 13. **RPCEC**: Cuban Public Registry of Clinical Trials

Not feasible

14. **SLCTR**: Sri Lanka Clinical Trials Registry 15. TCTR: Thai Clinical Trials Registry

8. **JRCT**: Japan Registry of Clinical Trials

9. LBCTR: Lebanese Clinical Trials Registry

Number of trials that had run in India as identified by Methodology A and Methodology B Methodology A 340 Methodology B 320 300 280 260 240 220 200 180 160 140 120 100 80 60 40 20 ANZCTR DRKS Registry name/acronym

### **DISCUSSION**

The primary objective of our study was to establish a comprehensive approach for identifying all clinical studies conducted in India and registered in 15 non-Indian registries recognized by the World Health Organization (WHO) as data providers to its registry portal. Our findings revealed that only four registries provided a consistent and unambiguous count of clinical studies using both methods. However, we encountered discrepancies in six registries where certain records displayed conflicting information by Methodology A, with one field indicating that the trial ran in India, and another field suggesting otherwise. This ambiguity has significant implications for the accuracy and transparency of clinical trial reporting. Although the number of discrepant records was relatively small, we recognize the significance of this phenomenon and the potential impact on future trial-related meta-research. Being mindful of these discrepancies will improve the reliability and quality of clinical trial data.

In conclusion, our study sheds light on the complexities involved in identifying clinical studies conducted in India across various international registries. By highlighting the need for consistent and reliable data reporting practices, we aim to contribute to the advancement of evidence-based research and the overall integrity of clinical trial data.

### **ACKNOWLEDGEMENT**

## REFERENCES

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- o Nundy S, Gulhati CM. A New Colonialism? Conducting Clinical Trials in India. New England Journal of Medicine. 2005;352: 1633–1636. doi:10.1056/NEJMp048361
- Ioannidis JPA. Why Most Clinical Research Is Not Useful. PLOS Medicine. 2016;13: e1002049. doi:10.1371/journal.pmed.1002049
- Venugopal N, Saberwal G. A comparative analysis of important public clinical trial registries, and a proposal for an interim ideal one. PLOS ONE. 2021;16: e0251191. doi:10.1371/journal.pone.0251191