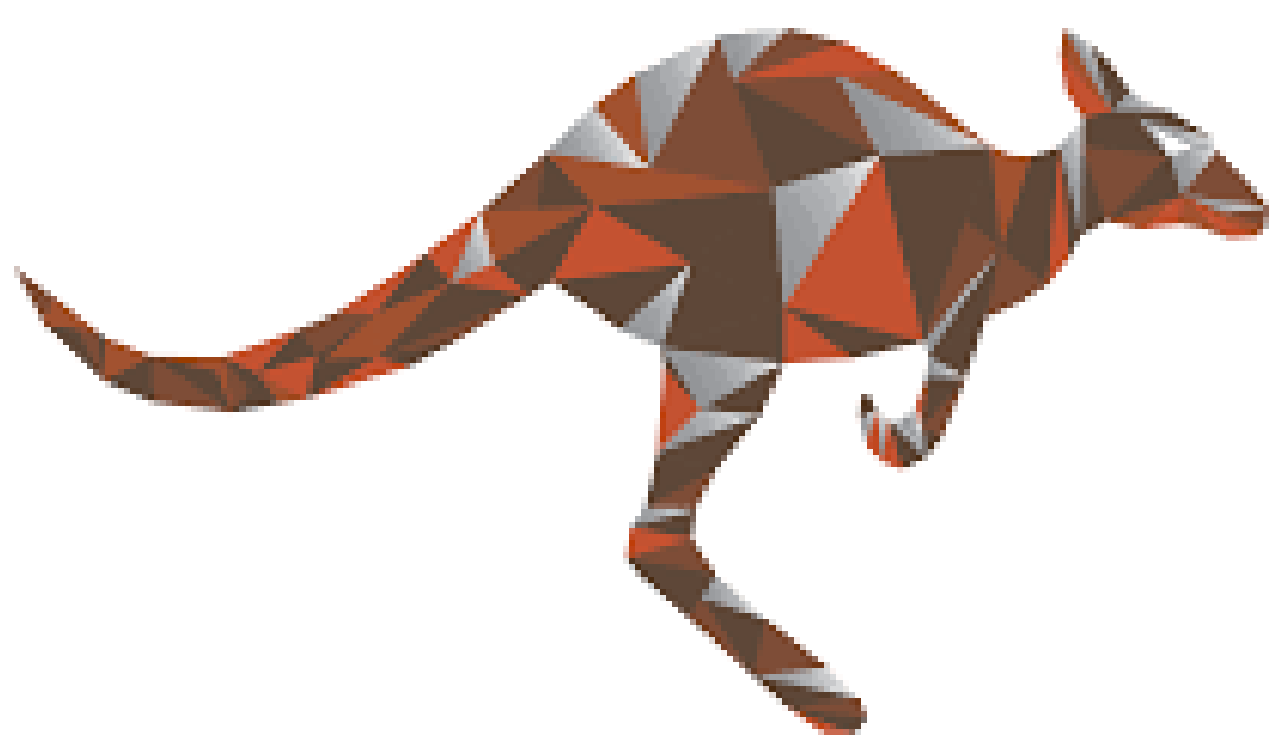




Practices and perceptions in research data management: a cross-sectional study based in a Brazilian university hospital

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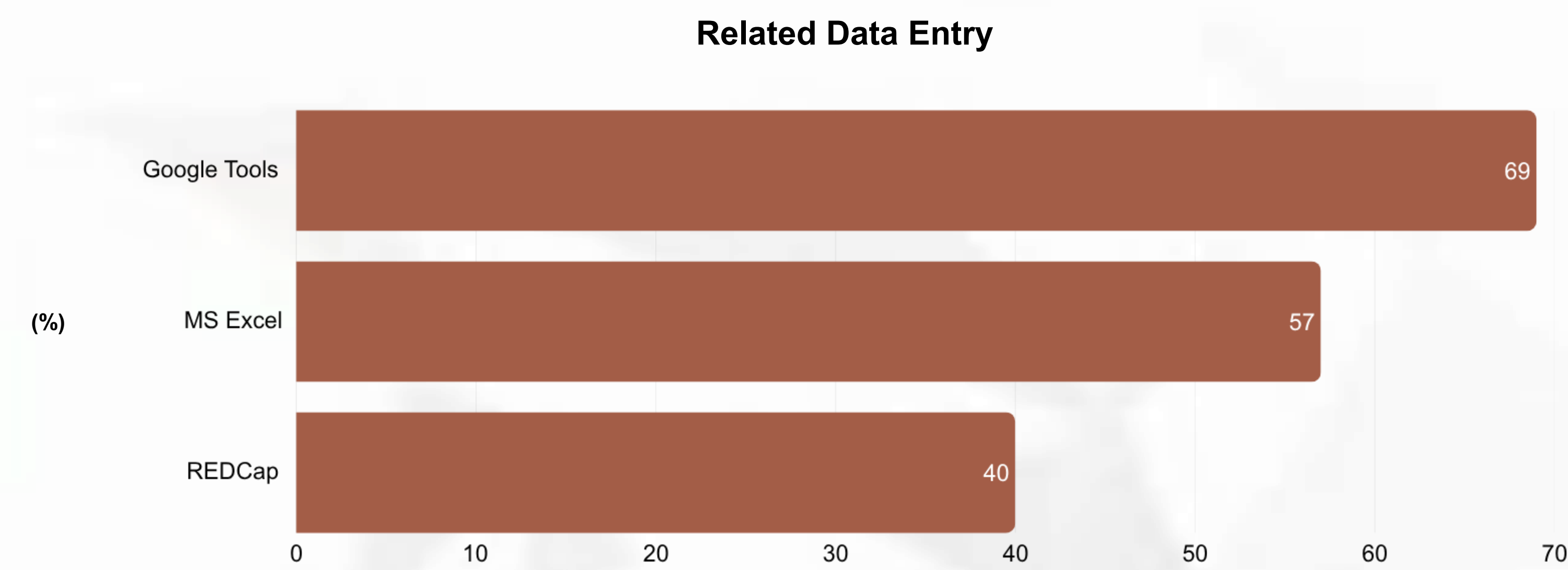
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Introduction: Research Data Management (RDM) is a cornerstone of innovation, scientific integrity, and transparency. Proper data management is essential to ensure the integrity, transparency, and reuse of data in scientific research. However, inadequate data management compromises the extraction of data's potential value, especially within complex environments such as university hospitals. FAIR principles and Data Management Plans (DMPs) are important in this context to strengthen and ensure robust RDM.

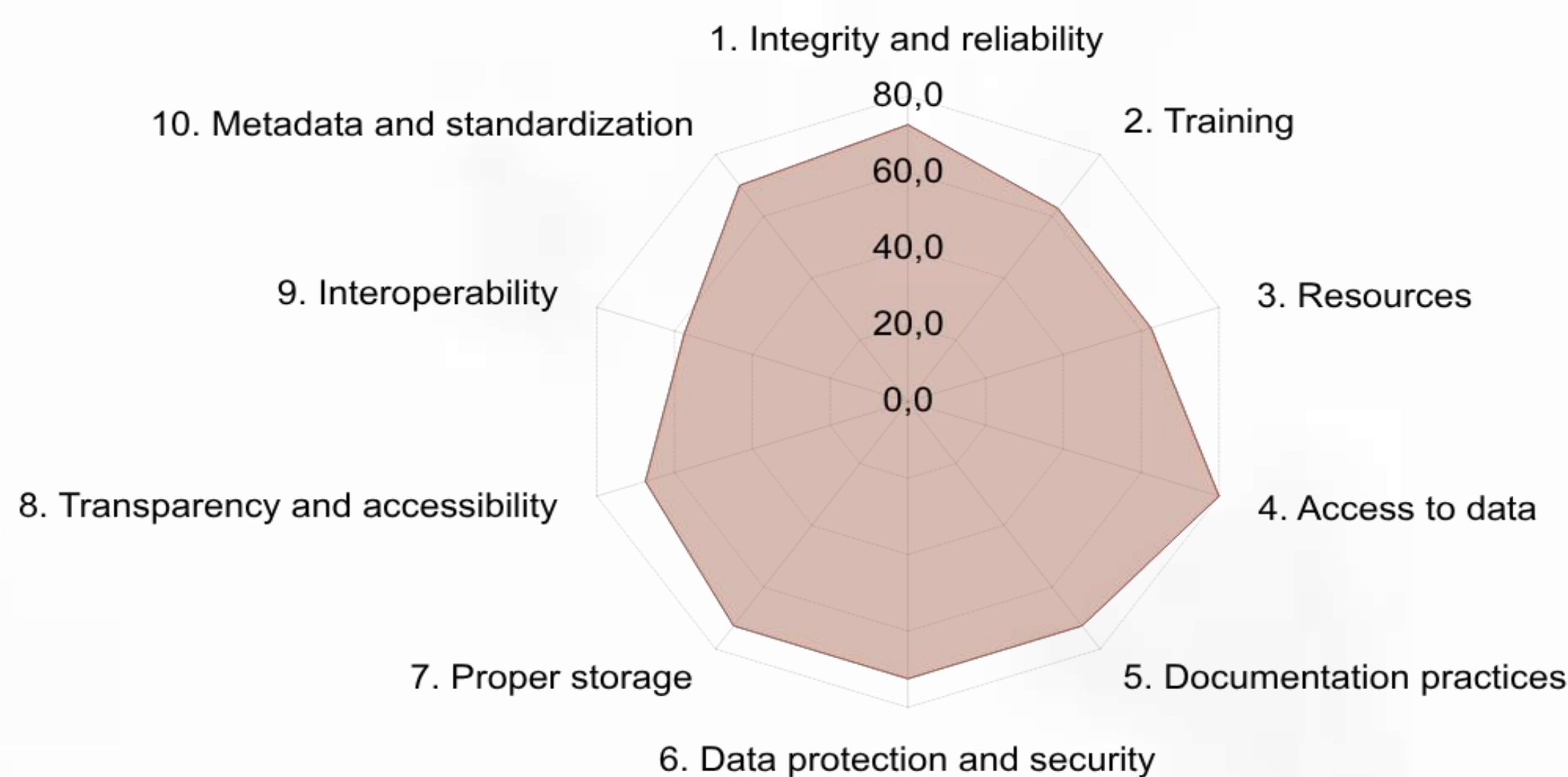
General Objective: To investigate the practices and perceptions related to data management among researchers in a university hospital.
Specific Focus: To evaluate research projects in relation to adherence to RDM practices, such as the use of informational tools, secure storage, controlled access, and intention to share data from their research.

Methods: This was a cross-sectional, exploratory study. Consecutive sampling was used to invite researchers with at least one active human research project. Data collection was conducted between April and November 2024 through an electronic questionnaire. The questionnaire was divided into two sections: Practices (37 items across six dimensions) and Perception (10 items). Document analysis (14 items) was carried out through duplicate review of research protocols. Additionally, a project structure assessment was performed in the REDCap platform (11 items).

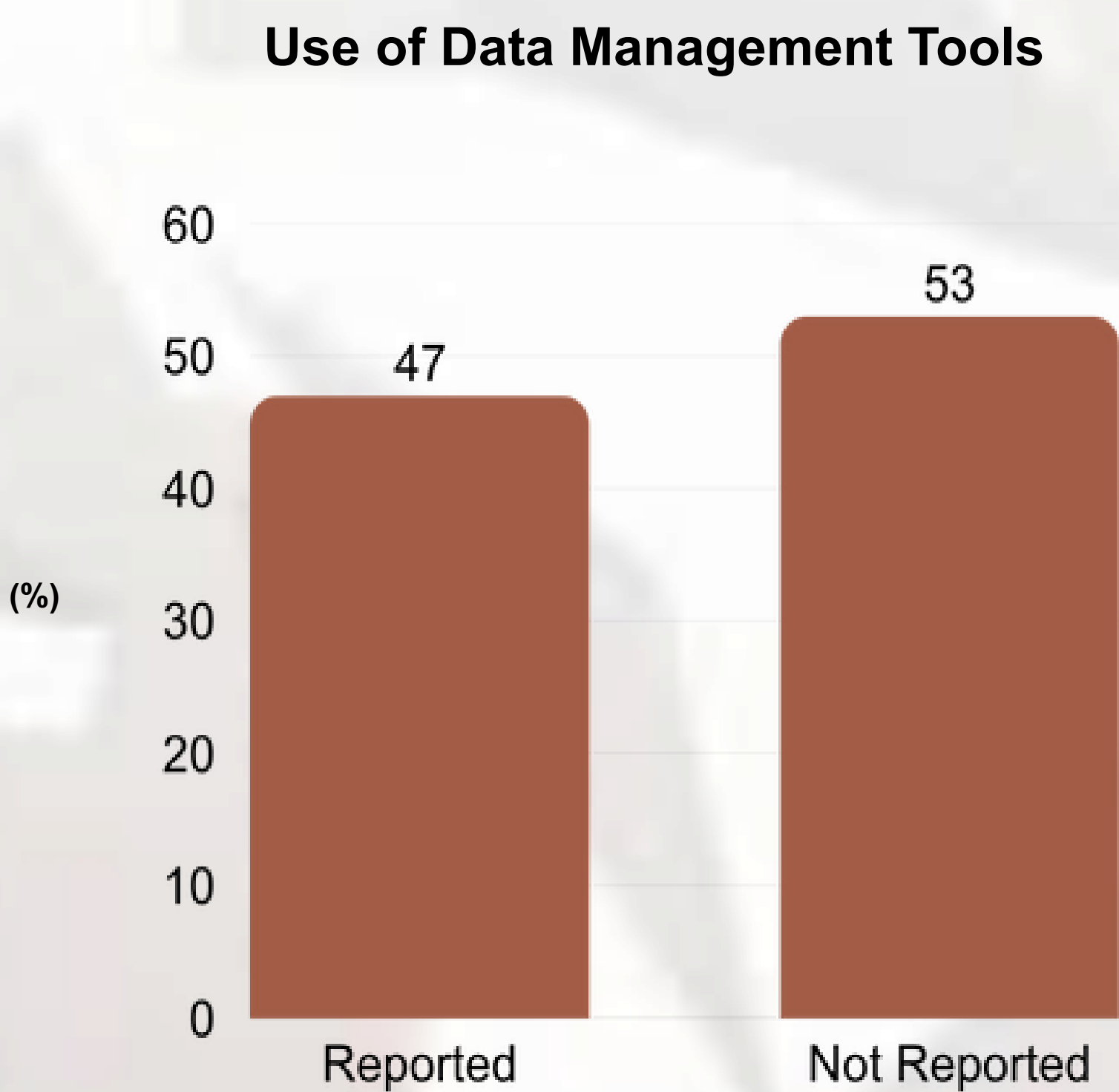
Researchers Related Practices



Researchers Related Perception



Analysis of Research Protocols



REDCap Analysis

REDCap Status	Frequency (%)
Development	50 (48,5)
Production	52 (50,5)
Analysis/cleanup	1, (1,0)
Number of records	
0	15 (14,6)
1-100	46 (44,7)
101-500	24 (23,3)
> 501	18 (17,48)
Identifiers Validation	
Completely	31 (33,7)
Partially	33 (35,9)
Not defined	28 (30,4)
Variables Validation	
Completely	36 (37,5)
Partially	58 (60,4)

Results: Of the 375 researchers invited, 184 agreed to participate; 166 responded to the section on data managementpractices, and 160 completed the entire questionnaire, answering both the practices and perception sections. Additionally, 544 research projects registered at the institution were analyzed through document review, of which 103 (17.6%) had databases registered on the REDCap platform. The results revealed shortcomings in data management planning, with 52.8% of projects not specifying tools for this purpose, as well as variations in storage and security practices. Despite the growing use of platforms such as REDCap, many researchers still lack adequate training. Although 69.9% of participants reported preserving their research data, only 10.2% planned to use public repositories. Researchers'perceptions were positive in 9 out of 10 items on a 5-point scale.

Conclusion: The analysis revealed **gaps in the initial documentation** of projects and limited specification in data management. Frequent **use of spreadsheets was observed, despite the existence of safer platforms such as REDCap**. The **positive perception of RDM do not translate into robust practices**, evidenced by the absence of formal DMPs and the reliance on generic tools. This underscores the need for institutional support to foster a data **culture aligned with FAIR principles**.

- Recommendations and next steps:**
- a) Mandatory Data Management Planning (DMP) training for all researchers.
 - b) Strengthening institutional policies for the exclusive use of specilized tools (e.g., REDCap) for sensitive data.
 - c) Investing in data curation services to ensure data quality and repository readiness (preservation/sharing).

Access the complete study material through the QR Code:

