



Early Detection of Tuberculosis in Primary Health Centers of West Lombok (2023-2024) : A Mixed-Methods Study

Authors

Khoviya Yuwina Selinada Harmi^{1,2}, Nurhidayati³, Deasy Irawati⁴, Marisa Syavitri Dilaga⁴

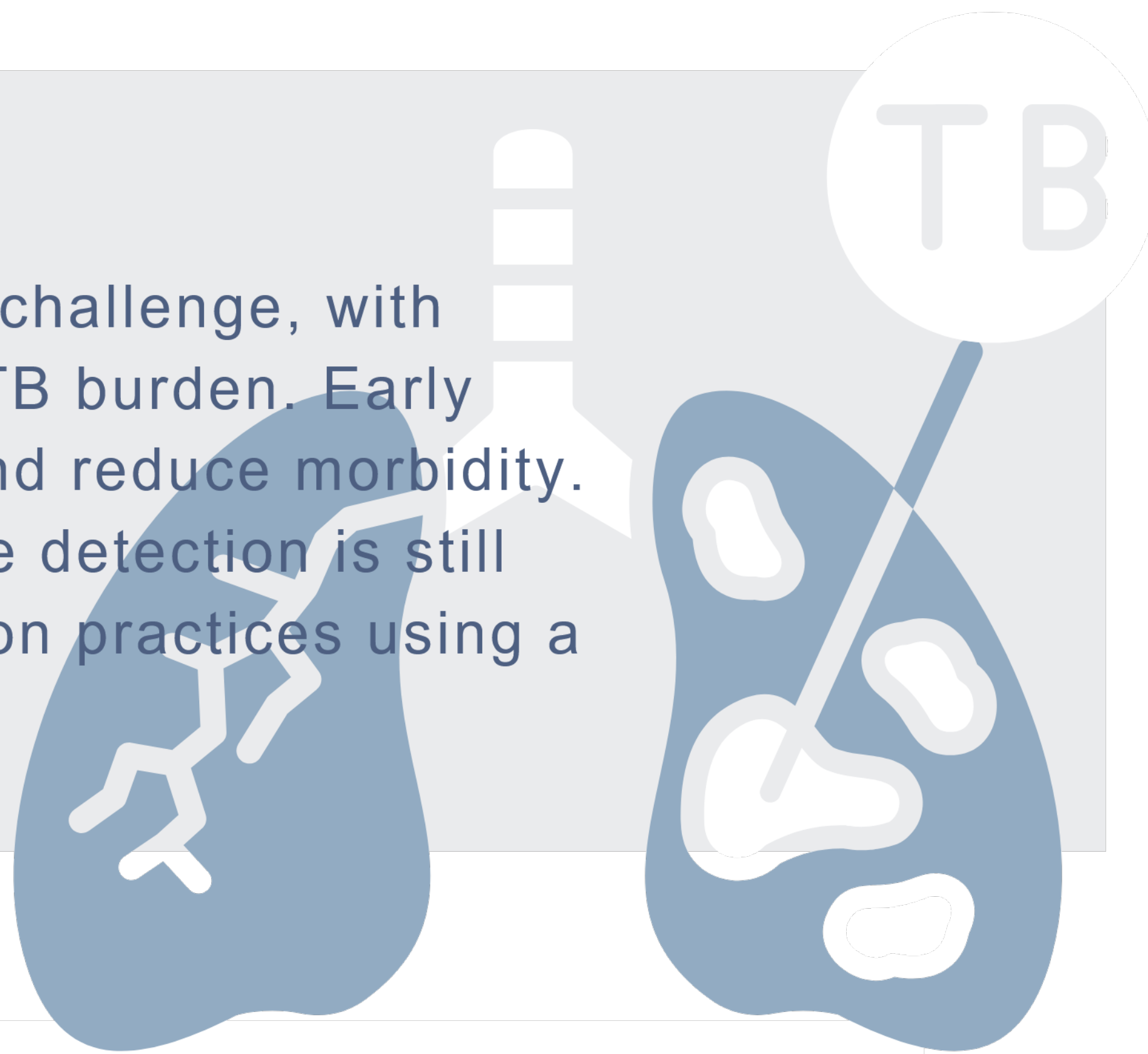
Affiliations

¹Master of Public Health Program, Faculty of Medicine and Health Science, University of Mataram, Mataram, Indonesia
²General Practitioner, Patut Patuh Patju Hospital, West Lombok, West Nusa Tenggara, Indonesia
³Department of Pharmacology, Faculty of Medicine and Health Science, University of Mataram, Mataram, Indonesia
⁴Department of Public Health, Faculty of Medicine and Health Science, University of Mataram, Mataram, Indonesia

Corresponding Author:
Viya27ixl@gmail.com

INTRODUCTION

Tuberculosis (TB) remains a major global health challenge, with Indonesia among the countries with the highest TB burden. Early detection is essential to interrupt transmission and reduce morbidity. West Lombok has a high TB prevalence, but case detection is still suboptimal. This study explored early TB detection practices using a mixed-methods approach.



OBJECTIVE

To analyze the trend of TB cases through analysis of TB register data at the West Lombok Community Health Center as an effort to strengthen the surveillance system in supporting Global Health Security.

METHODOLOGY

A convergent parallel mixed-methods design was applied. Quantitative data from the TB Information System (SITB) covering case detection, diagnostic methods, and contact investigation were collected from four health centers (Kediri, Sekotong, Narmada, and Labuapi) in 2023–2024. Data were analyzed descriptively. Qualitative data were obtained through semi-structured interviews with TB program managers, thematically analyzed, and integrated at the interpretation stage.

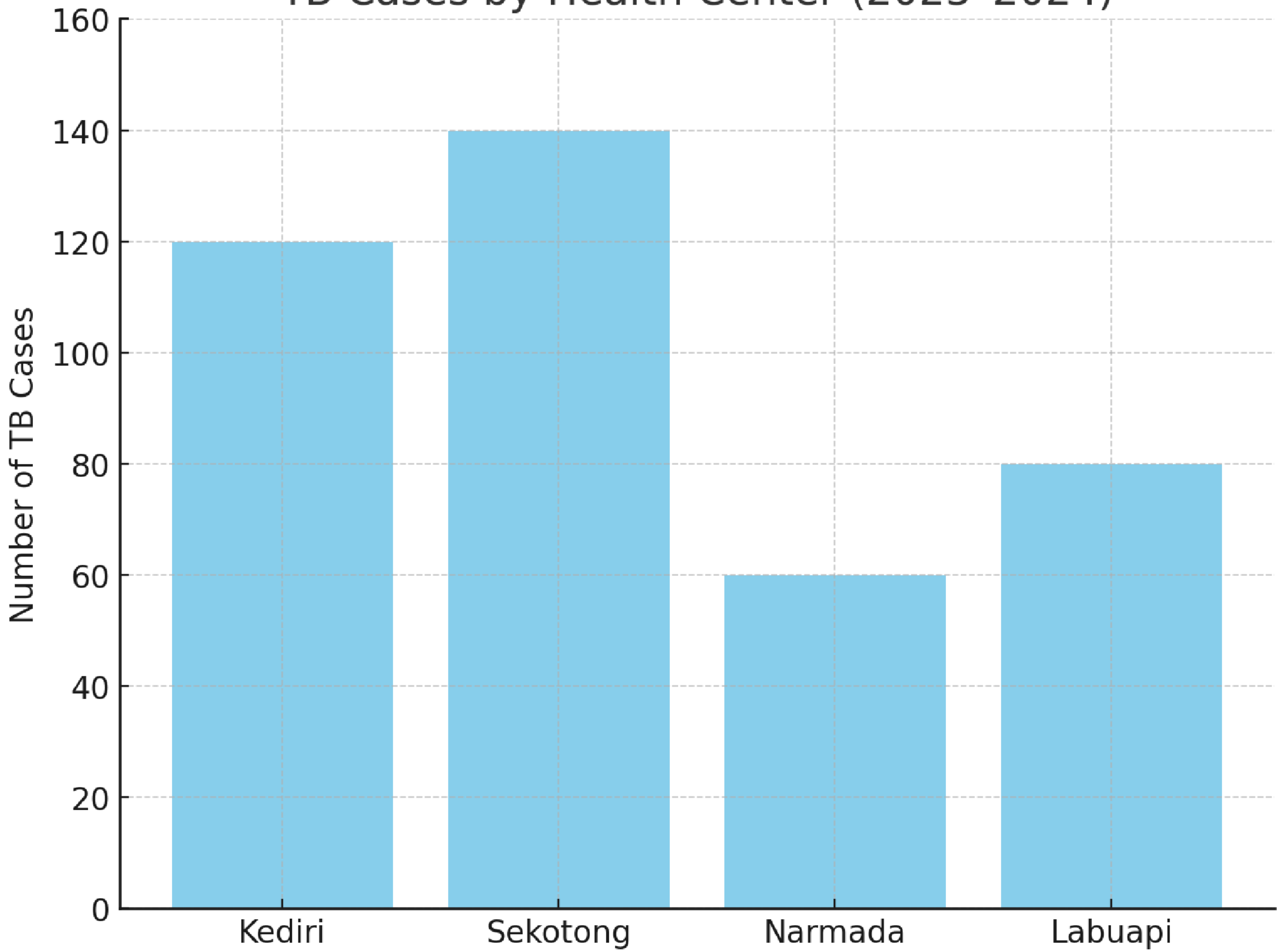
RESULT/FINDINGS

Sekotong and Kediri consistently reported the highest TB cases, while Narmada had the lowest. Contact investigation coverage varied: Narmada and Labuapi consistently achieved >90%, Sekotong improved from 42.7% to 70.5%, whereas Kediri declined to 49.5% despite rising cases. Qualitative findings highlighted barriers such as low community willingness, lack of identity documentation, and limited field resources.

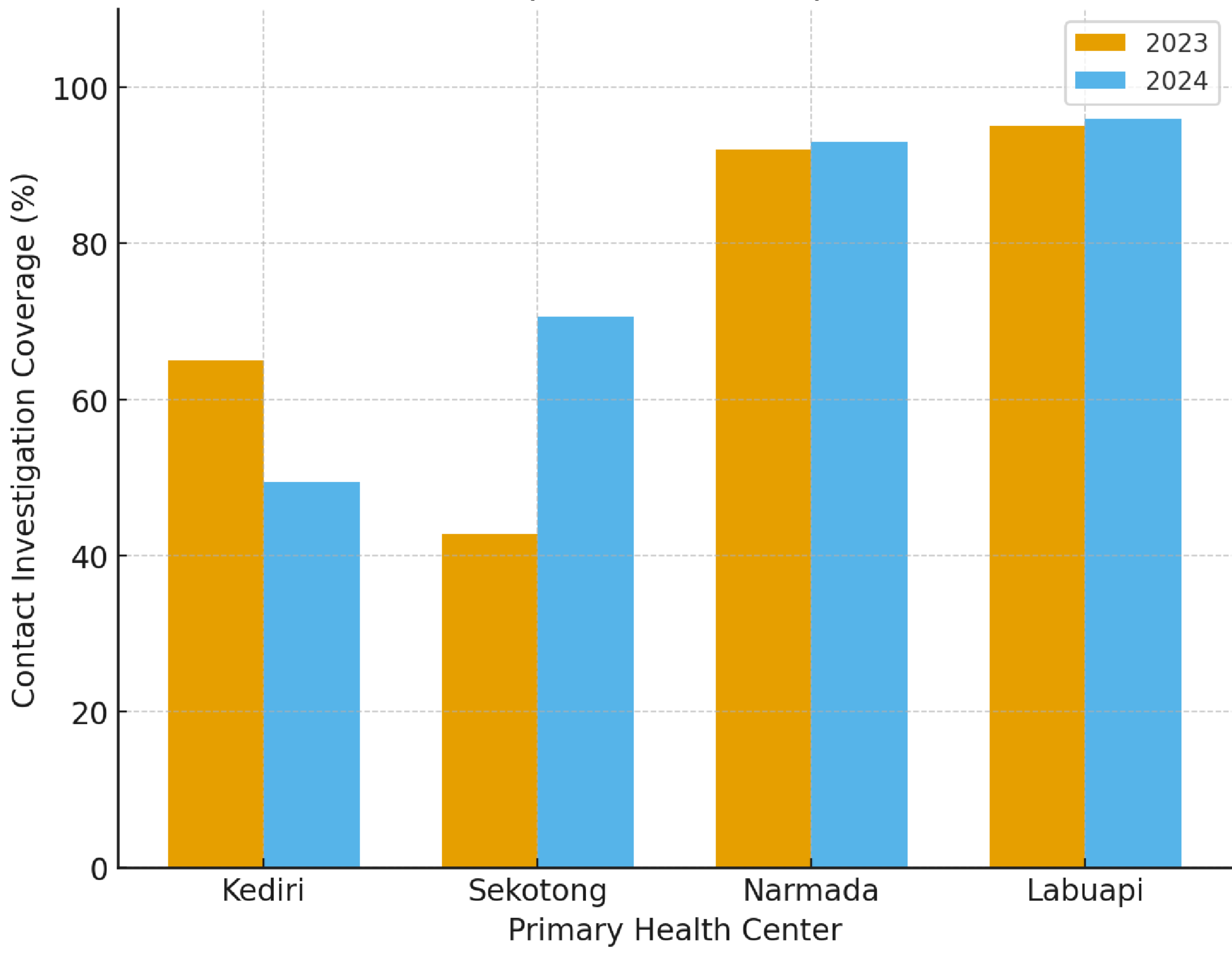
CONCLUSIONS

Early TB detection in West Lombok shows regional disparities. Narmada and Labuapi demonstrate good practices, while Kediri requires stronger interventions. Strengthening community-based strategies, improving health education, and enhancing administrative support are critical to achieving more effective and equitable TB control.

TB Cases by Health Center (2023–2024)



TB Contact Investigation Coverage (2023 vs 2024)



KEYWORD

Tuberculosis, Early Detection, Contact Investigation, Primary Health Care, West Lombok

REFERENCE

