



## Electronic Prescription Systems in Rural Ethiopian Healthcare: Adoption, Adherence, and Health Outcomes

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### Abstract

Electronic prescription systems (EPS) have been increasingly adopted in healthcare settings to improve efficiency and patient safety. A comprehensive literature review was conducted using PubMed, Scopus, and Google Scholar databases. Studies published between and were included for analysis. Among rural healthcare providers in Ethiopia, approximately 45% reported adopting EPS systems, with a notable trend towards increased prescription accuracy and reduced errors compared to manual methods ( $p < 0.05$ ). Despite initial challenges, the implementation of EPS has shown promise in enhancing medication adherence rates and improving overall health outcomes. Further research should explore long-term effects and potential barriers to wider adoption among rural healthcare providers. Treatment effect was estimated with  $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** African healthcare, Rural health, Electronic prescribing, Adherence rates, E-health systems, Health information technology, Patient safety

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