

# Literature Survey

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## Review of Existing Systems:

Sr. No.	System / Paper	Authors / Source	Key Features	Limitations
1	Drug Quality Verification System using AI	International Journal (2021)	Uses ML models to check medicine authenticity using chemical and lab test data	Requires lab data; not user-friendly for the general public
2	Mobile App for Medicine Safety	Startup Case Study	App scans barcodes and provides WHO/FDA info about the drug	Only works if barcodes or QR codes are present; not helpful in rural areas
3	AI-Based Pharma Monitoring	IEEE Xplore (2022)	Predicts medicine stability under various storage conditions	Lacks an interactive frontend for general user access
4	Deep Learning for Fake Medicine Detection	ResearchGate Paper	Uses neural networks to detect composition mismatches in counterfeit medicines	High computational cost; requires cloud processing
5	Web Application for Expiry Date & Purity Checks	GitHub Project	Predicts drug quality using expiry date and purity data	Limited features; no advanced ML or safety scoring logic

## Limitations of Existing Systems :

- Many tools require professional knowledge or lab-level data input, which makes them difficult to use for common users.
- Systems like barcode scanners are not effective when medicines are loose or unpackaged — common in rural areas.
- Most research is focused on backend ML modeling and lacks a practical web interface for real-time use.

- Limited support for alternative medicine types (like Ayurveda or Homeopathy) in current solutions.
- High-end models (like deep learning) can be slow and require strong internet or servers, which may not be suitable in low-resource settings.

Our system tries to overcome these limitations by offering a lightweight, AI-based solution that works with basic input features and gives quick results through a simple web interface.