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Review Article

**ROLE OF CLINICAL PHARMACISTS IN THE GENERAL  
MEDICINE DEPARTMENT COMPREHENSIVE REVIEW  
STUDY OF DRUG-RELATED PROBLEMS, MEDICATION  
ERRORS, AND ADVERSE DRUG REACTIONS**Aerva Swetha<sup>1\*</sup>, Jinipe Rithika<sup>2</sup>, Ramavath Manjula<sup>3</sup>, Dr.P.SomaShekhar<sup>4</sup><sup>1,2,3</sup> Student of Pharm D 4th year, Vision College of Pharmaceutical Sciences And Research,  
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Hyderabad, Telangana.**Abstract**

**Background:** The general medicine department of any hospital is characterized by high patient load, polypharmacy, and multimorbidity. Most hospitals see their internal medicine units packed with patients dealing with multiple health issues and complex medication routines. Without pharmacists regularly on hand, mistakes in prescribing have often slipped through. These oversights sometimes led to harmful side effects or complications during treatment. Patient well-being frequently took a hit as a result. Problems tied to medicines piled up when no expert was watching closely. Outcomes tended to worsen under such conditions.

**Objectives:** This narrative review aims to evaluate and highlight the evolving role of clinical pharmacists in the general medicine inpatient ward, with emphasis on their impact on DRP identification, medication error prevention, ADR monitoring, and overall patient care optimization, comparing outcomes from the pre-integration era to the current era of active clinical pharmacy practice.

**Methodology:** A comprehensive literature search was conducted across PubMed, Google Scholar, Cochrane Library using MeSH terms: "clinical pharmacist," "general medicine ward," "drug-related problems," "medication errors," "adverse drug reactions," and "pharmaceutical interventions." Articles published from 2014 to 2026 were included. Prospective and retrospective observational studies, systematic reviews, meta-analyses, were considered.

**Conclusion:** Clinical pharmacists are indispensable members of the general medicine multidisciplinary team. Their proactive role in identifying and resolving DRPs, preventing medication errors, and monitoring ADRs directly translates to improved patient safety, reduced hospital stays, and better therapeutic outcomes.

**Keywords:** Clinical pharmacist, general medicine ward, drug-related problems (DRP), medication errors, adverse drug reactions (ADR), pharmaceutical care, pharmacovigilance, pharmaceutical interventions

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## 1. INTRODUCTION:

Treating patients on a general medicine floor usually means handling several health issues at once, so medicines become central to care. Because conditions pile up, treatment often involves many drugs working together - sometimes too much. Problems linked to medications show up more here: mix-ups in prescriptions happen, some pills clash when combined, side effects pop up unexpectedly, doses may miss the mark. In the past, doctors made all medicine choices alone, while pharmacists only handed out pills without joining decisions. Without active pharmacy support inside the team, mistakes tied to drugs became far too common - and most could have been avoided.

Back in the 1970s, something shifted inside U.S. hospitals - pharmacists started stepping out from behind counters. Instead of just handing out pills, they began joining doctors during visits to patients, looking closely at medicine plans, talking directly with those taking drugs, keeping track of blood levels when needed. [18] India took a different path, slower, quieter until things stirred again years later. A new kind of training arrived there around 2008 thanks to an official council decision; students now studied longer, learned deeper skills tied to real-time care. These graduates brought fresh eyes into clinics, shaped less like traditional dispensers and more like advisors tuned to individual needs.

Right where hospitals feel most crowded - inside the general medicine wing - you'll find pharmacists doing especially crucial work. People come in with issues like high blood pressure, diabetes, failing kidneys, breathing trouble, or active infections, usually juggling at least five different drugs at once. Back in 2003, research led by Kucukarslan showed teams including pharmacists cut down on avoidable medication harms during rounds. [1] Since then, newer findings confirm these specialists do far more than spot problems - they stop them well ahead of time.

Looking back, problems with medicines often slipped through the cracks, leading to real damage. [2] Now, things shift once pharmacists step into general medical care. Evidence from India and beyond, spanning more than two decades, shows their quiet impact. [3,7] Instead of standing on the sidelines, they catch risks before harm unfolds. One study after another confirms how their presence changes outcomes. [1,9] Where errors once thrived in silence, oversight begins to take root. Their work does not shout - it steadies. From detection to intervention, adjustments happen without fanfare. Slowly, the system learns to lean on them. Not every hospital moves at once, yet momentum builds. Behind steady numbers lies a simple truth: fewer

patients suffer because someone watches closely. [4,6]

## 2. Study Design

This study is a comprehensive Review that pulls together existing research about what happens when clinical pharmacists work in general medicine departments. Rather than follow strict methods, this kind of summary lets room for wider insights - it blends past trends, how things function, along with real-world effects on rules and care. Because of that flexibility, it fits well when looking at practices still taking shape, like those tied to clinical pharmacy.

### 2.1 Literature Search Strategy

A comprehensive, structured search was conducted across the following electronic databases as PubMed, Google Scholar, Cochrane Library, ScienceDirect, ResearchGate

Search terms used (individually and in combination): "clinical pharmacist," "general medicine ward," "drug-related problems," "medication errors," "adverse drug reactions," "pharmaceutical care," "pharmacovigilance," "medication reconciliation," "DRP," "inpatient pharmacy," "hospital pharmacist," "pharmaceutical intervention," "clinical pharmacy services."

### 2.2 Inclusion Criteria

- Studies published between 2003 and 2026 (emphasis on 2014–2026)
- Studies conducted in general medicine, internal medicine, or mixed adult inpatient wards
- Studies reporting DRPs, medication errors, ADRs, or pharmacist interventions as outcomes
- Prospective observational studies, retrospective studies, randomized controlled trials, systematic reviews, and meta-analyses
- Studies from both Indian and international settings
- Articles in English language

### 2.3 Exclusion Criteria

- Studies exclusively focused on ICU, pediatric, psychiatric, or surgical settings without general medicine component
- Case reports and editorials
- Studies not reporting quantifiable clinical pharmacy outcomes
- Duplicate publications

### 2.4 Data Extraction

Data was extracted from every study that made the cut, details came out about how it was set up, where

it happened, how many people took part, what kinds of drug-related problems showed up, what pharmacists did about them, how often those fixes were accepted, plus results on patient health. The findings got pieced together through storytelling, then grouped by common threads.

### 3. Objectives

The primary and secondary objectives of this narrative review are:

#### Primary Objectives

- To evaluate the impact of clinical pharmacist integration in the general medicine inpatient ward on drug-related problem (DRP) identification and resolution
- To assess the role of clinical pharmacists in preventing medication errors in the general ward setting
- To examine the contribution of clinical pharmacists to adverse drug reaction (ADR) detection, causality assessment, and pharmacovigilance reporting

#### Secondary Objectives

- In order to highlight the historical evolution of clinical pharmacy in general medicine ward from absence to active integration and its impact on patient safety
- To compare pre and post-integration outcomes in terms of medication safety, length of stay, and pharmacotherapy optimization.
- To summarize the economic benefits of clinical pharmacy services in general medicine settings
- To underscore the necessity of clinical pharmacists as permanent members of the general medicine multidisciplinary team (MDT) in Indian hospitals

### 4. Historical Perspective: General Medicine Without Clinical Pharmacists

Medication decisions once rested entirely with doctors on general medical floors, while pharmacists stayed behind the scenes filling scripts. Not long ago, pharmacy staff played no active role at the bedside - just handed out pills. Problems crept in fast when checks and balances were missing. Mistakes happened more often than anyone admitted. Patient safety took a hit under this setup, quietly but steadily. [1,2]

#### 4.1 The Era of Undetected Drug-Related Problems

Back then, before pharmacy teams joined clinics, issues with medicines stayed hidden till patients got hurt. Mistakes like wrong doses, skipped drugs,

miswritten orders, or incorrect routes often slipped through when prescriptions were written. Without regular checks on medicine regimens, harmful mixtures between drugs, unsafe choices for certain conditions, and improper amounts for kidney or liver problems passed without notice. [2,7]

Back in 1999, Leape and team found something striking: when pharmacists joined doctors during hospital visits, serious medication errors dropped sharply - by two thirds. Instead of ten harmful incidents per thousand patient days, just over three remained. That gap reveals how much danger slips in when pharmacists are missing. [2] Jump forward a few years, Kucukarslan's work showed much the same thing. Pharmacists walking rounds with care teams in general wards cut avoidable drug problems again. Their effort helped prove early on that having pharmacists right where patients are makes treatment safer. [1]

#### 4.2 Polypharmacy and overload risks

Patients often arrive carrying several long-term conditions at once - high blood pressure, diabetes, failing kidneys, weak hearts, active infections - and wind up on five medicines or more without pause. [7] A lone doctor rarely has time to sort through every pill's risks, fit, clashes, or correct strength with full attention. When liver or kidney function dips, mistakes in medication choice become one of the top avoidable problems during hospital stays. [13] Only when a pharmacy specialist steps in does someone consistently track those details from start to finish. [1]

#### 4.3 Adverse Drug Reactions: Underreported and Underaddressed

Most adverse drug reactions slipped through cracks when clinical pharmacists weren't involved in tracking them. [17] Even after India rolled out its national safety program in 2010, hospitals barely logged any reports - mainly because few staff knew how to spot or record these issues. [20] Wards treating common illnesses used many different medicines, creating hotspots for unwanted effects. Still, nearly every incident passed without notice or follow-up.

### 5. The Clinical Pharmacist in the General Medicine Department: Current Roles and Evidence

Clinical pharmacists not just handing out pills, but watching how each one affects the person taking it. Often found beside doctors and nurses, talking treatment plans during morning rounds. Instead of waiting for questions, they spot risks before problems start. When a drug might cause harm or interact badly, they step in quietly. Teaching patients happens in real moments - while checking vitals or adjusting doses. They weigh costs without

sacrificing care quality, making sure resources make sense long term. Behind every decision: clarity, close observation, attention to detail. [18]

### 5.1 Identification and Resolution of Drug-Related Problems (DRPs)

Every so often, issues pop up when someone takes medicine - these hiccups go by the name DRPs if they block a person's path to better health. The way PCNE sees it, such problems might mean picking the wrong pill for the condition. Sometimes the amount taken is off - one too strong, another too weak. Mixing medicines can stir trouble where none existed before. Side effects show up even when everything seems right on paper. There are moments when a needed treatment gets missed entirely. Other times, pills get used where no solid reason supports their place. [19]

Most issues tied to medicines showed up as adverse reactions, nearly four out of ten cases, spotted by pharmacists on rounds at an Indian teaching hospital. Over one fifth involved wrong

prescriptions caught only when pharmacy staff reviewed charts closely. Duplicates crept in eleven percent of the time - two meds doing the same job slipped through checks. Eight percent stemmed from picking a less suitable medicine, while seven percent dealt with missed diagnoses needing treatment. Without clinical pharmacists flagging these, they stayed buried in daily workflow. [7]

One year inside a Swiss hospital's internal medicine unit saw pharmacists join daily rounds. Their presence brought financial gains - each euro spent returned one point seven one euros in value. This outcome came from spotting serious medication errors before harm occurred. Mistakes like wrong prescriptions, overlooked interactions, missed treatments, doses too low or too high, and drugs given with no clear reason were caught early. Prevention of adverse events drove down costs significantly. Work led by Mengato and team uncovered these patterns across the full cycle. Financial benefits emerged directly from avoiding patient complications. [13]

The table below summarizes key DRP categories encountered in general medicine wards and the corresponding clinical pharmacist interventions:

DRP Category	Common Examples in General Medicine Ward	Clinical Pharmacist Intervention
Medication Errors	Wrong dose, omission, illegible prescriptions, delay in administration	Prescription review, order clarification, nursing education
Drug-Drug Interactions	Warfarin + NSAIDs, ACE inhibitors + K-sparing diuretics, QT prolongation drugs	Interaction screening, dose adjustment, therapeutic substitution
ADRs	Antibiotic hypersensitivity, NSAID-induced nephrotoxicity, statin myopathy	Naranjo/WHO causality assessment, reporting to PvPI, drug discontinuation
Inappropriate Dose	Renal/hepatic dose not adjusted; overdosing in elderly	Renal dose adjustment, TDM, eGFR-based dosing recommendations
Drug Duplication	Double PPI prescribing, duplicate antihypertensives from different teams	Medication reconciliation, rationalization of therapy
Untreated Indication	Missed DVT prophylaxis, absent stress ulcer prophylaxis	Guideline-based therapy recommendation, protocol enforcement
Non-Adherence	Patient fear of side effects, complex regimen, language barriers	Patient counselling, medication information leaflets, follow-up

*Table 1: Drug-Related Problem Categories in General Medicine Wards and Clinical Pharmacist Interventions*

### 5.2 Medication Error Prevention

Medication errors represent the largest preventable category of patient harm in inpatient settings. [2] They may occur at any stage of the medication use process — prescribing, transcription, dispensing, administration, and monitoring. [10] In the general medicine ward, prescribing errors are most common, followed by administration and documentation errors. [7]

A systematic review and meta-analysis by Jaam M and Pawluk S (2021), published in PLOS ONE, evaluated pharmacist-led educational interventions delivered to healthcare providers and found statistically significant reductions in medication error rates. Ward-based clinical pharmacists who provide real-time advice to physicians during prescribing were found to be more effective than those providing post-hoc recommendations. This finding emphasizes the importance of embedding the clinical pharmacist directly within the general ward team rather than restricting their role to the pharmacy dispensing unit. [10]

Notably, a 2024 *Frontiers in Pharmacology* clinical trial from Slovenia demonstrated that pharmacist-led medication reconciliation at admission and discharge in adult general medical patients significantly reduced medication errors compared to standard care, with a high rate of correction of medication errors at discharge in the intervention group — highlighting the critical juncture of patient transitions as a high-risk point for errors. [14]

In the Indian setting, clinical pharmacists at ESI Hospital and similar government teaching hospitals are particularly vital: high patient volume, complex prescribing by residents and postgraduate students, and the use of generic drug names with variable formulations all contribute to error risk. [7] A dedicated clinical pharmacist reviewing prescriptions on the general medicine ward each morning can intercept a substantial proportion of these errors before they reach the patient. [10]

### 5.3 Adverse Drug Reaction (ADR) Monitoring and Pharmacovigilance

Most hospital units in India overlook checking drug side effects, even though it matters a lot. [8] Right inside patient care areas, pharmacists take charge - spotting possible harms from medicines. [8] They run standard checks like Naranjo or WHO-UMC methods to judge how likely the link is. [12] Notes get written only after signs point clearly toward a reaction. Each confirmed case moves forward, shared with PvPI using local AMC channels. Reports travel up through a nationwide web meant just for tracking these events. [20]

One morning, Delgado-Pérez and colleagues spotted fewer missed drug reactions once pharmacists joined hospital teams. Instead of waiting around, these professionals walked the wards every day - eyes on charts, tracking lab shifts, talking directly with people who were unwell. Because they kept close watch, things got noticed more often than when doctors reported on their own. Routine checks made it easier to catch what might have slipped through before. That kind of alertness came from being present - not just passing notes between rooms. [12]

Most often seen on general medical floors, bad drug reactions pop up with antibiotics - especially ones like penicillin or sulfa drugs - triggering allergic responses. Instead of healing, some painkillers harm kidneys or wear holes in the stomach lining over time. Blood thinners sometimes go too far, leading to unwanted bleeds. Muscle aches might trace back to cholesterol medicines when doses aren't right. In people with weak kidney function, diabetes pills such as metformin can shift body chemistry toward dangerous acidity. Spotting these issues is part of what pharmacists learn. They sort out whether symptoms come from medication mishaps or worsening illness. Their role includes stepping in with fixes that fit each situation. [17]

On hospital wards, clinical pharmacists who train nursing and medical staff tend to see more adverse drug reaction reports. Not long ago, a 2024 Cochrane analysis found that when these specialists work directly within hospitals, flagging issues and encouraging documentation, incident submissions rise notably. Their involvement shifts how teams respond, making recording more routine. Simply having them present changes behavior without mandates. [16]

### 5.4 Medication Reconciliation

Every time a patient moves between hospital areas - like when they arrive, shift units, or leave - their medication list gets checked carefully. [14] Instead of just matching old prescriptions to new ones, it's about spotting what might have slipped through cracks. Missing pills show up often. Sometimes the same medicine appears twice by accident. Wrong doses pop up too. Even small changes in drug type can matter if no one meant them. Pharmacists on general wards handle this step every single day. Their job keeps treatment aligned with what patients actually need. [14]

One morning in 2024, a real-world test by Knez L and team at a teaching hospital showed how pharmacists checking medicine lists helped adults after they left the hospital. Instead of usual routines, these patients faced fewer mistakes with their drugs. Because of the extra review step, visits back to care

settings dropped noticeably in one month. While typical processes moved on once discharge happened, this support kept giving results afterward. What stood out was not just accuracy during stay but continued protection later. After release, people under this system slipped into crisis less often. Since follow-up problems dipped, avoiding repeat admissions became more likely. [14]

### **5.5 Therapeutic Drug Monitoring (TDM) and Dose Optimization**

Working alongside doctors, clinical pharmacists help adjust medication levels using therapeutic drug monitoring. [18] For certain medicines - like aminoglycosides, vancomycin, phenytoin, digoxin, lithium, and tacrolimus - staying within a safe range matters most. Because these drugs have tight safety margins, their blood levels need frequent checking. [3] Using kidney function data, patient weight, plus how the body handles each drug, pharmacists figure out correct doses. Then they share those suggestions directly with prescribing providers. [13]

Most hospital patients have some form of kidney problem, so adjusting drug doses for their condition happens often. [7] Because kidneys aren't working well in many cases, medicines like blood thinners or insulin can build up if not scaled back carefully. One thing hospitals rely on is pharmacists who check each prescription closely when kidney function is low. [3] Antibiotics, especially, need close attention - too much harms more than helps. What looks like routine checking turns out to be vital protection against avoidable harm. [17]

### **5.6 Antibiotic Stewardship**

Antibiotics used without good reason push microbes to resist treatment - this sparks worldwide health dangers. [17] On hospital floors where adults receive care, clinical pharmacists step into stewardship roles, checking each prescription's fit: does the medicine match the infection, at the right strength, method, and time. [3] Instead of simply listing options, they guide teams toward lab-backed decisions based on test results. Shifting treatments from heavy-duty drugs to more focused ones becomes smoother with their input. Knowledge sharing happens quietly - not through lectures but conversation - helping those who prescribe think again before choosing powerful antibiotics. [18]

Outcomes in intensive care units, per Hisham and team in 2016, showed better decisions around

antibiotics when pharmacists adjusted doses or scaled back treatments. Because doctors on general wards frequently start antibiotics before lab reports come back, those same practices fit well there too. In India, a 2016 report published by IJCCM found most drug reactions tied to antibiotics - like low platelets, allergic responses, kidney harm - which makes having pharmacists monitor therapy even more critical. [3]

### **5.7 Patient Counselling and Adherence Promotion**

Out there among the beds, a clinical pharmacist might explain medication details one person at a time. Not just names of pills, but how to take them - morning or night, with food or without. Think about someone managing both high blood pressure and trouble breathing; each condition needs its own rhythm. Missed doses pile up quietly until symptoms return harder than before. Learning what a drug does helps avoid those slips. Timing matters more when multiple prescriptions overlap daily routines. Some tablets upset stomachs if swallowed too fast on an empty gut. Others work best only when taken exactly as written, every single day. For long-term health problems like seizures or sugar imbalances, understanding builds consistency. When people know why they follow rules, skipping becomes less likely. This kind of guidance sticks longer than printed leaflets ever could. [18]

Bedside chats with clinical pharmacists help patients understand their meds one on one. Instead of handing out generic printouts, they craft personalized info sheets tailored to each person's needs. Talking directly with family members or helpers keeps treatment steady after leaving the hospital. [14] When pharmacists take charge of teaching, people stick to their prescriptions more closely. Fewer trips back to the hospital happen under such guidance. [9] Knowing exactly how and why to take medicine gives patients real control over their health routines. [18]

## **6. Comparative Analysis: Pre- vs. Post-Clinical Pharmacist Integration**

The following table provides a structured comparison of important clinical outcomes in the general medicine ward before and after clinical pharmacist integration and also synthesizing evidence from the reviewed literature:

Aspect	Before Clinical Pharmacist Integration	After Clinical Pharmacist Integration
<b>DRP Detection</b>	Undetected; only identified after harm occurred	Proactive identification during daily ward rounds
<b>Medication Errors</b>	High incidence; prescribing, transcription, administration errors common	Up to 66% reduction in preventable adverse drug events (Leape et al.) [2]
<b>ADR Monitoring</b>	Underreported; no systematic surveillance in general wards	Active identification, causality assessment, and PvPI reporting
<b>Drug Interactions</b>	Frequently missed; polypharmacy unchecked	Systematic screening; clinically significant interactions flagged and resolved
<b>Patient Counselling</b>	Minimal or absent; compliance issues prevalent	Structured counselling improves adherence and therapeutic outcomes
<b>Antibiotic Stewardship</b>	Irrational antibiotic use; resistance escalation	De-escalation, dosing optimization, and culture-guided therapy
<b>Economic Impact</b>	Increased LOS, readmissions, treatment cost burden	ROI of €1.71 per €1 invested; reduced LOS and readmission rates [13]

**Table 2: Comparative Outcomes Before and After Clinical Pharmacist Integration in the General Medicine Ward**

### 7. The Clinical Pharmacist as an Indispensable MDT Member

Hospital care built around teams of doctors, nurses, physical therapists, nutrition experts, and social support staff has become the usual way to manage patients in general medicine. Because none of these roles focuses fully on medicines, adding a clinical pharmacist strengthens the group. [18] That specialist brings detailed understanding of drugs that others lack. Their role makes it possible to review every person's prescriptions carefully. Adjustments based on such reviews often lead to safer, more effective treatment plans. [4] Medication choices get matched closely to individual needs when this expertise joins the circle. One by one, drug interactions or unnecessary doses come to light through their analysis. [13] This kind of attention shifts how treatments unfold across complex cases. Most doctors accept advice from clinical pharmacists quite often - between 85.5% and 99%, research shows (Klopfer & Einarson; Berger et al., 2025). That kind of reception speaks volumes about mutual respect built through face-to-face conversations during hospital rounds. When recommendations come up in conversation right then and there, agreement climbs even higher. Being physically present on the unit clearly makes a difference compared to working behind a screen or inside a pharmacy room. [11,15]

Most patients at places like ESI Hospital face serious health issues, yet see too few doctors. Because of crowded clinics, a clinical pharmacist helps prevent medicine mistakes more deeply here. [7] Trained through a Pharm.D., they handle prescriptions with precision, adjusting doses based on how bodies process drugs. Their skill in planning treatment supports what doctors do - it fits alongside, not over. Instead of repeating medical decisions, their role sharpens accuracy where resources stretch thin. [18]

One study by MacLaren and others in 2008 looked at more than 260 hospitals across the country, finding lower death rates, shorter hospital stays, along with reduced expenses once a clinical pharmacist joined patient care teams. [4] Around the same time, work from MacLaren plus Bond two years later showed clear health and financial gains for people dealing with blood clots or heart attacks when pharmacists were part of their treatment - results that matter just as much today for typical hospitalized adults. [5]

### 8. Economic Impact of Clinical Pharmacy in General Medicine

Money saved by having pharmacists on medical floors adds up fast. [6] When bad reactions to medicines happen, patients stay longer in hospital, need more ICU time, extra tests pile up, health problems grow worse - more work for everyone. [13] Stopping medication errors before they start

means these experts pay for themselves many times over. [4]

For each euro spent on clinical pharmacy work in internal medicine, Mengato and team found 1.71 euros came back. Money was saved by steering clear of problems like wrong medication choices, mixed drug reactions, missing treatments, doses too low, or medicines given with no reason. It just so happens these are the exact issues that hit hospital ward patients hardest. [13]

One study from 2008 by De Rijdt and team looked closely at how clinical pharmacy work impacts hospital budgets - finding clear financial benefits in many cases. Since then, newer studies have backed this up, showing shorter stays play a big role. Readmission numbers drop when these services are active. Harm avoided during care means extra expenses vanish. Put together, it adds up. A clinical pharmacist becomes hard to overlook when balancing safety against spending. Value shows clearly when outcomes improve without raising costs. [6]

## 9. Discussion

Nowhere has progress been clearer than where pharmacists work directly on medical wards. Before their involvement, mistakes with medicines often went unseen. Problems like harmful reactions slipped through the cracks more often than anyone admitted. [2] Yet things shifted once clinical pharmacists became part of everyday care. Their role brought changes that were neither subtle nor temporary. Instead of waiting for issues to arise, teams began catching risks before harm occurred. Patient safety stopped being an afterthought. [1] What was once considered extra support now feels essential. Evidence across studies points in one direction. Having a pharmacist present changes how care unfolds. Mistakes dropped. Detection improved. Outcomes followed. This shift did not happen by accident. [4,6]

From intensive care units in India (Hisham et al., 2016) to major hospitals there (Das et al., 2020), yet also in Swiss medical departments (Mengato et al., 2024), Slovenian academic centers (Knez et al., 2024), even general hospital floors in Australia (English et al., 2020), one pattern holds: pharmacists on clinical teams catch drug problems early. [3,7,13,14,9] Because of their presence, mistakes in prescribing slip through less often. Reporting serious reactions becomes more routine. Patients tend to do better when treatment plans include pharmacist review. Though health systems differ widely in structure and location, results point the same way. Since benefits appear again and again,

embedding pharmacists into regular care seems less like an option - more like something expected.

Looking back shows something useful. Without clinical pharmacists on general wards, drug-related problems stayed hidden - until someone got hurt. [2] With them around - checking prescriptions, joining team discussions, talking to patients, watching lab results - those issues get caught early. [1,7] Problems that once slipped through now stop in time. Instead of waiting for trouble, care moves ahead of risk. That change - spotting harm before it happens - is what these pharmacists bring. [13,14] Most folks who walk into ESI Hospital's general medicine wing carry more than just one health issue - they often juggle several prescriptions, sometimes handed out by different doctors. [7] This place runs busy, serving many people every day, dealing with a wide mix of illnesses across its wards. When someone is older, already taking many pills, even small errors in treatment can lead to serious trouble. [17] Having a Pharm.D-trained clinical pharmacist step in changes how things unfold. Instead of slipping through cracks, patients meet a specialist focused solely on their medicines each morning. [18] These experts do not write scripts but instead review them, catching risks others might miss. They talk face-to-face with individuals about what each pill does and why it matters. [11] Watchful for side effects, they log any unusual reaction that shows up during treatment. [12] Their role fills gaps left when doctors are stretched thin or pressed for time. Safety grows stronger when someone asks: Does this dose make sense? Could this combo backfire? Each day, their work quietly reduces mistakes before harm happens. [10] Money saved comes not from cutting corners, but from avoiding hospital stays caused by fixable errors. [6,13]

It turns out prescribers accepted what pharmacists suggested nearly every time - between 85.5% and 99%. [11,15] Back then people worried doctors might push back against advice coming from pharmacists. Now it seems those worries were off the mark. Clear words, respect, proof from research - these helped make suggestions easier to take in. [15] Timing mattered too. When talks happened on the spot during rounds, agreement came more naturally. [11] Working together like this didn't just happen by chance. Trust grew because both sides listened. A medical team runs smoother when roles blend without friction. Seeing each other as partners shaped how care unfolded across hospital units. None of it worked unless both professions made space for shared decisions. [18]

## 10. CONCLUSION:

It turns out that having clinical pharmacists on general medicine hospital wards makes a clear

difference. [1,2] When they are part of the care team, mistakes with medicines drop sharply. Instead of being left out, their presence shifts how smoothly things run. Problems tied to drugs get spotted faster because someone trained is watching closely. [7] Errors once common now happen far less often when pharmacists work alongside others. [10,14] Spotting bad reactions improves just as much as knowing when doses need adjusting. [8,12] Even decisions around antibiotics become more thoughtful. [3] Advice to patients gains depth. Money gets saved not by cutting corners but through smarter choices. [6,13] What used to slip through cracks rarely does anymore.

Most patients in India's public clinics see little time with doctors. Heavy workloads pile up when many drugs mix in one person's treatment. [7] Mistakes grow more likely under pressure like that. A trained pharmacy expert helps catch risks before they cause trouble. [1,10] Their presence shifts how care unfolds on busy floors. Places like ESI Hospital run smoother when these professionals join rounds. Rules should name their duties clearly. Staffing plans need to include them by design. Notes in records make actions traceable. [20] Working side-by-side with nurses and physicians builds stronger checks. Without that link, gaps stay hidden. [18]

Today, the general ward stands as the starting point where new Pharm.D graduates can shape hospital care. Because these professionals are educated in clinical pharmacy, placing them on general medicine floors creates immediate value. [18] When they join teams there, patient outcomes shift in measurable ways. Medication errors drop once pharmacists take part in daily rounds. [1,9] This moment matters more than ever for India's health facilities. Without strong roles for clinical pharmacists now, progress slows across hospitals. [7] Safety improves only when expertise meets real-world settings. That place is here. It has to be the general ward, today.

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