

## Chapter 8

### Prescription Practices in the Grey

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#### Introduction: Where Science Meets Suspicion

A prescription is meant to be a product of **clinical reasoning**, backed by **evidence**, and tailored to **individual patient needs**. In India, however, a significant portion of prescriptions fall into a **grey zone** – influenced not by science, but by **habit, marketing pressure, profit incentives, or simple ignorance**.

The overuse of antibiotics, irrational combinations, polypharmacy, and incomplete prescriptions not only raise treatment costs but also contribute to **antimicrobial resistance, iatrogenic harm, and public distrust**.

This chapter explores the **structural, commercial, and behavioural factors** driving India's irrational prescription epidemic.

#### 1. The Scope of Irrational Prescribing in India

Various audits over the last decade suggest that **30–50% of prescriptions in India** are either **incomplete, irrational, or potentially harmful** [1].

| Table 1: Common Prescription Errors in India (2022) |

Type of Error	Prevalence (%)
Unnecessary drugs	28%
Incomplete dose instructions	19%
Irrational drug combinations	22%
Brand substitution confusion	12%
Unwarranted antibiotic use	26%

Source: WHO-SEARO Rational Use of Medicines Audit, 2022 [1]

These errors are not limited to quacks or informal providers. In fact, **many licensed physicians**, including specialists in private hospitals, **routinely prescribe irrational drug regimens**.

## 2. Polypharmacy: When Less Is More

**Polypharmacy** is the use of **five or more medications concurrently** – common in elderly and chronic disease patients.

In India, this is often **non-evidence-based**, driven by:

- Diagnostic uncertainty
- Commercial pressure
- Belief that “more is better”

A 2021 study across tertiary hospitals found that **62% of hypertensive patients were prescribed ≥4 medications**, often including **vitamin supplements, PPIs, sedatives, and unnecessary antibiotics** [2].

| **Table 2: Average Number of Drugs per Prescription (By Sector)** |

Healthcare Setting	Avg. Drugs per Prescription
Private Hospitals	4.9
Government Clinics	3.1
Informal Practitioners	5.4

Source: *Indian Journal of Clinical Practice*, 2022 [2]

## 3. Antibiotic Misuse: A National Emergency

India is the **world’s largest consumer of antibiotics**. But 40–60% of these are **inappropriately prescribed** – either for **viral infections, without proper dosage**, or for the **wrong duration**.

| **Table 3: Common Antibiotic Misuse Scenarios** |

Scenario	Frequency (%)
Antibiotics for viral cold/fever	36%
No culture sensitivity done	78%
Fixed-dose combinations (FDCs)	42%

Paediatric use without weight check 28%

Source: CDSCO-AMR Joint Task Force Report, 2021 [3]

This overuse has led to **skyrocketing antimicrobial resistance (AMR)**. India now reports **third-line resistance in E. coli, Klebsiella, and Acinetobacter**, severely limiting treatment options [4].

“We’re running out of effective antibiotics. And irrational prescribing is the front-line culprit.” – Infectious Disease Specialist, AIIMS.

#### 4. Irrational Drug Combinations: Legal Yet Lethal

India has a long history of approving and selling **irrational Fixed Dose Combinations (FDCs)**—mixtures of two or more active drugs that often **lack scientific rationale**.

Examples include:

- **Nimesulide + Paracetamol** (painkiller + hepatotoxic risk)
- **Ciprofloxacin + Tinidazole** (broad-spectrum misuse)
- **Antibiotic + Lactic Acid Bacillus** (to reduce gut side effects—without addressing AMR)

In 2016, the government attempted to ban **344 such FDCs**, but **legal challenges delayed enforcement** [5].

| **Table 4: Status of FDC Regulation in India** |

Year	Action	Outcome
2016	344 FDCs banned by MoHFW	Stayed by courts
2018	Supreme Court clears ban	328 banned, but many still available
2022	CDSCO notifies audit of new FDCs	Implementation pending

Source: MoHFW Notifications, 2016–2022 [5]

#### 5. Vitamins and Nutraceutical Overuse

India has witnessed a **30% year-on-year growth** in the sale of **nutraceuticals and over-the-counter vitamins**, many of which are:

- Unnecessary for well-nourished patients
- Prescribed as placebos or “boosters”
- Promoted with aggressive pharma incentives

| **Table 5: Top 5 Prescribed Non-Essential Drug Categories (2022)** |

Category	% of Prescriptions
Multivitamins	42%
Digestive enzymes	18%
Herbal tonics	14%
Liver supplements	11%
Neuromodulators	9%

Source: AIOCD-AWACS Data, 2022 [6]

## 6. Diagnostic-Driven Prescribing: The Revenue Loop

In many private hospitals, doctors are **rewarded based on revenue targets** that include prescriptions. Some use **diagnostic reports to justify polypharmacy**, even when:

- Findings are clinically insignificant
- Investigations are unnecessary
- Repeat testing is not needed

“Tests generate prescriptions, and prescriptions justify tests – a closed loop of commercial medicine.” – Internal medicine physician, Bengaluru

## 7. Systemic Issues Behind Poor Prescription Practices

### a) Lack of Updated Guidelines

Many physicians rely on outdated knowledge from medical school or **brand-sponsored CME slides**.

### b) No Prescription Audits

Unlike NHS systems, India has **no national or state-level audit of prescriptions**, except for a few pilot studies.

### c) No Real Deterrent

Doctors violating rational practice face **no penalties**, unless a specific patient files a case—and even then, **proof is elusive**.

### d) Influence of Pharma Marketing

As discussed earlier, **gifts and loyalty schemes** distort decision-making.

## 8. National Medical Commission (NMC) Role: A Missed Opportunity

The NMC has issued guidelines encouraging:

- **INN (generic name) prescribing**
- **Rational use of antibiotics**
- **Documentation of prescriptions**

However:

- These remain **advisories, not enforceable regulations**
- **Electronic prescription systems**, which enable auditing, are absent in most states
- Doctors rarely undergo **periodic competence tests or CME-linked recertification**

## 9. Impact on Patient Safety and Public Health

Consequences of irrational prescribing include:

- **Drug resistance and superbugs**
- **Iatrogenic harm (e.g., liver damage from excess paracetamol)**
- **Poor compliance due to high pill burden**
- **Out-of-pocket bankruptcy**
- **Delays in actual diagnosis and effective therapy**

A 2021 Lancet study estimated that **nearly 140,000 deaths in India could be linked to AMR-related treatment failure**, many stemming from **over-the-counter or inappropriate prescriptions** [7].

## 10. Reform Blueprint for Rational Prescribing

| Table 6: Key Reforms to Improve Prescription Quality |

Reform Proposal	Status
National Prescription Audit Program	Not yet launched
Mandatory e-Prescribing in urban areas	Pilot in Tamil Nadu
CME-based license renewal	Proposed by NMC
Penalties for irrational prescribing	Not implemented
Hospital prescription transparency	Voluntary disclosures

### Other Recommendations:

- Promote **point-of-care prescribing checklists**
- Deploy **e-prescription platforms** linked to NLEM
- Integrate **clinical pharmacists** into care teams
- Empower patients to ask: *Is this drug necessary?*

### Conclusion: The Prescription as a Mirror

A doctor's prescription is a **mirror of the system's values**. In India, it reflects a combination of **scientific expertise and systemic distortion**—a cocktail of knowledge diluted by profit, pressure, and habit.

Until prescription practices are treated as a **public health concern**—and not a matter of professional discretion alone—patients will continue to suffer the consequences of **preventable, commercialized polypharmacy**.

### References

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