



## UNDERSTANDING THE PRESCRIPTION PRACTICES IN A TEACHING HOSPITAL THROUGH AN AUDIT IN A RURAL SETUP

### Pharma

|                                 |                                                                                                                                                                                           |
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### ABSTRACT

**Background:** Prescription auditing is an important quality improvement tool to assess prescribing practices and ensure patient safety. Errors in prescription writing are common in teaching hospitals and may lead to adverse drug events. **Methods:** A cross-sectional prescription audit was conducted in the outpatient department of a tertiary care teaching hospital in rural Maharashtra. A total of 310 prescriptions were evaluated for compliance with 26 parameters based on NABH and WHO prescription standards. **Results:** High compliance was observed for patient identification details and medication availability. Areas such as documentation of clinical examination, generic prescribing, legibility, and stop orders showed deficiencies. **Conclusion:** The audit highlights both strengths and gaps in current prescribing practices. Regular audits and educational interventions are recommended.

### KEYWORDS

Prescription audit, prescribing practices, medication errors, rural teaching hospital

### INTRODUCTION

Prescription writing is a fundamental component of medical practice<sup>1</sup>, serving as the primary link between the physician's clinical judgment and the patient's treatment. A well-written prescription not only ensures the accurate delivery of therapy but also plays a crucial role in safeguarding patient safety. However, errors or omissions—such as incomplete patient details, illegible handwriting, inappropriate drug selection, or inadequate dosage instructions—can lead to adverse drug reactions, therapeutic failure, or even life-threatening complications. These lapses may also increase healthcare costs and erode patient confidence in the healthcare system.

Prescription audits are therefore essential tools for systematically evaluating prescribing practices.<sup>2</sup> By assessing prescriptions against established standards and guidelines, audits help identify deficiencies in completeness, accuracy, and rational drug use. They also provide valuable insights into prescriber behaviour, highlight areas needing intervention, and promote adherence to regulatory requirements. Ultimately, such audits serve not only to monitor but also to improve the quality of healthcare delivery, thereby ensuring safe, effective, and patient-centred pharmacotherapy.

### METHODS

This cross-sectional study was conducted in the outpatient department of a tertiary care teaching hospital in rural Maharashtra. Prescriptions were collected from consenting patients and analyzed for 26 predefined parameters including patient details, drug information, and physician identification. Prescriptions were evaluated based on predefined audit criteria. Each criterion was marked as fulfilled (Yes) or not fulfilled (No), and compliance percentages were calculated for each parameter.

### RESULTS

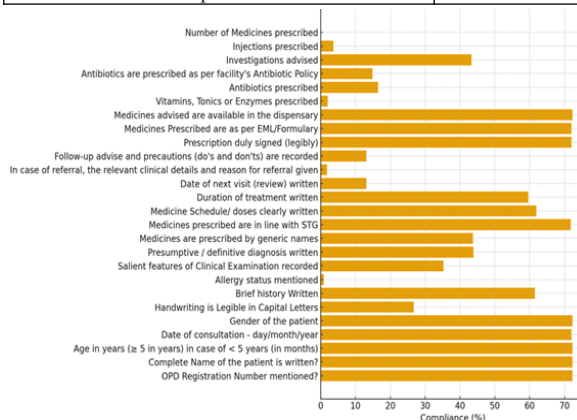
A total of 310 prescriptions were analyzed. Patient identification details such as name, age, and gender showed high compliance. Clinical examination findings and generic drug prescribing showed comparatively lower compliance.

Compliance percentages for each criterion are summarized below.

**Table-1 Compliance of Prescriptions with Standard Audit Criteria**

| Criteria                                                             | Average Compliance (%) |
|----------------------------------------------------------------------|------------------------|
| OPD Registration Number mentioned?                                   | 72.27                  |
| Complete Name of the patient is written?                             | 72.27                  |
| Age in years ( $\geq 5$ in years) in case of $< 5$ years (in months) | 72.27                  |

|                                                                                  |       |
|----------------------------------------------------------------------------------|-------|
| Date of consultation - day/month/year                                            | 72.03 |
| Gender of the patient                                                            | 72.27 |
| Handwriting is Legible in Capital Letters                                        | 26.7  |
| Brief history Written                                                            | 61.5  |
| Allergy status mentioned                                                         | 0.92  |
| Salient features of Clinical Examination recorded                                | 35.25 |
| Presumptive / definitive diagnosis written                                       | 43.85 |
| Medicines are prescribed by generic names                                        | 43.73 |
| Medicines prescribed are in line with STG                                        | 71.8  |
| Medicine Schedule/ doses clearly written                                         | 61.9  |
| Duration of treatment written                                                    | 59.59 |
| Date of next visit (review) written                                              | 13.13 |
| In case of referral, the relevant clinical details and reason for referral given | 1.84  |
| Follow-up advise and precautions (do's and don'ts) are recorded                  | 13.13 |
| Prescription duly signed (legibly)                                               | 72.03 |
| Medicines Prescribed are as per EML/Formulary                                    | 72.03 |
| Medicines advised are available in the dispensary                                | 72.27 |
| Vitamins, Tonics or Enzymes prescribed                                           | 2.07  |
| Antibiotics prescribed                                                           | 16.5  |
| Antibiotics are prescribed as per facility's Antibiotic Policy                   | 14.88 |
| Investigations advised                                                           | 43.31 |
| Injections prescribed                                                            | 3.67  |
| Number of Medicines prescribed                                                   | 0.0   |



**Fig-1.: Distribution of Compliance in Prescription Writing**

## DISCUSSION

A total of 310 prescriptions were reviewed in this audit. Most prescriptions included basic patient details and medication availability, and adherence to essential drug lists was relatively high. However, clinical examination findings were often not recorded, which may compromise diagnosis and treatment. A proportion of prescriptions lacked legible signatures, raising medico-legal concerns. Minor inconsistencies were also noted in recording age and consultation dates. While certain parameters such as patient demographics and OPD registration number showed 100% compliance due to pre-printed formats, illegible handwriting emerged as a recurrent issue, posing risks of misinterpretation. Generic prescribing was suboptimal, with a preference for brand names observed in some cases. Additionally, incomplete or missing stop orders were noted, increasing the risk of prolonged or inappropriate medication use.<sup>3</sup>

## CONCLUSION

This prescription audit highlights both strengths and deficiencies in current prescribing practices at a tertiary care teaching hospital. While compliance with basic patient details and medication availability was satisfactory, significant gaps were identified in critical areas such as legibility, documentation of clinical findings, essential prescription details, and consistent use of generic names. These shortcomings have important implications for patient safety and medication efficacy. The findings emphasize the urgent need for corrective measures to enhance prescription quality and ensure safe, rational drug use.

To improve prescribing practices, structured training programs should be conducted for healthcare professionals, supported by the adoption of electronic prescription systems to reduce errors due to illegibility. Routine prescription audits are essential for continuous monitoring, while policy revisions can ensure adherence to international standards. A multidisciplinary approach involving doctors, pharmacists, and administrators will further strengthen the quality and safety of prescriptions.

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## DECLARATIONS

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**Conflict of Interest:** None declared

**Ethical Approval:** Approved by Institutional Ethics Committee

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