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Assessment of Legibility and Completeness of Prescriptions at Tertiary Care Hospitals: A Cross-Sectional Study

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Introduction

Prescription is written advice given by hakim and doctors to the patient to improve his/her health status. A complete prescription consists of physician's information, patient's information, and details of advised medication. Prescription mistakes such as prescription incompletion and illegibility account for a large percentage of pharmaceutical errors that might have significant consequences.

Aims and Objectives

The objective of this study was to assess the legibility as well as components of a prescription prescribed by doctors in tertiary care hospitals of Rawalpindi.

Table: Completeness Assessment Score and Grading for Prescription

Dimension	Score and Grading
Doctor's Information	0-1 Poor
	2 Below Average
	3 Average
	4 Good
	5 Excellent
Patient's Information	0-1 Poor
	2-3 Below Average
	4-5 Average
	6 Good
	7 Excellent
Medication Information	0-1 Poor
	2 Below Average
	3 Average
	4 Good
	5 Excellent

Materials and Methods

An analytical cross-sectional study was conducted in pharmacies of two allied hospitals (Holy Family Hospital & District Headquarters Hospital) of Rawalpindi Medical University.

A total of 4228 prescriptions (2832 from HFH, and 1396 from DHQ) were collected within 2 weeks of April.

Data was collected during the OPD hours of the hospital. The prescriptions that were either torn/burnt or prescribed outside the hospital were excluded.

A total of 661 prescriptions were selected using stratified randomized sampling and analyzed for legibility by three pharmacists.

Completeness assessment score and legibility assessment score tables are given below

SPSS version 26.00 and Graph Pad Prism were used to enter and analyze the data.

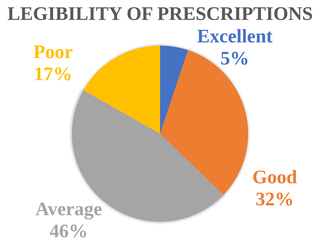
Descriptive statistics, correlational model and multinomial logistic regression were applied.

Table: Legibility Assessment Score and Grading for Prescription

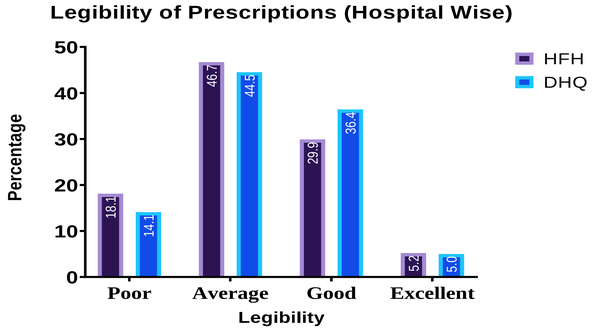
Quality of Prescription	Grades	Scoring
Illegible (almost all words are unclear to identify	Grade 1 (poor)	1
Barely legible (half of the prescription is unreadable)	Grade 2 (average)	2
Moderately legible (clear but took efforts)	Grade 3 (good)	3
Legible (all words are clear)	Grade 4 (excellent)	4

Results

- 1982 drugs were prescribed with an average of 3.01 (95% CI: 2.92, 3.08). Maximum drugs prescribed were 7 whereas minimum drugs prescribed were 1.
- About half of the prescriptions (46.0%) were classified in grade 2 and (32.1%) in grade 3.

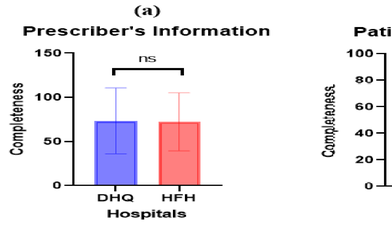


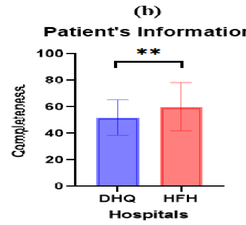
Prescriptions of grade 3 were more common in DHQ, whereas prescriptions of grade 2 were more common in HFH hospital.

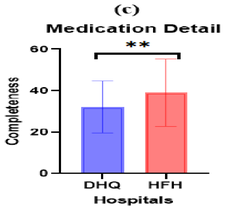


- On average, a prescription was found to be 55.74% completed. Generic name was not used in prescribing drugs. On average, prescriber's information, patient's information and medication details were 72.64%, 57.25%, and 36.73% completed respectively.

- Significant difference was found for patient's information ($t = -6.38$, $p < 0.001$), and medication detail ($t = -5.95$, $p < 0.001$) between the two tertiary care hospitals







Conclusion

Majority of the prescriptions prescribed at tertiary care hospitals were incomplete and barely legible.

Overall there is a need to devise means for improving the quality of handwritten prescriptions among the doctors.

References

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