

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/24039389>

Doctor, is your writing legible?

Article in *Indian Journal of Medical Ethics* · January 2009

DOI: 10.20529/IJME.2009.012 · Source: PubMed

CITATIONS

2

READS

1,362

2 authors:



Animesh Jain

Manipal Academy of Higher Education - Deemed to be University - Institute of Emine...

83 PUBLICATIONS 815 CITATIONS

[SEE PROFILE](#)



Prateek Rastogi

Manipal Academy of Higher Education

59 PUBLICATIONS 836 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Malaria - Prevalence, surveillance as well as drug resistance [View project](#)



malaria [View project](#)

COMMENT

Doctor, is your writing legible?

ANIMESH JAIN¹, PRATEEK RASTOGI²¹ Department of Community Medicine, Kasturba Medical College, Mangalore 575 001 INDIA email: animesh_j@yahoo.com ² Department of Forensic Medicine and Toxicology, Kasturba Medical College, Mangalore 575 001 INDIA

Today, computers are used in every field of work including medicine. Despite the computer revolution, however, a great deal of information in clinical records in hospitals continues to be handwritten. The doctor may understand what he/she has written, but difficulties arise when other parties are involved.

The handwriting of healthcare professionals in general and doctors in particular has been known to be illegible and difficult to decipher (1). In India, as in most other parts of the world, it is generally accepted that doctors have handwriting which needs some skill to decipher. Yet the importance of a doctor's handwriting cannot be overemphasised. Pharmacists and nurses have to read the physician's prescription to dispense and administer the correct medication to patients. Patients need to understand the prescription to take proper and timely treatment. In one study, 117 case notes were examined and 18 (15%) were so illegible that the meaning was unclear (1). Another study suggests that doctors, even when asked to be as neat as possible, produce handwriting that is worse than that of other professionals (2). This provides supportive evidence for the commonly held belief that the legibility of doctors' handwriting is unusually poor.

The implications of poor penmanship in doctors can be grave: it can harm patients, lead to poor performance of nurses and support staff, to administration of incorrect drugs and even doses, to improper treatment schedules, and even trouble with the law (3). Medication errors are thought to cause at least 7,000 deaths a year in the United States, a quarter of which stem from mix-ups in drug names (4). This is especially important in case of drugs with similar names—such as, for example, Terbinafine and Terfenadine or Diovol and Daonil—with disastrous consequences.

Doctors have been sued for harm caused due to negligence and illegible handwriting. In 1999, a ground-breaking lawsuit drew international attention to the implications of doctors' handwriting when a cardiologist was fined \$225,000 by a Texas jury. A prescription he had scrawled for Isordil, a drug for heart pain, was misread by the pharmacist as Plendil, used for high blood pressure. The patient took the wrong medication and died of a heart attack (5, 6).

This famous or, rather, infamous case was the first time that a doctor was convicted solely because of bad handwriting. Six American states have subsequently passed legislation making doctors' illegible handwriting a fineable offence. The US Food and Drug Administration recognises that bad handwriting leads to medication errors and now demands that drug names are tested by simulating the process of dispensing drugs using handwritten prescriptions (4). Even in India the court had directed that doctors should write legibly (7).

What could be the possible reasons and plausible explanation for illegible writing? Is it indifference? Or does it have to do with less time, a busy practice, or too many patients, and/or too many hospitals to attend to? Is it because the doctor does not know the correct spelling and by scribbling he tries to mask his ignorance, leaving it to the pharmacist/chemist to decipher and decide? Maybe he has not paid enough attention to his handwriting during his formative years, or else he is just trying to show off (especially so among young graduates) or he takes illegible handwriting to be the trademark of a busy medical professional, and thinks he is just following in the footsteps of earlier generations.

We have looked at the consequences and probable causes of bad penmanship among doctors, but what remedial measures and solutions are there?

To begin with, parents and teachers in school should pay more attention to ensuring that their wards learn to write legibly. Undergraduate and postgraduate medical courses should take bad handwriting seriously and penalise careless handwriting by cutting exam marks, issuing memos etc. Doctors don't need pretty handwriting, just legible handwriting. More needs to be done to generate awareness and sensitise doctors to the dangerous consequences of unreadable handwriting. Legible handwriting should be considered part of the duty of a medical practitioner and failure to conform should be penalised. Chemists should advise patients to go back to the doctor and request a neat prescription. Provisions should be made to report to the state medical council and professional bodies like the Indian Medical Association if illegible prescriptions are received even after requesting legible ones from a particular doctor. Collective efforts and awareness will go a long way in ending the growing problem of illegible handwriting among medical professionals and saving precious lives.

References

1. Leo P. Tracing the roots of illegible handwriting. *Pittsburgh Post-Gazette* 2006 Apr 13 [cited 2008 Feb 10]. Available from: <http://www.post-gazette.com/pg/06103/681741-294.stm#>
2. Lyons R, Payne C, McCabe M, Fielder C. Legibility of doctors' handwriting: quantitative comparative study. *BMJ* 1998; 317: 863-4.
3. Rao BC. My thoughts - Doctors' handwriting. *Sunday*, 2007 Oct 21. [cited 2008 Feb 10]. Available from: <http://badakerecrao.blogspot.com/2007/10/doctors-handwriting.html>
4. Hughes C. Thou shalt write legibly. *BMJ* 2003; 327: s67-8.
5. Rodríguez-Vera FJ, Marín Y, Sánchez A, Borrachero C, Pujol E. Illegible handwriting in medical records. *JR Soc Med* 2002; 95: 545-6.
6. Waters R. Precarious prescriptions: Can your doctor's handwriting kill you? *WebMD* 2000. [cited 2008 Feb 12]. Available from: http://www.webmd.com/content/pages/9/1691_50655.htm
7. Bansal RK. Court directs doctors in India to write legibly. *Med Leg J* 2005; 73: 111.