

Effectiveness of Compulsory Rotatory Internship Posting in Forensic Medicine: A Comparative Evaluation Among InternsSahajad Khilji¹, Sweekriti Sahu², Swapnil Paliwal³, Ashok Kumar Jain⁴^{1,2}Assistant Professor, Department of Forensic Medicine & Toxicology, Chirayu Medical College & Hospital, Bhopal, M. P., India³Associate Professor, Department of Forensic Medicine & Toxicology, Chirayu Medical College & Hospital, Bhopal, M. P., India⁴Professor & Head of the Department of Forensic Medicine & Toxicology, Chirayu Medical College & Hospital, Bhopal, M. P., India

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Abstract:**Introduction:** Forensic medicine is a cornerstone in ensuring the delivery of justice through medical evidence. The Compulsory Rotatory Medical Internship (CRMI) is designed in such a way so that intersect with almost every clinical discipline—consent, documentation, MLC registration, sexual assault examination, injury certification, chain of custody, and death certification.**Aim:** This study aims to assess the value of compulsory forensic postings through a comparative analysis between two groups of medical interns**Methods:** Two study groups were made for comparison where 50 students who completed their internship in forensic medicine (Group A) and 50 students who were yet not posted (Group B) for internship to FMT department in over 5 months at our Chirayu Medical College & Hospital. which is a tertiary-care teaching hospital in central India region, Bhopal, M.P.**Results:** The mean knowledge score was significantly higher in Group A (3.8 ± 1.22) compared to Group B (2.28 ± 1.25). Majority of interns in Group A (81%) reported adequate exposure-based skills in handling cases compared to only 43% in Group B. Confidence levels in handling the medicolegal cases was markedly higher among Group A interns (75.6%) than Group B interns (20.4%). Positive attitude toward the relevance of forensic medicine was significantly greater in Group A (89.2%) in comparison to Group B (9.6%).**Conclusion:** The outcomes of the study are vital, as doctors frequently encounter medico-legal issues in practice, and inadequate training could result in errors with legal consequences. A Structured orientation for each day, casualty duties, supervised hands-on tasks, daily case-based discussions, feedback, mandatory logbook and autopsy visits in FMT internship posting can significantly enhance interns' readiness for medicolegal tasks.**Keywords:** Compulsory Rotating Medical Internship, Interns, Exposure based skills, medicolegal tasks, MBBS curriculum.**DOI:** 10.25258/ijcpr.18.5.6

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Introduction

Medicolegal work pervades routine clinical practice in India—especially in casualty, obstetrics, orthopedics, community postings, and primary care. Interns encounter cases with legal implications, including sexual assault examinations, injury documentation, death certification, and handling of forensic samples when they enter practicing medicine. In the new MBBS curriculum enacted since the 2019 academic year, the subject of FMT has been given its due importance by MCI. The elective internship posting of 15 days was the innovative step in this direction.[1] Another initiative taken by NMC was CRMI (Compulsory Rotating Medical Internship) that came into force on

the date of final publication in the official gazette of India on 18th November 2021, which made internship in Forensic Medicine and Toxicology mandatory exclusive for 1 week including autopsy postings. CRMI regulations 2021 are applicable to all medical graduates who begin their internship on/after the date of publication.[2]

In an Indian scenario, despite the public interest and obvious shortcomings of medical practitioners in forensic medicine, the Medical Graduate is expected to be equipped with basic medico-legal skills. These new graduates are directly posted to rural areas as medical officers in rural or primary health centers

without supervision and so they are facing serious problems in dealing with critical social issues such as domestic violence, child and adult sexual abuse, traffic medicine, and custodial medicine.[3] The compulsory rotatory posting in Forensic Medicine seeks to bridge this gap, yet systematic evidence quantifying its effect is sparse. This study aims to formally evaluate the effectiveness of the compulsory FMT internship posting using a robust, Comparative cross sectional study design.

Materials and Methods

We conducted a comparative cross-sectional study among MBBS interns posted to FMT in over 5 months at our Chirayu Medical College & Hospital, which is a tertiary-care teaching hospital in central India region, Bhopal, M.P. Quantitative outcomes—knowledge, skills, and self-efficacy—were measured after posting of 8 batches (7 students in each batch). Two study groups were made for comparison where 50 students who completed their internship in forensic medicine and 50 students who were yet not posted for internship. All interns posted to FMT during 5 months consisting of 8 batches wherein 7 students in each batch became the part of this study.

Interns having ≥80% attendance were included whereas interns who did not give joining in the department, not willing to participate and attendance <80%. Were excluded from the study. Outcomes was observed in four categories, Knowledge test (5 items), skills (5 items), self-efficacy (5 items) and attitudes (5 items). One plus marks was given for correct answer. The questions with more than 2 options as in Q9. Correct answer was given plus one rest all options and no marks. Q14. Low anxiety level was given plus one where as high and average anxiety level was given no marks. In Q15. While rating comfort level 1-2-3 star were given no marks were as 4 & 5 star was given plus one score. From Q16-20 the “don’t know” was considered under “no” and was given no marks as the group which was not posted did not have the relevance approach towards the subject.

Interventions were made as Structured orientation for each day, casualty duties, supervised hands-on tasks, daily case-based discussions, autopsy visit, feedback, mandatory logbook and reflective portfolio. Appropriate statistical test was applied for analysis of data and results was obtained.

SECTION – I KNOWLEDGE BASED QUESTION		
	Do we need to perform medicolegal autopsy irrespective of patients or relative’s request?	(Yes/ No)
	Which form is used to report unnatural death in hospital?	(MCCD/ Death certificate)
	In every case of poisoning, it is mandatory to inform the police.	(Yes/ No)
	For a 15-year-old alleging sexual assault, consent for medico-legal exam is given by	(Girl herself / Either parent or Guardian)
	For medico-legal blood alcohol estimation, the recommended preservative is:	(NaF vial/ EDTA Vial)
SECTION – II EXPOSURE BASED SKILL QUESTIONS		
	Are you independently capable of certifying the grievous nature of an injury?	(Yes/ No)
	Specific qualification is required to deal with MLCs of victims of sexual assault	(Yes/ No)
	After autopsy we should hand over the body to the relatives.	(Yes/ No)
	An adult conscious patient refuses examination after alleged assault. The doctor should: A) Force examination B) Respect refusal after explaining consequences and document informed refusal C) Ignore and proceed D) Call police to compel exam	(A/B/C/D)
	Casualty medical officer who handles MLC cases are experts in weapon examination	(Yes/ No)
SECTION – III CONFIDENCE IN HANDLING CASES		
	While issuing the medico-legal report, you as a doctor is afraid of putting your name?	(Yes/ No)
	Extra qualification of MD Forensic medicine is required for conducting autopsy.	(Yes/ No)
	Do you think you can prepare any type of MLC report with confidence after attending regular clinical postings?	(Yes/ No)
	2 years ago, you did MLC with the history of sexual violence 10 days before the date of examination, where you forgot to keep evidences from vaginal swab & slide.	(High/ Average/ Low)

	What will be your anxiety level when you receive the summon from court.	
	Rate your comfort level between 1 to 5 in handling police communication during duty. (where 1 is low and 5 highly comfortable)	(1 star/2 star/3 star/4star/ 5 star)
SECTION – IV ATTITUDE TOWARDS FORENSIC RELEVANCE		
	What type of reporting you find is the best when you receive an MLC.	(Online/ Offline/ Don't know)
	Do you think CFM should be taught like regular clinical postings?	(Yes/ No/ Don't know)
	Forensic posting helped me knowing real-world cases better	(Yes/ No/ Don't know)
	Intern teaching is helpful to know medico- legal responsibilities?	(Yes/ No/ Don't know)
	Do you think forensic medicine should be given more hours in UG training?	(Yes/ No/ Don't know)

Results

This present study compared two groups of medical interns—those who were posted in the department of forensic medicine (Group A) and completed their 7

days internship and those who were not posted (Group B)—with respect to their knowledge, skills, confidence, and attitude toward forensic relevance. The results obtained are shown in the table

Parameter	Group A (Posted)	Group B (Not Posted)	p-value
Mean Knowledge Score (out of 5)	3.8 ± 1.22	2.28 ± 1.25	<0.001
Practical/Exposure-based Skills (%)	81.6%	31.6%	<0.001
Confidence in handling cases (%)	75.6%	20.4%	<0.001
Attitude toward forensic relevance (%)	89.2% positive	9.6% positive	<0.001

Discussion

1. Knowledge Acquisition

The mean knowledge score was significantly higher in Group A (3.8 ± 1.22) compared to Group B (2.28 ± 1.25), with a p-value of <<0.001. There is highly significant difference in the mean knowledge of posted and not posted interns (t (98) =6.16, p<0.001). This shows that posted students have significantly higher knowledge and study clearly demonstrates that compulsory posting in forensic medicine substantially improves theoretical knowledge in the subject. The structured exposure, supervised learning, and direct interaction with real life cases likely contribute to this improvement.

2. Practical/Exposure-based Skills

As stated in the study done by Parth s et al [1] that over-zealous departments are trying to teach each & every aspect of FMT to the intern, treating them like “PROXY JRs”. But this had rather let into a confusing situation resulting in two extreme scenarios because most of the faculties have never done an internship in this subject as it was not available in their time. Another aspect of exposure-based learning comes into the purview of Clinical Forensic Medicine (CFM) where Sharma et al. [3] expressed their opinion that clinical toxicology and CFM should be practiced and not just taught in theory. In our study an overwhelming majority of interns in Group A (81%) reported adequate exposure-based skills in handling cases compared to

only 43% in Group B. The mean score in both groups (4.08 vs 1.58) indicate better exposure. Slightly lower SD (0.85) among the posted group shows more consistent performance, while higher SD (1.02) in not posted interns indicates greater variability. The statistical data (t(98)=13.32, p<0.001) in our study, this suggests that actual postings bridge the gap between theoretical learning and practical application, equipping students with hands-on experience essential for medico-legal case management.

3. Confidence in Handling Cases

In study done by Shrigiriwar & Thube [4] it was found that many casualty medical officers were freshly appointed and were not oriented to sexual assault cases, and before joining as medical officers, they always had a fear of such cases in mind and also have a fear of facing summons in the court of law. It was also came into observation by them that in fear of inadequate knowledge, doctors don't write their full name on injury certificates so that the court should not be able trace them. In our study confidence levels were markedly higher among posted students (75.6%) than non-posted students (20.4%) The statistical data is as follows (t(98)=15.6, p<0.001), suggesting that interns when provided with adequate exposure to handle medicolegal cases during their clinical posting, it will significantly uplift their confidence and competence in handling such situations in future. The practical knowledge and experience allows

them to correlate theoretical knowledge with the real life scenarios, understand legal documentation, and develop decision-making skills under supervision. Posted interns performed dramatically better which indicates that active participation during postings builds self-assurance in dealing with medico-legal responsibilities and ethical clarities, which are crucial components of medico legal practice.

4. Attitude toward Forensic Relevance

As mentioned in above study by Shrigiriwar & Thube [4] about the fear among the freshly appointed medical practitioners, one reason could be their ignorance and non-interest and unawareness toward the subject during their MBBS tenure of 5 years. In the article published in United Kingdom [5] it was given emphasis that by creating trained forensic medical professionals, that aid in the interests of victims, detainees, and the criminal justice system as a whole would lead to a high medico legal quality standard of the country. In our study, the Positive attitude toward the relevance of forensic medicine was significantly greater in Group A (89.2%). The interns of Group B who were not posted didn't have adequate medicolegal insight for the subject, since most of them opted for "don't know" in questionnaire, which drastically lead to fall of their percentage to (9.6%). The statistics showed ($t(98)=23.96, p<0.001$), This highlights that clinical postings not only enhance knowledge and skills but also shape students' perception about the subject's importance in their future professional life. It was noted that the attitude towards the subject changes among interns when their horizons of knowledge and skill were broadened.

Strengths: From the group of non-posted interns, next batch, (comprising of 7 students) same questionnaire was given on the last day was posting and gross change of answers was noted.

Conclusion

Forensic medicine gives medicine its legal vision and transforms a doctor into a witness of truth. The overall findings underscore the effectiveness of compulsory rotatory internship postings in forensic medicine. In the study done by Haripriya & Haripriya [6] Singh K et al [7] & Jasuma et al in Vadodra [8] data showed that senior doctors have better level of knowledge, Skill and confidence in handling medicolegal cases than juniors' doctors. Also, male doctors were found superior as compared to female doctors. This can be correlated with the fact that seniors' male doctors gained knowledge-based experience and skill by frequent exposures to medicolegal cases for more time. Keeping in view the studies conducted by various researchers when internship in forensic medicine was not compulsory to the time of implementation of CRMI in Forensic medicine, these results weigh more importance in

comparing the knowledge, skills, exposure and attitude towards the subject.

The posting enhances cognitive knowledge, provides practical skill acquisition, boosts confidence, and fosters a favourable attitude toward the subject. These outcomes are vital, as doctors frequently encounter medico-legal issues in practice, and inadequate training could result in errors with legal consequences. A Structured orientation for each day, casualty duties, supervised hands-on tasks, daily case-based discussions, feedback, mandatory logbook and autopsy visits in FMT internship posting can significantly enhance interns' readiness for medicolegal tasks. Although this study provides replicable evaluation framework and practical levers for improvement but this could only uplift medicolegal standards of India as a whole when all the faculties of medical colleges across the country would take this CRMI as their due responsibilities in shaping the new interns just like wet clay is molded into beautiful pot.

Declarations:

Funding: None **Conflicts of interest/Competing interests:** None **Availability of data and material:** Department of Forensic Medicine & Toxicology, Chirayu Medical College & Hospital, Bhopal, M. P. India, **Code availability:** Not applicable **Consent to participate:** Consent taken **Ethical Consideration:** There are no ethical conflicts related to this study. **Consent for publication:** Consent taken

References

1. Bhattacharyya, P. (2022). Internship in Forensic Medicine & Toxicology-A Proposed Curriculum. *International Journal of Ethics, Trauma & Victimology*, 7(02), 35-36. Available from: <https://doi.org/10.18099/ijetv.v7i02.7>
2. Compulsory Rotating Medical Internship Regulations 2021. <https://www.nmc.org.in/rules-regulations-nmc/>
3. Sharma BR, Harish D, Chavali KH. Teaching, Training and Practice of Forensic Medicine in India - An overview. *J Indian Acad Forensic Med.* 2005; 27:247-251; Available from: https://www.researchgate.net/publication/278678041_Teaching_training_and_practice_of_forensic_medicine_in_India_An_overview.
4. Shrigiriwar M, Thube H R. Assessing the Need for Clinical Forensic Medicine Training in the Medical Undergraduate Curriculum. *Cureus* 2024.16(5): e59545. doi:10.7759/cureus.59545. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11144070/>
5. G A Norfolk. The future of clinical forensic medicine. *BMJ.*1999 Nov 20;319(7221):1316-1317. PMID: 10567116,

- PMCID: PMC1117061,
DOI: 10.1136/bmj.319.7221.1316
6. A. Haripriya & V. Haripriya. Knowledge about Medical Law and Its Negligence among Doctors: A Cross-Sectional Study. International Journal of Scientific and Research Publications, 2014; 4(5) ISSN: 2250-3153. <http://www.ijsrp.org/research-paper-0514.php?rp=P292709>
 7. Singh K, Shetty S, Bhat N, Sharda A, Agrawal A, Chaudhary H. Awareness of Consumer Protection Act among Doctors in Udaipur City, India. Journal of Dentistry, Tehran University of Medical Sciences, Tehran, Iran 2010; 7(1): 19-23. PMCID: PMC3184720 PMID: 21998771
 8. Jasuma J. Rai, Rajesh V. Acharya, Deepak Dave. Knowledge and Awareness among interns and residents about medical law and negligence in a medical college in Vadodara – A Questionnaire Study. Journal of Dental and Medical Sciences 2013; 3(4): 32-38. Available from: www.iosrjournals.org ISSN: 2279-0853, ISBN: 2279-0861.