

The Pentagonal Model of Medical Practice: Re-defining the Role of the Physician

Mumtaz Ali¹

There is no doubt that when doctors become qualified, they get a very important role in society by treating sick people. Medical education gives doctors knowledge about clinical practice, but the real problem is how to use this knowledge in real life. If knowledge only stays in books, lectures or discussions and does not help common patients then it has no real value. A doctor should connect clinical thinking with actual patient problems because doctors are responsible for solving problems seen in daily practice. There is always a gap between what doctors know and what they do. To reduce this gap there should be a proper but practical system which can help doctors in making clinical decisions in different situations. Because of this the Pentagonal Model of Medical Practice is suggested to improve and standardize patient care. ^{1,2}In the middle of this model is clinical diagnosis which is the main center of all medical decisions. Diagnosis can be made by taking proper history, doing clinical examinations and using radiological physiological pathological or histological findings. The correctness of diagnosis decides the success of all next steps. If diagnosis is wrong, then even good treatment can fail. Around this central part there are four connected components which together decide the quality of clinical practice. ^{3,4} The first is proper indication. Clear and correct indication is the base of good treatment. If indication is correct, then results are usually better but if it is wrong then even advanced treatment cannot fix the mistake. ⁵ The second component is management and referral. Clinical care is not only making decisions but also using proper resources and expertise in the correct way. Some patients need medical treatment, some need surgery and some need rehabilitation. Proper and timely referral to the right specialty is very important for better patient outcomes. ⁶ The third component is understanding the disease mechanism. Good treatment is not only controlling symptoms but also understanding the disease process how it progresses regresses or stays stable. All treatments, whether medicines supportive care or surgery are basically used to change or stop the disease process. ⁷ The fourth component is procedure and technique. Procedure means the overall treatment plan while technique means how that plan is carried out. Skill precision and following proper principles are important for successful results. ⁸ These four components work around diagnosis and together support the whole structure of clinical care. Every component affects the others and weakness in one part can damage the result. The quality of medical practice can be judged by checking every component from excellent to poor. In practical life a doctor has three main responsibilities. First, to identify the correct indication for the disease. Second to make a proper and effective management plan. Third, to perform the treatment with good technical skill while balancing risks and benefits carefully. The Pentagonal Model gives a combined framework which joins accurate diagnosis proper decision making and technical skill into one approach for patient care. Its main strength is that it is simple and can be used in all medical fields. By using this structured approach in daily practice doctors can move from only theoretical knowledge toward better and more patient centered clinical care. ^{1,2,5}

References:

1. Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. BMJ. 1996;312(7023):71–72. DOI: 10.1136/bmj.312.7023.71

2. Grol R, Grimshaw J. From best evidence to best practice: effective implementation of change in patients' care. *Lancet*. 2003;362(9391):1225–1230. DOI: 10.1016/S0140-6736(03)14546-1
3. Croskerry P. Diagnostic failure: a cognitive and affective approach. In: *Advances in Patient Safety*. 2005. PMID: 21249862.
4. Graber ML, Franklin N, Gordon R. Diagnostic error in internal medicine. *Archives of Internal Medicine*. 2005;165(13):1493–1499. DOI: 10.1001/archinte.165.13.1493
5. Elwyn G, Frosch D, Thomson R, et al. Shared decision making: a model for clinical practice. *Journal of General Internal Medicine*. 2012;27(10):1361–1367. DOI: 10.1007/s11606-012-2077-6
6. Forrest CB, Glade GB, Baker AE, Bocian A, von Schrader S, Starfield B. Coordination of specialty referrals and physician satisfaction with referral care. *Archives of Pediatrics & Adolescent Medicine*. 2000;154(5):499–506. DOI: 10.1001/archpedi.154.5.499
7. Hanahan D, Weinberg RA. Hallmarks of cancer: the next generation. *Cell*. 2011;144(5):646–674. DOI: 10.1016/j.cell.2011.02.013
8. Birkmeyer JD, Stukel TA, Siewers AE, Goodney PP, Wennberg DE, Lucas FL. Surgeon volume and operative mortality in the United States. *New England Journal of Medicine*. 2003;349(22):2117–2127. DOI: 10.1056/NEJMsa035205

¹Chairman/HoD Neurosurgery, Ali Institute of Neurosciences, Irfan General Hospital

This editorial may be cited as; Ali M. The Pentagonal Model of Medical Practice: Re-defining the Role of the Physician. *Ali J Neurosci*. 2026;1(1):1-2