

Pakistan Cannot Afford Defensive Medicine

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For the first two-thirds of the 20th century, the most common basis on which malpractice lawsuits were lodged against physicians were allegations that the physicians did something wrong.^{1,2} About three decades ago, physicians began to be sued for failing to do something right.³ This was when defensive medicine came into being as a response to malpractice litigations and now it has become an undeclared standard of care, the cost of which is passed on to the patients.

Defensive medicine is practiced when doctors order tests, procedures, or visits, or avoid high-risk patients or procedures, primarily (but not necessarily or solely) to reduce their risk of malpractice liability.⁴ While the former is positive defensive medicine (assurance), the latter is negative defensive medicine (avoidance).⁵ It is not that defensive clinical practices do not provide any benefit to patients, only that the expected benefits are small relative to their costs. It may not be conscious. Some medical practices may get so entrenched over time that physicians become unaware of how liability concerns initially drove them.

Perhaps the key findings of the Jackson Healthcare National U.S. Survey of 2009 may assist in giving a thorough idea.⁶ Ninety two percent of the physicians reported practicing rule-out rather than diagnostic medicine out of fear that they will miss a diagnosis. The estimated annual cost of defensive medicine is \$650 - \$850 billion, which means \$1 of every \$4 spent on healthcare is spent on defensive medicine. Moreover, emergency room and primary care physicians and Obstetricians and Gynaecologists were found most likely to practice it. An 83% of young physicians reported being taught in medical school or residency to avoid lawsuits. Emphasis during training has moved from listening to and examining patients to clicking as many buttons on the computer order set as possible to cover every deadly diagnosis. A major portion i.e. 72% of the respondents felt that defensive medicine negatively impacts patient care. Unnecessary testing can lead to false positive results and hence more invasive tests, making complications more dangerous. Unnecessary admissions have their own risks too, as hospitalization

exposes patients to new environment, lack of sleep, relative immobility and the risk of nosocomial infections - often triggering a considerable deterioration in function.

The risk of being exposed to unnecessary radiation is another huge concern. A 2006 U.S. study conducted in a Level-1 trauma center⁷ has found that blunt trauma patients were exposed to radiation doses equal to 1,005 (approx.) chest X-rays from radiographic imaging during the first 24 hours of their care - thereby potentiating about 322 cancer cases per 100,000 exposed subjects. Since the precise indications for ordering a CT scan are often imprecise, it is hard to claim they are over-ordered. Alongside, not only does the cancer caused by a CT scan generally show up after decades but other intervening factors are involved too. This indicates that no one is scared of getting sued for ordering a CT scan; getting sued for not ordering one is more likely to be a fear factor.

It seems like for the sake of avoiding malpractice litigation; more medicines do not equal better medicine. Instead, it alienates patients even further from their physicians, starting the cycle of defensive medicine all over again. But the question is why do doctors order unnecessary tests?

Fear of being sued is stated to be the most common reason behind the unnecessary tests.⁸ Another reason is the fear of standing up in a dreaded Morbidity and Mortality (M & M) conference and talking about the mistakes - much more common than relatively rare malpractice suits. Once it happens, the same mistake is never made again also ordering more tests even for minor symptoms becomes much more likely. After all, M & Ms are never held to explain cases in which all the tests ordered come back negative.

Another suggested reason is that junior doctors cannot function without the senior ones. Doctors in training are no longer taught how to distinguish those patients who need testing from the ones who do not; making testing more of a reflex than a decision. Interestingly, according to a study of orthopedic surgeons,⁹ young doctors are less likely to order tests for defensive reasons, possibly because they are more likely to consider ordering tests as the standard of care and not view it as defensive.

There is a more subtle positive incentive too. Ordering a test takes less effort than thinking about whether it is really needed. An emergency medicine physician once said, It takes 30 minutes of trying - and often failing - to convince patients they don't need an X-ray versus 5 minutes to send them off for an X-ray.¹⁰

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Even greater concern is the American phenomenon which is being disseminated to countries that have lately managed to remain unaffected for example, Ireland.¹¹ Common examples of defensive medicine in our local setting include unnecessary labs, imaging, antibiotics, consults, admissions and follow-ups, together with avoiding high risk patients as well. Another example is the unnecessary management of DNR (do not resuscitate) patients.

Pakistan is the sixth most populous country with a total population of approximately 180 million people¹² and an average number of 6.8 people per family.¹³ With an annual per capita income of US \$1085,¹⁴ almost 17.2% people live below the poverty line.¹³ Even further, only 27% of the population enjoys full healthcare coverage while 73% depends on out-of-pocket payments.¹⁵ Hence, looking at national statistics one may easily conclude that Pakistan cannot afford defensive medicine. What shall be done?

Listen to the patient, as the art of listening well can sometimes surely lead to a faster and cheaper remedy.

Never worry alone.¹⁶ If you are concerned about a case, consult a colleague, as an outside perspective can support patient-oriented decision-making. Doctors should feel confident enough if they provide optimal care by obtaining a thorough informed consent, practicing safely with evidence-based medicine, following standard guidelines and protocols and documenting the concerns and reasons that lead to decisions.

Physician awareness about costs needs to be increased too. Researchers have found that simply by making physicians aware of the cost of regular blood tests, cuts the daily bill for the tests by as much as 27%.¹⁷ Minimize radiation exposure by reducing repeated imaging studies, using lower-dose or alternative imaging techniques and returning to an increased reliance on clinical examinations.⁷

Patients should be educated to ask questions such as how necessary is the test? What diagnosis are you looking for? What are the risks of not doing the test? What are the risks of the test itself? Patients' active participation in decision-making has significant beneficial effects in overall outcome and satisfaction.¹⁸

Above all, keep in mind that unfortunate outcomes, despite textbook medicine and a world of technology, are one of the major facts of life - a bitter reality that one has to accept sooner or later. Adverse events will take place and they should be considered as learning opportunities by presenting them anonymously at monthly meetings in a blame-free environment.

REFERENCES

1. Sandor AA. The history of professional liability suits in the United States. *JAMA* 1957; **163**:459-66.
2. Mohr JC. American medical malpractice litigation in historical perspective. *JAMA* 2000; **283**:1731-7.
3. Leape LL, Brennan TA, Laird N. The nature of adverse events in hospitalized patients. *N Engl J Med* 1991; **324**:377-84.
4. U.S. Congress; Office of Technology Assessment. Defensive medicine and medical malpractice. Washington, DC: U.S. Government Printing Office; 1994.
5. Studdert DM¹, Mello MM, Sage WM, DesRoches CM, Peugh J, Zapert K, *et al.* Defensive medicine among high-risk specialist physicians in a volatile malpractice environment. *JAMA* 2005; **293**:2609-17.
6. Jackson Healthcare. Overview key findings from Jackson healthcare survey [Internet]. 2010. Available from: http://www.jacksonhealthcare.com/media/9004/jh_summary_sheet_dm_p_hase_3_updated.pdf
7. Winslow JE, Hinshaw JW, Hughes MJ, Williams RC, Bozeman WP. Quantitative assessment of diagnostic radiation doses in adult blunt trauma patients. *Ann Emerg Med* 2008; **52**:93-7.
8. Pines JM, Meisel ZF. Why doctors order too many tests (it's not just to avoid lawsuits) [Internet]. Available from: <http://www.time.com/time/health/article/0,8599,2053354,00.html>
9. Sethi MK, Obremskey WT, Natividad H, Mir HR, Jahangir AA. Incidence and costs of defensive medicine among orthopedic surgeons in the United States: a national survey study. *Am J Orthop* 2012; **41**:69-73.
10. Terry NR. Physicians are talking about: the culture of defensive medicine [Internet]. Available from: <http://www.medscape.com/viewarticle/718665>
11. Murphy JFA. When careful medicine becomes defensive medicine. *Irish Med J* 2004; **97**:292.
12. Population Census Organization, Statistics Division, Government of Pakistan. Census Data [Internet]. Available from: <http://www.census.gov.pk>
13. Pakistan Defense [Internet]. 2011. Available from: <http://www.defence.pk/forums/economy-development>
14. Pakistan Ministry of Information and Broadcasting [Internet]. 2011. Available from: <http://www.infopak.gov.pk>
15. Sania N. Choked pipes: reforming Pakistan's mixed health system. London: *Oxford University Press*; 2010.
16. Donovan A. Challenges may be daunting, but APA helps meet them. *Psychiatric News* 2007; **42**:13.
17. Elizabeth AS, Thomas JM. Surgical vampires and rising healthcare expenditure: reducing the cost of daily phlebotomy. *Arch Surg* 2011; **146**:524-7.
18. Stewart M. Effective physician-patient communication and health outcomes: a review. *CMAJ* 1995; **152**:1423-33.

