



ISSN: 2091-2749 (Print)  
2091-2757 (Online)

#### Correspondence

Dr. Arbin Joshi  
Consultant, Department of  
Surgery  
Kathmandu Model Hospital,  
Nepal  
Email:  
joshiarbin2012@gmail.com

#### Peer Reviewed By

Assoct. Prof Dr. Imran Ansari  
Patan Academy of Health  
Sciences

#### Peer Reviewed By

Prof Dr. Jay N Shah  
Patan Academy of Health  
Sciences

## Are we practising defensive medicine: A cure that is costlier than the disease?

Arbin Joshi

Consultant

Department of Surgery, Kathmandu Model hospital, Kathmandu,  
Nepal

### ABSTRACT

**Introductions:** In the current scenario where intimidation and manhandling to health personnel and vandalism in the hospital is high, sense of insecurity among the newer lot of surgeons and methods they incorporate to combat the possible threat from the patients or their peers has not been validated properly yet.

**Methods:** A preformed questionnaire with ten yes or no answers was circulated manually or via emails among the surgical residents and surgeons of less than 5 year experience. More number of 'yes' answers was considered as high level of sense of insecurity.

**Results:** Majority (n= 45, 90%) of respondents had 5 or more than 5 'yes' answers in the questionnaire and median 'yes' answer in the questionnaire was 8, indicating high level of insecurity among the respondents. All respondents (100%) expect themselves to be intimidated or sued in their career and 60 percent of respondents admit themselves ordering more tests than required to be on the 'safe' side.

**Conclusions:** This study has showed both sense of insecurity and subjective prevalence of defensive medicine among the newer lot of surgeons are high.

**Keywords:** defensive medicine, litigation, medical malpractice

## INTRODUCTIONS

Intimidation to the health personnel and vandalism in the hospital are on the rise. Scenario in Nepal is not much different. Modifications in medical practice both positive and negative has surfaced in recent times; one of which is the practice of defensive medicine, which is being practiced by the doctors out of compulsion to be more accurate and to check themselves from missing rare possibilities. This worrying fact of medicine practice has not gained attention, which is more worrying especially in the context of resource constrained medical scenario of country like Nepal. There is lack of published data locally, to define the magnitude of the effect defensive medicine has created in Nepal. Hence this study was conducted to determine the subjective prevalence of defensive medicine among the current and future surgeons of Nepal.

## METHODS

This is a cross sectional descriptive study conducted at Patan Academy of Health Sciences in year 2012. Fifty surgical residents and recently passed out surgeons of less than 5 years of experience were interviewed with a preformed questionnaire personally or through the mail. Responders' names were kept secret in the questionnaire form and for those who responded through e-mails author himself filled up the form on their behalf. Incomplete forms were planned to exclude from the interpretation. An independent reviewer was appointed to interpret the results manually.

Number of yes answer in the questionnaire is considered directly proportional to the sense of insecurity among the responder. And any score higher than or equal to 8 is considered highly insecure and score of 5 to 7 is considered insecure.

## RESULTS

Out of 50, 42 (84%) were interviewed manually, rest responded through e-mails.

There were no incomplete forms. Questionnaire contained ten yes or no questions, results of which are outlined in the table below.

Forty five responders (90%) had more than 5 yes answers in the questionnaire. Median number of yes answer in the questionnaire was 8 which showed high level of insecurity among the respondents.

**Table 1. Proportion of "Yes" response to the questions**

S	Questions	% Yes
N		
1.	Do you expect to get sued / intimidated / manhandled in your career?	100
2.	Will you order an investigation that does not help in the diagnosis but will be vital if you have to face the lawsuit in the future?	60
3.	Have you noticed other doctors ordering more tests that would have been necessary?	80
4.	Do you tend to exaggerate the risks involved in the procedure while signing the informed consent?	20
5.	What do you say when the mistake has been made? Do you believe in culture of secrecy than acknowledging your error?	80
6.	Do you refrain to try a new innovation in your practice which might be risky if fails?	80
7.	Do you think professional interaction or go-ahead signal from your senior colleague in a difficult case will make you safe?	60
8.	Will you buy an insurance policy for doctors if available?	80
9.	Does your practice in public or private hospital differ in terms of ordering investigations or performing a procedure with high risk?	40*
10.	Do you intend to refer critical cases to public hospitals citing unavailability of resources in the private setting?	100*

\*Only 20 responded to this questionnaire.

## DISCUSSIONS

This small study clearly shows high prevalence of sense of insecurity among the surgical residents and recently passed out surgeons. Magnitude of insecurity is reflected by number of 'Yes' answers in the questionnaire. Most of the questionnaires further elaborates methods that these young surgeons are incorporating to combat the feeling of insecurity. Some of the answers like refraining from new innovation, developing culture of secrecy and exaggerating the risk are definitely do not imply with the Hippocratic oath. Hence, our findings expose one of the most dreadful practice that is evolving in the medical field of our country.

According to Merriam Weber Definition 2011, the practice of ordering medical tests, procedures or consultations of doubtful clinical value in order to protect the prescribing physician from malpractice suits is termed as Defensive Medicine. Office of Technology Assessment (OTA) US Congress has broadened the definition of Defensive Medicine terming it to occur when doctors order tests, procedures or visits or avoid high risk patients or procedures, primarily (but not necessarily solely) to reduce their exposure to malpractice liability.<sup>1</sup> This OTA definition permits a practice to be defined as defensive even if the physician is not consciously motivated by a concern about liability.

Two types of medical behaviour have been described in literature because of threat of malpractice liability; assurance behaviour and avoidance behaviour.<sup>1</sup> Assurance behaviour consists of ordering unnecessary test, procedure or investigations which is economically hazardous but avoidance behaviour which is to avoid or withdrawing treatment because of risk of liability, is directly risky for the patient's life and is totally unacceptable. Hundred percent respondents agreed that they tend to refer critical patients to public hospitals (see question no 10) is a good example of prevalence of avoidance behaviour. In a study, 42% of the respondents reported that they had taken steps to restrict their practice, including eliminating procedures

prone to complications such as trauma surgery and avoiding patients who had complex medical problems or were perceived as litigious.<sup>2</sup>

Medical economists too are concerned with this 'costly defence' as it is estimated that in US defensive medicine may account for up to US\$ 100 billion annually in excessive cost which is about 26 to 34% of their annual healthcare cost.<sup>3</sup> Healthcare Cost because of defensive medicine in Nepal is undefined and there is no criterion against which defensive medicine can be compared. In a country like ours with poor economy issue of defensive medicine is much more relevant.

In contrast, some of the papers have outlined positive side of defensive medicine. In a survey<sup>4</sup> among 300 UK general practitioners, 98% claimed to have made some practice changes as a result of possibility of patient complaining. Some change in practice such as increased patient explanations or more detailed note taking are clearly beneficial changes noticed from the survey.

In the author's opinion, defensive medicine is not absolutely good or bad; on the other hand it is neither avoidable nor beyond our control. In this complex scenario, what we need to do in the first place is, we need to acknowledge it explicitly and adopt positive aspects of defensive medicine and at the same time, take steps to keep it under control without letting the fear of litigation, manhandling and vandalism put financial burden on our economy. For that every institute need to develop a mechanism to reduce the load of defensive medicine. We should not let defensive medicine be a cure more expensive than the disease itself.

Defensive Medicine is inevitable. Our effort should be to draw a line somewhere not to let cost of defensive medicine go overboard. Ordering essential procedures with check and balance system, reforming hospital policy and regular audit might be the possible answer to this issue.

## CONCLUSIONS

This study has suggested that sense of insecurity amongst the surgeon is high and subjective prevalence of practice of defensive medicine is equally high in Nepal.

## REFERENCES

1. U.S. Congress, Office of Technology Assessment. Defensive medicine and medical malpractice, OTA-H-602. Washington, DC: U.S. Government Printing Office; 1994.
2. Studdert DM, 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*. 2005Jun1;293(21):2609-17.
3. Kessler D, McClellan M. Do doctors practice defensive medicine? *The Quarterly Journal of Economics*. 1996May;111(2):353-90.
4. Summerton N. Positive and negative factors in defensive medicine: a questionnaire study of general practitioners. *BMJ*. 1995Jan7;310(6971):27-9.