GENERAL SECTION ORIGINAL ARTICLE



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

## Correspondence

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

## **Peer Reviewed By**

Assoc. 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 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 the year 2012. Fifty surgical residents and recently graduated surgeons of less than 5 years' experience were interviewed with a preformed questionnaire personally or through email. 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 excluded from the interpretation. An independent reviewer was appointed to interpret the results manually.

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

# **RESULTS**

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

There were no incomplete forms. All respondents (100%) expect themselves to be intimidated or sued in their career, (Table 1).

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.

	e 1. Proportion of "Yes" response stions	to the
SN		% Yes
1	Do you expect to get sued /	100
1.	intimidated / manhandled in your	100

	career?	
2.	Will you order an investigation	60
	that does not help in the	
	diagnosis but will be vital if you	
	have to face the lawsuit in the	
	future?	
_	and the second of the second o	

3.	ordering more tests that would have been necessary?	80
4.	Do you tend to exaggerate the risks involved in the procedure	20

	while	signing	the	infor	med	
	consen	t?				
5.	What	do you	say	when	the	80
	mistake	e has bee	n mad	le? Do	you	
	believe	in cultur	e of se	ecrecy	than	
	acknow	ledging y	our en	ror?		

80

60

80

40\*

100\*

Do	you	refrain	to	try	а	new	
inno	ovatio	n in you	r pr	actio	e v	vhich	
mig	ht be	risky if f	ails?	)			
	inne	innovatio	innovation in you	innovation in your pr	,	innovation in your practice v	Do you refrain to try a new innovation in your practice which might be risky if fails?

7.	Do	you	thin	ık prote	ssional
	inter	action	or	go-ahead	signal
	from	your	senio	r colleagu	e in a
	diffic	cult case	e will	make you	safe?

10.	Do you intend to refer critical
	cases to public hospitals citing
	unavailability of resources in the
	private setting?

<sup>\*</sup>Only 20 responded to this questionnaire.

## **DISCUSSIONS**

This study shows high prevalence of sense of insecurity among the surgical residents and recently graduated 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 in our country.

According to Merriam Webster 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. 1 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 literatures because of threat of malpractice liability; assurance behaviour and avoidance behaviour. 1 Assurance behaviour consists of ordering unnecessary tests, or investigations which procedures economically hazardous; but avoidance behaviour which is to avoid or withdraw 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, 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 is, 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 or putting 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 to 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 within framework of protocol, 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**

U.S. Congress, Office of Technology Assessment.
Defensive medicine and medical malpractice, OTA-

- H-602. Washington, DC: U.S. Government Printing Office; 1994.
- 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.
- 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.