

# **Defensive Medicine as a Tool against the Malpractice Issues**

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#### **Review Article**

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### Abstract

**Background:** Defensive medicine is the requesting for procedures, tests, referral and /or avoidance of high-risk patients with the aim that to minimize the malpractice liability. These tests or measures are done mainly as a safeguard and not for the benefit of patients. OTA (The Office of Technology Assessment) described the procedures done to the patients as they ordered to minimize the risk of malpractice and so not all action of defensive medicine are bad to patients.

Defensive medicine can take either positive or negative forms, depending on the direction of deviation from typical practice. Negative DM involves withholding or avoiding high-risk treatments and diagnostic tests to avoid possible associated risks and poor outcomes that might lead to a malpractice suit. Conversely, positive type of DM is characterized by the do excessive, unnecessary diagnostic tests and interventions to decrease risk of being found negligent.

The practice of defensive medicine DM is a significant financial burden on health care systems.

In Egypt, Defensive medicine creeping rapidly, this may be due to the fear of doctors from being accused of malpractice, inflicting harm to the patient for not doing enough or decrease the patient satisfaction.

**Conclusion:** Defensive medicine is a deviation from the ethical medicine but when discussing the DM, we should take in mind the concerns of doctors about the legal issues and their harm being in court due to their efforts with the patients, so in doctors view it is the only action to minimize the risk of malpractice issues, or in another words it is fear from patient dissatisfaction.

Keywords: Defensive Medicine; Malpractice; Office of Technology Assessment

# Introduction

#### **Historical Part**

In JAMA 1974, letter to the editor reported that doctor need to order many tests to keep himself out of trouble [1]. In Lancet 1982; the authors reported that failure of the doctors to ask for tests considered by the patients as failure to give the proper diagnosis [2]. Another historical story mentioned in Lancet JAMA 1975, in St James Hospital, doctors saved a patient from ruptured abdominal aortic aneurysm complicated by free rupture into the peritoneal cavity and shock, the doctors saved the time and proceeded into the surgery without any investigations [3].

In 1765 was the beginning in England, Sir Blackstone published a compendium of legal principles and referred to what is called "Malapraxis" [4]. This followed by 1794 the first medical malpractice lawsuit in US, in this a patient

died due to surgical complications [5]. In nineteenth century, malpractice lawsuits begin to appear as a "Tempting new growth area for aggressive lawyers" [6,7]. In Egypt the medical law was emerged in 1954 under the number of 415 [8].

# **Defensive Medicine Definition**

The main definition of the defensive medicine is that ordering of procedures, and/ or tests or avoid dealing with high-risk procedures or patients in order to reduce the malpractice liability [9,10].

#### **Statistics**

Medical errors are nowadays the third cause of death in United States [11]. In Harvard and Australian study about half of the bad events in patients resulted from surgery. Complications from medical treatment, therapeutics adverse effects and errors in diagnosis were the most common cause in non-surgical complications. In Australian study making inaccurate diagnosis or wrong medications were the main cause of complications in patients [12]. Study was done in Johns Hopkins state that more than 100.000 deaths occur each year related to medication complication. 1.500.000 suffer from nonfatal injury due to medical error each year. Unnecessary surgery led to about 12.000 deaths each year [13].

Defensive medicine is an international problem beyond the restrictions of countries, economics, cultures, and beliefs. Some authors gave it the name of 'positive defensive medicine' (beneficial for patients) and 'negative DM' (detrimental for patients), but defensive medicine was generally regarded as a negative behavior [14-17,10].

#### **Defensive Medicine in Developing Countries**

Developing countries lack the statistics for the presence of defensive medicine but is not uncommon and there is possibility to rise all over the time [18]. This may be due to many factors; for example, most of these countries suffer from limited medical reporting for their populations with deficiency and improper documentation for the health care system [19]. Some studies were done in Turkey and Jordan reported that there is increase in the practice of defensive medicine with the increase in the lawsuits against doctors [20,21].

In another study was done in Egypt about practicing of defensive medicine in different specialties, they found that the most common form of practicing defensive medicine in its positive form was extra details and investigations done to patients, while the most common forms of negative defensive medicine were avoiding the high-risk procedures and avoiding high risk patients.

Another study were done in Jordan claim that the limited financial expenditure of the health sector is the main cause that push doctors towards defensive medicine.

# Cost of the defensive medicine

Defensive medicine has many harms to patients and to the health care system. The patients exposed to non-beneficial unnecessary tests, procedures, and may hospitalization. These over tests may lead to overtreatment both contribute to rise health care costs and increase length of stay in hospitals, without adding value [21-26].

Keane, et al. [27] reported that in their study about health care costs in US versus UK and the roles of medical education costs, malpractice risk and defensive medicine. US United States spends a lot of money on the diagnostics procedures. This may be due to two main factors, the first, is that the high cost of medical education which is very expensive, and the second is that due to horror of doctors from losing their job due to malpractice and so they order excessive procedures and tests to decrease the malpractice litigation. Patients have no idea about these tests and its value and so rely on the doctor decision. A study was done in Italy state that the practice of DM has no evidence that it provides benefits for patients. The economic burden of it on the health care system may lead to economic crisis and so in their view the DM is immoral [28]. Another study among orthopedics state that DM is a significant factor in health care costs and of marginal value for patients [29].

# Interaction between Malpractice Litigation and Defensive Medicine

The interaction between the malpractice litigation and defensive medicine was discussed by many papers which describe this relation as vicious circle. Physicians choose to practice defensive medicine or not and patients choose to claim them for malpractice or not, this lead to cycle typical to prey and predator [30,31].

# **Defensive Medicine Changes the Vision Of Doctors**

The probability of defensive action among doctors is directly proportional to the risk level. Surgeons considering their work as very high risk in addition to the fear from malpractice claims, so, they try to decrease the liability of errors by ordering many tests and procedures and they do not give it the name of defensive medicine [32,33]. The same idea presented in many papers to prove that surgeons with all their specialties fear from malpractice litigation and so ordering tests and procedures to avoid the misdiagnosis and so the maltreatment, neurosurgeons [34].

#### **Ethics of Defensive Medicine**

Defensive medicine is considered by some doctors as it is deviation from the usual practice to prevent the occurrence of criticism. There is a grey area between the proper usual investigations and the overprotective investigations and tests [14].

It is very hard to differentiate between what is the necessary for patients and what is the unnecessary, there is no solid line between the use of the resources and the overuse. When the main action is to perform tests and procedures to protect doctors from the malpractice litigation without any benefits for the patients, so, this not ethically and should be decreased [35,36]. The main way to avoid the non-ethical direction of the defensive medicine is that the core decision and the dialogue between doctors and patients to reach the most beneficial type of treatment [37]. A study was done in Australia in 2022 stated that it is easier for doctors to talk about the fear from lawyers that directing patients towards the court [38].

#### Plan to Decrease the Defensive Medicine

One of the most beneficial actions for decreasing the defensive medicine, is that collaboration between doctors by discussing the best care and tests for the patients, for example radiologist can educate other doctors what are the benefits and risks for the required imaging. The collaboration between doctors will be the best way for patients and for the health care centers [39,40]. Another method is that increase the trust between patients and doctors because it decreased in the last decade. These may act as antidote to decrease the act of the defensive medicine [41-43]. A study was done in Jordan, stated that defensive medicine is also present in Jordan but the main solution for that is restoration of the ethical dimension between doctors and patients [44,45].

#### Conclusion

Defensive medicine is and epidemic, spread rapidly and can be taught from older doctors to their students, to be the main and not the side way fearing from malpractice litigation. Many methods can be done to avoid the rapidly spread of defensive medicine, the first is good medical education which help coming doctors to differentiate between the necessary and the added unnecessary tests and procedures. The second is the media which can help in regain the confidence between patients and doctors, stop publishing the bad news and fear from doctors' decisions before the court judgement. The third is that support of the institutions to their doctors that can help them to work in safe environment. The fourth is that the collaboration between doctors to take the final correct decision for every patient.

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