Defensive Medicine: A Bane to Healthcare

Sir,

“I will prescribe regimen for the good of my patients according to my ability and my judgment and never do harm to anyone” - Hippocrates

The above oath is what every physician is bound to follow, but what happens in real practice is quite alarming. The so-called divine profession has lost its glory due to the intrusion of an evil namely ‘defensive medicine.’ Defensive medicine in simple words is departing from normal medical practice as a safeguard from litigation. It occurs when a medical practitioner performs treatment or procedure to avoid exposure to malpractice litigation. Defensive medicine is damaging for its potential to poses health risks to the patient. Furthermore, it increases the healthcare costs. Not the least, defensive medicine also paves way for degradation of physician and patient relationship.

Defensive medicine may be positive or negative, depending on the situation. The former includes performing unnecessary diagnostic tests and invasive procedure, prescribing unnecessary treatment and needless hospitalization. The latter comprises avoiding risky procedures on patients who could have benefitted from them, thereby excluding patients from treatment and hospital admission. Both practices are increasingly becoming professional behavior in medical practice, thus increasing the cost of healthcare and sometimes lowering the quality of the service provided. For example, unnecessary invasive diagnostic tests are additional risks and costs to the patient.

Generally, the physician’s aim is to reduce chances of litigation. In some cases, it may be medically justified, but in some, it will be medically inept. In a study conducted by Studdert, et al. in Pennsylvania among 800 physicians to determine the prevalence of defensive medicine revealed that 92% of physicians were found to be ordering imaging tests and diagnostic measures for assurance and 42% were eliminating high risk procedures and avoiding patients with complications. Gallup and Jackson Healthcare in 2010 found 73% and 92% of private sector physicians, respectively, admitted practicing defensive medicine, which was high compared to 48% of government physicians. The above studies highlight how prevalent defensive medicine is due to fear of litigation. Another study conducted by Harvard Medical School concluded that majority of physicians across various specialties tends to adopt a defensive professional culture.

Rodriguez, et al., study in 2007 demonstrated that 50% of the doctors operating in emergency departments in California between 2001 and 2005 were concerned with matter of malpractice litigation. Similar results emerged from a study conducted in Japan in 2006 with a group of 131 gastroenterologists.

Usually, defensive medicine raises the cost of healthcare for patients. The bonuses for increasing patient care revenues also added to the reasons for practicing defensive medicine. In some instances, this may be to confirm diagnosis, determine the seriousness of disease or due to lack of accuracy of available diagnostic tests. However, the personal finances or professional status of most physicians is not affected by a lawsuit as they have malpractice insurance. This notwithstanding, some physicians show symptoms of anxiety, depression, behavior or personality changes due to reputational consequences that might undermine their professional career and respect.

Insurance status of patients has also added to the keenness to use resources. It was clearly seen in various researches that hospital patients with private insurance stay in hospitals longer and receive many procedures compared to patients with Medicaid coverage or patients who lack health insurance.

In conclusion, practicing defensive medicine is not good for patients or physicians. The adverse effects of defensive medicine are not limited to the increased cost of healthcare, but also affect the overall quality of the healthcare system.

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References


Lurking Dangers Behind Overuse of Lamivudine to Treat Non-HIV Hepatitis B Patients in Africa

Sir.

The potent nucleoside analog reverse transcriptase antiretroviral drug lamivudine, which is also called 3TC, is a vital tool in the treatment and management of HIV and acquired immunodeficiency syndrome (AIDS)-related diseases. Using 3TC in combination with other antiretrovirals to treat HIV-positive patients ensures that the viral load is kept at a beneficially low level thus preventing the advent of opportunistic infections like tuberculosis and Pneumocystic carinii pneumonia (PCP).

However, the continuous use of 3TC in the treatment of non-HIV hepatitis B in poor countries will invariably counteract all the good intentions behind the creation of the drug in the first place. 3TC was created primarily to help reduce HIV-related morbidity and mortality by keeping the viral load minimal, lowering the healthcare cost for HIV-positive patients obtaining treatment as a result of comorbidity with other infections and to help reduce the treatment time for HIV-infected patients.

There are many biomedical problems associated with the overuse of 3TC in the treatment of hepatitis B. The pharmaceutical world is populated with cases in which the overuse of one drug to treat a disease has led to different types of drug resistances, including that of cross-resistance, whereby there emerges a tolerance to a toxic drug as a result of exposure to a similarly acting drug. Hepatitis B is now being recorded to show resistance to 3TC. Cross-resistance is well documented for many non-antiretroviral drugs such as colistin and polymyxin,[1] as well as for antiretroviral like 3TC[2] and zidovudine that are used to treat HIV and AIDS-related diseases.

One of the main reasons offered for the overuse of a particular drug for the treatment of a disease for which it was not originally designed is the unavailability of the appropriate medicine for the disease under consideration due to its high cost. 3TC was initially approved for use as part of a combination of HIV treatment by the Food and Drug Administration (FDA) in 1995, but was subsequently approved for chronic hepatitis B treatment in December 1998[3] after researches showed that the drug was successful in preventing the hepatitis B virus from reproducing itself.

In many underdeveloped countries, the overprescription and hence the overdependence on a clinically approved drug for the treatment of a different disease for which it was not originally designed is almost of a daily practice these days. For example, patients diagnosed with chronic hepatitis B in Sierra Leone nowadays are treated with 3TC treatment immediately: A practice that is common even among medical practitioners with better clinical experience.

This situation is also similar to other third world countries, where hepatitis B prevalence is on the increase in the presence of high HIV/AIDS prevalence. Most local physicians in these countries, due to the non-availability and high cost of conventional hepatitis B drugs such as interferon alpha, entecavir, adefovir dipivoxil and telbivudine, often prescribed 3TC as the drug of choice. But, while entecavir[4] and the other drugs that are also used to treat hepatitis B are said to have little or no effect on HIV infection, 3TC does.

Treating hepatitis B using 3TC seems reasonable. After all, there are striking similarities between viruses that have the same mode of transmission and use the same methods of prevention and control.

Studies have also shown that there is a direct correlation between the prevalence of HIV-induced immunodeficiency and the prevalence of hepatitis B antigen HBeAg in certain subpopulations.[5] A high prevalence of HIV/AIDS in a population is often associated with a high prevalence of hepatitis B within the same population. This is quite understandable because many viral infections like hepatitis B are as a result of T-cell immunodeficiency, of which HIV is the primary cause for immune deficiency. However, what is lacking in such studies is the fact that correlation does not necessarily imply causation. There is a high prevalence of hepatitis B among HIV/AIDS patients nowadays, especially in many developing countries, which will have an influence in the treatment option for these patients. It is possible that the over-reliance on 3TC for the treatment of hepatitis B, particularly in Sub-Saharan African, is due to medics prescribing 3TC on the assumption that...