



## THE MANY TENTACLES OF KNOWLEDGE ASYMMETRY IN HEALTHCARE

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**T**he other day, I was invited to participate in the National convention on Medicine and Law at Mumbai to deliberate on violence against doctors. The brochure ominously asserted that “75% of doctors have faced violence at work”

Why has this antipathy towards doctors become so commonplace? Is it from the seeds of suspicion planted by Google-driven health information systems retrieved from the internet? Or is it the mounting expectations of the ‘informed’ patient with insurance cover and cash? Could it be the corporatization of healthcare that places profit before patient care? Or is it lack of personalized attention? Or a sense of being swindled by unnecessary diagnostic tests and avoidable hospital admissions?

Must be a combination of all of the above, in addition to even more reasons peculiar to India. The healthcare system is particularly vulnerable to exploitation because of ‘knowledge asymmetry.’ When we want to buy a car, we decide what car we need, what additional fittings it should adorn, and when we should take delivery. No such freedom exists when it comes to our own health. We have no idea what vaccinations or diagnostic tests we need, what medicines we should buy or what surgeries we have to go through. The knowledge intensive nature of healthcare typically creates a conflict of interest between the ignorant patients and well-informed, profit-seeking healthcare providers. Trust alone can bridge this divide.

But why is trust fading? On second thoughts, the angst is not a recent phenomenon after all. The Sanskrit verse below reflects an enduring dread.

*Vaidyaraja namasthubhyam Yamaraja sahodara*

(Salutations to the doctor; brother of Yama, God of death)

*Yamo harathi pranani, Vaidyo prana dhanani cha*

(Yama takes away your life; and doctor, both life and wealth)

Knowledge asymmetry and conflict of interest are as old as the profession of healing. But matters have come to a head. What about knowledge asymmetries *within* the healthcare system? What about RCTs that announce the worth of a new cure to the world? How reliable and dependable are they?

Unfortunately, pharmaceutical industries are adding more layers of mystery to the knowledge asymmetries *within* the healthcare system itself, particularly between those who manufacture drugs and those who prescribe them. Recently, *PLOS One* published a paper [1] that reported a significant drop in the success rate of heavily funded clinical trials since 2000, when registration of clinical trials became mandatory. A comprehensive analysis of the outcomes of National Heart Lung, and Blood Institute (NHLBI) - funded RCTs (costing more than \$500,000/year) between 1970 and 2012, revealed that 17 of 30 studies (57%) published before 2000 showed positive results in primary outcome as opposed to just 2 out of 25 (8%) trials published after 2000. The transparency and trust endowed by the procedure of pre-registration of RCTs have been shown to be associated with poorer outcomes.

What does it mean? What about the umpteen RCTs that preceded mandatory registration? Is it not true that a significant proportion of drugs prescribed today owe their market-worth to the results from trials that were never subject to registration? How are we to interpret the clinical meaning of those trials? It has been widely accepted that clinical trials that produce positive results are more often published [2]. It has also been argued that dangerous adverse events surface after patent expiry. Does it not follow that published results have been tailored (or doctored?!) to benefit the pharmaceutical industries more than treat the patient or inform the pharmacist or doctor?

Authors of the *PLOS one* paper rightly conclude that “null results in large RCTs may be disappointing to investigators, but they are not negative for science”. The FDA Modernization Act (1997) has done well to create the Clinical Trials registry that provides information on ongoing clinical trials [3]. Much of these recent revelations are the direct result of recognizing the hazards of knowledge asymmetry.

Governmental policies alone can tackle its stranglehold. It is impossible to overstate the relevance of the Internet-enabled democratization of knowledge systems in healthcare. The vigilance that follows (this *PLOS One* report is one example!) is critical for ensuring patient safety.

## REFERENCES

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