



Medical Technology: Less Use and More Misuse

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Abstract

This paper deals with ethical conundrum involved in the surge of high end technology invading medical equipment and gadgets. The pace of ethical understanding and formulation under strips the momentum of value added medical technology. All technologies come at a price, basically the initial investment cost and later the recovery cost which may go on and on. The main casualty in the process is that of practicing ethics. It is killed and the valuable technology is smothered by invaluable social thrust and service. The authors in this article have tried to go deep down in to this malaise and find out some of the root causes with the hope that if saner minds get together ethical practices could be salvaged.

Keywords: *high value medical technology, ethical conundrum, salvaging ethical practice, misuse of technology.*

Background

The high costs involved in procurement, maintenance and running of high value medical equipment make its necessary to charge high for investigation¹. The irony of situation is that, there is no uniformity in the charges levelled and each laboratory or diagnostics centre has a free hand in deciding about what to charge and how much to charge. The government has no control over it in as much as it could not impose a quality control in the first place. Against this back drop, seeding of medical problems takes place and the user must have a fair amount of knowledge in order to differentiate whether they have been discriminated or not.

Technological abuse

In recent years, there has been a general protest against the doctors in misusing the diagnostic facility. Big corporate hospitals have a fixed agenda and the patients are made to ride the conveyer belt to predestined halts. Each halt means fresh investigation and generation of money for the hospital. A multicenter survey in USA of pre-operative diagnostic tests found that of 6200 test performed on 2000 patients; more than 60% are not warranted by the patient's clinical history or physical examination³. Is it a practice of "defensive medicine" or luxurious indulgence of "offensive medicine"? We keep this question open for our readers to decide. But there

is no gain either way patient stand to lose monetarily.

The relevance of technology

The constant and perpetual rise in medical cost depends on a variety of variables, as follows

1. In less developed countries the equipments is imported once.
2. The cost of import including customs and excise duties levied on the equipment raises it to the exorbitant price.
3. The running cost including reagents, cartridges etc, are hooked to the company or its subsidiary which has sold the equipment and they sell it at high cost.
4. Every few years, new and improved version of the equipments appears in the market. The spare part of earlier model suddenly gets drained out of the market rendering the equipment redundant. This has double benefit for the manufacturing. New equipments are sold and older one is taken under by back policy in pennies.

Some causes of technological abuse

Major causes attributable to technological abuse and the doctor is unable to desist are:

1. Desire to genuinely help the patient.
2. Use of new technology to explore better treatment options.
3. To earn more.
4. For reputation and enhance professional stability.
5. Desire to protect from unsavoury litigation.
6. And to a lesser extent, fascination to use new technology and harness its potential.

Ethical implication

Ethical measures are at risk in the following situations

1. The instrument is bought not out of necessity but as a “fashion” to enter the “high club”

2. Trained personnel may not be available, who can operate it leading to compromise in its operation
3. Interpretation of results is incorrect
4. Quality control and quality of result are not taken care of
5. Over use of high calibre equipments over less calibre once, when in fact the lower once too can give reasonably similar results

Conclusion

Practice of ethics in every sphere of medical profession ensures that everyone gets equal share of attention and resources. No prejudice is nurtured against any one based on financial status. The doctrines of beneficence and non-maleficence must be practices under all circumstances. The ethical codes enunciated for doctors, nurses, radiographers etc must be adhered to. The codes are tailor made for specific group of professional and ensure smooth conduct.

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