

Technology At A Cost

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New technologies in medical field have made significant contribution to healthcare in terms of diagnosis and treatment.¹ A paradigm shift is observed in management of many surgical conditions. From open surgery to minimally invasive approaches is apparent in many diseases. Many surgical conditions are now treated by endoscopic surgeons, radiologists and even physicians. This is particularly apparent in the field of cardiology. This change is positive and highly appreciated as cost of treatment decreased and quality of life improved; however there is a big question mark against some of the technologies that are considered a burden on existing healthcare resources.

Field of medical technology includes biotechnology, information technology, development of new medical equipment etc. Commercial interest of healthcare industry cannot be ignored. This is based upon the observations of some groups where concern has been shown as to the usefulness of new technologies in comparison with already existing surgical approaches. New technologies come at a cost. This is understandable as huge investment is made on developing new equipment. It is therefore important to find out what is the motivation behind developing new equipment. There should be sound reason behind such ventures.

A comparison can be made between the cost of treatment with the use of robotic versus laparoscopic surgery in general surgical procedures. In a recent study it was observed that cost incurred upon by robotic surgery was more than that of laparoscopic surgery for the same procedure without any significant added advantage.² The cost in that study was related to consumable items only. The cost of robots, its installation and services was not included. This must be understood that it is not a one time expenditure, but in fact is a recurring cost.

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The installation of new equipment needs added construction in an organization. The training that must be imparted for its running, maintenance and the human resource required, also adds to monetary burden. The equipment model changes in few years time and therefore considered outdated with non availability of spare parts. This questions the very intent of industry people. The expertise that surgeons will acquire over period of time and learning curve, also adds to the overall cost. In addition non availability of well controlled randomized trials cannot justify utility of these technologies in all procedures.³ It is therefore important to be cautious and wait till such technologies are available at economical rates, especially for public sector hospitals. With limited healthcare resources equitable utilization of available budget is thus important.

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