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Research and clinical practice current scenario

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We all know that aims of clinical care and research are being, the betterment of patients at present and in the future. This dual role however if tilted to either side it can disturb the delicate balance between the two. For instance inter trochanteric fracture has undergone an evolving concept from conservative treatment like de-rotation boot / skeletal traction and immobilization for 6 weeks to surgical treatment. Were in the stratagies include intramedullary and extramedullary fixation [1-2].

Intramedullary fixation has gradually become the main line of treatment of intertrochanteric fractures due to its minimal invasiveness and biomechanical advantages like reduced structural deformity of fracture after treatment , reduced blood loss , surgical exposure time and increased functional ability and well being of patient resulting in the better outcome [3].

Thus when surgeon or a physician performs an intervention in a patient with baseline medical problem, there is either a good or equivocal or a bad outcome. The observation of the relationship of the intervention with the type of outcome becomes a research which becomes guide/ rule for future health care. Thus a research is a spontaneous and inseparable outcome in the treatment of every patient , which needs to be observed, compiled and disseminated for the betterment of health guidelines.

In present times the individual doctor has become hard pressed for time due to advancement in the research methodology in terms of designing trails of higher grades and simultaneously there is a need for producing the higher end clinical results due to the higher expectation of the patients, added upon the pressure of consumerism. It has coerced to take a better informed consent and keep a meticulous treatment record. Which could be a useful tool for a good research.

However there is a silver lining that if we incorporate research tools like outcome scores in our routine clinical practice and follow clinical practice guidelines there will be a scope for boosting the quality of medical care as well as producing more standardized and quality research. Hence clinical care and research are closely related. This dual role, if tilted either way can disturb the delicate relationship between the two.

For example, a researcher if uses a medical/surgical intervention to generate the evidence in favor/against a hypothesis well aware of fact that the intervention is either useless or even harmful to patients, is disturbing the delicate balance then I call him/her a perverted researcher.

The famous Tuskegee study, where in the syphilis patients were denied antibiotics for studying the natural history of disease is a glaring example of perverted researcher. The other example of unbalanced researcher includes artificially skewing the results towards a particular arm(direction) of treatment due to various conflicts of interest and adding zero/negative power to the data to enhance the power of study.

There is always a risk of stagnating the improvement of modalities by keeping ones mind closed to the clinical observation, due to the so called too busy in clinical work. Hippocrates around 2500 years back treated clubfoot deformity by moulding the feet, Similar to modern day treatment. Subsequently a number of other techniques including metallic wrench correction, kites plastering,turcos posteromedial release were tried under observation. ponseti technique evolved in 1940s published in 1963 [4]. Was not widely accepted but still was under observation for almost three decades. Only after so many comparative studies were done which proved its superiority over other traditional methods and latter on accepted and widely practiced currently [4-5].

Hence one should remember that all the great clinicians like Charnley, Ponseti etc were busy and busier than us. Had they confined themselves to the clinical work only; without compiling the observations, doing comparative, prospective/ retrospective studies of their work. Present day treatment of ponseti casting technique, treatment of painful degenerative hip would not have been possible. So research is a moral obligation for all the practicing clinicians to keep the interest of patients at present and in future.

Due to the glaring examples of imbalance the modes of separate clinical care and research are being modified to an integrated clinical care and research. The proposed solutions to achieving a balance between the two includes clinical equipoise from clinicians /physicians as well as patients view point and the therapeutic oriented randomized control trials (RCT) [6-7]. The research oriented informed consent has been changed to patient oriented informed consent [8].

For example the procedures of ankle arthrodesis and ankle arthroplasty are likely to give equal level of immediate pain relief, however the benefits of lifelong survival and lower the cost of arthrodesis also need to be informed to the patient before he/she is subjected to the procedure. Thus the impact two or more procedures of equal efficacious potential beneficence/ equivocalness/ maleficence of each arm of treatment should be known and clear before he/she decides to be a participant in treatment/research study[8].

Hence to keep a perfect balance between clinical practice and research separate specialized teams should be made and the clinician play a role of leader to superwise and guide them. Many clinicians do not have aptitude for conducting research work/RCTs, nevertheless documentation of observations of individual cases as case reports/case series would provide the first line of evidence, from where the research question emerge for designing of RCTS [9-12].

It's a our foremost responsibility as a clinician to safe guard patients interest. Patient neither wants to be treated by a perverted researcher nor do they want to lose the advantage of newer treatment/scientific discoveries in hands of monomanic clinicians. So it becomes a professional obligation to keep an optimum balance between clinical care and research activities.

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