

Risk Aversion and its Impact on Medical Practice in Pakistan

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It has been a standard practice historically to categorize difficult patients and their therapeutic options based on initially subjective criteria and then a more objective one. In an effort to assess surgical decision-making and the outcome of surgery by different surgeons, surgeon specific outcome data was introduced to the US and UK surgery in 1991 and 2005 respectively, initially in cardiothoracic surgery. This data was made available to public access to named surgeon procedural outcome. It was associated with an improvement in patient outcome, but with a concern about changes in surgeon behaviour, upgrading of patients' risk factor and cessation of low volume and/or poorly performing surgeons.

The impact of such factors, though may not be as documented or assessable as in advanced countries, can be seen in medical and surgical practices in various indigenous forms here in Pakistan with results leading to either turning down the due procedure or unnecessary procedure with unexpected or poor outcomes, or recruitment of poorly prepared or high risk patients in an underprivileged setup or with an underprivileged team and ancillary staff, or any combination of these with an overt or covert intention of availing an opportunity to exercise or acquire a skill. Historically, all such steps were justifiable to various extents in the practice of modern medicine but as of today, the gestalt of medical practice has been carved out to its limits. So, all such surgical adventures and endeavors are defined with an expected and agreeable outcome to almost certainty. Except for emergency situations involving poly-trauma or multi-system medical conditions, the outcome of all the elective procedures are predictable and should be guaranteed in a reasonable healthcare system, and to be at least aimed for by the first hand care provider.

One such step toward ensuring high standard, reproducible and transparent healthcare delivery is the consultant outcome in relation to a named, individual performer, instead of a team or institution. All the confounding factors relating to patient condition and co-morbidity, logistics of healthcare facility and the profile of healthcare provider can be matched to ultimate outcome of each case. Different studies pertaining to maintaining the record and making it available to public access revealed three types of effects on surgical practice after the institution

adopted the policy from 1991 to date. This included assessments for evidence of risk-averse behavior, evidence of gaming and cessation of operative activity by low workload volume or poorly performing surgeons.¹

Findings from survey based on a large number of studies suggest the monitoring policies including outcome publications was associated with risk averse behavior in cardiac surgeons and physicians alike.² One of the findings was that the health expenditure decreased significantly more in public reporting states in the US, for example, patients in such states were significantly less likely to undergo percutaneous coronary intervention for acute myocardial infarction if there was associated cardiogenic shock.³ The gaming is defined as "the incorrect reporting of patients at high risk in an attempt to reduce risk adjusted mortality".^{4,5} One form of gaming includes referral of high-risk patients to non-reporting states (out migration).⁶ Following the introduction of a consultant outcome publication in New York (a reporting state), there was a significant increase in the prevalence of renal failure, heart diseases and chronic obstructive pulmonary diseases among patients undergoing CABG surgery. In fact, the COPD at one hospital increased from 1.8% to 52.9%.⁷ On the other hand, more than 20% of surgeons in the lowest quartile for performance stopped practicing within two years of the introduction of consultant outcome publication which is in contrast to only 5% of surgeons from the other quartiles leaving practice over the same period.⁸

Though current international reviews reveal conflicting evidence as to whether surveillance measures really lead to risk averse behavior or the like, it is found in several survey-based studies that surgeons turned down high-risk patients for surgery due to concern regarding published outcome. Now, anyone with just a cursory look of the medical and surgical practices in countries like Pakistan can envisage the spectrum of all types and range of empiricism when there is no such kind of surveillance system by legal, social, personal (conscience) or spiritual means. Then there may be the practice of using cheap disposable items like syringes, endotracheal tube, catheter etc making sure to destroy after single use compared to costly single use items

like disposable laparoscopic ports, instruments and harmonic scalpel, as well as laryngeal masks, all of which are reused till breakage or worn out. There are referrals of patients from apparently well-equipped and qualified staff of T.H.Os and D.H.Os for all sort of semi-urgent as well as urgent medical and surgical cases without documentation or liaison and the health facility is only used for minor surgical cases like lipoma excision, circumcision, or at the most appendectomy, or for diarrhea, intra venous rehydration, enteric fever or tuberculosis. Most of the precious bed strength lies vacant or filled in documents only. While such patients reach in teaching and tertiary care setups, they are initially managed by most junior workforce with obvious and expected shortcomings of all sorts. There is a lack of coherence between different departments and in the same department as well. The patients are allocated to different departments by a layman clerk in outpatient departments as well as in the emergency except for obvious trauma patients. All patients are routinely over-investigated, prescribed by the junior-most health care professional, and the results of the even costly work-up are seen with a suspicion for the authenticity. It is incomprehensible that in the absence of any concrete check-and-balance, the patients are subjected to advanced investigations including hematology, serological profile, radiological including C.T and M.R.I, along with cardiac and respiratory evaluation for many an innocuous medical and surgical ailment mostly by junior doctors or equally, by senior doctors with an air of scepticism about the quality of ensuing results.

The classical triad of procrastination described at the start of this editorial applies here in all its forms and implications including risk-averse behaviour, gaming or turning down the necessary, or at times vital, jobs at hand. Though universal, the relations of the anesthesia, intensive care professionals, surgery and allied professionals is a classic example of all sorts of gaming, risk-averse behavior on one-side and blaming, adventurism and personal whims on the other. Patients are deferred or refused surgery or anesthesia, off-listed, sometimes the whole of the O.T list is deferred for one reason or the other including sometimes or often to power shut-down or lack of functioning power generator or lack of fuel for the generator, or the demand of fresh laboratory investigations against all the academic recommendations, till with such many departmental tussle, already advanced disease progresses relentlessly, leads to complication and thus

deterioration in already compromised patient physiology. Such a patient becomes moribund or death ensues, or patient flees away to another facility or goes home in despair.

On the other hand, many of the ancillary medical facilities are not available in one setup for which a request is made to other hospitals, or institutions, for example CT scan, MRI studies, ERCP, MRCP, or some image guided biopsy procedures, endoscopy and oncology services which add gravity to already advanced disease presentation, leading to delay in getting these services for the patients due to huge volume of workload, lack of coordination or sometimes lack of understanding about the cause of the disease and necessity of timely intervention or very occasionally perhaps lack of commitment.

With this plethora of examples of all such a haphazard, flimsy and non-orchestrated efforts to the individual or collective patient care, there are unprofessional whims, heroism and examples of adventurism in treating patients, which includes introduction of new and fancy options of treatment without proper training and requisite infrastructure, such procedures may be justified a bit in emergency set up, but are unacceptable in elective settings while safer conventional options equally work. Examples include advanced endoscopic procedures like MRCP before ERCP, in patients with obstructive jaundice secondary to documented choledocholithiasis leading to delay and inevitable deterioration in patient condition, advanced laparoscopic procedures when only basic hardware is available in the facility and many of single use instruments are not affordable by the poor patient, so obviously re-using the single use instrument with risk of disease transmission including hepatitis C. Regarding spread of infectious hepatitis B and C, the situation at any public hospital is a dismal, and in particular at the emergency and accidents stage, where only one set of or a few stitching instruments are available, and they are reused with just washing or at the most, putting in one cubic foot boiler. It is an embarrassment to blame the GPs, quacks, dentists or barbers for such a spread of infectious hepatitis.

Many extensive procedures are performed on patients with advanced disease thereby consuming huge expert time and facility resources with ultimate questionable benefit to the patient when the palliation could be a better choice. One such procedure that consumes precious O.T space, time and postoperative facility is Whipple procedure for pancreatic cancer with dismal outcome despite loud claims in underdeveloped countries, thoracic surgery when the requisite

instruments and training is not available, doing occasional endocrine surgery in low volume institutions, doing total thyroidectomy by junior consultant with inevitable morbidity and sometimes mortality, which in most of the set up does not come to surface. There is one more aspect of ongoing studies on patients and their data that complicates further the ultimate outcome for the individual patient.

All these manifestations of lack of uniformity in understanding, practice and recommendations can be tackled with concrete, legible and basic agreement in coordination in different arms of health care professionals, for which bold and courageous steps should be taken. As of today, probably there is no scarcity of economic resources, political will or public participation, the professional activism should take start by professionals. One cannot see any discrete psychology behind the practices at work except terror and awe to everybody alike, both patients and professionals. These are all examples of risk aversion as well as risk-seeking, gaming and blaming as well as cessation of certain practices replaced by other equally unprofessional practices.

*"...Technique is an individually acquired and socially secured way of doing something; a science is a way of understanding how to do it in order to do it better."*⁹

The only deterrent to reckless risk-taking (or aversion) is to make sure that reckless risks have real

consequences for those who take them – to make sure that the players have a "skin in the game".

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