Reclaiming the morbidity and mortality conference: between Codman and Kundera

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ABSTRACT

In recent years, a number of commentators have voiced unease about the direction and format of the Morbidity and Mortality (M&M) conference. Drawing on historical, literary and philosophical perspectives, and detailing the recent shift towards incorporating systems-based approaches to healthcare safety into the M&M, this article explores the nature and purpose of the M&M conference. It is argued that improving future health outcomes is insufficient as the goal of the conference. Instead, transcending hubris should be an endorsed objective. This paper aims to provide a definition and philosophical framework for the M&M conference.

A doctor (unlike a politician or actor) is judged only by his patients and immediate colleagues, that is, behind closed doors, man to man.

Milan Kundera, The Unbearable Lightness of Being.

The morbidity and mortality (M&M) conference has potential to be one of the pure, anchoring practices of being a doctor; providing an opportunity to admit personal failures, expose faulty reasoning and promote transparency among colleagues. Instead, in recent years, it has strayed from these objectives. This paper, which draws on historical, literary and philosophical perspectives, will provide a framework and guiding principles for the M&M conference.

Recent research has quantified the fact that the M&M has undergone a shift in focus. One survey showed that 72% of the cases presented at an anaesthesia M&M conference involved neither morbidity nor mortality. While surveys of residency program directors demonstrate that the majority believe M&M cases are ‘most often selected because of unexpected adverse events or suspected error’, Pierluissi found that only 37% of cases presented at an internal medicine M&M conference contained an adverse event, while in only 18% of those cases did an error lead to that event.

Commentaries on the M&M over the last decade seem to agree that the conference is no longer fit for purpose, but with respect to addressing this problem there is disagreement. The recent shift towards systems-based approaches to healthcare safety, exemplified by the Institute of Medicine (IOM)’s report on the state of patient safety in America, has found its way into the format of the M&M, and in this capacity has as many detractors as supporters. Other educational competencies—medical knowledge, patient care, practice-based learning, communication and professionalism, put forth by the Accreditation Council of Graduate Medical Education (ACGME)—are another point of contention. Some have called for the inclusion of these themes into the format of the M&M. Critics contend that, though they may be laudable goals, their incorporation can take the focus off of error. Despite disagreement on the proper extent of systems issues and educational competencies in the M&M, nearly all contemporary writers maintain that the goal of the conference is learning how to prevent error in the future. The strengthening of clinical governance in the UK in the wake of the organ retention scandal, whereby the M&M became considered as just one part of clinical audit, reflects this shift in emphasis.

In this paper I will argue against the underlying assumption that the M&M conference exists to improve health outcomes. While the M&M conference may incidentally improve care, this is not and cannot be the primary purpose. Atul Gawande, in his book Complications, acknowledges that the M&M is ‘a rather shabby approach to analysing error and improving performance in medicine’. Instead, over the course of the last century, the conference became a vehicle for transcending hubris in a field prone towards it: an opportunity, once a week, for unscripted reflection; the chance to experience, even fleetingly, catharsis. Philosophically, the conference can be understood as a forum to pose the eternal question that faces any doctor who, despite his or her best efforts, encounters an adverse outcome: could I have done things differently?

HISTORICAL ROOTS AND MODERN REFORMERS

If there is something awry with the modern M&M, it seems logical to examine the conference’s past for guidance. There is a certain appeal to the idea of returning to founding values and commentators frequently provide a précis of the conference’s history as prelude to their own definition. But, when it comes to the M&M, an originalist conception is, I would argue, an inadequate guide. I will therefore examine the conference’s origins, arguing that, if we take seriously the aims and intents of these forerunners, the M&M would be left in precarious position—resting on a foundation no longer able to support it.

Most discussions of the M&M begin with Ernest Armory Codman and his ‘End Results’ system. Codman, an early 20th century surgeon at the Massachusetts General Hospital, believed in the systematic tracking of patient outcomes, their dissemination and comparison. Codman eventually established his own hospital, and pioneered practices of quality improvement and transparency, publishing the results of all patient encounters in a book entitled A Study in Hospital Efficiency. Codman’s writings, in subject and scope, bear close resemblance to that of a modern champion of quality improvement, the surgeon Atul Gawande.
Both men believe in measurable differences among the performance of doctors. Codman thought that, while most doctors performed homogeneously, some outliers (like himself) were demonstrably better. Gawande, meanwhile, thinks in terms of a ‘bell curve: a handful of teams with disturbingly poor outcomes for their patients, a handful with remarkably good results, and a great undistinguished middle’. Codman and Gawande both criticise the paucity of comparable statistics of doctors and hospitals. Codman writes:

At present, in most hospitals, no such investigation (into outcomes) is made by anyone. There is no standard of good results to go by; but we are setting standards in this report. We believe they are as high as any. The questions that should interest you are: Are your results better or worse? Are you making any effort to find out?

Gawande writes:

In medicine, we are used to confronting failure; all doctors have unforeseen deaths and complications. What we’re not used to is comparing our records of success and failure with those of our peers. I am a surgeon in a department that is, our members like to believe, one of the best in the country. But the truth is that we have had no reliable evidence about whether we’re as good as we think we are. Baseball teams have win/loss records. Businesses have quarterly earnings reports. What about doctors?

Gawande has discussed the idea of applying principles of industrial management to medicine, as a method of quality improvement. He writes that such reformers, ‘can already claim successes; the Shoulder’s hospital’s ‘focused factory’ for hernia operations, for one—and far more broadly the entire specialty of anaesthesiology, which has adopted its precepts and seen extraordinary results’. Codman was also influenced by scientific principles of management. He spoke at the Taylor society, a group of efficiency engineers, managers of major industries and the heads of corporations, and described the failure of hospitals to keep charts of hospital organisation; their failure to check their own work. Codman believed doctors often placed inordinate importance on anecdotal information; ‘some even trust their individual experience more than that of their whole race’. Gawande claims that ‘doctors have difficulty estimating which was the mass of information tips, and they are easily influenced by extraneous factors, such as what the last EKG [electrocardiogram] they came across looked like’. In the epilogue of his book Better, Gawande urges the medical professionals to, ‘Count something. Regardless of what one ultimately does in medicine or outside medicine for that matter—one should be a scientist in this world’. Codman advocated that doctors not just count something but everything, and catalogue it meticulously.

Codman, of course, hadn’t read the Institute of Medicine’s report and lived prior to the ‘no blame’ era. So, while Codman and Gawande both discussed problem of retained sponges and instruments after surgery, Codman attributed such errors to personal shortcomings, ‘the lost sponge in the abdomen is a glaring error, obviously preventable, obviously a proof of wretched carelessness’, whereas Gawande attributes the retained sponge to a systems failure: ‘Our usual approach of punishing people for failures wasn’t going to eliminate the problem, I realised. Only a technological solution would…a device that could automate the tracking of sponges and instruments’.

The comparison of Gawande and Codman serves an important point. Both men are concerned with quality improvement in a broad way. Atul Gawande, however, writes during an era where institutional review and quality improvement have become commonplace. Therefore, if, on the subject of the M&M, Gawande is at best ambivalent, deeming it a ‘shabby approach’ to improving outcomes; perhaps Codman might feel similarly were he provided modern tools of outcomes research.

The Anaesthesia Study Commission, a multi-institutional group charged with reviewing fatalities and other topics in the burgeoning field of anaesthesia, provides another historical origin for the M&M conference. This group met monthly, starting in the 1930s, and comprised surgeons, anaesthesiologists and internists. The meetings were participatory and cases discussed were selected such that error was likely to be identified. At the conclusion of the meeting, a vote was taken to determine whether, from an anaesthesia perspective, the death was preventable or not. Henry Ruth published a detailed description of this commission and its meetings in the Journal of the American Medical Association in 1945, and he modestly estimated his own impact: I trust that this small venture of ours may spread at least to some extent to other portions of the country.

While the format of the M&M originated from the Anaesthesia Study Commission, the aim of those meetings differed from that of the modern M&M in a fundamental way. In general, modern M&M conferences serve the purpose of examining mistakes that have occurred within a largely well hewn field. In the 1930s the aim was to address novel problems in a relatively nascent one. Ruth’s vision was actually quite modest, that, ‘basic improvements in the choice of agent, technic and general management of anaesthesia, indicated resuscitative measures, and correct preoperative and postoperative care could be more widely disseminated’ (emphasis added).

In general then, the difficulty with returning to the founding principles of the M&M is that the conference’s origins fail to provide contemporary guidance. While the pursuit of improved outcomes is certainly a virtue, we have grown more sophisticated in evidence-based methodology. As such, even if we accept the goals and purposes of these forerunners to the M&M, it seems unreasonable to continue a practice, which does not show results. Thus, the very meetings these pioneers advocated to improve outcomes should now be held to modern standards of outcomes research.

The ideal study of the conference’s utility would be a randomised trial. The conference, run however one desires, should show that it independently improves health outcomes at hospitals. Let us randomise 50 comparable hospitals to the intervention of having the conference or not having it, and track patient outcomes. If we fail to detect a difference at 2, 3, even 5 years, then the M&M is likely not a viable tool for quality improvement and must be abandoned. Codman would likely accept this harsh logic. He understood that it was as important to question what we consider our successes, as it was, our errors. He simply lacked the tools to realise the former.

One may contend that this experiment is unnecessary. Instead, one might argue that the value of the M&M is explained by the principles of adult learning whereby reflecting on mistakes can be instructive. Or, as Cicero, put it ‘Nothing stands out so conspicuously, or remains so firmly fixed in our memory, as something in which we have blundered’. However, in modern world, this argument is untenable. Proper empirical comparisons, and not simply mechanistic rationale, are required to justify the claim that the M&M conference improves health outcomes. Nevertheless, regardless of the results of such a study, there is, I would suggest, something else that attracts doctors to the M&M.

While quality improvement is clearly desirable, allowing it to be the sole focus of the conference risks other desirable reasons
to be sidelined or ignored. Frederick Taylor, one of the pioneers of scientific management, argued that efficiency was the sole purpose of all employment. His relentless pursuit of it left many workers exhausted, unable to get out of bed in the morning. Just as the purpose of employment, then, is the constructive use of our time for the benefit of our employers, ourselves, and all of society and only incidentally about efficiency, so, I would argue, the purpose of holding the M&M is only incidentally about quality improvement, with its direct and primary aim being to ritually anchor medical professionals, defining their sense of what it means to be a doctor.

In an effort to engender what is true and important to the M&M, I propose that the following criteria be met by any M&M. The M&M should involve the presentation of a patient (1) cared for at that hospital or medical centre (2) in the presence of the doctor(s) who cared for that patient and took part in medical decision making and/or invasive procedures in question (3) where the patient experienced an adverse or poor outcome, where (4) the putative cause of that outcome was related to the doctor’s diagnosis, judgement or action and where (5) there is discussion of that putative cause. The error should be one of medical decision making or action, the stock and trade of being a doctor, and not the failures of computer systems, ancillary staff, or insurance companies. The putative mistake should involve a doctor in attendance—not an uninvited consulting service, or a mail-away laboratory test.

These guiding principles undoubtedly will reinvent the conference. They will push us away from the nebulosity of systems failures. They may address the unease many have encountered when trying to reconcile quality improvement with critical reflection. They may move us towards timeless human truths: humility and hubris.

HUMILITY AND HUBRIS AND RESUMING THE TRADE

Leo Gordon’s book Gordon’s Guide to the Surgical Morbidity and Mortality Conference offers a sustained account of the purpose and format of the M&M prior to the IOM’s report. Just as architecture and spaces can guide human interactions, the pattern and pace of the conference Gordon describes engender laudatory architecture and spaces can guide human interactions, the pattern and pace of the conference Gordon describes engender laudatory

While describing the M&M as the ‘golden hour’ of the week, Gordon also directly broaches the issue of hubris. Discussing the tragic arc of the Greek hero, he writes, ‘Hubris followed. Hubris was the most lethal quality. It was a dangerous physical and spiritual arrogance… Surgeons who feel that they are ‘above it all’ or who feel they are protected from serious complications because of their self-perceived brilliance demonstrate hubris’. Later, Gordon describes his own fumbled attempt at presenting the M&M, writing, ‘My ignorance and humiliation were cathartic…. The morbidity and mortality meeting rides the resident and surgeon of hubris’.

Concern for hubris may not be in vogue the way ‘no blame’, ‘checklist’ and ‘systems failures’ are, and yet, like other truths of human nature, it plays an important role within medicine. The writer William Faulkner recognised the importance of timeless literary themes, and lamented how many of his contemporaries had replaced them with capricious sentiments. Faulkner thought that the writer should leave:

...no room in his workshop for anything but the old verities and truths of the heart, the universal truths lacking which any story is ephemeral and doomed—love and honour and pity and pride and compassion and sacrifice. Until he does so, he labours under a curse. He writes not of love but of lust, of defeats in which nobody loses anything of value, and victories without hope and worst of all, without pity or compassion. His griefs grieve on no universal bones, leaving no scars. He writes not of the heart but of the glands.

To omit from medical practice and reflection those countless cases where misfortune evokes humility, responsibility, remorse, even agony, is surely to strip the conference of the title, ‘golden hour’. To discuss error without these sentiments is ephemeral and doomed. The M&M conference is about more than patient outcomes and cannot be understood simply in the language of ‘systems’.

The writer Milan Kundera explores the life of a surgeon in his novel the Unbearable Lightness of Being. About Tomas, Kundera writes, ‘he had come to medicine not by coincidence or calculation but by deep inner desire. Insofar as it is possible to divide people into categories, the surest criterion is the deep-seated desires that orient them to one or another lifelong activity.’

The person who embarks into medicine, who perseveres through its arduous years of training and who emerges committed to patient care, is the person for whom any error is intensely personal. To be invested and thwarted, necessitates reflection. The M&M is the answer to a philosophical question: how, despite best intentions, do doctors make sense of poor outcomes. According to Gordon (quoting Rene Leriche), ‘Every surgeon carries a little cemetery around him, in which from time to time he goes to pray, a cemetery of bitterness and regret, of which he carries a little cemetery around him, in which from time to time he goes to pray, a cemetery of bitterness and regret, of which he seeks the reason for certain of his failures. Our cemetery of bitterness and regret is the Morbidity and Mortality Conference.

Cicero recognised that our blunders are firmly fixed in our memory, but that is not to say they reside there solely to prevent us from erring again. They reside there to give us a sense of who we are as doctors—to reengage our deep inner desire. If, as Gordon claims, the conference is a gesture of the humanity of doctors, and if active participation in it is integral to becoming a decent doctor, then we are in danger of losing something incalculable if such gestures are lost, dismissed as low yield and inefficient. As Gordon wrote more than a decade ago, ‘a rejuvenated spirit behind the morbidity and mortality can do a lot to bring it back’.

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REFERENCES

Poem

Lost
Sweet taste of madness,
deluding the naïve soul,
possessing the spineless body.
Overwhelming sensation of bizarre ideas,
suffocating the unbearable truth,
leading to everlasting ignorance.
Ceaseless melody of unreal voices,
destroying every last piece of sanity,
mutilating the already broken mind.

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