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Minimalism and the Promotion of Substandard Medical Care: A Lawrence, Kansas Perspective

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Semantics is a major challenge in medicine, as in most other fields. The term "minimalistic medical care approaches" utilized herein reflects how little effort is expended, in contrast to the effort-intensive process of medication minimalism. The latter is exemplified by utilization of the safest medications at the lowest effective doses, mindful of their continuing necessity and vigilance for drug interactions and development of side effects and obtaining consultations in a timely manner.

A disconcerting phenomenon seems pervasive in certain areas of the country: Patient statements to their physician that they "never had such a complete examination" might at first glance be perceived as simply complimentary. However, such comments elicit the observation that the examination that they just experienced is no different from that which should routinely be performed by any internist or family physician. When questioned as to how it differs, they frequently indicate that it was the first time they had undressed for an examination – even by subspecialty internists (e.g., rheumatologists). The importance of adhering to a full physical examination was drilled into me early in my career. I discovered advanced breast cancer in a patient who had been under the care of a superb physician. It turned out that they had become friends and he had, therefore, not performed a breast examination in years. That physician was badly shaken by the results of his "consideration," and we all learned an important lesson: Friends should not receive a lower level of care than what we owe the rest of our patients, and our patients deserve the full measure of our attention.

History and physical examination provide 3/4 of correct diagnosis; physical examination contributes 40%.[1] Minimalistic approach was assessed with a very limited, allegedly directed examination[2] with a sensitivity of 60% and specificity of 70%.[3] While that approach was more extensive than that pursued by most physicians, diagnosis was missed in 40% of patients. Even specialists aware that their examination was being evaluated only performed extensive physical examination in 64% of ankylosing spondylitis, 57% of psoriatic arthritis, 38% of rheumatoid arthritis, and 85% of fibromyalgia.[4] Diagnoses were commonly missed: These included 27% of fibromyalgia cases, 46% of ankylosing spondylitis cases, 39% of psoriatic arthritis cases, and 50% of osteoporotic fractures. Ninety-five percent missed cervical instability! Failure to obtain routine cervical spine x-ray studies (with flexion extension views) is inexcusable when one in four individuals with rheumatoid arthritis has cervical instability.[5] This is a reminder that the complete history and physical is essential to patient care and return to basics seems in order.

Another complication of minimalistic evaluations is simply accepting previous diagnoses, rather than verifying that they were accurate and complete. Protocols have been utilized, without analysis/verification of original diagnosis and assessment of whether it applies to the actual clinical situation.[6,7] This blind approach even extends to some post hoc errors as some physicians became aware of an article on new treatment approaches to "COLD" not realizing that the subject was chronic obstructive lung disease, not the common cold.

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One of the factors leading to such minimalistic approaches may be the medical equivalent of the "no child left behind" approach. "Grading" physicians and facilities on the basis of fulfilling a discharge checklist for specific diagnoses may be a step in establishing standards but also compromises care on several levels. It distracts from the need for cognitive evaluation of the patient and individualization of care, especially related to ancillary problems. It is intriguing that prospective monitoring of hospital care has been essentially limited to such checklists,[6,7] an approach that one might expect to eliminate at least related lapses. Requirement for aspirin prescription clearly reveals the fallacy of even standard checklists. Standard doses of aspirin (81 mg/day) inadequately "control" platelet adhesiveness in a large portion of patients,[7,8] while higher doses often impair endothelial cell prostaglandin production so important for vascular patency.[7] If aspirin is to be prescribed, shouldn't its efficacy related to the desired effect also be assessed? Thoughtful care, not routine care, seems the appropriate practice model.[7] "Standardized approaches" have other effects. Phlebotomists and radiology technicians often disapprove of the number of tests or number of views ordered by physicians who refuse to be minimalistic in the evaluations and care they provide. In some cases, the technicians/technologists even tell patients that studies are unnecessary – without even talking to the physician ordering the test(s).

Another aspect of minimalism is compromise of clinical diagnostic skills. Minimalistic approaches remove/reduce the challenges of appropriate individualization of care, resulting in physician's cognitive atrophy and subsequent medical errors. This has resulted in the tendency and, perhaps, the necessity in those evaluation-compromised physicians to rely upon laboratory test results. Attributing diagnosis on the basis of such tests, however, is fraught with risks. The antinuclear antibody (ANA) test is a classic example. Many other disorders can produce a positive test and 5-30% of individuals with systemic lupus erythematosus have a negative ANA.[9] Even dependency on laboratory test results is compromised by minimalism. Cryoglobulinemias are detected by the presence of cold-precipitable protein. If cryoglobulins are categorized according to whether their components are mono-specific or poly-specific varieties, observing serum for three days will identify most individuals with the mono-specific variety. However, that group represents only 10% of individuals with cryoglobulinemia.[10] Detectable precipitation of the cryoglobulin takes up to 10 days for 90% of individuals with cryoglobulins, yet most laboratories (both commercial and hospital-based) refuse to run the test for more than three days. "Running the test" means visually examining the tube daily for precipitate, not really a hardship. The minimalistic approach being utilized potentially fails to recognize 90% of individuals with cryoglobulinemia, yet the minimalistic approach has not been abandoned.

Another outcome of minimalism is failure to distinguish signs from diagnoses. Giving a name to a physical finding is not the same as attribution. Lichen planus is a classic example. It names a physical alteration of the skin. Unfortunately, minimalistic approaches have led to that being perceived as the patient's problem, rather than searching for its etiology. Appropriate searches uncover the responsive medication side effect, collagen vascular diseases (e.g., lupus), or paraneoplastic disease. Skin alterations are often an early sign of the latter, permitting intervention when retention or restoration of quality of life and even cure are often feasible. Treatments have anticipated outcomes. When that outcome is not achieved or unexpected events occur, complete reevaluation is required.

The minimalistic approach overlooks the need for and value of consultations and second opinions, leading to cessation of intellectual growth, stagnation and loss of skills for the physician, and medical error sequelae (increased morbidity and mortality for the patient). Failure to consult makes primary care physicians less aware of key advances[6,7,11] and less responsive to new standards of practice. Medications often are added to a patient's regimen, few are deleted, and monitoring safety "falls through the cracks." Medication side effects can occur at any time during the course of their utilization. Periodic monitoring (including laboratory testing) is critical. If the physician is not assiduous in assuring this important process, can patients be expected to perceive its importance?

A great deal of effective medical intervention is determined by patient motivation. If the physician is perceived as cavalier about patient care and monitoring for medication side effects, what can be expected of patients? The result is often failure to appreciate the importance of monitoring. It is problematic when a subspecialist's assiduous approach conflicts with the minimalistic approach of the patient's primary physician. Contributing to the problem of minimalism is the primary physician's perceived time constraints. When a patient requests a certain medication or long intervals between visits, it takes less time to accede to that request than it does to educate the patient as to what is appropriate or safe. Combine that approach with scheduling limitations (e.g., when a patient reschedules a missed appointment, an idiosyncrasy of this area is that they may have to wait several months "to be fit in" for a "replacement" appointment), is it surprising that patients do not perceive the appointments and their timing as important? Reinforcing the significance and importance of interactions is as important to patient care as the actual advice and medications we dispense.

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Part of minimalism may relate to automation of laboratory testing. The test is performed, and the results are entered into a system. The recording system is typically organized according to the convenience of the laboratory and not necessarily amenable to the physician ordering the test. Between the time the patient is given the order, the time the laboratory receives the material for testing, and the time requirements/scheduling of those tests, the physician has very limited insight as to when the results will be available. The electronic records utilized by the laboratories require that the physician examine each individual "chart" of all their patients every single day – if they were to learn of results in a timely manner. That impediment typically seems to lead to the minimalistic approach of only examining results when the patient has their next scheduled visit. A simple alternative solution would appear to be acquiescence (by the performing laboratory or hospital) to physician requests that the results be directly faxed to the requesting physician, rather than simply entered into an electronic database. That alternative, however, exceeded the minimalistic approach in vogue in this area, and it took two years for that request to be routinely honored.

While the phenomena described above may be simply a local phenomenon, its exposure serves as a sign. Impediments to provision of quality medical care must be removed. Minimalism may be convenient, but I suggest that the price is too high. Patients deserve the full measure of our attention and skills. It is time not simply to fulfill checklists, but to extirpate associated minimalism.

While minimalistic approaches may be time-effective for the practitioner, at least in the short term, it must be acknowledged that they have no role in the following circumstances and are more expensive (both fiscally and physically) over time:

1. First contact with the patient. This includes assurance that previous diagnoses are correct and that no pertinent diagnosis has been missed.

2. Occurrence of new symptoms. This is contradistinctive to appropriateness of minimalistic evaluations when the purpose of a given patient visit is to assure the safety and appropriateness of their ongoing therapeutic regimen.

3. Acute change in chronic symptoms.

4. Occurrence of falls and/or injuries – to assure no underlying health contribution.

5. Evaluation of safety of anesthesia or surgery.

Guidelines are not without merit and should be disease-responsive but not limit evaluation or treatment. This would obviate the minimalism-related morbidity/mortality related to anesthesia and/or surgery for patients with inflammatory arthritis. It is critical to assure that cervical spine x-rays (including flexion and extension views) have been obtained within the six months prior to any considered procedure. Further, given the frequency with which cervical subluxations and cranial settling are overlooked in standard reports, it is critical that the films be examined specifically for those problems by an individual skilled in skeletal radiology (e.g., rheumatologist).

Medicine has changed. Many hospitals have become businesses with clients, rather than health care providers with patients. As patient satisfaction surveys have become a major component of hospital evaluations and with movements towards disease-based, rather than care-based, reimbursement as a function of payment schedules, there are market forces motivating economic shortcuts, propaganda-related efforts, and the mind-set that change suggests that current approaches have been deficient or negligent. When a physician reports behaviors that compromise patient care or put patients at risk, the concern is not reviewed by physicians but by managers. All of this impedes provision of quality patient care.

What solutions can be offered to "reorient" this behavior and correct the problems? These problems have persisted because people of good will have not been successful in motivating their resolution. Part of the problem relates to what might be considered inertia (e.g., hospital, laboratory, and insurance company demands for adherence to their status quo) and the other part involves the risk of being penalized and labeled disruptive if modifications are requested.

First and foremost, there is a need for patient education as to what constitutes appropriate medical care and the risks associated with minimalistic approaches to that care. Avenues for such communication must be developed. This requires a free and open press, unfettered by the economic pressures applied by major advertisers (e.g., hospitals and insurance companies). Thus, those parties would not be able to control the flow of information and their misleading claims would be exposed.

It is critical that regulations be in place and enforced to assure that reports of deficiencies and other insurance company activities that compromise patient care are resolved in a timely manner. Their medical directors must not have immunity to state medical board actions (as appears to be the case in Kansas) and must have the authority that should accompany such responsibility. That obviously requires "whistleblower" protection to make it illegal to disadvantage physicians who report concerns, and "gag" rules must be removed from hospital and insurance

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company bylaws/contracts. Physicians must take back the helm. It is most appropriate for pharmacists and laboratory/radiology technicians to question the physician directly regarding their requests. Medical care is compromised when such communication occurs only with the patient. Insurance companies have "convinced" some pharmacists to suggest alternative medications to the patient, medications which, in some instances, they (both the insurance company and the pharmacist) should know are less safe. Such communications should be professionally conducted, and that means between professionals. They should not be touting alternatives to less medically-knowledgeable individuals – our patients.

Insurance companies claim they are not directing medical care; they say they just won't pay for it. However, when they suggest alternatives, they are actually promoting specific approaches to medical care. Thus, they appear to be practicing or enlisting others to practice without a license. State medical boards need to vigorously police such practices. State insurance commissions need to actually regulate insurance company behavior and hold them to the standards of due diligence, ethical behavior, non-compromise of patient care, and routine billing practices. The Kansas State Insurance Commission refused to take action when an area insurance company stated that acceptance of those standards would change its contracts. Perhaps it is time for another czar? It needs to be assured that regulatory agencies are charged with clearly defined duties and that they pursue them vigorously in an unbiased manner.

It is only a matter of time before the effects of minimalism become common legal fodder and physicians will likely be the target, however inappropriate. It was once said that a physician was at risk for malpractice if he or she did not fight hard enough against an insurance company patient-compromising rule, so as to get him or herself deselected from that insurance company's panel of preferred physicians - with the associated economic losses. Our responsibility is to our patients. Our only options are to reject minimalism and to continue to fight for the ability to provide the care that our patients deserve and to resist becoming victims of the Stockholm syndrome.

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References

1. Cheitlin M. Medical technology - Still an adjunct to clinical skills in making a diagnosis. *Arch Intern Med*. 2011;171:1396-1397.
2. Doherty M, Abawi J, Patrick M. Audit of medical inpatient examination: A cry from the joint. *J R Coll Phys*ians *Lond.* 1990;24:115-118.
3. Beattie KA, MacIntire NJ, Cividino A. Screening for signs and symptoms of rheumatoid arthritis by family physicians and nurse practitioners using the Gait, Arms, Legs, and Spine musculoskeletal examination. *Arthritis Care Res*. 2012;64:1923-1927.
4. Gorter S, van der Linden S, Brauer J, et al. Rheumatologist's performance in daily practice. *Arthritis Care Res*. 2001;45:16-27.
5. Mathews JA. Atlanto-axial subluxation in rheumatoid arthritis: A 5-year follow-up study. *Ann Rheum Dis*. 1974;33:526-531.
6. Chassin MR, Kosecoff J, Winslow CM, et al. Does inappropriate use explain variations in the use of health care services? *JAMA*. 1987;258:2533-2537.
7. Mitchell JR. "But will it help *my* patients with myocardial infarction?" The implications of recent trials for everyday country folk. *Br Med J*. 1982;285:1140-1148.
8. Rothschild BM. Comparative anti-platelet activity of COX-1 NSAIDS versus aspirin, encompassing regimen simplification and gastroprotection: A call for a controlled study. *Reumatismo*. 2004;56:89-93.
9. Rothschild BM, Jones JV, Chesney C, et al. Relationship of clinical findings in systemic lupus erythematosus to seroreactivity. *Arthritis Rheum*. 1983;26:45-51.
10. Vermeersch, Gijbels K, Marien G, et al. A critical appraisal of current practice in the detection, analysis, and reporting of cryoglobulins. *Clin Chem*. 2008;54:39-43.
11. Ayanian JZ, Hauptman PJ, Guadagnoli E, et al. Knowledge and practices of generalist and specialist physicians regarding drug therapy for acute myocardial infarction. *N Engl J Med*. 1994;331:1136-1142.