Editorial

Replacing Surf and Turf Medical Care: A Clarion Call for the Incorporation of Rheumatology as an Integral Component of Primary Care Education

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The current time/experience allotted for rheumatology in primary care education seems like paying lip service to a medical education clinical approach consisting of: 1. The review of an apparently related (to an individual’s apparent problem) subject summary online. 2. Referring (the turf) individuals with disorders for which the student/resident has not pursued exposure, which may or may not be appropriate medical care.

Making timely arrangements for the transfer of at least this portion of the patient’s care would certainly minimize the risk of malpractice. It is, however, not a given, especially with the shortage of rheumatologists. Thus, the patient is often left in limbo.

Ignoring this aspect, there is something more than vaguely familiar contained therein—something which sounds a lot like artificial intelligence (AI). What does a physician trained in the surf and turf manner have to offer? After all, does it take seven years of medical training to offer the same advice/approach as that which is available from AI? Such education in basic biological/medical sciences does facilitate use of the information as a technologist, but does it create clinicians?

Medical school and residency education/training programs face tremendous challenges related to incorporating advances in understanding diseases and new intervention approaches [1]. Addressing the increased information base is complex, especially in view of artificial time limitations. Information transfer has been advanced by some programs at the expense of clinical training in the use of this information. Some training programs have adopted a paradigm wherein the student/resident essentially reads only on the problems of patients who are under their care. Such reading has always been a part of any good training program, but it is not sufficient and is now even more compromised. Rather than directing residents to in-depth subject reviews, some programs direct them to sources which essentially provide “bullet points.” Past training programs had curricula which directed reading encompassing the field/specialty/subspecialty. Most programs today incorporate lectures, with the subject matter often determined by what a given faculty member would like to present, rather than assuring systematic coverage of the specialty/subspecialty.

Such random/arbitrary exposures (both lecture and bedside) result in a conundrum. What are the graduate’s options when a presenting problem differs from what they experienced in their training (clinical clerkship/residency rotation)? Should they surf the Internet for information based on how that physician interprets the complaint/clinical finding? Such surfing is laudable and usually appreciated by patients when the physician is confirming specifics for their clinical approach. However, I am not so sure that patients appreciate this when the physician depends entirely on a given source to start developing an approach.

Experience is important. The physician intervening for the first time is unlikely to be as effective as those who have previously intervened for such problems. From this perspective, referring the patient to another physician (the turf) is not only reasonable, but it actually represents good medicine. Admit to what you do and do not know, because one cannot turf everything. If a clinical problem is common, it is essential to develop expertise in its
management. This expertise is not developed by simply reading the consultant’s report. It is the actual “bedside” interaction with the experienced physician that permits one to develop expertise. Programs can continue to produce physicians with the ability to surf the net and parrot a one-size-fits-all cookbook approach (which is totally amenable to replacement by AI), or one can create clinicians. This would require a return to the systematic coverage of conditions for which members of the chosen medical specialty are commonly requested to intervene. A successful curriculum would be cognitively based to assure sufficient exposure (both a syllabus-grounded lecture series and bedside/office experiences) to the conditions for which their future patients will seek care. The bedside/office experiences specifically need to be organized to assure exposure to/participation in the full spectrum of that specialty’s/subspecialty’s practice, and not relegated to the fortuitous problems that are inherent to routine patient appointments.

Incorporating meaningful rheumatologic education and experience into primary care training would at least prepare the participant for management of the musculoskeletal phenomena that comprise up to 30% of the challenges presented to primary care physicians. The standard one-month rotation for trainees is insufficient, providing “paper” documentation, but not preparing them for actual patient care [2]. While 160 h of interactions allowed the participant to “talk about” rheumatologic diseases, 200 h was required for preliminary decision making in patient care. Given all the other currently mandated activities, less than 80 h is currently allotted to actual rheumatology experience in such a rotation month.

Given:
1. The value of early intervention;
2. The long rheumatologist shortage-related waiting lists for rheumatology appointments;
3. The medicolegally derived aversion towards providing telephone advice for an unseen patient;
4. That rheumatologic/musculoskeletal problems are so often (30–40%) the driving factor for primary care visits,
5. The current approach obviously does not meet the need.

If rheumatologic/musculoskeletal problems are so common, perhaps it would be appropriate to consider incorporating supervised interactions directly into the residents’ primary care experience? The pace of rheumatology patient care clinics has reached a point that compromises the educational experience with which it would otherwise be associated. Perhaps it is time to consider placing a rheumatologist in primary care training clinics to be accessible for immediate guidance on how to approach the specific issue [3–5]. This would enhance physical diagnosis skills and enhance primary care physician confidence in what they can and cannot accomplish for their patients [6]. It would establish an effective triage mechanism to identify which patients require urgent consultations. Identifying who should be prioritized seems essential when rheumatology appointment wait times may exceed 6 months or even a year.

So, what is required in a curriculum that would fulfill the need and prepare primary care physicians for musculoskeletal pathology/disease identification and management? Obviously, joint examination techniques must not only be communicated, but the recipients of such education must be vetted to verify their ability to apply those skills, and to incorporate them into a time-effective physical examination.

A database that would facilitate the primary care physician’s ability to provide initial care for patients should incorporate the following:
1. The ability to distinguish specific from non-specific laboratory tests and recognize which tests will not override clinical assessment;
2. The ability to distinguish mechanical from inflammatory processes;
3. The ability to recognize the activity of disease—ongoing versus residual damage;
4. The ability to recognize multisystem disease, distinguishing it from multisystem complications of other disorders;
5. Stimulating a high index of suspicion for the recognition of infectious arthritis;
6. Recognizing potential rheumatologic emergencies:
   a. Recognizing when to refer;
   b. Recognizing rheumatologic versus orthopedic problems.

Additionally, there are skills which would facilitate the primary care physician’s diagnostic abilities [6,7]: arthrocentesis, crystal assessment and the interpretation of plain X-ray images. The latter should at least include the ability to recognize joint erosions, chondrocalcinosis, and vertebral compression fractures. A polarizing examination of synovial fluid is a relatively straightforward technique for the identification of gout and pseudogout. The most complicated and time-effective among these skills is arthrocentesis. The landmarks for knee aspiration are readily learned, and one’s friendly orthopedic surgeon can assist with it and the aspiration of other joints.

It is important for the primary care physician to recognize that they do not function in a vacuum. While rheumatologists may be less accessible [8], physical and occupational therapists can often offer perspectives that are helpful to the primary care physician’s management efforts. The primary care physician is on the front line of musculoskeletal disease management. Only with the primary care physician’s acquisition of the above-identified understanding and skills can individuals afflicted with more complicated musculoskeletal diseases/pathologies have access to more timely visits with rheumatologists [9].

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