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## **Clinical Decision Science: Experience can be shared; can it be taught?**

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FROM THE EDITOR:

## Clinical Decision Science: Experience can be shared; can it be taught?

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When I observe doctors who have been in clinical practice for twenty years or more, I am always struck by how much personal information they know about their patients. These doctors often know about their patients' children, things about family members that seem frivolous or annoying, the patients' unrealized dreams, the struggles they have had with co-workers, and millions of seemingly insignificant facts. This fund of knowledge about individual patients is a result of an intimate patient-doctor relationship. Such relationships become more intimate through repeated cycles of the "healing ritual" and reflect a mutual investment of both the doctor and the patient.<sup>1</sup>

While these facts may seem insignificant on the surface, I ask myself, "Why does the doctor include these details when they present the clinical case?" Doctors generally ignore things that do not have importance or relevance. I surmise experienced clinicians find this type of information valuable to clinical practice. I also wonder what this phenomenon has to do with clinical decision science. Of course, these details form what we call the Clinical Context in the Clinical Decision Reports we publish. Does knowing someone intimately change the type of decisions that are made in clinical practice? I think so. Nearly 25 years ago, Sackett, et. al. stated, "Increased expertise is reflected in many ways, but especially in more effective and efficient diagnosis and in the more thoughtful identification and compassionate use of individual patients' predicaments, rights, and preferences in making clinical decisions about their care."<sup>2</sup>

To emphasize the importance of this type of information, we have changed Clinical Context to Clinical-Social Context beginning with this issue of *Clinical Research in Practice: The Journal of Team Hippocrates*.

Another aspect I noticed about doctors who have been in clinical practice for more than twenty years is that they also seem to break the rules more than less experienced doctors. Less experienced doctors seem more insistent that there is a right answer and that right answer is based on the biomedical model. Experienced doctors seem more willing to discuss various right answers for each unique individual. This is of course a basic tenet of Clinical Decision Science—social context affects the doctor's recommendation even when the clinical research evidence indicates a specific guideline.

I recall an example of a different right answer for one of my patients. While everyone else would have diagnosed "morbid obesity; ICD-10 E66.01," I diagnosed "musculoskeletal insufficiency." She was a petite woman and there was simply no way her slender boney frame and diminutive musculature could support her massive weight. Of course, she had back pain in her paraspinal muscles—she couldn't stand up straight and had to lean on the counter after walking 30 feet. I recommended bariatric surgery, but her insurance required an entire year of monthly office visits for nutrition counseling before they would pre-authorize surgery. On the second visit I asked her why she ate only "wings and pizza" and she replied, "I don't have a car and where I live, those are the only foods I can get delivered." The structural violence embedded in the social context ensured she never received her surgery.<sup>3,4</sup>

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A couple years later, the same patient told me how her caseworker at the Department of Health and Human Services never answered the phone. Even though she mailed the proper forms to the Department of Health and Human Services multiple times, she got no response. Her subsidized housing was condemned, and she had to move. After searching for weeks, my patient finally found a first-floor apartment, only to be denied approval because the monthly rent was \$4.00 more than the allowable limit. She had to start the paperwork process from the very beginning, with the same caseworker who wouldn't answer the phone. Fifty years ago, Carol Stack described the exact same circumstances for Ruby Bank's mother [pseudonym] in her description of urban, poor, Black social structures. Stack labelled it, "...institutional or personalized racism."<sup>5</sup> Instead of giving my patient education about healthy eating to treat her diabetes, I told her, "Stay here and use the fax machine in our office so you can get this done; you can stay as long as you want." On the next visit when I asked where my patient and her children were staying, I knew that when she said, "With my Auntie," she wasn't referring to any biological family member—I knew from our relationship that she considered her family of origin unsafe. "Auntie" was another woman with whom she could barter resources.

I cannot tell you how many times I've heard less experienced doctors wonder why patients with diabetes "...won't follow a healthy diet?" Clinical decision science asks us to change the question. I had the audacity to treat my obese patient with diabetes described above by using our office visit and our office resources to affect the Social Determinants of Health. Less experienced doctors are more likely to stick to the biomedical script and tell patients they "need to eat a healthier diet or your diabetes will damage your health." I often ask medical students (and all doctors) to consider the broader social context when making clinical decisions. One doctor told me, "I'm not a social worker." It was a way of saying, "I've only been trained to manage biology." I wonder what Virchow meant when he said, "The physicians are the natural attorneys of the poor, and the social problems should largely be solved by them."<sup>6,7</sup>

There is no explicit clinical literature or curriculum in medical school that teaches experience. Experience is gained through the apprenticeship model of medical education that occurs during clinical rotations. By including the Clinical-Social Context in the framework of Clinical Decision Science, I am attempting to see whether experience can be taught. This would require new cognitive schemata to be added to medical education<sup>8</sup> and recognition that the unit of analysis is more inclusive than the single human organism. This range in the unit of analysis has been recognized by other scientists.<sup>9,10</sup>

Science has explored our world from chemistry to the molecular and genetic level, to organ systems, family systems, and most recently to the recognition of Social Determinants of Health. Historically, Western Medical Science developed at the level of organ systems.<sup>11,12</sup> It makes sense that doctors should be able to function at multiple different levels of case analysis, which is the unique contribution of Clinical Decision Science.

The Reflection published in this issue by Suleiman & Ilyan is an illustration.<sup>13</sup> The medical student reviewed pathophysiology; the post-graduate trainee introduced psychopharmacology and team-based care with counseling; the attending physician analyzed the case within a social context. As discussed above, experienced clinicians include additional levels of analysis. Clinical reasoning and clinical decision-making typically ranges from pathophysiology to critical appraisal of evidence, but also includes the social context—"the biopsychosocial" Suleiman & Ilyan reference. Johanna Lynch observes, "The biopsychosocial model has never been realized in clinical practice."<sup>14</sup> I agree and disagree with her assessment. I think in actuality the biopsychosocial model is used by experienced clinicians but has never been articulated or taught—certainly not in medical school. It is this gap in scholarship our journal endeavors to explore.

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