After a Decade, What I Wish I had learned Sooner

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More than a decade of post-secondary education has left me with just one regret; that I did not master and implement physical assessment (PA) skills sooner. (This might be an oversimplification – the number of items on my Shoulda-Woulda-Coulda list seems to grow exponentially with each passing year.) I was in the third year of my undergraduate program when they began teaching PA skills in second year practice lab. After graduating, I let my residency slip by without taking the initiative to learn and practice these skills, relying instead on physicians’ and nurses’ physical findings to assess patients under my care. I let this opportunity pass because I did not realize that these skills would be of value to my practice.

This changed when I moved across the country to return to school and complete a Doctor of Pharmacy (PharmD). The program was a positive experience; I met amazing people, learned from leaders within the profession, and grew as a clinician. It was also an era of personal firsts; I took up woodcarving, got my first stitches, slept overnight on a train, and ate shrimp for the first time. I opened myself to good-natured teasing when I learned, courtesy of a clinical rotation in California, that NYD (Not Yet Diagnosed) is a purely Canadian term. Most importantly, this 21-month period of my life was when I finally took the opportunity to learn some of these important patient assessment skills.

PA may be broken into five separate but interconnected techniques: observation, inspection, auscultation, palpation, and percussion. PA is a tool that allows a clinician to distinguish between the normal and abnormal physical characteristics of a patient (1). The practice of PA by pharmacists has appeared in the literature for over 30 years (2,3). Initially, it was argued that a pharmacist should use these skills to assess and monitor their patients for both drug therapy benefits and side effects (2). These skills also afforded pharmacists more active participation in the health care team, improved understanding of physical findings, and the possibility of enhanced roles in practice (i.e. a role in the triage and treatment prescription of minor ailments) (3).

PA skills have demonstrated positive impact on patient care when employed by pharmacists. HIV-infected patients receiving anti-retroviral therapy showed improved adherence when pharmacists monitored and managed drug adverse effects (4). Other studies showed improved surrogate markers with pharmacist intervention in a patient population with type 2 diabetes (5,6,7). A pharmacist-led heart failure clinic demonstrated titration to target doses of angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers and beta-blockers was more often achieved versus historical comparators without pharmacist intervention. These measurable improvements in patient outcomes may have been attributable to the close monitoring of the patients—monitoring enhanced by physical assessment. Pharmacists could also employ these skills to monitor the effectiveness of a patient’s anti-hypertensive and assess the necessity of an emergency prescription, the progression or resolution of a skin or soft tissue infection, or monitoring vitals of a patient following immunization (8). As we move into our expanded scope, assessing and monitoring patients will become paramount.

There are many potential barriers to pharmacists conducting PA. These include but are not limited to; lack of formalized training, pharmacist discomfort in performing PA, perceived discomfort of the patient at a pharmacist conducting PA, and pharmacist perception of overstepping bounds into the realm of other health care professionals (9). As pharmacists expand the scope of their practice, physical assessment must become a fundamental part of patient assessment. We should put the days of providing care from afar and not touching our patients behind us (10). These barriers, both those imposed upon us and those we impose upon ourselves, must be overcome. If it is a question of availability of training, pharmacy students trained with mannequins may even offer an advantage, as they could simulate disease states and generate sounds for auscultation impossible to simulate with a patient.

As Canadian pharmacy schools move towards entry-level or entry-to-practice PharmD programs, many already include or will include physical assessment education in their curricula. With this addition, faculties are now graduating a small army of clinicians equipped with PA skills. Pharmacists educated before this will have other opportunities to
learn these skills, from continuing education seminars, conference sessions, and other independent training courses (12). A training session as short as two hours and tailored to pharmacists can increase confidence in conducting physical assessment (9).

The training is not the only barrier to the adoption of change. Short training sessions may not be sufficient to make lasting practice changes. Training may make pharmacists more confident in their ability to conduct a physical exam, but may not improve their confidence enough to make drug therapy alterations based on PA findings (9). Pharmacists must become comfortable dealing with a small degree of uncertainty when weighing the risks and benefits of treatment selection (10). Information gathered with PA helps fill in the colour in the patient’s clinical picture. Along with training in physical exam, we need to develop our ability to apply PA findings to our decision-making. For instance, some may argue that, if it is simply a blood pressure measurement, then why not just let an automatic machine do it for you? PA allows greater insight into the patient and a better understanding of the physical findings (3). A machine will not tell you that a patient measured their blood pressure after going for a run; it will simply tell you the blood pressure is elevated. Investigation by a skilled clinician provides this insight. To practice these skills, there needs to be training and mentorship, support from practice sites and colleagues, and commitment by the clinician.

During one of my final PharmD clinical rotations I met a patient who presented with a urinary tract infection, nausea, vomiting, and hypovolemia. After two days of intravenous fluids and antibiotics, he reported shortness of breath and a decreased serum oxygen saturation was measured. Upon physical examination, I noted rales on auscultation and ankle edema. Thanks to this additional clinical knowledge, I was able to work with hospitalist to treat a suspected nosocomial heart failure exacerbation. Regardless of the literature available to support conducting PA, nothing drives home its impact like a firsthand experience.

PA skills, like many others, are perishable. If we fail to continue to practice and show our skills the light of day, they will wilt. As I now build upon my previous experience and begin my career anew, I challenge myself to continue using PA for selected patients to enhance my post-diagnostic therapeutic review, my understanding of my patients’ clinical picture, and monitoring of their therapy. My use of PA means I no longer solely rely on the PA of other health care team members. PA practiced independently can help avoid bias from the other members of the team and potentially uncover a contrasting view of the clinical picture, thus allowing me to better support my patients. I urge students, new practitioners, and practicing pharmacists to seize the opportunity to build these skills and add them to their practice. I encourage you to add these into your repertoire.

References