* There are a number of key factors that contribute to the occupational injury of nurses.
* Patient-care activities often require moving heavy loads, performing repetitive movements, standing for long periods of time, working in awkward positions, and working in the same position for long periods of time.
* These biomechanical challenges are a recipe for musculoskeletal disorder.
* Nurses often work 12-hour shifts and experience significant physical demands during their workday.
* Muscular fatigue can set in after many hours, leading to poor body mechanics and overwhelming the soft tissues from excessive demand. Fatigue is a key factor in the cause of many muscular and soft-tissue injuries. Not only are the soft tissues weakened from fatigue, but biomechanical force relationships around the joints change as muscles no longer work in balance with each other. Consequently, reduction of muscular fatigue during these long work shifts should be a key goal.
* Low-back injury is the most common musculoskeletal complaint affecting nurses. A brief review of relevant anatomy and lifting mechanics sheds light on the reason for this problem. The primary lumbar extensor muscles, such as the quadratus lumborum, erector spinae, and multifidus, carry the vast majority of load during heavy lifting activities. However, these muscles are not ideally designed for heavy lifting.
* Massage therapy is highly valuable in reducing the chronic, compressive loads that lead to disc injury. Techniques such as myofascial release, deep longitudinal stripping, and trigger point therapy are particularly helpful for addressing the chronic muscular overload experienced by nurses.
* Massage is a valuable approach for reducing the cumulative stresses absorbed by the soft tissues. Deep, longitudinal stripping techniques and active engagement methods applied to the tibialis posterior and other posterior calf muscles are very effective in addressing the chronic cumulative stresses in the distal lower extremities. Similar deep stripping techniques applied to the plantar fascia help reduce chronic tension loads in these soft tissues that support the longitudinal arch of the foot.
* While health-care workers are highly compassionate for those in their care, it is often at the expense of their own health, especially when it comes to musculoskeletal overuse. Massage therapists can do much to tend to these workers who play an often undervalued but critical role in our communities. However, those in the profession must also be willing to let someone else nurse them once in a while—letting go of the caregiver role and learning to enjoy being cared for.
* In 2012, researchers at the Mayo Clinic investigated the feasibility and effect of chair massage for nurses during work hours. A total of 38 nurses were provided 15-minute massages weekly for 10 weeks, and stress and anxiety were measured at baseline, five weeks and 10 weeks. At the end of 10 weeks, researchers found that massage therapy helped reduce stress related symptoms. 1

