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The Future of Physical Therapy Clinics: Working to Diminish the Opioid Epidemic

Senior Project

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Abstract

The world of physical therapy has been known for its works in the rehabilitation realm, healing after injuries, recovering following surgery, management of chronic illness, and the list continues. However, the field has entered a light, taking the form of preventative medicine. This new role has had a significant impact on the reduction of opioid usage in what seems to be a time of an opioid epidemic. For years, opioids have been the first resort for pain management, but the dangers of the drug have come to light, pushing doctors toward alternative solutions. Physical therapy has stepped up to the challenge and provided a safe and effective alternative to pain management and rehabilitation. This paper looks to explore the problem of opioids in the United States and poses a solution in the form of physical therapy, in particular, physical therapy as preventative medicine.

**The Future of Physical Therapy Clinics: Working to Diminish the Opioid Epidemic**

Over the past decade, deaths from opioid overdoses have reached staggering levels. Although this epidemic has reached every population in the United States, including old and young, this study will focus on the effects of prescription opioids. According to Bohnert (2011), between the years of 1999 and 2007, overdose deaths increased by 124%, with prescription opioids being the leading cause of this statistic. These trends have continued in a likewise manner. In a 2013 study, deaths associated with opioids increased to over 200%, making opioid deaths higher than that from motor vehicle accidents (Algnam & Castillo, n.d.). Unfortunately, the downward spiral that many opioid users experience is no accident. There are many factors that cause people to be predisposed to addiction, including depression, biology, and childhood events. A clearer population that is more heavily predisposed to addiction are those that seek treatment for injuries. According to Algnam and Castillo (n.d.), there is a prevalent number of injured patients that became persistent opioid users following injury. In examining the demographics, this same study also showed those with depression were at a higher risk to experiencing an injury, creating two high risk factors for potential dependence on opioids. As one may expect, the more traumatic the injury, the higher the risk of opioid use.

Another seemingly obvious factor that would predispose a patient to opioid abuse or overdose is the number of physicians and pharmacies that are dispersing the drug. As more physicians are prescribing opioids, more pharmacies are dispersing the drugs, and doses continue to increase, the rate of overdoses continues to escalate (Baumblatt, 2014). As a result, doctors are in the spotlight, as many are accused of overprescribing or prescribing opioids when there may be alternative, non-drug treatments available. It begins when patients seek medical attention following a surgery, injury, or onset of disease. Many doctors use medication, including powerful opioids, to allow their patients to experience immediate pain relief. This is an important component to note because a majority of doctors are not maliciously prescribing drugs with the intent to harm their patients. They respond to their patients needs with the “quick” solution.

As patients continue on these highly addictive drugs in their rehabilition, they slowly become dependent on them in their daily lives. Lembke (2016), author of *Drug Dealer, MD: How Doctors Were Duped, Patients Got Hooked, and Why Its So Hard To Stop*, states, “The enormous pressures on doctor’s today to prescribe pills, perform procedures, and please patients, all within a disjointed medical beuracracy and all with an eye on the bottom line, has contributed to the current prescription drug epidemic” (pg. 118). When the patients return to their physician seeking more pills, the doctor is put in a difficult situation of deciding to meet the needs and requests of their patients, while also being cautious with the drugs they are prescribing.

**Physical Therapy’s Aid in Opioid Use Reduction**

Physical therapy is a field that works to rehabilitate the body following injury or disease through exercises and manipulations. This is a natural approach to rehabilitation that allows the body to work to recover itself, a process that many times the body is fully capable of accomplishing on its own. Unfortunately, patients are typically referred first to medication. Prior to the studies that showed correlation between prescription opioid use and overdose deaths, doctors would frequently prescribe opioids for their patients. This was a fast acting solution that left patients healed or at least gave the illusion of true healing. However, as statistics have come out about the long term effects of prescription opioids, doctors have quickly scrambled to change their approach to rehabilitation.

For many patients, treatment came to a standstill as alternative approaches to medicine were being sought out. This was a delimma for both patient and doctor. From the patient’s point of view, they were no longer receiving their typical form of treatment, prescription opioids. A large percentage had become dependent on these medications for their everyday life, so they were suffering the physical and mental consequence of this withdrawl. The doctors, however, were also experiencing difficulties when it came to pressures from their patients. According to Lembde (2016), “The pressure to treat pain has become so overwhelming that doctors who leave pain untreated are not just demonstrating poor clinical skills; they are viewed as morally compromised” (pg. 42). At the end of the day, patients want their needs met, and doctors want to be able to meet their needs as their healthcare provider. However, the opioid crisis resulted from the vicious circle of physician prescriptions and patient expectations.

In the midst of this scramble for solutions, physical therapy entered the seen to dominate in the rehabilitation world. Because of its natural approach to medicine, physical therapy takes away the physical and mental stress of opioid use. Not only that, but it provides healing that is oftentimes more long lasting then simply taking medication for fast results. Additionally, in a PTJ special issue (2018), researchers conducted a study to analyze the financial benefits of physical therapy over opioid therapy in Veteran Affairs (VA) patients. When comparing patients following hip surgery, it was found that those who solely went to physical therapy for rehabilitation had lower overall health costs because they were not returning for as many follow up visits or surgeries in the subsequent years. It was also discovered that even patients who relied on a combination of both opioids and physical therapy experienced lower costs because of the reduction in follow up visits and treatments.

**Preventative Physical Therapy**

It has become obvious to healthcare workers that physical therapy is the safest form of rehabilitation following surgery, injuries, or the onset of disease. However, taking the field one step further into the role of preventative care has become a new idea. Preventative physical therapy is just as the name entails: physical therapy that works to prevent injuries or other health concerns before it becomes a major issue. This could include strengthening muscles, improving flexibility, or performing rehabilitation exercises in potentially injury prone areas. In a *NYC In Touch Physical Therapy* article (2022), various forms of physical therapy as a form of prevention come to light. Among these include “prehab”, meaning a pre-rehabilitation routine. For someone who engages in rigorous, high-intensity exercises, having massages or strengthening programs that will allow the body to best prepare for such activities could be vital in the prevention of injuries. In older adults, this could include an exercise program to prevent the onset of chronic conditions, such as osteoporosis. Physical therapy has the potential to emerge into a new role of preventative care, allowing patients to be proactive when it comes to their health by working safely with a skilled professional in designing exercise programs.

Works Cited

Alghnam S, Castillo R. (n.d.). Traumatic injuries and persistent opioid use in the USA:

findings from a nationally representative survey *Injury Prevention*2017;**23:**87-92.

Baumblatt JAG, et al. (2014). High-Risk Use by Patients Prescribed Opioids for Pain

and Its Role in Overdose Deaths. *JAMA Intern Med.* 2014;174(5):796–801. doi:10.1001/jamainternmed.2013.12711

Bohnert ASB, Valenstein M, Bair MJ, et al. (2011). Association Between Opioid

Prescribing Patterns and Opioid Overdose-Related Deaths. *JAMA.* 2011;305(13):1315–1321. doi:10.1001/jama.2011.370

Jette, A. M. (2018, February 28). Responding to the Opioid Epidemic in the United

States. *Physical Therapy*, *98*(3), 147–148. Retrieved from https://academic.oup.com/ptj/article/98/3/147/4913713

Lembke, A. (2016). *Drug dealer, Md: how doctors were duped, patients got hooked,*

*and why its so hard to stop*. Baltimore: Johns Hopkins University Press.

PTJ Special Issue Podcasts: Physical Therapy for Pain May Reduce Overall Costs,

Opioid Use. (2018). *PT in Motion*, *10*(6), 47. Retrieved from http://www.apta.org/PTinMotion/NewsNow/?blogid=10737418615&id=47244643662

Singh, G. K., et al. (2019). Opioid Epidemic in the United States: Empirical Trends,

and A Literature Review of Social Determinants and Epidemiological, Pain

Management, and Treatment Patterns. *International journal of MCH and AIDS*, *8*(2), 89–100. https://doi.org/10.21106/ijma.284

“What Is Preventive Physical Therapy & When Do You Need It?” *In Touch NYC*

*Physical Therapy*, 24 Mar. 2022, https://www.itnycpt.com/blog/what-is-preventative-physical-therapy-when-and-worth/.