Physical Therapy as an Adjuvant De-addiction Technique for Opioid Dependence: Answers Unquestioned or Questions Unanswered

Nisha Rani Jamwal*, Senthil P. Kumar**

IJMHS (Jul-Dec 2015) 02 (02): 117-118 / ©Red Flower Publication Pvt. Ltd.

This short communication article would highlight the probable scope of using physical therapy as an adjuvant de-addiction therapeutic option for opioid dependence syndrome, from an evidence-informed perspective.

Opioids are extremely effective in managing cancer pain, and now are utilized for longer periods of time in cancer patients as the treatment for malignancies has become more successful. Under-treatment and dependence are two extreme ends of the palliative care spectrum which both lay public and clinicians face frequently (Meera, 2011). Whether medically prescribed or otherwise, dependence / addiction and overuse-associated deaths (Juurlink and Dhalla, 2012) with prolonged opioid use were reported commonly among patient population with chronic pain, in both developed and developing countries equally (Praveen et al, 2012).

Illicit drug dependence directly accounted for 20.0 million Disability adjusted life years (DALYs) and Opioid dependence was the largest contributor to this direct burden of DALYs at 9.2 million, with a suicide risk rate of 671,000 DALYs (Degenhardt et al, 2013). There were 15.5 million opioid dependent people globally in 2010, males being more affected than

Author's Affiliation: * Senior Physiotherapist, Department of Physiotherapy, Fortis Super Speciality hospital, Phase-VIII, Mohali, Punjab **Professor & Principal, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation (Maharishi Markandeshwar University), Mullana - Ambala-133207, Haryana.

Reprint Request: Senthil P Kumar, Professor & Principal, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation (MMIPR), Maharishi Markandeshwar University (MMU), Mullana University Road, Mullana, Ambala, Haryana-133207

E-mail: senthilparamasivamkumar@gmail.com

females and more so between 25-29 years age. The incidence and prevalence of opioid dependence due to opioid analgesics for pain relief is up to 21% and 30% respectively (Minozzi et al, 2013).

We write this letter to editor to provide an emphasis on the role of physical therapy as an adjuvant deaddiction technique for people with Opioid dependence (OD) and Opioid dependence syndrome (ODS).

Although medication-assisted treatments and psychosocial techniques are available for opioid dependence, they are associated with attitudinal, political, policy-related and financial issues (Pecoraro et al, 2012). Other alternative treatments such as acupuncture (Hann et al, 2011; Lin et al, 2012), phytotherapy (Tabatabai et al, 2013), telephonic patient support programs (Ruetsch et al, 2012) were reported for their efficacy in OD/ODS as well as Withdrawal syndrome.

Treatments such as exercise (Pareja-Galeano et al, 2013) were reported as optional adjunctive deaddiction methods for OD. However, recognition of ODS during rehabilitation of patients with chronic pain remains a clinical challenge (Gregg and Jones, 2013). Questioning patients about their use of prescription analgesics direct clinicians to know when and how to intervene a potential ODS (Hill et al, 2012).

Blum et al (2013) proposed the use of a novel electrotherapeutic technique named H-wave stimulation therapy (HWST) for OD/ODS in view of their findings (Blum et al, 2008) from a meta-analysis of five studies on HWST as a safe and effective non-pharmacological analgesic treatment in chronic pain. The HWST for 2-3 weeks treatment reduced pain ratings, decreased the intake of pain medications, and improved patient functionality in people with chronic pain (Blum et al, 2006).

Clinical research on OD should address two main issues: concurrent heroin use, and individuals with pain and pain-related symptoms while defining patient population (Weiss et al, 2010). Although educational interventions, music therapy, soft tissue massage, transcutaneous electrical nerve stimulation (TENS), and individually structured physical activity prescription were found in the literature, as physical therapy for people with chronic pain, nonetheless not many could be found in OD and ODS. Hence it is a collective responsibility for clinicians and researchers in developing countries to address this unique mental health issue in palliative care settings.

References

- Blum K, DiNubile NA, Tekten T, Chen TJ, Waite RL, School field J, Martinez-Pons M, Callahan MF, Smith TL, Mengucci J, Blum SH, Meshkin B. H-Wave, a non-pharmacologic alternative for the treatment of patients with chronic soft tissue inflammation and neuropathic pain: a preliminary statistical outcome study. AdvTher. 2006; 23(3): 446-55.
- Blum K, Chen AL, Chen TJ, Prihoda TJ, Schoolfield J, DiNubile N, Waite RL, Arcuri V, Kerner M, Braverman ER, Rhoades P, Tung H. The H-Wave device is an effective and safe nonpharmacological analgesic for chronic pain: a meta-analysis. AdvTher. 2008; 25(7): 644-57.
- 3. Degenhardt L, Whiteford HA, Ferrari AJ, Baxter AJ, Charlson FJ, Hall WD, Freedman G, Burstein R, Johns N, Engell RE, Flaxman A, Murray CJ, Vos T. Global burden of disease attributable to illicit drug use and dependence: findings from the Global Burden of Disease Study 2010. Lancet. 2013; 382(9904): 1564-74.
- Degenhardt L, Charlson F, Mathers B, Hall WD, Flaxman AD, Johns N, Vos T. The global epidemiology and burden of opioid dependence: Results from the Global Burden of Disease 2010 study. Addiction. 2014 Mar 25. doi: 10.1111/ add.12551. [Epub ahead of print]
- 5. Gregg JA, Jones JS. How do you recognize opiate addiction in the rehabilitation patient?

- RehabilNurs. 2013; 38(5): 217-20.
- 6. Han J, Cui C, Wu L. Acupuncture-related techniques for the treatment of opiate addiction: a case of translational medicine. Front Med. 2011; 5(2): 141-50.
- 7. Hill KP, Rice LS, Connery HS, Weiss RD. Diagnosing and treating opioid dependence. J FamPract. 2012; 61(10): 588-97.
- 8. Juurlink DN, Dhalla IA. Dependence and addiction during chronic opioid therapy. J Med Toxicol. 2012;8(4):393-9.
- 9. Lin JG, Chan YY, Chen YH. Acupuncture for the treatment of opiate addiction. Evid Based Complement Alternat Med. 2012; 2012: 739045.
- Meera A. Pain and Opioid Dependence: Is it a Matter of Concern. Indian J Palliat Care. 2011; 17(Suppl): S36-8.
- 11. Minozzi S, Amato L, Davoli M. Development of dependence following treatment with opioid analgesics for pain relief: a systematic review. Addiction. 2013; 108(4): 688-98.
- 12. Pareja-Galeano H, Sanchis-Gomar F, Mayero S. Exercise as an adjuvant intervention in opiate dependence. SubstAbus. 2013; 34(2): 87-8.
- Pecoraro A, Ma M, Woody GE. The science and practice of medication-assisted treatments for opioid dependence. Subst Use Misuse. 2012; 47(8-9): 1026-40.
- 14. Praveen KT, Law F, O'Shea J, Melichar J. Opioid dependence. Am Fam Physician. 2012; 86(6): 565-6.
- 15. Ruetsch C, Tkacz J, McPherson TL, Cacciola J.The effect of telephonic patient support on treatment for opioid dependence: outcomes at one year follow-up.Addict Behav. 2012; 37(5): 686-9.
- Tabatabai SM, Dashti S, Doosti F, Hosseinzadeh H. Phytotherapy of Opioid Dependence and Withdrawal Syndrome: A Review. Phytother Res. 2013 Oct 22. doi: 10.1002/ptr.5073. [Epub ahead of print]
- 17. Weiss RD, Potter JS, Copersino ML, Prather K, Jacobs P, Provost S, Chim D, Selzer J, Ling W. Conducting clinical research with prescription opioid dependence: defining the population. Am J Addict. 2010; 19(2): 141-6.