CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
SJIF Impact Factor: 7.187

Avalable online at: http://www.iajps.com *Research Article*

FREQUENCY OF WORK-RELATED BACK PAIN AMONG PHYSIOTHERAPISTS PRACTICING IN LAHORE

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Article Received: November 2020 **Accepted:** December 2020 **Published:** January 2021

Abstract:

Background: *Musculoskeletal disorders are common among health care providers who use manual skills. Physiotherapists are subjected to severe stresses throughout their course of practice. All techniques of physiotherapy involve much use of back. Therefore, back is likely to be under strain.*

Objective: *The objective of study was to find the frequency of work-related Back pain among physiotherapists practicing in Lahore.*

Methods: *It was a Cross sectional study design. Data was collected from 100 physical therapists. Data was collected through questionnaire. Data was entered and analyzed through SPSS version 20.0. All qualitative data was shown in the form of mean and standard deviation. Data was presented with the help of charts, graphs and tables.*

Result: *The results showed the results of different parameters as for Age [as at last birthday] mean value was 33.6552 and [SD±10.57240], for Hours per Week [HPW] Spent in Direct Patient Care in Last year as Part of Physiotherapy Practice the, mean value was 26.1724 and [SD±15.86534] and for Numeric Pain Rating Scale the mean value was 4.0776 and [SD±1.57784].*

Conclusion: *There was found high frequency of work-related pain in back among physical therapists in Lahore. Most of therapists do preventive, compensative and corrective measure for coping highly prevalent back pain including pausing, rest intervals after sessions and modifying technique to some extent.*

Keywords: *Back Pain, Frequency, Work Related Musculoskeletal Disorders, Physical Therapy*

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Please cite this article in press Sehrish Riaz et al, ***Frequency Of Work-Related Back Pain Among Physiotherapists Practicing In Lahore.,*** *Indo Am. J. P. Sci, 2021; 08[1].*

INTRODUCTION:

In rehabilitation centers and clinical settings physiotherapists need to perform physical demanding exercises like truly difficult work, twisting, tedious powerful exercises and static bad stance for long duration. Due to this high demanding working circumstance, physiotherapists are inclined to work related musculoskeletal issue and injuries. Severity and sort of disorder change with the state of workplace, term of occupation, remedial methods regularly utilized and patient result these are the work components which straightforwardly influence the work-related musculoskeletal disorders. Restorative exercises incline physical advisor to business related injuries of various district of body because of high drive level and reiteration and bad posture in which these exercises are performed.[1-5]

Some studies have demonstrated that physiotherapists have a high prevalence of LBP. The activities of these professionals are related to the development of this pain. It is estimated that up to 60% of LBP events in this group occur as a consequence of work-related injuries. Many physiotherapists report the onset of LBP during undergraduate course. In fact, physiotherapy students are potentially exposed to the same LBP occupational risks as graduates, such as poor working postures and frequent manual handling activities, often undertaken in difficult environments and with variable training regarding personal safety.[6-8]

In order to evaluate the association between undergraduate physiotherapy study and LBP, we developed a prevalence study with physiotherapy and medical students, analyzing the possible confounding factors in a logistic regression model. We also aimed to verify if LBP is more severe and disabling in physiotherapy students.[9]

In Western social orders back pain is a typical problem, that causes significant disability and extensive economic loss. Self-restricted episodes of intense low back pain are common and individual suffering don't look for medicinal care. Among the individuals who do look for therapeutic care, incapacity, and come back to work normally enhance quickly in the main month. Numerous alternatives are accessible for assessment and administration of low back pain. Unluckily lack of agreement, either inside or between specialties, on proper clinical assessment and administration of low back pain has been a setback.[10, 11]

Patient's age and general health of individual and his physical demand are vital factors to consider in individuals suffering from pain in lower back before prescribing them activity limitation. Insufficient evidence is available about specific recommendations about the effectiveness of work modification for promoting return to work. Specific regulations should be there with reference of specific clinicians regarding their area of practice for worker's compensation claims. Brief individualized educational treatments that includes detailed clinical examination and counseling, typically lasting several hours over 1 to 2 sessions can reduce sick leave in workers with sub-acute low back pain. The objective of study was to find the frequency of work-related Back pain among physiotherapists practicing in Lahore. [12, 13]

METHODS:

It was a Cross sectional study design. Data was collected from physical therapy department of Mayo hospital, Jinnah Hospital Lahore. A sample size of 116 physiotherapists experiencing work related musculoskeletal pain was taken by using below mentioned formula, with 95% level of confidence, 5% level of significance.

Both the male and female physiotherapists were included, who were doing clinical practice and willing to participate in the study.

While all pregnant physiotherapists, Physiotherapist having LBP due to pathological cause for example Ankylosing Spondylosis and Tuberculosis etc., Physiotherapists having red flags [i.e. tumor, fracture, metabolic disease, rheumatoid arthritis, osteoporosis, prolonged use of steroid, infection, severe spondylo-arthropathy, were excluded.[14, 15]

Sampling technique was non probability convenient sampling method was used. The was completed in 6 months after the approval of synopsis. 116 physiotherapists who fulfilled the selection criteria was enrolled in the study. Prior to take any information written informed consent was taken from each individual participating in the data was collected with the help of questionnaire distributed among participants.

Data was entered and analyzed through SPSS version 20.0. All qualitative data was shown in the form of mean and standard deviation. Data was presented with the help of charts, graphs and tables.

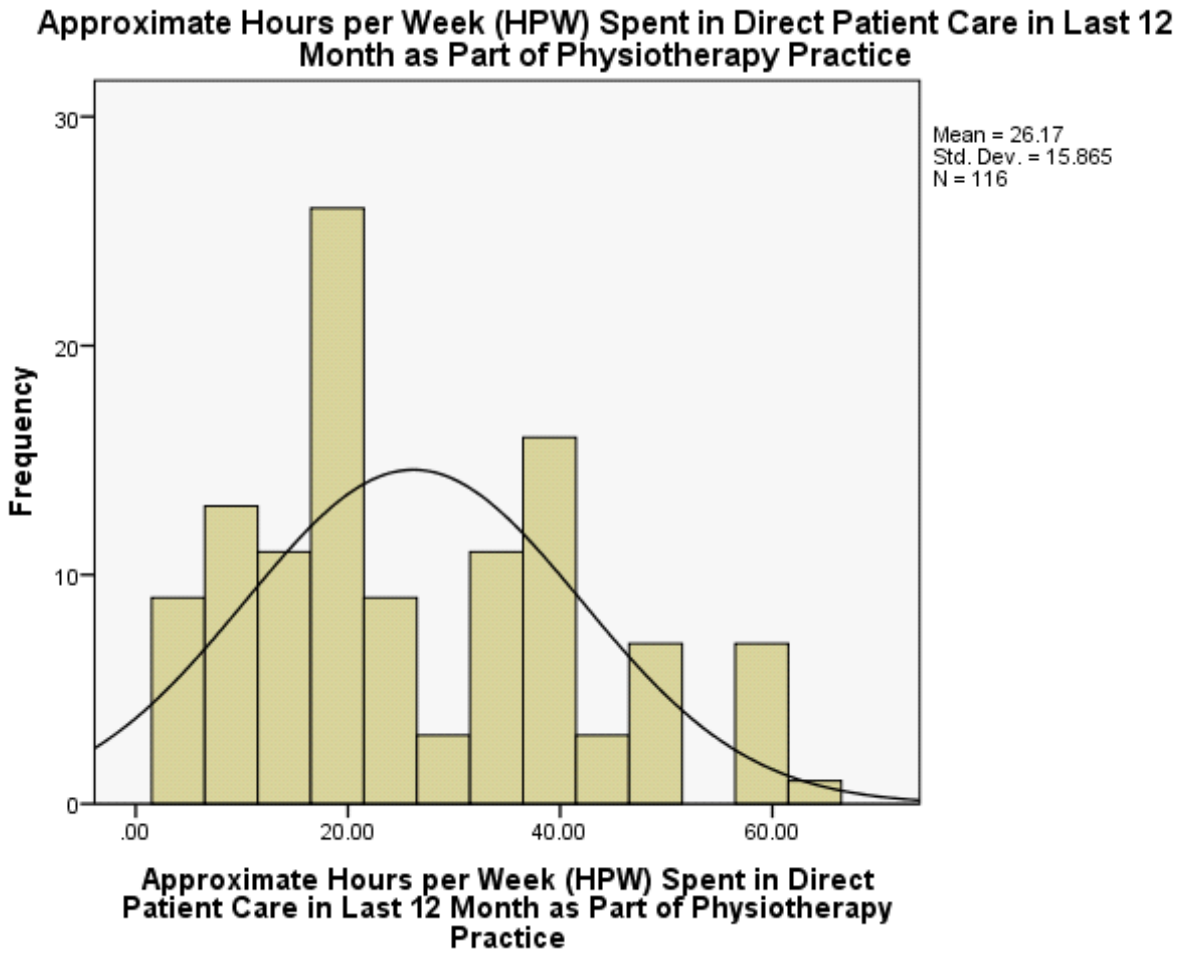
RESULT:

The results showed the results of different parameters as for Age [as at last birthday] mean value was 33.6552 and [SD±10.57240], for Hours per Week [HPW] Spent in Direct Patient Care in Last year as Part of Physiotherapy Practice the, mean value was 26.1724 and [SD±15.86534] and for Numeric Pain Rating Scale the mean value was 4.0776 and [SD±1.57784]

Mean	Std. Deviation	Range	Mean
Age [as at last birthday]	33.6552	10.57240	39.00
Approximate Hours per Week	26.1724	15.86534	59.00
Numeric Pain Rating Scale	4.0776	1.57784	7.00

Complain of work-related pain or discomfort in any part of body that lasted >3 days	64	55.2
Alter or modified treatment plan as a result of work-related discomfort	98	84.5
Work-related discomfort has you ever changed your area of practice or specialty	44	37.9
Special ergonomic training to alter your environment to reduce strain on your body	41	35.3
Physiotherapy practice to pursue another profession as a result of work related disorder	33	28.5

Questionnaire variable	Almost always	sometimes	Never
Modified treatment as a result of work-related discomfort?	89	12	15
Have you changed the area/ specialty in which you practice as a result of work-related discomfort?	44	58	13
Have you ever had training in ways to alter your environment to reduce strain on your body [ergonomics]?	41	57	18
Have you left the physiotherapy profession to pursue another career as a result of work related disorder.	7	27	79
I get someone else to help me handle a heavy patient	14	75	27
I modify patient's position/ my position	37	74	5
I use a different part of my body to administer a manual technique	29	80	7
I warm up and stretch before performing manual technique.	28	79	9
I use electrotherapy instead of manual techniques to avoid stressing an injury	35	37	44
I pause regularly so I can stretch and change posture.	50	49	17
I adjust plinth/bed height before treating a patient.	73	33	17
I select techniques that will not aggravate or provoke my discomfort.	57	50	9
I stop a treatment if it causes or aggravate my discomfort	22	32	62



Histogram with normal curve regarding Approximate Hours per Week [HPW] Spent in Direct Patient Care in Last year during Physiotherapy Practice showed mean value of 26.17[SD±15.865] while the curve was positively skewed towards higher values.

DISCUSSION:

My study findings, facts and figures lead us to number of results and helpful conclusive points about work related back pain among physiotherapists. Age of therapists with a high standard deviation showed a versatile nature of physical therapists in study. Plus, points that make my study more reliable is collection of variety of opinions.

Numerous respondents in study were female physiotherapist. Most of work related back pain among physical therapists were found gradual in onset and few therapist showed a result of sudden onset back pain regarding work related strain. This gradual onset may be due to improper posture that they used to adopt for exercise therapy. Because this is very slow adaptation and minor in its intensity that is why it may go unnoticed but results into a major work-related problem later on.[16]

The fact that most physical therapists were working as part time which make little uncertainty about findings in a way that part time working of physical therapists may have different but advanced patterns of practice due to marketing forces and they had less work related backache It seems despite being otherwise experienced in physical therapy field, experience of full time practice and work related back pain would made a difference in their opinions regarding practice patterns as physical therapist.

Most significant work-related problem experience and location indication found to be less pain in upper back and more problem found in lower back which showed physical therapists were more prone of having lower backache regarding work related stress.

Regarding work related back pain only few physical therapists were less likely to leave the profession permanently instead they modified different intervention related positioning and more percentage of physical therapist stick to their profession and made some easy and convenient methods of interventional adjustments regarding height of plinth.[14, 15, 17]

Prevalence of work-related musculoskeletal disorder in one year among Nigerian physiotherapists was studied. Study focused on prevalence of WRMD among gender group and their job response. Study shows 91.3% prevalence among female physiotherapist is significantly higher than male PT [p=0.007]. Most common body region affected by WRMD is low back 69.8%.[Adegoke et al., 2008]. For acute pain in lower back having duration of less than 4 weeks, spinal manipulation techniques applied by professional expert having professional training is effective with small to moderate benefits for short duration of time. Exercise therapy under expert supervision and home exercise plans are not effectively beneficial for acute low back pain and the optimal time to start exercise therapy for treatment after the onset of symptoms is not clear. Some studies suggest the intervention of exercise therapy plan after 2 to 6 weeks, although these recommendations are not supported by reliable high-quality evidence.[18]

Online survey was conducted to observe prevalence and demographic association of the work-related musculoskeletal disorder regarding job nature and working environmental setup. Three most affected region of body are reported including low back 66%, neck 61%. Among the PTs working at ICU geriatric, pediatric, out-patient clinics and hospitals the most commonly affected region is low back.[Vieira et al., 2015[10]

CONCLUSION:

There was found high frequency of work-related pain in back among physical therapists in Lahore. Most of therapists do preventive, compensative and corrective measure for coping highly prevalent back pain including pausing, rest intervals after sessions and modifying technique to some extent.

REFERENCES:

1. Alghadir A, Zafar H, Iqbal ZA, Al-Eisa E. Work-related low back pain among physical therapists in Riyadh, Saudi Arabia. Workplace health & safety. 2017;65[8]:337-45.
2. Vujcic I, Stojilovic N, Dubljanin E, Ladjevic N, Ladjevic I, Sipetic-Grujicic S. Low back pain among medical students in Belgrade [Serbia]: a cross-sectional study. Pain Research and Management. 2018;2018.
3. Sharma S, Jensen MP, Moseley GL, Abbott JH. Results of a feasibility randomised clinical trial on pain education for low back pain in Nepal: the Pain Education in Nepal-Low Back Pain [PEN-LBP] feasibility trial. BMJ Open. 2019;9[3]:2018-026874.
4. Farragher JB, Pranata A, Williams G, El-Ansary D, Parry SM, Kasza J, et al. Effects of lumbar extensor muscle strengthening and neuromuscular control retraining on disability in patients with chronic low back pain: a protocol for a randomised controlled trial. BMJ Open. 2019;9[8]:2018-028259.
5. Chou L, Cicuttini FM, Urquhart DM, Anthony SN, Sullivan K, Seneviwickrama M, et al. People with low back pain perceive needs for non-biomedical services in workplace, financial, social and household domains: a systematic review. J Physiother. 2018;64[2]:74-83.
6. Alhowimel A, AlOtaibi M, Radford K, Coulson N. Psychosocial factors associated with change in pain and disability outcomes in chronic low back pain patients treated by physiotherapist: a systematic review. SAGE open medicine. 2018;6:2050312118757387.
7. Perreault K, Dionne CE, Rossignol M, Poitras S, Morin D. Inter-Professional Practices of Private-Sector Physiotherapists for Low Back Pain Management: Who, How, and When? Physiother Can. 2016;68[4]:323-34.
8. Milhem M, Kalichman L, Ezra D, Alperovitch-Najenson D. Work-related musculoskeletal disorders among physical therapists: A comprehensive narrative review. Int J Occup Med Environ Health. 2016;29[5]:735-47.
9. Synnott A, O'Keeffe M, Bunzli S, Dankaerts W, O'Sullivan P, O'Sullivan K. Physiotherapists may stigmatise or feel unprepared to treat people with low back pain and psychosocial factors that influence recovery: a systematic review. Journal of physiotherapy. 2015;61[2]:68-76.
10. Abolfotouh SM, Mahmoud K, Faraj K, Moammer G, ElSayed A, Abolfotouh MA. Prevalence, consequences and predictors of low back pain among nurses in a tertiary care setting. International orthopaedics. 2015;39[12]:2439-49.
11. Nordin NAM, Singh DKA, Kanglun L. Low back pain and associated risk factors among health science undergraduates. Sains Malaysiana. 2014;43[3]:423-8.
12. Tella BA, Akinbo SRA, Asafa SA, Gbiri CA. Prevalence and impacts of low back pain among peasant farmers in south-west Nigeria.

International journal of occupational medicine and environmental health. 2013;26[4]:621-7.
13. Shah S, Dave B. Prevalence of low back pain and its associated risk factors among doctors in Surat. Int J Heal Sci Res. 2012;2[1]:1-5.
14. Vredeveld T, Eberlein A, Ramaekers SPJ, Coppieters MW, Pool-Goudzwaard AL. Barriers and facilitators to ask for lower urinary tract symptoms in people with low back pain and pelvic girdle pain. A qualitative study. Musculoskelet Sci Pract. 2020;48[102155]:5.
15. Al Amer HS. Low back pain prevalence and risk factors among health workers in Saudi Arabia: A systematic review and meta-analysis. J Occup Health. 2020;62[1]:1348-9585.
16. Moroder P, RunER A, Resch H, TAuBER M. Low back pain among medical students. Acta Orthopaedica Belgica. 2011;77[1]:88.
17. Suman A, Schaafsma FG, van Dongen JM, Elders PJM, Buchbinder R, van Tulder MW, et al. Effectiveness and cost-utility of a multifaceted eHealth strategy to improve back pain beliefs of patients with non-specific low back pain: a cluster randomised trial. BMJ Open. 2019;9[12]:2019-030879.
18. Falavigna A, Teles AR, Mazzocchin T, de Braga GL, Kleber FD, Barreto F, et al. Increased prevalence of low back pain among physiotherapy students compared to medical students. European Spine Journal. 2011;20[3]:500-5.