ABSTRACT

Background: Physical therapy often is used in the management of work-related low back pain (LBP). Little information, however, is known about work related low back pain that may occur in physical therapy experts themselves. Work related low back agony speaks to one of the real wellbeing issues that happen in well-being experts. The point of this study is to examine the pervasiveness of work related low back pain in physical therapy experts, and its connection to the way of work.

Methods: One hundred and seven physical therapy experts working at general hospitals at Taif, KSA took part in this study, their age ranged from 25 to 60 years, and they were complaining from low back pain for more than 3 months and their current pain for at least three or more weeks. Every subject was requested to finish the Oswestry Low Back Pain Disability Index Questionnaires that comprised of 15 close-ended inquiries.

Results: We analyzed Data by utilizing descriptive statistics to gauge the predominance of low back pain in physical therapy experts and to explore connection between back pain and hospital facility work. Out of two hundred thirty physical therapist advisor, one hundred and ten (47.8%) physical specialists finished/gave back the surveys. three polls were rejected from investigation since members had missed a few things in filling the survey. In this manner, just information from 107 members was utilized to figure the predominance rates. It was found that the commonness of work related low back pain in physical therapy expert is equivalent 72%. It was found that a connection between the works related low back pain and age, proficient rank, and specialty.

Conclusion: There is a higher occurrence of work related back pain among physiotherapist expert and this may be impacted by age, proficient rank and specialty.

Keywords: Work- Low back pain-Prevalence - Physical therapy- Taif- KSA.
INTRODUCTION

Low back pain is a standout amongst the most widely recognized injuries endured by experts who work at outward clinic and it is a standout amongst the most well-known reasons for non-appearance from work[1]. Medical professionals are incorporated into the records of large amounts of occupational pain. The side effects meddle with the execution of day by day exercises and range from constraints of development to temporary invalidity, contingent upon the force of the pathology[2]. The rate of low back pain (LBP) in the general and working populaces has been an issue for a long time. Thinks about have shown that from 62 to 80 percent surprisingly will experience the ill effects of LBP sooner or later in their lives [3]. This figure changed with the sort of subject contemplated, the strategy for information accumulation, and the meaning of LBP used [4].

Physical specialists are among medical experts who indicate more postural unsettling influences subsequent to their occupation requests awesome endeavors of the musculoskeletal framework, dull movements of the upper appendages, support of static and dynamic postures for long periods of time and particularly developments which over-burden the spine [5].

Albeit physical therapy plans to advance an individual’s well-being, most of the instruments utilized and the workplace where the practice is completed do not regard numerous ergonomics statutes. In this way, numerous specialists do their exercises, which request solid and dreary developments, in insufficient rooms and with improper stances. This can prompt musculoskeletal aggravations, for the most part of the lumbar spine[6].

The physical therapy treatment strategies that build the danger are persistent exchange, bowing and contorting stances, manual treatment methods, delicate tissue activation, and physical occupation strain [7].

The rate of commonness of these injuries in Australia, America, Britain, Europe and a few sections of Middle East like Kuwait was reported [8-11]. That as it may, little information is accessible on LBP among Saudi PTs [12]. The point of our study was to examine the causes, commonness, hazard elements and reaction to LBP among Saudi physical therapist in Taif, KSA.

MATERIAL AND METHODS

A cross sectional study done on chosen physical specialist working in the health facility at Taif Region, KSA. All information gathered by hand given survey that comprised of 15 close-ended inquiries. All subjects were drawn closer amid their working hours, they were educated of the reason for the examination venture, and subjects why should willing take an interest where required in the study. ‘A self-Assessment The Oswestry Low Back Pain Disability Index Questionnaires’ Fairbank, et al [13] were circulated to all physical therapist (number =107) consenting.

One hundred and seven inquiries were filled and gave back, the information entered were further broke down. Low back pain rating scale adjusted from Fairbank, et al [13]. It was used for the physical examination on the individuals who had self-reported back agony to unbiased decide the back torment and its seriousness. This scale incorporates estimation of back torment, and inability record. This information was examined utilizing both descriptive and inferential measurements to appraise the commonness of back pain in physical therapist and to explore whether back agony is straightforwardly identified with their clinic work.

Inclusion criteria: All persons participated in the study their age ranged from 25 to 60 years and they were complaining from low back pain for more than 3 months (to exclude the first episode) and their current pain for at least three or more weeks.

Exclusion criteria: All persons which have history of back dysfunction (complaining of pain episodes), Current nerve root pain (below knee in dermatome distribution), previous spinal Surgery. Post pregnancy or History of any precious medical conditions that can lead to back pain were excluded from this study.

Statistical analysis

Information was examined utilizing SPSS 10.0 for Windows. Results for the general data and work related part things were communicated as number/rate.

RESULTS

Out of two hundred thirty physical advisors, one hundred and ten (47.8%) physical specialists finished/gave back the surveys. three polls were rejected from investigation since members had missed a few things in filling the survey. In this manner, just information from 107 members was utilized to figure the predominance rates. The time taken to finish the survey was 10 to 15 minutes.

Participants’ description

There were more male than female physical specialists who took part in this study (Table 1); their age extended from 20 to 60 years. Most members (80.4%) had lesser than 10 years of clinical experience, (Table 1). Orthopedics was the most widely recognized zone of specialty (Table 1). With respect to working hour, a large portion of the member (74.8) worked from 31 to 40 hours (Table 1). Around seventy-five percent of members were positioned as physical specialist technician (Table 1).

| Variable       | Number (n = 107) | Percentage % |
|----------------|-----------------|--------------|
| Gender         |                 |              |
| Male           | 70              | 65.4 34.6    |
| Female         | 37              |              |
| Age            |                 |              |
| 20-30          | 52              | 48.6 34.6 13.1|
| 31-40          | 37              | 3.7          |
| 40-50          | 14              |              |
| 50+            |                 |              |
| Nationality    |                 |              |
| Saudi          | 80              | 74.8 25.2    |
| Non Saudi      | 27              |              |

Table 1: Participants demographic data
As indicated by The Oswestry Low Back Pain Disability Index Questionnaires the level of incapacity because of low back torment can be characterized into 5 levels of handicap, on the present study, lion’s share of patient (48.6%) have a moderate disability level which implies that Patients may encounter more agony and issues with sitting, lifting and standing. Travel and social life are more troublesome. Patients might be off work. Individual consideration, dozing and sexual movement may not be terribly influenced. Conservative treatment might be adequate. Then again, around 22% of the aggregate patients grumbled from minimal disability which mirrors that Patients can adapt to most exercises of day-by-day living. No treatment might be demonstrated aside from proposals on lifting, stance, physical wellness and eating regimen. Patients with inactive occupations (ex. secretaries) may encounter a bigger number of issues than others as seen on table 2 and figure 1.

Table 2: Percentage of disability according to Oswestry Low Back Pain Disability Index Questionnaires

| Disability level | Number (107) | Percentage % |
|------------------|--------------|--------------|
| 0% to 20% (minimal disability) | 23 | 21.5 |
| 21%-40% (moderate disability) | 52 | 48.6 |
| 41%-60% (severe disability) | 2 | 1.9 |
| 61%-80% (crippled) | 0 | 0 |
| 81%-100% | 0 | 0 |
| Total prevalence of disability | 77 | 72 |

Figure 1: Percentage of disability according to Oswestry Low Back Pain Disability Index Questionnaires

Luckily, an insignificant rate (1.9%) of aggregate populace of this study have sever disability which implies that Pain is an essential issue for these patients, however they may likewise be encountering noteworthy issues in travel, individual consideration, social life, sexual action and rest. A nitty gritty assessment is suitable as seen on table 2. To aggregate up, we have found that the perservativeness of work related back pain among physical therapist experts working in Taif, KSA was 72%.

As found in table (3) there was an immediate relationship amongst age and level of disability, sever disability were just seen in physical therapist more than fifty years just, while negligible or moderate disability can be seen between 20 to 40 years. Moderate disability is noticeable in middle age between 31 to 40 years.

Table 3: Prevalence of work related back pain and age

| Disability | Minimal N (%) | Moderate N (%) | Sever N (%) |
|------------|---------------|----------------|-------------|
| Age        |               |                |             |
| 20-30      | 11 (10.2)     | 12 (11.2)      | -           |
| 31-40      | 10 (9.3)      | 42 (39.3)      | -           |
| 40-50      | -             | -              | -           |
| 50+        | -             | -              | 2 (1.9)     |

Table (4) shows that the professional rank can affect the level of low back pain disability as most technician have either moderate or minimal disability, on the other hand, the majority of specialist have either moderate or sever disability.

Table 4: Prevalence of work related back pain and professional rank

| Disability | Minimal N (%) | Moderate N (%) | Sever N (%) |
|------------|---------------|----------------|-------------|
| Professional rank |               |                |             |
| Technician | 23 (21.5)     | 41 (38.3)      | -           |
| Specialist | -             | 11 (10.2)      | 2 (1.9)     |

Table (5) reveals that physical professionals working in orthopedic areas have either minimal or moderate disability; on the other hand, the majority of physical therapy working

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in neurology areas has either moderate or severe disability.

**Table 5:** Prevalence of work related back pain and specialty

| Disability specialty | Minimal N (%) | Moderate N (%) | Sever N (%) |
|----------------------|---------------|----------------|-------------|
| Orthopedic           | 23(21.5)      | 12(11.2)       | -           |
| Neurology            | -             | 40(37.4)       | 2(1.9)      |
| Burns                | -             | -              | -           |
| Pediatric            | -             | -              | -           |

**DISCUSSION**

Work related Back Pain (WRBP) is characterized as a back agony that outcomes from a business related occasion. Such issues associated with work related conditions are regular among medical and para medical specialists. This may bring about work time misfortune, work limitation, or exchange to another employment and these sorts of wounds are regular among nurses and physiotherapists [14,15]. Research done by Feng et al 2007 [14] has demonstrated that musculoskeletal issues are especially basic in medicinal services laborers who are in direct contact with patients. It was found that the commonness of work related low back pain in physical therapy expert is equivalent 72%. It was found that a connection between the works related low back pain and age, proficient rank, and specialty.

On the present study, WRBP were regular among physical specialists working in the Taif region, KSA. Be that as it may, the pervasiveness rate of WRBP reported by members in our study was higher than the commonness reported in the United States (61%) [9], Kuwait (47.6%) [12], Brasil (78.58%) [16] then again, our study was lower than the pervasiveness reported in Australia (91%) [11], and Nigeria (91.3%) [17]. A conceivable clarification for this lower rate might be practice contrasts, with more physical advisor assistants being accessible in the Taif locale, KSA to help with the fluctuated business related undertakings (e.g., lifting, exchanging). Past inquires about have connected manual treatment procedures are not generally or regularly rehearsed in Kuwait, this could be another conceivable clarification for the lower rate of WRBP.

The commonness of WRBP was altogether connected with member age. In this concentrate, more than 70% of the members between the ages of 20-40 years had lower back objections, while just 1.9% of those more established than 50 years. This relationship amongst age and lower back protests has likewise been accounted for in past studies [9,11]. On contrary to the work done by Alrowayeh (2010) [12] and Rugelj (2003) [6], who stated that the frequency of WRBP was not age related. The high pervasiveness of lower back objections among more youthful physical specialists could be connected with an absence of expert experience, information and skills [10,18]. Higher work burden could be another clarification for the higher predominance of lower back objections in more youthful physical specialists. Moving out of direct patient consideration and into managerial positions, which are less physically requesting, could clarify the lower predominance of lower back complaints in our study is more older age group.

The predominance of WRBP was not fundamentally connected with claim to fame. The expanded predominance of low back torment grievances among members who work in neurology and orthopedic regions might be clarified by the every now and again honed manual treatment strategies. This discovering underpins the investigation of Bork and colleagues [9]. Bork et al [9] reported that physical specialists who routinely perform manual treatment were 3.5 times more inclined to have wrist or hand manifestations than the individuals who did not play out these procedure.

**CONCLUSION**

Our study concluded that the prevalence of work related back pain among physical therapist professional working in Taif district, KSA represent 72% from the total population and there was a direct relationship between the age, specialty, and professional rank and the level of disability resulting from work.

**Recommendation**

According to the results of this study it is recommended to:

1. Study the effect of work on different regions such as neck and knee which might be affected.
2. Increase the population of the study and include another area of KSA.

**REFERENCES**

[1] Cromie, J. E., Robertson, V. J. & Best, M. O. Work-related musculoskeletal disorders and the culture of physical therapy. Phys Ther. 2002 May;82(5):459-72.

[2] Meirelles, E. S. Como diagnosticar e tratar as lombalgias. Rev Bras Med. 2000;57:1089–1102.

[3] Biering-Sørensen, F. A prospective study of low back pain in a general population. I. Occurrence, recurrence and aetiology. Scandinavian journal of rehabilitation medicine. 1983;15(2):71-9.

[4] Hirsch, C., Jonsson, B. & Lewin, T. Low-back symptoms in a Swedish female population. Clinical orthopaedics and related research. 1969 Mar-Apr;63:171-6.

[5] Holder, N. L. et al. Cause, prevalence, and response to occupational musculoskeletal injuries reported by physical therapists and physical therapist assistants. Phys Ther. 1999 Jul;79(7):642-52.

[6] Rugelj, D. Low back pain and other work-related musculoskeletal problems among physiotherapists. Appl Ergon. 2003 Nov;34(6):635-9.

[7] Caragianis, S. The prevalence of occupational injuries among hand therapists in Australia and New Zealand. Journal of hand therapy : official journal of the American Society of Hand Therapists.2002; 15(3): 234–41.

[8] Nyland, L. J. & Grimmer, K. A. Is undergraduate physiotherapy study a risk factor for low back pain? A prevalence study of LBP in physiotherapy students. BMC musculoskeletal disorders.2003; 4: 22.

[9] Bork, B. E. et al. Work-related musculoskeletal disor-
ders among physical therapists. *Physical therapy*. 1996 Aug;76(8):827-35.

[10] Salik, Y. & Ozcan, A. Work-related musculoskeletal disorders: a survey of physical therapists in Izmir-Turkey. *BMC musculoskeletal disorders*. 2004; 5: 27.

[11] Cromie, J. E., Robertson, V. J. & Best, M. O. Work-related musculoskeletal disorders in physical therapists: prevalence, severity, risks, and responses. *Phys Ther.*. 2000 Apr;80(4):336-51.

[12] Alrowayeh, H. N. *et al.* Prevalence, characteristics, and impacts of work-related musculoskeletal disorders: a survey among physical therapists in the State of Kuwait. *BMC musculoskeletal disorders*. 2010; 11: 116.

[13] Fairbank, J. C. & Pynsent, P. B. The Oswestry Disability Index. *Spine (Phila Pa 1976).* 2000 Nov 15;25(22):2940-52.

[14] Feng, C.-K., Chen, M.-L. & Mao, I.-F. Prevalence of and risk factors for different measures of low back pain among female nursing aides in Taiwanese nursing homes. *BMC Musculoskeletal Disord.* 2007 Jun 25;8:52.

[15] West, D. J. & Gardner, D. Occupational injuries of physiotherapists in North and Central Queensland. *Aust J Physiother.*. 2001;47(3):179-86.

[16] FSiqueira, G., Cahú, F. & Vieira, R. Ocorrência de lombalgia em fisioterapeutas da cidade de Recife , Pernambuco Occurrence of low back pain in physical therapists from the city of Recife . *Revista Brasileira de Fisioterapia*. 2008; 12(3): 222–227.

[17] Adegoke, B. O. A., Akodu, A. K. & Oyeyemi, A. L. Work-related musculoskeletal disorders among Nigerian physiotherapists. *BMC Musculoskeletal Disord.* 2008 Aug 18;9:112.

[18] Molumphy, M., Unger, B., Jensen, G. M. & Lopopolo, R. B. Incidence of work-related low back pain in physical therapists. *Phys Ther.*. 1985 Apr;65(4):482-6.

**Citation**

Ahmed, E. (2016). PREVALENCE OF WORK RELATED LOW BACK PAIN IN PHYSICAL THERAPIST PROFESSIONAL FROM THE CITY OF TAIF, KSA. *International Journal of Physiotherapy*, 3(5), 552-556.