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Research Article

### PREVALENCE OF LOW BACK PAIN AMONG OVERWEIGHT PERSONS. (Cross Sectional Study)

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**Abstract:**

**Objectives:** To find the Prevalence and to identify socio demography of the affected group among the overweight Person by age and to assess severity and behavior in context to its pain.

**Methodology:** The study design was descriptive cross-sectional study with a total of 378 samples were selected conveniently for the study. Data was collected by using mixed type of questionnaires. Descriptive statistic was used for data analysis which focused through (table, pie-charts and bar charts).

**Results:** The finding of the study was that 18.7% overweight persons suffered from Low Back Pain where 52.4% were males and 47.6% were females. About 73.5% of participants had obesity in their family and 59.8% had past medical history of surgical procedure in their families. However, 24.3% of participants had mild pain, 34.9% had moderate pain, 35.4% had severe pack pain 10.3% of Participants had below 1 month, 27.8% 1 to 6 months of duration, 37% of Participants had severe to 12 months of duration, 23% of Participants had 2-3 years of duration, 9% of participants had occasional, 21.2% had intermittent and 38.4% had contest type of pain.

**Conclusion:** overweight persons are more vulnerable to LBP. Having said, it is responsibility for Physiotherapist or rehabilitation expert to accurately evaluate treat Low Back Pain complains and make individual physically active in order to reduce further health related complications.

**Keywords:** (Low Back Pain), (Obesity), (Diabetes Mellitus), (Physical inactivity)

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**INTRODUCTION:**

Low Back Pain is defined as Pain, muscle tension or stiffeners localized below the costal margin and above the inferior glottal folds with or without leg Pain. (1). Low Back Pain more common as people age, affecting more than half of People over age of 60 years (2). Low Back Pain Sign and Symptoms develops after movements that involve lifting, twisting or forward bending. It may not increase and aggravate with specific type of movements such as leg raising standing or sitting, it is called sciatica when pain radiate down the legs. Low Back Pain among the ages of 20 years and 40 years. (3) Low Back Pain is the most common Symptoms experienced by people throughout the world (4) Low Back Pain is a common health Problems, it is a common cause of work-related disability and sickness absence. (5) According to the obesity association of American, the Persons who are effected with musculoskeletal Pain particularly Back Pain, and 1/3 of American categorized as obese.(6) The obesity association of American gave statement that the Persons who are obese they formed as disabled and problem to doing daily activities of everyday life. According to association who had risk of Lower Back Pain those have large waist size and those who are obese. (7) The effected person may be recommended to for bed rest may be stop the mechanical stern and to minimize the pressure on the disc in the spine. A short duration of bed rest can help to reduce the acute type of Back Pain. More the 10 or 2 days of rest can it cover pain, if pain increased and other adverse results such as (cardiopulmonary reconditioning, muscle atrophy, Bone mineral loss, risk of Blood dots, creating old illness mindset). (8) The acute type of Low Back Pain is the 5<sup>th</sup> most common reason for visits to Physician. In us about out of ten, nine adults experience pain and out of ten, five working adults had back pain in every year.(9) Ultra Sinologists find factors and Bivalence of work related musculoskeletal discomforts duration of work and weight of the Participants possible risk factors for the increase of Musculoskeletal discomforts Pain (10). Overweight and obesity are the fifth leading risk of global deaths. At least 2.8 million adults die each year as a result of being overweight and obese. In addition, 44% of the diabetes burden, 23% of the is chemic heart disease burden and between 7% and 41% of certain cancer burdens are attributable to overweight and obesity. (11) Low Back Pain is the most common symptoms experienced by people throughout the world (12). Low Back Pain is one of the most common problems nowadays, obesity together with overweight, which means a higher body mass Index (BMI), correlate with worsening of life quality and muscle skeleton functioning. Obese people

often look for medical help in relation to their complaints of back muscle pain (13).

**MATERIAL & METHODS:**

**Objectives:** To find the Prevalence of Low Back Pain among the overweight Persons.

**Research deigns:** \_A Descriptive Cross-Sectional Study

**Setting:** This study was carried out in different hospitals of District Sanghar.

**Sampling Technique:** Sampling Technique was used in Non-Probability, Convenience.

**Study Duration:** 6 Months

**Sample Size:** About 378 overweight Persons were selected, (Calculated through Rao Soft Calculator Sample Size).

**Inclusion Criteria:**

- Both male and female Patients
- Overweight and obese person with BMI
- Age group was b/w 20-40 years
- Participants who were willing to participate

**Exclusion Criteria:**

- Injury or trauma in Low Back Pain
- Psychiatric Patient who may give irrelevant information
- Pregnant females
- Rheumatic disorders
- Any Surgery
- Bone Injection
- Participant not willing to Participate

**Data Collection Method:**

Data Collection Method Validated Questionnaire adopted from Dosta Mohammad at al study. All relevant information regarding study collected by face to face communication and structured Questionnaire was distributed along with consent form.

**Demo Graphics:**

Includes medical record number, age, sex nationality, job description, height weight and BMI.

**Data Analysis Procedure:**

Data is to be analyzed by using statistical Package for social sciences (SPSS) Version 20.0 was used for data processing descriptive statistics frequencies and percentage was used.

**Budget:**

Budget of this research was 15000 Pakistani Rupees.

**Ethics approval:** The Ethics Committee at Isra institute of Rehabilitation Sciences Karachi (IIRS)

approved this study. All participants gave written informed consent before data collection began

**RESULTS:**

Total out of 378 Participants 198 (52.4%) were male and 180 (47.6%) were females.

**Table 1: Age of participants**

N	Valid	378
	Missing	0
Mean		32.9868
Std. Deviation		4.32037
Minimum		22.00
Maximum		42.00

**Table 2: Gender of participants**

	Frequency	Percent	Valid Percent	Cumulative Percent
VALID Male	198	52.4	52.4	52.4
Female	180	47.6	47.6	100.0
Total	378	100.0	100.0	

**Table 3: Duration of pain**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < 1 month	39	10.3	10.3	10.3
1-6 months	105	27.8	27.8	38.1
7-12 months	140	37.0	37.0	75.1
2-3 years	87	23.0	23.0	98.1
Not applicable	7	1.9	1.9	100.0
Total	378	100.0	100.0	

**Table 4: The behavior of your pain**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Occasional	34	9.0	9.0	9.0
Intermittent	80	21.2	21.2	30.2
Constant	145	38.4	38.4	68.5
Not applicable	119	31.5	31.5	100.0
Total	378	100.0	100.0	

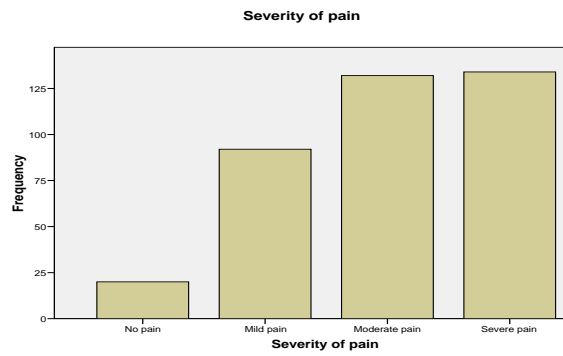


FIGURE: 1

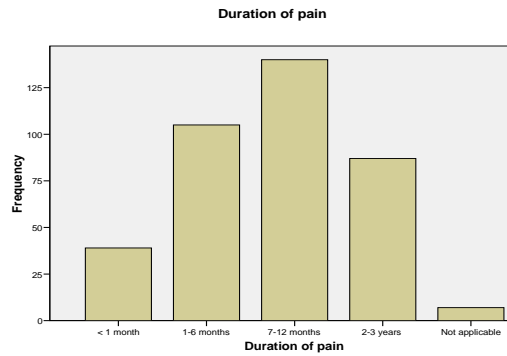


FIGURE 2.

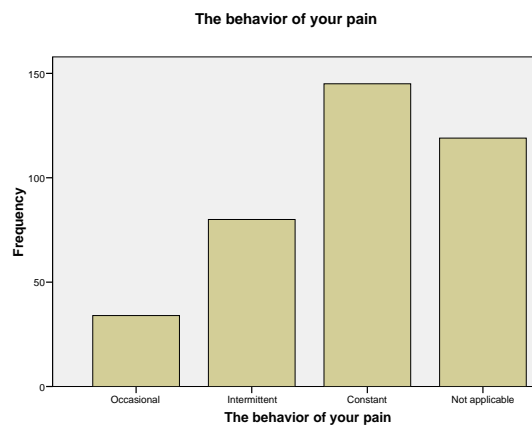
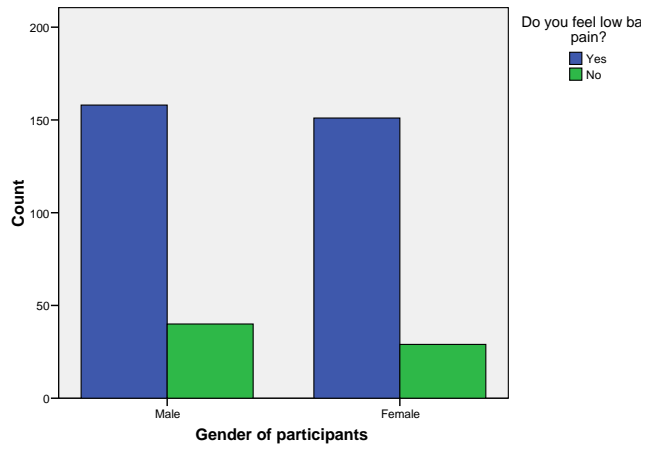


FIGURE 3.

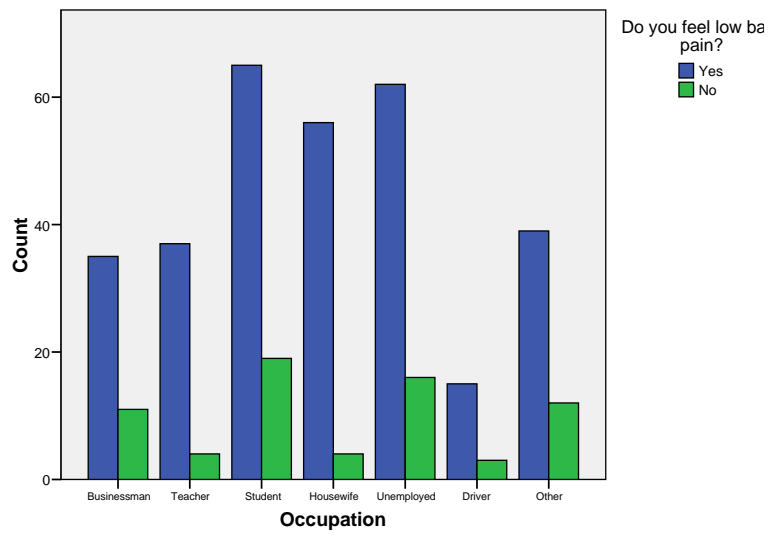
**CHARTS:**

**Bar Chart**



**1.1**

**Bar Chart**



**1.2**

**DISCUSSION:**

This study was conducted through a descriptive cross-sectional study data of Patients at different Hospitals in district of Sanghar, concluded that 76% overweight Persons was Suffering the Problem of LBP. Most of them had moderate type of LBP with 54.4 % were central LBP and 45.6 % were radiated LBP, 40 % Participants felt constant LBP, 26.7% felt intermittent LBP and 9.3 % occasional LBP, 98.2% overweight Persons who suffered from LBP took different kind of treatment, among then 77.22% took Physiotherapy with other treatment of then LBP. Obese Postmenopausal women often suffered from LBP, the 23.7% of the Participants reported chronic type of LBP and 73.5% of there were overweight and obese. In this study Prevalence of Low Back Pain was 81.7 % found in the overweight Population. In this study most of Low Back Pain found in Unemployed Persons. In this study obese postmenopausal women often suffer from LBP, the 23.7 % of the Participants reported chronic type of LBP and 73.5 % of them were overweight and obese.

**Recommendations:**

Based on our results, the Awareness should be given to the Population about the effects of overweight. Exercise and physical activity facilities should be provided to the Population to minimize the risk in addition, Importance of Exercise and physical activity should be provided to the Population.

**CONCLUSION:** To Conclude, the Prevalence of Low Back pain among the overweight Population. Study should that all most they had low Back Pain. Male Female ratio almost was equal, but more problem seen in unemployed persons, housewife and students

**Competing interests:** The Authors have no competing interests relevant to this study

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