



## Iranian Individuals with Low Back Pain and Social Disabilities

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### ABSTRACT

**Aim:** Low back pain (LBP) is a biopsychological problem which involve all aging groups worldwide which could limited social and sexual activities among suffered people. In this regard, this study aimed to obtain viewpoints of Iranian people involved with LBP.

**Method and Materials:** This descriptive study was done on Iranian adults who suffered from LBP. To do this study, demographic questionnaire and Oswestry Disability Index (ODI) were completed by eligible participants. The last three sections of this questionnaire which were related to sexual, traveling and social activities were completed by the participants who were satisfied to be studied and signed the written consent form. Completed data were entered into the SPSS version 26 and analyzed through descriptive statistics.

**Findings:** In total, 238 eligible adult including 159 female aged 40.06±13.22 years and 79 male aged 35.56±16.12 years were assessed. In this study, of 238 responded participants 147 (61.7%) participants explained some LBP, of 179 responded participants 89 (49.7%) participants described sexual activity limitation and, of 228 responded participants, 146 (64%) participants verified that they had social activity limitation due to disability consequently to LBP.

**Conclusion:** This study showed the majority of Iranian participants with disability due to LBP have limited social and sexually activities. Therefore, doing further studies to confirm these results and designing proper interventions are strongly recommended.

**Keywords:** Low Back Pain, Social Activity, Sexual Activity, Traveling.

Low back pain (LBP) is a health problem which involve all aging groups worldwide [1]. It has been argued that back pain is the second most common complaint for visiting health care providers [2] and also the most common musculoskeletal pain among elderly [3]. Chronic back pain has been considered as a syndrome that multiple factors are responsible for its' causes [4]. Previous work declared a strong relationship between chronic back pain and disability in old people [5]. Biopsychosocial factors of pain are reported in many evidences [6,7]. The biopsychosocial model indicates that individuals experience or perceive pain through different ways including biological, prior experience, sociocultural and psychological

influences [6]. Therefore, it is debated that there is a potential bidirectional association between psychological and biological factors with regard to back pain [5]. Thus, vigorous activity could help people strengthen muscles and bones, return to adaptive activity and finally decrease their pain in some circumstances [8]. It has been discussed that many factors such as vertebral posture and stressful life, ageing, gender; smoking, unhealthy life style and occupational conditions could deteriorate LBP [9]. Low back pain is known to be a key contributor to disability [8] and is considered as a socially and economically problems in all countries [1]. Many evidences indicated that people suffering from low back pain have districted functions socially due to their pain [1,8].

Furthermore, these people may have limited sexual activity because of experiencing extra pain during intercourse. Since, up to our knowledge, there is not enough documents in these regards, this study aims to describe how Iranian who are suffered with back pain explain their social activities.

### Method and Materials

This descriptive study was done on adult with LBP regarding social disability due to LBP. This study was deprived from a general physician thesis which was approved in Ethical Committee of Zanjan University of Medical Sciences (ZUMS) with the code of IR.ZMUS>REC>1399. In this study the individuals who suffered from LBP were entered to the study. However, individuals with mental disorders, depression or anxiety and who has history of surgery on column vertebra were excluded from the study. The sample size was calculated based on statistics formula which was obtained as 266 individuals. For sampling, all referees to the orthopedic and neurosurgery clinics of ZUMS who were eligible due to exclusion/inclusion criteria and they signed the written consent form were registered to be assessed. They were provided with demographic questionnaire and Oswestry Disability Index (ODI). Oswestry Disability Index was applied to assess the disability to assess daily and social activities. In present study the first six sections of the questionnaire are related to routine daily activities of respondent and the last three sections are related to sexual and social activities. These sections are as following areas: ability to traveling, sexual activity, and social activity. Originally, this questionnaire was designed in 1980 [8]. The Persian version of this questionnaire was validated in previous study [9]. Completed data were analyzed through descriptive statistics using SPSS version 26.

### Findings

In all 266 individuals were registered for the study of which 28 individuals were not satisfied to be assessed, so 238 eligible participants including 159 female with mean age of (40.06±13.22) and 79 male with mean age of (35.56±16.12) be assessed. Table 1 shows the rest demographic characteristics of the studied participants. Table 2 shows the responses of the participants to the last three sections of the Oswestry questionnaire. According to the findings of this Table about half of the participants revealed that they were suffering from LBP and due disabilities regarding social and sexual activities.

**Table 1)** Demographic characteristics of the studied participants

Variables	
<b>Gender</b>	<b>N (%)</b>
Female	159 (66.8)
Male	79 (33.2)
<b>Marital status</b>	
Married	144(60.5)
Single	90 (37.8)
Others	40 (1.7)
<b>Residency</b>	
Urban	5 (2.1)
Rural	233 (97.9)
<b>Economic status</b>	
Good	83 (34.9)
Medium	148 (62.2)
Bad	7 (2.9)
<b>No of children</b>	
2≤	199 (83.6)
3-5	33 (13.9)
6≥	6 (2.5)

### Discussion

This study explored how LBP could leading to sexual and social disabilities among Iranian

**Table 2)** Descriptive study of pain and different disabilities of the participants

Pain intensity	Frequency	Per cent
I have no pain at the moment	91	33.6
The pain is very mild at the moment	70	25.8
The pain is moderate at the moment	28	10.3
The pain is fairly severe at the moment	44	16.2
The pain is very severe at the moment	3	1.1
The pain is the worst imaginable at the moment.	2	0.7
<b>Total</b>	<b>238</b>	<b>100</b>
<b>Sexual activities</b>	<b>238</b>	<b>100</b>
My sex life is normal and causes no extra pain	90	50.3
My sex life is normal but causes some extra pain	60	33.5
My sex life is nearly normal but is very painful	10	5.57
My sex life is severely restricted by pain	9	5.2
My sex life is nearly absent because of pain	6	3.4
Pain prevents any sex life at all	4	2.2
<b>Total</b>	<b>179</b>	<b>100</b>
<b>Social activities</b>		
My social life is normal and gives me no extra pain		
My social life is normal but increases the degree of pain	82	34.4
Pain has no significant effect on my social life apart from limiting my more energetic interests eg, sport	107	44.9
Pain has restricted my social life and I do not go out as often	26	10.9
Pain has restricted my social life to my home	18	7.6
I have no social life because of pain	4	1.6
<b>Total</b>	<b>11</b>	<b>0.6</b>
<b>Traveling</b>		
I can travel anywhere without pain	89	37.6
I can travel anywhere but it gives me extra pain	122	51.5
Pain is bad but I manage journeys over two hours	16	6.7
Pain restricts me to journeys of less than one hour	4	1.7
Pain restricts me to short necessary journeys under 30 minutes	1	0.4
Pain prevents me from travelling except to receive treatment	5	2.1
<b>Total</b>	<b>237</b>	<b>100</b>

people. The findings of the study showed that majority participants were involved by different severity of LBP. The recent study has reported that LBP has significantly increased among Iranian people [10] and people aging has been reported as one of the main reasons of this health problem. In previous study [1, 11] it was documented that female were at higher risk of LBP. Furthermore, an existed study [12] also revealed that women experience musculoskeletal pain more than men. This finding about gender differences regarding LBP is supported by many other

studies which is in the line of our study. In present study, the majority of people were women and aged at pre- elderly. However, comparing LBP and disability between different gender and age groups were not assessed in present study.

In this study ODI was used to assess LBP and disability of the participants. In previous evidence, this instrument was confirmed as a reliable, valid, and responsive specific tool to measure disability due to LBP [13]. This tool has been applied mostly in either chronic or disabled populations. Based on the results

of this study, about half of the participants stated that they experience extra pain or even severe pain during their sexual activities so that their sex life has been so limited for these people. Of course in this section, there was more attrition in responding to the questions and so about one fourth of the participants did not response to the sexual questions maybe due to cultural issues. Sexual activity limitation that stated by the participants of this study has been supported by previous studies<sup>[14]</sup>. The majority of the participants in current study stated their social life has been normal but the degrees of their low back pain have been increased during these activities . In some cases, these participants explained their social participation has been so limited because of their pain. In this regard, other studies verified that LBP could strongly limit social activities of individuals who suffered from this problem<sup>[15]</sup>. Furthermore, an existed document verified that while individuals suffering from LBP, their quality of life including social activities decreased<sup>[16]</sup>. Many participants of this study explained that they can travel anywhere but it gives them extra pain. In some cases the participants described that they experienced severe pain so that they were not able to travel more than 2 hours . In accordance with this result, previous evidences documented that traveling cause extra LBP because of activity limitation due to LBP<sup>[17]</sup>. Prolong sitting especially in wrong posture has been reported as one of main reason for backache. An extensive study which was conducted in Iran showed that 15.7 % of Iranian people over 15 years old suffered from low back pain<sup>[18]</sup>. This study<sup>[18]</sup> verified that sitting in wrong posture -as a wrong life style among Iranian- could contribute to more prevalence of LBP among in this target population which could leading to disability.

This study has some limitations. One of limitations self-reporting of the questions

that might be miss- information. Another limitation is not considering subgroups of demographic differences due to LBP and disability. However, despite of these limitations , this study has its' own strong points because using standard instruments, large sample size and so obtaining the findings that were in the line of many valid mentioned documents.

### Conclusion

This study verified that the majority of Iranian participants suffered LBP which has led to different disabilities regarding social activities, traveling and sexual activities. Therefore, doing further researches to confirm the results and designing proper intervention is strongly recommended.

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**Authors' Contribution:** RM was the principal investigator and designed the study and conducted all stages of the study .MHP was supervisor of the study and NM was advisor of the study.

**Conflicts of Interest:** There is no conflicts' of interest for this study

**Ethical Permissions:** This study was deprived from a general physician thesis which was approved in Ethical Committee of ZUMS with the code of IR.ZMUS>REC>1399.

**Findings:** None

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