VOLUME-9, ISSUE-2, FEBRUARY-2020 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper | Rehabilitation Science

A COMPARATIVE STUDY BETWEEN QUALITY OF LIFE OF MALE AND FEMALE AND ITS ASSOCIATION WITH NON-SPECIFIC NECK PAIN

Sana Ansari — Intern (B.O.Th), Department Of Rehabilitation Sciences, Jamia Hamdard, New Delhi, India

Dr. Deepshikha Gupta* — Assistant Professor (Occupational Therapy), Department of Rehabilitation Sciences, Jamia Hamdard, New Delhi, India *Corresponding Author

ABSTRACT

BACKGROUND: The prevalence of neck pain is generally higher in women than men and usually increases with age. QOL is an area of study that has attracted an ever increasing amount of interest. The WHO defines quality of life (QOL) as an individual purpose-aligned cultural and value system by which a person lives, relative to their aims, hopes, living standards and interests. HRQOL has become increasingly important, as it combines the evaluation and treatment of the patient's perception of the diseases impact.

OBJECTIVE: To find out the association of non-specific neck pain with quality of life. To find out the Difference in quality of life of male and female due to non-specific neck pain.

METHOD: 50 Males and 50 Females between the ages of 18-25 years with Non-Specific Neck Pain were taken. Data was collected by using Neck Disability Index questionnaire and filled by the participants.

RESULT: Higher the Non-Specific Neck Pain more will be the Quality of Life affected.

CONCLUSION: The finding of the study suggests that QOL of Females is more affected than males and it is associated with Non-Specific Neck Pain.

KEYWORDS : Non-specific Neck Pain, Hrqol, Chronic Pain.

INTRODUCTION

The prevalence of neck pain is generally higher in women than men and usually increases with age; there is evidence that the younger population has a better prognosis for improvement. People with neck pain may have associated psychological factors, including anxiety, depression, catastrophizing, and fear of movement[1]

The WHO defines quality of life (QOL) as an individual purpose-aligned cultural and value system by which a person lives, relative to their aims, hopes, living standards and interests. This is a detailed concept which incorporates individuals' physical and psychological health, their degree of independence, their social liaisons and how they relate to their surroundings. Quality of life is an area of study that has attracted an ever increasing amount of interest (McCall, 2005; Ruzevicius, 2012).

The long term, lower intensity stress and strain and improper posture are believed to be the most important causative factor for neck pain[13]

MATERIAL AND METHOD

- **Study design**: Comparative study
- **Sample size**: 100
- **Source of data collection**: community
- **Sampling design**: convenient

PARTICIPATION CRITERIA

INCLUSION CRITERIA:

- Undergraduate students between the ages of 18-25 years.
- Both male and female suffering from Non-specific neck pain since 6 months.

EXCLUSION CRITERIA:

- Person who have traumatic injury in past 6 months.
- History of cervical fracture.
- Any other clinical pathology in last 6 months.

RESULT

Table 1: Comparison of Pain intensity scores between male and female subjects.

Gender	N	Mean	S.D	t-value
Male	50	0.84	0.817	3.250**
Female	50	1.46	1.073	

***Significant at .01 level*

INFERENCE:

the mean value for the score of pain intensity (PI) of male is 0.84 with standard Deviation of 0.817. The mean value for the score of pain intensity (PI) of female is 1.46 with standard deviation of 1.073.

The t-value is 3.250 suggesting results to be Significant at .01 levels, which means that the pain intensity component of quality of life in females with non-specific neck pain is higher than males with non-specific neck pain.

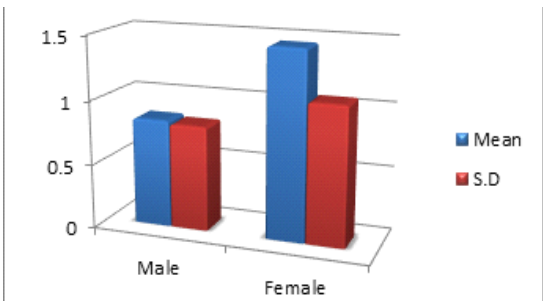


Table 2: Comparison of Reading scores between male and female subjects.

Gender	N	Mean	S.D	t-value
Male	50	0.88	0.824	3.659**
Female	50	1.54	0.973	

***Significant at .01 level*

INFERENCE:

The mean value for the score of reading (RG) of male is 0.88 with standard deviation of 0.824. The mean value for the score of reading (RG) of female is 1.54 with standard deviation 0.973. The t-value is 3.659 suggesting results to be significant at .01 levels, which means that the reading component of quality of life in females with non-specific neck pain is higher than males with non-specific neck pain

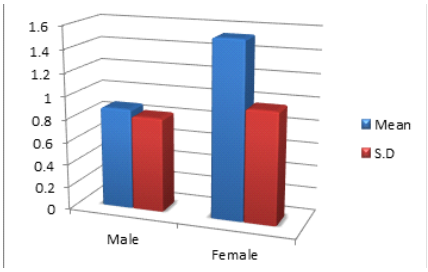


Table 3: Comparison of Headache scores between male and female subjects.

Gender	N	Mean	S.D	t-value
Male	50	1.00	0.833	2.196*
Female	50	1.44	1.146	

**Significant at .05 level*

INFERENCE:

The mean value for the score of headache (HA) of male is 1.00 with standard deviation of 0.833.The mean value for the score of headache (HA) of female is 1.44 with standard deviation 1.146.

The t-value is 2.196 suggesting result to be significant at .05 level, which means that the headache component of quality of life in females with non-specific neck pain is higher than males with non-specific neck pain.

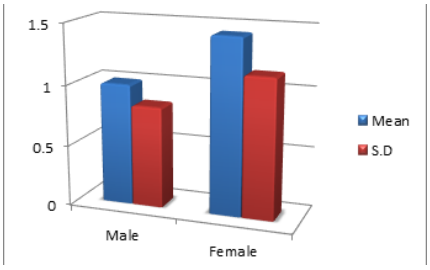


Table 4: Comparison of Concentration scores between male and female subjects

Gender	N	Mean	S.D	t-value
Male	50	0.78	0.864	2.442*
Female	50	1.30	1.233	

**Significant at .05 level*

INFERENCE:

The mean value for the score of concentration (CC) of male is 0.78 with standard deviation 0.864. The mean value for the score of concentration (CC) of female is 1.30 with standard deviation 1.233.

The t-value is 2.442 suggesting results to be significant at .05 levels, which means that the concentration component of quality of life in females with non-specific neck pain is higher than males with non-specific neck pain.

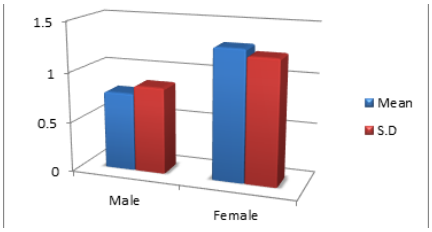


Table 5: Comparison of total score between male and female subjects.

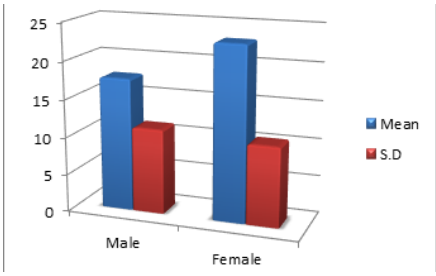
Gender	N	Mean	S.D	t-value
Male	50	17.64	11.302	2.485*
Female	50	23.08	10.581	

**Significant at .05 level*

INFERENCE:

The mean value for the total score (TS) of male is 17.64 with standard deviation 11.302. The mean value for the total score (TS) of female is 23.08 with standard deviation 10.581.

The t-value is 2.485 suggesting results to be significant at .05 levels, which means that total score of female with non-specific neck pain is higher than males with non-specific neck pain.



DISCUSSION

The purpose of the study was to compare the Quality of Life of Male and Female and its Association with non-specific Neck Pain in general population from age range 18 to 25 years. The result of the study suggested that, Higher the non-specific neck pain more will be the Quality of Life affected.

Total 100 subjects were taken in the study with non-specific neck pain after considering the inclusion and exclusion criteria. The age group of the subjects taken was 18-25 years. The participants were divided into male and female, 50 each. The purpose of study was explained to all eligible participants in their local language. Consent was obtained from all who were willing to participate in the survey. After taking the Demographic data, Research Data was collected. Questio nnaire was filled by the participants. The questionnaire used was The Neck Disability Index (NDI) developed by Vernon, H. & Mior, S. (1991). NDI is 10 items scale.-Pain Intensity, Personal Care, Lifting, Reading, Headache, Concentration, Work, Driving, Sleeping, and Recreation. Each of the 10 item scores from 0 to 5.The maximum score is 50. Scoring was calculated by the investigator and was statically analyzed using T-test. The scoring of the questionnaire was calculated by the investigator and was statistically analyzed using T test.

The result of the study for N=100, the mean of Pain Intensity for male is 0.84 with S.D 0.817 and mean for female is 1.46 with S.D 1.073. The t-value is 3.250**, which is significant at .01 levels. This result suggested that the Pain Intensity of Females with non-specific Neck Pain is higher than Males. For N=99, 50 were Male 49 were Female, the mean of Personal Care for Male is 0.58 with S.D 0.883 and for female is 0.53 with S.D 0.844. The t-value is $0.284^{NS,}$ which is not significant. This result suggests that the Personal Care component of Quality of Life is not affected by non-specific Neck Pain in Males and Females. For N=100, the mean of Lifting for Male is 0.98 with S.D 1.152 and Mean for Female is 1.18 with S.D 1.173. The t-value was 0.860^{NS}, which is not significant. This result suggests that Lifting component of Quality of Life is not affected by non-specific Neck Pain in Males and Females. For N= 100, the mean of Reading component for Male is 0.88 with S.D 0.824 and mean for Female is 1.54 with S.D 0.973. The t-value was 3.659** which is significant at .01 levels. The result suggests that the Reading component of Quality of Life in Females with non-specific Neck Pain is higher than Males with non-specific Neck Pain. For N=100, the mean of Headache for Male is 1.00 with S.D 0.833 and mean for Female is 1.44with S.D 1.146. The

t-value was 2.196*. Which are significant at .05 level. The Headache component of Quality of Life in Females with non-specific Neck Pain is higher than Males with non-specific Neck Pain. FOR N=100, the mean of Concentration Male is 0.78 with S.D 0.864 and mean for Female is 1.30 with S.D 1.233. The t-value was 2.442*, which is significant at .05 level. This result suggests that, the Concentration component of Quality of Life in Females with non-specific Neck Pain is higher than Males with non-specific Neck Pain. For N=100, the mean of Work for Male is 1.00 with S.D 1.143 and Mean for Female is 0.78 with S.D 0.840. The t-value is 1.097^{NS}, which is not significant. Hence this result suggests that the Work component of Quality of Life is not affected by non-specific Neck Pain in Males and Females. For N=80, 39 were Male 41 were Female, the mean of Driving for Male is 1.38 with S.D 1.549 and Mean for Female is 1.37 with S.D 1.729. The t-value was 0.51^{NS}, which is not significant. This result suggests that the Driving component of Quality of Life is not affected by non-specific Neck Pain in Males and Females. For N=100, the mean of Sleeping score for Male 0.76 with S.D 1.098 and Mean for Female 1.00 with S.D 0.990. The t-value is 1.148^{NS}, which is not significant. This result suggests that, the Sleeping component of Quality of Life is not affected by non-specific Neck Pain in Males and Females. For N=99, 50 were Male, 49 were Female, the mean of Recreation component of Quality of Life for Male is 0.76 with S.D 0.797 and Mean for Female is 1.00 with S.D 0.677. The t-value was 1.613^{NS}, which is not significant. This result suggests that Recreation component of Quality of Life is not affected by non-specific Neck Pain in Males and Females.

For N=100, the mean of total score for Male is 17.64 with S.D 11.302 and mean for Female is 23.08 with S.D 10.581.The t-value was 2.485*. Which is significant at .05 level. This result suggests that the total score of Female with non-specific Neck Pain is higher than Males with neck pain. Which suggest that higher the neck pain more will be the quality of life affected.

The result of the present study suggests that, there is a comparison between quality of life of Male and Female and its association with non-specific neck pain. This research is supported by the research conducted in 2018 **Prachita Walankar et al** department of musculoskeletal sciences, MGM College of physiotherapy, Navi Mumbai on Pain and Quality of Life in Non-specific Neck Pain Patients. Significant difference was observed quality of life scores among males and females, hence these component should included during assessment which will provide a holistic and multimodal approach towards the understanding, planning and enhancement of management of these patients. According to **Filiz Altug et al** that chronic neck pain negatively impacts on overall health status and the causes of dysfunctions due to an increase in intensity of pain and decreasing of level quality of life. We recommended that improving quality of life and preventing disability in chronic neck pain patients must be motivated for regular exercise**. Begum Saripinarli,et al** Department of physiotherapy and rehabilitation, Faculty of Health Science, OKAN University on Relationship Between Sleep Quality And Chronic Neck Pain In Adults. Negative findings in individuals with non-specific chronic neck pain can affect the individual's sleep quality. Although medium correlation found between neck pain and sleep quality in response, patients may face many of the traditional compensatory strategies in an effort to improve sleep quantity and quality.

CONCLUSION

The study showed that there is significant difference in quality of life of males and females with non-specific neck pain. The pain intensity, personal care, lifting, reading, headache, concentration, and recreation is higher in females, but work, sleeping and driving is higher in males, so the quality of life of females is more affected than males. It showed there is a negative correlation between pain and quality of life which indicates that increase in the intensity of pain the quality of life reduces.

ACKNOWLEDGEMENT

It is my esteemed to present the research survey and whole hearted thanks to each and everyone who helped me in this research survey.

Firstly, I would like to thank Almighty God for giving me the courage to complete my research survey.

I thank **Dr. Manju Chhugani** Dean of SNSAH and **Dr. Ona P. Desai, H.O.D** of Department of Rehabilitation, who provided a conductive atmosphere to pursue this research survey.

It is a great pleasure to express my deep sense of respect to my Guide **Dr. Deepshikha Gupta.** I took up this project and could see myself through the completion of it only because of her friendly suggestion, abundant affection and high degree of knowledge, excellent research temperament and zeal.

I express my sincere thanks to **Dr. Nazia Ali, Dr. Saba Aziz, Dr. Aditya Kasotia, Dr. Kaaynat Khan** who always enriched me with experiences, high degree of knowledge, and valuable advices, wherever I required.

I am also thankful to **Prof. B.S Nagi,** who played a key role in analyzing my data. I would like to show my gratitude towards him for helping me whenever and wherever I needed.

I am grateful to my family and friends who are the ultimate source of strength, their love and sacrifice over the years who have opened countless opportunities for me.

I want to thanks my mother **Mrs. Nasra Ansari;** father **Dr. Ruknuddin Ansari,** Brother **Mr. Momin Ansari,** Sisters **Mrs. Tamhid Ansari, Mrs. Nahid Ansari, Ms. Hina Ansari,** sister in law **Mrs. Khushhal Sahiba.**

I am very thankful to my friends **Sidra Farooqui, Waize Naqui, Jagriti Yadav, and Namira Hasan.** Finally yet importantly, I would like to thanks all the subjects who have participated in the study. To these people and many others-thank you once again for your help and encouragement.

I regret if I have forgotten anyone's name. May God bless them all.

REFERENCES

1. Prachita Walankar, Disha Gandhi Pain and quality of life in non-specific neck pain patients. IERJ 2018, ISSN No: 24549916
2. Hector- Beltron- Alacreu, Ibai Lapez-de-Uralde-Villanueva, Cesar Calvo Labo, Roy La Touche, Roberto Cano-de la-Curda, Alfonso Gil-Martinez, David Fernandez-Ayuso, Josue Fernandez-Carnero. Prediction models of health related quality of life in different neck pain conditions: a cross sectional study. Dove Press 2018; 12:657-666.
3. Wasfi –A- Al Hadid Prevalence and factors influencing neck pain among health worker in Dentistry in Jordan. JOJNHCMS.ID.555706 (2018).
4. Fatemeh Ehsani, Zahra Mosallanezhad and Ghazaleh Vohedi The prevalence, risk factor and consequences of neck pain in office employees.Mejrh.42031 (2017).
5. Hector- Beltron- Alacreu, Ibai Lapez-de-Uralde-Villanueva, Cesar Calvo Labo, Josue Fernandez-Carnero, Roy La Touche. Clinical features of patients with chronic non- specific neck pain per disability level: A novel observational study. Rev Assoc MED BRAS 64(8):700-709 (2017).
6. Mohammad HR, Samena AK, Ehsanur R,Shazal KD,Obaidul H.Charac teristics of pain and disability among patient with chronic neck pain attended at centre for the rehabilitation of the paralyzed (CRP) Int. phys med Rehab J.2017,1(2):38-40.
7. Dr. Reshma S. Gurav, Dr.Vrushali P. Panhale. The association between neck pain and upper limb disability in patients with non-specific neck pain.IJHSR2017; Vol.7.
8. Andrade-ortega JA, Ceron-Fernandez, Ribeiro-Gonzalez M, Garcia-Liorent R, Almecija-Ruiz R and Delgado-Martinez AD. Pain disability and quality of life in chronic non-specific neck pain. Phys med Rehabil int 3(4):Id1094 (2016)01-04.
9. Sumaiyah O and Mirza OB. Disability due to neck pain. J Yoga phys Ther, an open access Journal ISSN: 21577595(2017).
10. Mustafa ozer, Lale Altan, Canan Celik and Burcu Metin Okmen Prevalence of neck pain in hospital secretaries and impact of disability on psychological state and quality of life. Austin Med Sci- volume 1 issue 2-2016.