



HEALTH RELATED QUALITY OF LIFE OF IT PROFESSIONALS IN CENTRAL INDIA – A CROSS SECTIONAL STUDY.

Community Medicine

Dr.Wandana Padole*

Junior Resident, Department of Community Medicine, Government Medical College, Nagpur. *Corresponding Author

Dr.Sonali Patil

Associate Professor, Department of Community Medicine, Government Medical College, Nagpur.

Dr.Uday Narlawar

Professor, Department of Community Medicine, Government Medical College, Nagpur.

ABSTRACT

a. Background: -The Information Technology (IT) Industry is one of the fastest growing industries in India employing nearly four million. The IT professionals are characterized with long working hours, tight schedules, high competition, continuous viewing of Visual Display Unit (VDU) and etc., that are increasing the occupational stress and putting the health of them in danger. There is a significant positive association between QoL and increasing stress in the domains of autonomy, physical infrastructure, work environment, and emotional factors. **b. Objectives:** - 1) To assess Health related quality of life of IT professionals in Central India. 2) To know the sociodemographic factors. 3) To suggest suitable recommendations based on study findings. **c. Methods:** - This cross-sectional study was conducted using Google forms which were sent to IT professionals in Central India using snow ball sampling method. Study has been conducted over 1-month duration from June – July 2020. All IT professionals who were currently working since at least past 6 months and working on computer for at least 4 h/day were included and subjects who did not give consent were excluded from the study. **d. Results:** - The proportion of subjects having overall good quality of life was found to be 66%. Scores in sf-20 HRQoL quality of life in domains of physical functioning, health perception, bodily pain, mental health, social functioning and role functioning are 57.58 % , 59.96%, 80.7%, 65.24%, 73.7%, 73.7% respectively. **e. Conclusion:** - In this study, we found that overall health related quality of life of IT Professionals is good. Maximum score is found in bodily pain and minimum score is found in physical functioning domain of physical component summary respectively. 66.08% and 70.88% were the mean scores for physical component and mental component summary respectively.

KEYWORDS

Health related quality of life, IT professionals, QOL

INTRODUCTION

The Information Technology (IT) Industry is one of the fastest growing industries in India employing nearly four million. The IT professionals are characterized with long working hours, tight schedules, high competition, continuous viewing of Visual Display Unit (VDU) and etc., that are increasing the occupational stress and putting the health of them in danger.[9]

The concept of health-related quality of life (HRQoL) and its determinants have evolved since the 1980s to encompass those aspects of overall quality of life that can be clearly shown to affect health—either physical or mental. On the individual level, this includes physical and mental health perceptions and their correlates, including health risks and conditions, functional status, social support, and socioeconomic status. However, some aspects of health do not appear to have a direct bearing on quality of life at the time of assessment. These include an illness, exposure, or genetic predisposition that is unknown to the individual without symptoms.[4]

Health-related quality of life (HRQoL) is a multi-dimensional concept that includes domains related to physical, mental, emotional, and social functioning. It goes beyond direct measures of population health, life expectancy, and causes of death, and focuses on the impact health status has on quality of life.[11]

Clinicians and public health officials have used HRQoL and well-being to measure the effects of chronic illness, treatments, and short- and long-term disabilities. In addition, institutes in the National Institutes of Health (NIH) – such as the National Cancer Institute (NCI) – and centers within the Centers for Disease Control and Prevention (CDC) – such as the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) – have included the evaluation and improvement of HRQoL and well-being as a public health priority.[11]

There is a significant positive association between QoL and increasing stress in the domains of autonomy, physical infrastructure, work environment, and emotional factors.[2]

13 significant predictors of QOL—four positive (age, regular fitness regimes, foreign placements and changing companies frequently) and the rest of the nine, negative (multiple sex partners, multiple

additions, extended working hours, night-shift duties, income, expenditure, carrying office work home, current illness and ITes company type).[6]

There are no such studies available at present. With these perspectives, we conducted the present study to assess Health related quality of life of IT professionals in Central India using SF-20 questionnaire and to know the socio-demographic factors and to suggest suitable recommendations based on study findings

METHODS:-

This web based cross-sectional study was conducted using a SF-20 questionnaire which was sent to subjects as google form. The duration of the study was 1-month duration from June – July 2020. The SF-20 assesses health across six domains, namely bodily pain (BP: one item), general health perception (GH: five items), physical function (PF: six items), mental health (MH: five items), social function (SF: one item), and role function (RF: two items). Items have categorical response options (range: 3-6 options); several items have reversed scoring. Domain item summation scores are transformed into a scale from 0 to 100, where higher values denote better health.

The study was conducted after obtaining the Institutional Ethics Committee approval. All IT professionals who were currently working since at least past 6 months and working on computer for at least 4 h/day were included and subjects who did not give consent were excluded from the study. Snow ball sampling method was used.

RESULTS

Among the 57 subjects enrolled in the study, 50 (88%) were in the age group of 21-30 years, 46(81%) were males, 73.68% were graduate, 70.18% were unmarried. (Table 1)

Table .Socio demographic characteristics of study participants (n =57).

	Number	Percentage (%)
Age group(years)		
21-30	50	88
31-40	7	12
Gender		
Male	46	81

Female	11	19
Education		
Graduate	42	73.68
Postgraduate	15	26.31
Marital status		
Married	17	29.82
Unmarried	40	70.18
Income		
Below 10K	7	12.28
10-20K	3	5.26
20-30K	10	17.54
30-40K	6	10.53
40K ABOVE	31	54.39

The proportion of subjects having overall good quality of life was found to be 66%. Scores in sf-20 quality of life in domains of physical functioning, health perception, bodily pain, mental health, social functioning and role functioning are 57.58 %, 59.96%, 80.7%, 65.24%, 73.7%, 73.7% respectively.

Table 2. Mean Scores of Health-related Quality of life (HRQoL) of study participants (n = 57).

QOLdomains	Good(x)	Poor (y)	Mean Scores (%)
Physical functioning	36.82	26.33	57.58
Health perception	19.99	17.1	59.96
Bodily Pain	26.9	9.65	80.7
Role functioning	41.67	16.65	73.7
Mental Health	21.75	11.59	65.24
Social functioning	24.57	8.77	73.7

(x denotes % of subjects having good HRQoL and y denotes % of subjects having poor HRQoL)

Table 3. Physical component summary, Mental component summary study participants (n = 57).

	Mean Scores (%)	SD
PCS	66.08	12.72
MCS	70.88	4.88

(PCS - Physical component summary, Mental component summary – MCS) PCS consists of domains physical functioning, health perception, bodily pain and MCS consists of role functioning, mental health, social functioning.

CONCLUSION –

In this study, we found that overall health related quality of life of IT Professionals is good. Maximum score is found in bodily pain and minimum score is found in physical functioning domain of physical component summary respectively. 66.08% and 70.88% were the mean scores for physical component and mental component summary respectively. This study shows that IT Professionals needs to do some physical activities to improve the physical functioning domain. For this some policies can be made for IT companies.

LIMITATIONS-

This study inherits the following limitations: The sample size of the study is small. Further research needed with large samples. As this was web-based study, it limits the validity of results.

REFERENCES

1. V. Padma, N. N. Anand et al. Health problems and stress in Information Technology and Business Process Outsourcing Employees J Pharm Bioallied Sci. 2015 Apr; 7(Suppl 1): S9–S13
2. Giridhara R. Babu et al. Association of quality of life and job stress in occupational workforce of India: Findings from a cross-sectional study on software professionals Indian J Occup Environ Med. 2016 May-Aug; 20(2): 109–113.
3. Saurabh R Shrivastava, Prateek S Bobhate et al. Computer related health problems among software professionals in Mumbai: A cross-sectional study International Journal of Health & Allied Sciences Vol. 1 Issue 2 Apr-Jun 2012
4. Centers for Disease Control and Prevention. Measuring Healthy Days. Atlanta, Georgia: CDC, November 2000
5. Yin et al. Summarizing health-related quality of life (HRQOL): development and testing of a one-factor model Population Health Metrics (2016) 14:22
6. Ayan Jha et al. Exploring the quality of life (QOL) in the Indian software industry: a public health viewpoint Int J Public Health (2012) 57:371–381
7. Sara Sarrafi Zadeh & Khyrunnisa Begum Association Between Insomnia and Quality of Life: An Exploratory Study Among Software Engineers Applied Research Quality Life (2011) 6:335–347

8. E. Lahana et al. The impact of ethnicity, place of residence and socioeconomic status on health-related quality of life: results from a Greek health survey Int J Public Health DOI 10.1007/s00038-010-0171-2
9. prathyusha et al. Occupational Stress among Information Technology Professionals in India: A Systematic Review of Literature International Journal of Scientific Research in Computer Science Applications and Management Studies Volume 8, Issue 1 (January 2019)
10. Rand Health Care. 20-Item Short Form Survey (SF-20) 12-Item Short Form Survey (SF-12). Available from: https://www.rand.org/health-care/surveys_tools/mos/20-item-short-form.html
11. Healthy People 2020 Foundation Health Measure Report Health-Related Quality of Life and Well-Being