# Assessment of quality of life (QoL) in known hypertensive workers of Karnataka State Road Transport Corporation (KSRTC), Mandya district

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#### **Abstract**

Background: Quality of life (QoL) is increasingly used to assess the impact of chronic illness and health-care intervention. Hypertension is one such chronic disease, which is an important risk factor for cardiovascular disease and found to impair the QoL.

Objective: To assess the QoL in known hypertensive workers of KSRTC, Mandya district.

Materials and Methods: This cross-sectional study was conducted over a period of 1 year in Karnataka State Road Transport Corporation (KSRTC) depots, Mandya district, Karnataka, India. All the 110 hypertensive workers in KSRTC, Mandya division, participated in this study. QoL was assessed by using the Kannada version of WHOQoL-BREF.

Result: The mean age of the study subjects was 42.4 ± 10.22 years. Majority of them felt that their overall QoL was neither good nor poor. QoL components can be ordered by their significance as follows: social, psychological, physical, and environmental domains. Occupation showed a significant correlation with psychological domain.

Conclusion: Among the various domains of QoL, the highest score was in social domain and the least score in environmental domain of QoL. Occupation, marital status, and the health condition of the workers were the main factors influencing the QoL.

KEY WORDS: Quality of life, hypertensives, KSRTC workers, Mandya

## Introduction

The World Health Organization defines QoL as "individual's perception of their position in life in context of the culture and value systems in which they live and in relation to their goals expectations, standards and concerns,"[1]

QoL research has emerged as a valuable research tool in assessing the outcome of therapeutic intervention in chronic diseases.[2] Hypertension is one such chronic disease, which

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is an important risk factor for cardiovascular disease and found to impair the QoL. The factors that may influence the QoL among the hypertensive patients are blood pressure, adverse effects of drugs used to treat hypertension, or beliefs and attitudes about illness and treatment.[3] Hence, this study was undertaken to determine the QoL in the hypertensive patients among the KSRTC workers.

# **Objective**

To assess the QoL in known hypertensive workers of KSRTC, Mandya district.

#### **Materials and Methods**

This was a cross-sectional study conducted over a period of 1 year. We included all the KSRTC workers in Mandya district.

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Karnataka, India, and all the known hypertensive patients among the KSRTC workers were included in the study after obtaining informed consent.

To assess the QOL, we used the WHOQoL-BREF, which includes four domains (physical health, psychological, social relations, and environment). The WHOQoL-BREF questionnaire is available in 19 different languages including Kannada, the local language. The Kannada version of WHOQoL-BREF has been validated and has demonstrated good content validity, test-retest reliability, and internal consistency.

## **Data Analysis**

The collected data were entered in Microsoft Excel and analyzed using Epi-info. The data consisted of 110 hypertensive subjects (8 women and 102 men) aged 34  $\pm$  10 years. QoL was analyzed by using WHO QoL tool: percentage, proportions, *t*-test, and Spearman's rank correlation test.

#### Result

Among the 1658 KSRTC workers, 110 (6.63%) of them were known hypertensive subjects, of which 102 (92.73%) were men and 8 (7.27%) women. The mean age of the study subjects was  $42.4 \pm 10.22$  years. Majority of the hypertensive subjects [76 (69.09%)] were from urban area, and 34 (30.91%) of them were from rural area. Among the 110 hypertensive patients, 94 (85.45%) subjects were married and 16 (14.55%) unmarried. Majority of them were drivers, followed by conductors and mechanics [Figure 1].

With regard to the overall QoL, majority of them felt that their overall QoL was neither good nor poor [Table 1]. In this study, majority of them felt that they were satisfied with their health [Table 2].

Among the various domains of QoL, hypertensive subjects showed higher scores among the social domain (63.87  $\pm$  17.64) than the psychological domain (56.56  $\pm$  8.68) and physical domain (56.15  $\pm$  13.59). The least score was for environmental domain of QoL (49.70  $\pm$  18.10).

In this study, occupation revealed a significant correlation with psychological domain, marital status with social domain, and health status with all the domains of quality of life [Table 3].

**Table 1:** Distribution of study subjects according to sex and their perception of Quality of Life (n = 110)

Quality of life	Males, n (%)	Females, n (%)	Total, n (%)
Very poor	3 (2.94)	0	3 (2.72)
Poor	10 (9.81)	0	10 (9.09)
Neither good nor poor	46 (45.09)	2 (25.00)	48 (43.64)
Good	31 (30.39)	4 (50.00)	35 (31.82)
Very good	12 (11.77)	2 (25.00)	14 (12.73)
Total	102 (100)	8 (100)	110

**Table 2:** Distribution of study subjects according to sex and their health perception (n = 110)

Health perception	Males, n (%)	Females, n (%)	Total, <i>n</i> (%)
Very dissatisfied	3 (2.94)	0	3 (2.72)
Dissatisfied	17 (16.67)	1 (12.50)	18 (16.36)
Neither satisfied nor dissatisfied	37 (36.27)	1 (12.50)	38 (34.55)
Satisfied	40 (39.22)	6 (75.00)	46 (41.82)
Very satisfied	05 (4.90)	0	5 (4.55)
Total	102	8	110

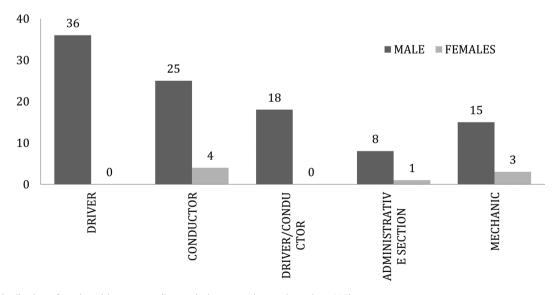


Figure 1: Distribution of study subjects according to their occupation and sex (n = 110).

Table 3: Spearman's rank correlation between different variables and domains of quality of life

Variables	Physical domain	Psychological domain	Social domain	Environmental domain
Age	-0.087	-0.057	0.079	0.037
Education	0.069	0.112	0.050	0.012
Occupation	0.160	0.199*	0.052	-0.023
Marital status	0.007	-0.001	0.310**	0.092
Income	0.016	-0.048	-0.057	-0.100
Health	0.528**	0.577**	0.293**	0.442**

<sup>\*</sup>Correlation is significant at the 0.05 level (two-tailed).

#### **Discussion**

This cross-sectional study was conducted among all the known hypertensive KSRTC workers in Mandya district. Hypertension is an emerging health problem throughout the world. The prevalence of hypertension is in the range of 26.7%-33.0% in India.[4] About 57% of all stroke deaths and 42% of coronary heart disease death in India are owing to hypertension.[5] It is also a leading cause of blindness, renal failure, and congestive heart failure. Apart from clinical and economical implications, they have a significant impact on physical, mental, and social aspects, which in turn reflects in the overall QoL. In this study, the mean age of the study subjects was 42.4 ± 10.22 years. In various other studies, the mean age was slightly higher. [6,7] In this study, 21.8% of the study subjects were smokers and only 31.8% of them were alcoholics, which was similar to another study.[5]

In Spearman's correlation of domains of QOL with variables, occupation showed significant correlation with psychological domain, marital status with social domain, and health status all the domains of QoL. Age, education, and socioeconomic status did not show significant correlation with any of the domains. Similarly, in another study, age and educational status did not show any significant correlation.[8]

In this study, the highest mean score among the various domains was present in social domain, indicating a good personal relationship and social support. The least score was in environmental domain, indicating not very good financial resources, opportunities for acquiring new information and skills, and leisure activities. In this study, QoL components can be ordered by their significance as follows: social, psychological, physical, and environmental domains, which was similar to various other studies.[9-11]

# Conclusion

In this study, a majority of them were male subjects, drivers, married, nonsmokers, and nonalcoholics, According to the various domains of the QoL, they showed higher scores among the social and psychological domains compared with the physical and environmental domains. Occupation, marital status, and the health condition of the workers were the main factors influencing the QoL.

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<sup>\*\*</sup>Correlation is significant at the 0.01 level (two-tailed).