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# Determinants of Health-Related Quality of Life: A Population Based Assessment

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**ABSTRACT**

**Background:** Quality of Life (QOL) is an important patient-reported outcome in both clinical and demographic studies. Measuring QOL is increasingly essential for evaluating healthy aging and determining the effectiveness of interventions aimed at promoting it. QOL encompasses both subjective experiences and objective conditions and is typically categorized into domains such as physical, psychological, social, and functional well-being. Various factors—such as socioeconomic status, ethnicity, overall health, community environment, social relationships, personal attitudes, and beliefs—can influence an individual's quality of life. This was an observational cross-sectional, questionnaire-based study involving 703 participants, of whom 236 were males and 467 were females.

**Objective:** To study the factors affecting the quality of life among the general population.

**Materials and Methods:** A cross-sectional study was conducted to evaluate the factors influencing the quality of life in the general population. Data were collected from Eraviperoor Grama Panchayat. The study included 703 participants over a six-month period (November 2023 – April 2024). Participants were asked to complete a questionnaire based on their knowledge, and the tool was validated using the WHOQOL-BREF. Data collection was conducted through one-on-one interviews with willing participants who completed the questionnaire.

**Results:** The factors found to affect quality of life among the general population include age, gender, employment status, marital status, education level, residential status, socioeconomic status, smoking, and alcohol consumption.

**Conclusion:** The results of the study indicate that health-related quality of life (HRQOL) is a significant concern, particularly among senior citizens, many of whom struggle with a poor quality of life. Contributing factors include smoking and alcohol consumption, inadequate water intake, poor access to health and social care services, lack of transportation, and limited financial resources. It was also observed that participants of advanced age were generally less concerned about their HRQOL.

**KEYWORDS:** Health – Related Quality of Life, Quality of Life.

## INTRODUCTION

According to WHO definitions, quality of life (QOL) is a person's assessment of their place in life within the culture and value systems of their community, as well as in relation to their objectives, standards, expectations, and worries. Health is not merely the lack of disease or infirmity; it represents a complete state of physical, mental, and social well-being. Quality of Life (QOL) refers to an individual's perception

of their position in life, taking into account their goals, values, expectations, concerns, and the cultural and societal context they live in. [1]

Quality of Life (QOL) is an important outcome reported by patients in both clinical and demographic studies. Measuring QOL is increasingly vital for understanding the process of healthy aging and evaluating the value of supportive interventions. It is a multidimensional concept that includes both subjective and objective aspects, typically categorized into physical, psychological, social, and functional areas. Various elements—such as socioeconomic status, ethnicity, overall health, community environment, social connections, personal attitudes, and cultural beliefs—can influence QOL. While the factors affecting QOL may differ from person to person, they often involve aspects like personal safety, health, job satisfaction, family relationships, and financial security.[2],[3],[4]

There are several common tools available to measure quality of life. One such tool, developed by the World Health Organization (WHO), is the WHOQOL, which incorporates many subjective aspects. Among its versions, the WHOQOL-BREF is widely recognized for its ability to compare quality of life across different cultures and is available in over 40 languages. This tool assesses four distinct domains of quality of life. While these instruments are valuable for clinicians to validate treatment benefits, they lack the ability to compare impacts across different diseases and treatments on HRQOL. In contrast, generic measures focus on an individual's overall self-perceived health without concentrating on any specific disease or treatment. The WHOQOL-BREF, which consists of 26 items, is divided into four domains: social relationships (3 items), psychological health (6 items), physical health (7 items), and environmental health (8 items). It also includes questions on general health and overall quality of life. Each item is rated on a 5-point ordinal scale from 1 to 5, and the scores are then converted linearly to a scale ranging from 0 to 100.[5],[6]

Several key lifestyle elements significantly affect overall health:

1. Diet and BMI: Diet is a major contributor to good health, with a clear positive link between nutritious eating and well-being. Urban lifestyles often involve unhealthy eating habits—like fast food consumption—which lead to obesity and cardiovascular problems. Body Mass Index (BMI) serves as a useful indicator to assess lifestyle-related health risks.[7]
2. Exercise: Regular physical activity is essential for maintaining general health and, when combined with a healthy diet, can enhance both physical and mental well-being. Studies have also linked an active lifestyle to greater happiness and life satisfaction.[7]
3. Sleep: Sufficient and quality sleep is critical to overall health. Poor sleep can negatively impact mental and physical health, economic productivity, and social interactions. Lifestyle choices such as screen time and irregular routines often affect sleep quality.[7]
4. Sexual Behavior: Healthy sexual relationships are important for physical and mental health. Sexual dysfunctions and unsafe practices can lead to family issues and the spread of diseases like HIV/AIDS.[7]
5. Substance Abuse: Substance use, including tobacco, drugs, and alcohol, poses serious health threats such as cancer, heart disease, and brain damage. Addiction is often considered a chronic condition with high relapse rates. Global substance use has increased significantly in recent years.[7]
6. Medication Misuse: Unhealthy practices include self-medication, taking drugs without prescriptions, overprescribing, and ignoring drug interactions or side effects. These habits can lead to serious health risks and complications.[7]

7. Technology Use: While modern technology improves daily life, its misuse—like excessive late-night screen time—can disrupt sleep and contribute to mental health issues such as depression, especially in cases of mobile phone addiction.[8]
8. Recreation: Leisure activities are a smaller but important part of lifestyle. Neglecting recreation or engaging in harmful leisure practices can negatively affect health and overall quality of life.[8]
9. Study and Education: Lifelong learning supports mental and emotional well-being. A lack of education has been linked to cognitive decline and conditions like dementia, including Alzheimer's disease.[8]

## METHODOLOGY

A cross sectional study was conducted in the Eraviperoor Grama Panchayat of Pathanamthitta district, Kerala, India. The test run was conducted from November 2023 to April 2024, lasting approximately six months. All patients who ,met the inclusion and exclusion criteria were included. Population aged above 15 years, males and females constitute the research study group. The total sample size was 703. The study was initiated after obtaining the approval from the Institutional review board of Nazareth college of pharmacy.

### Inclusion criteria

Patient age above 15 years.

### Exclusion criteria

Individuals who were unwilling to give details.
Individuals with cognitive impairments or dementia.

### Data collection method

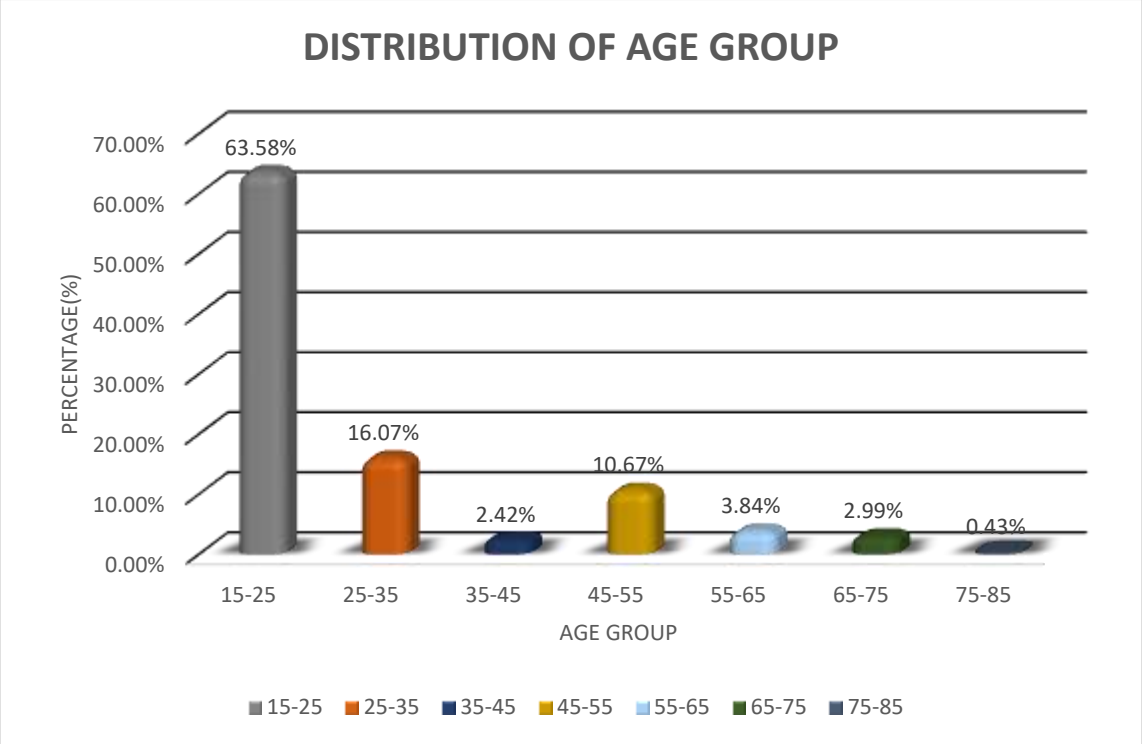
Data were collected by filling out pre designed data collection forms by making each individual's opinion and their consent with local language. Information was collected through direct, on-site interactions meetings with individuals after obtaining approval from the institutional review board from the Nazareth college of pharmacy. In our study procedure, Participants were first provided with the questionnaire which consist of whoqol – bref questions and after validating the quality of life of the participants we conducted awareness class regarding how to improve the quality of life. The data obtained were statistically analysed to determine the factors which affect the quality of life of general population.

### Statistical analysis

The analysis was performed after entering the data in Microsoft excel – 2013 version, then the result obtained were analysed and represented with graphs and tabulations.

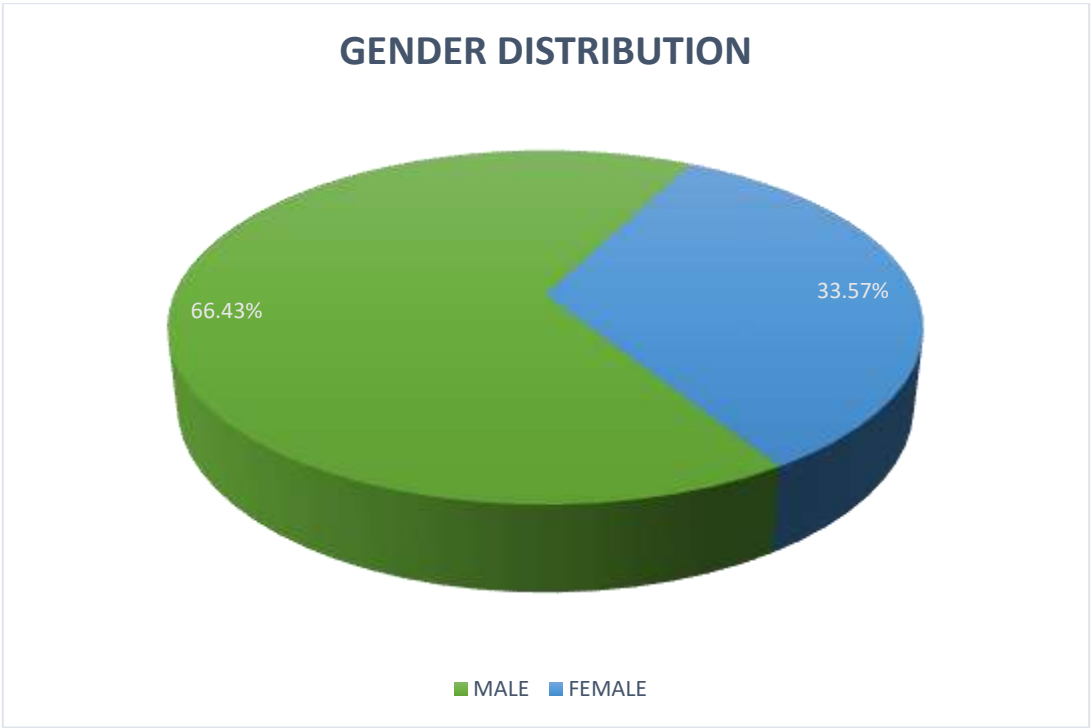
## RESULTS

### Distribution of age group



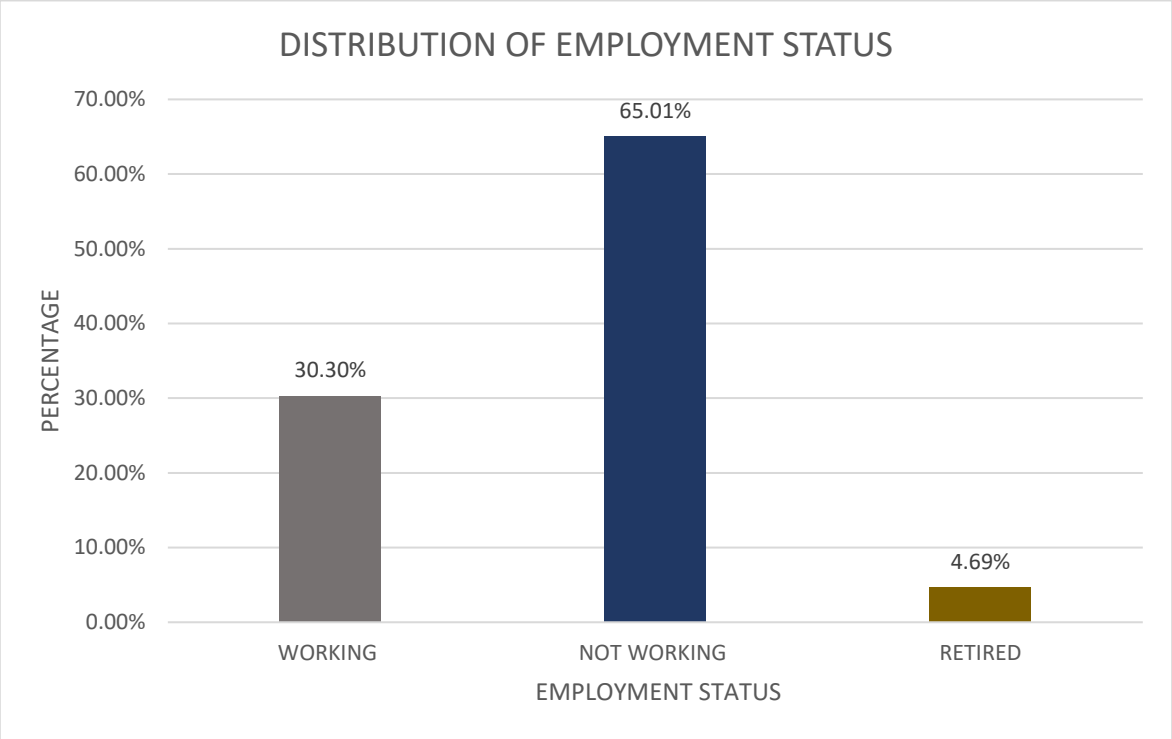

The graph above demonstrates how the 703 study participants were divided into seven age groups, with the 15 to 25 age group receiving the majority of responses.

**Distribution of gender**



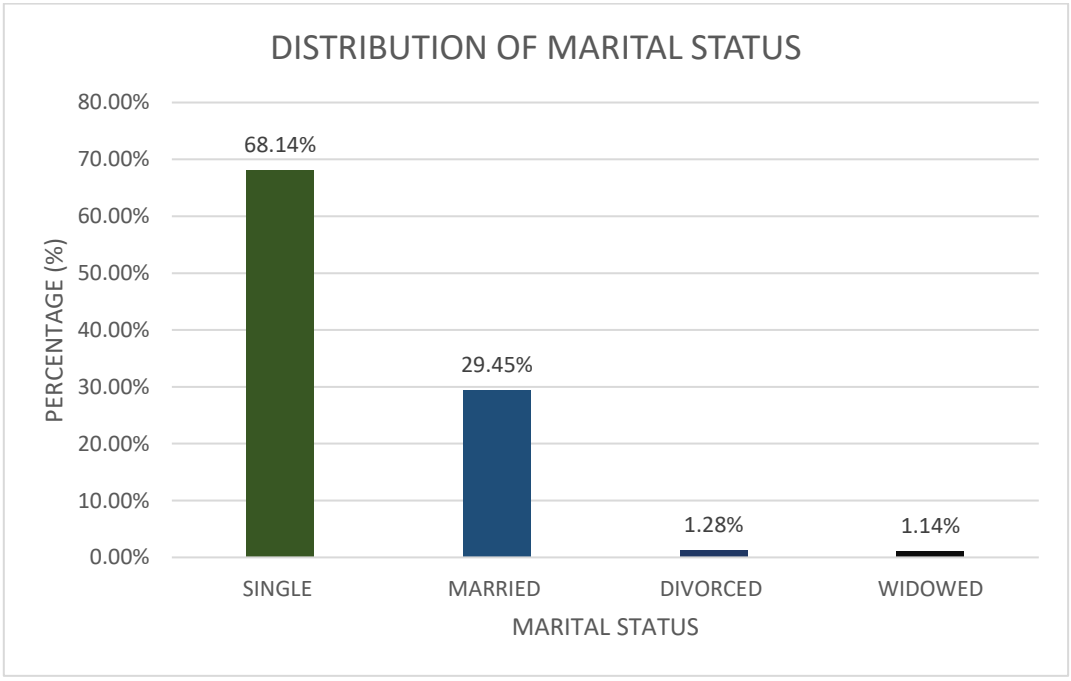

The above graph shows that the 703 participants are separated into two genders in which 467 (66.43%) individuals were male and 236 (33.57%) were female.

**Distribution of employment status**



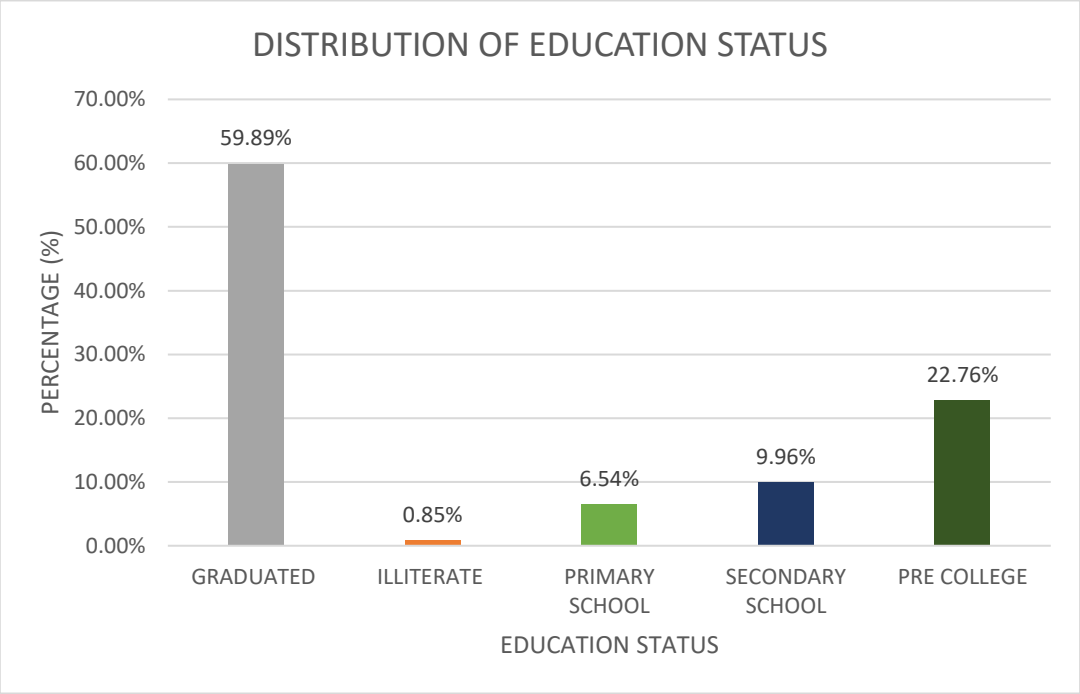

The above graph shows that out of the 703 participants, 213 (30.3%) were working, 457 (65.01%) were not working and 33 (4.69%) were retired.

**Distribution of marital status**



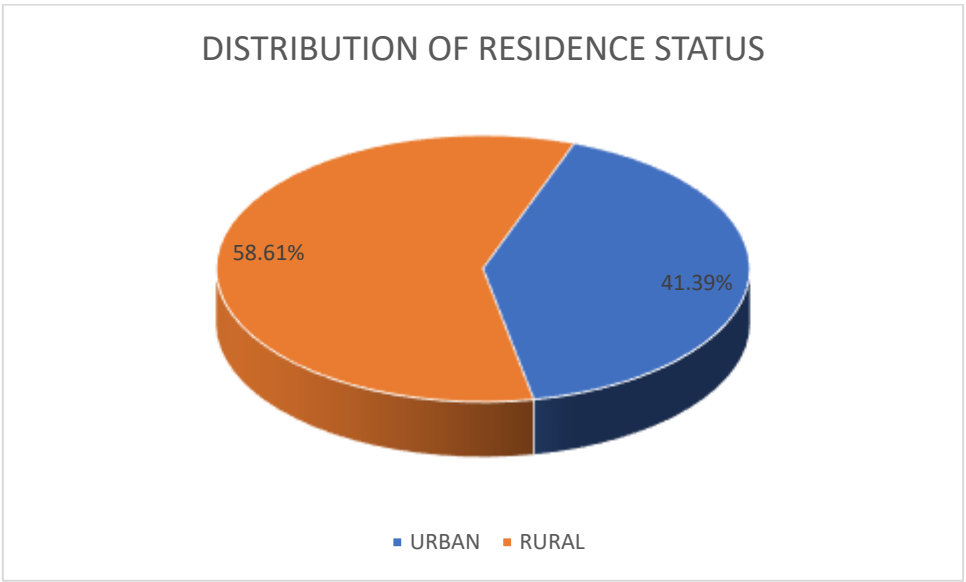

The graph above demonstrates that out of the 703 study participants, 68.14% were single, 29.45% were married, 1.28% were divorced and 1.14% were widowed.

**Distribution of education status**



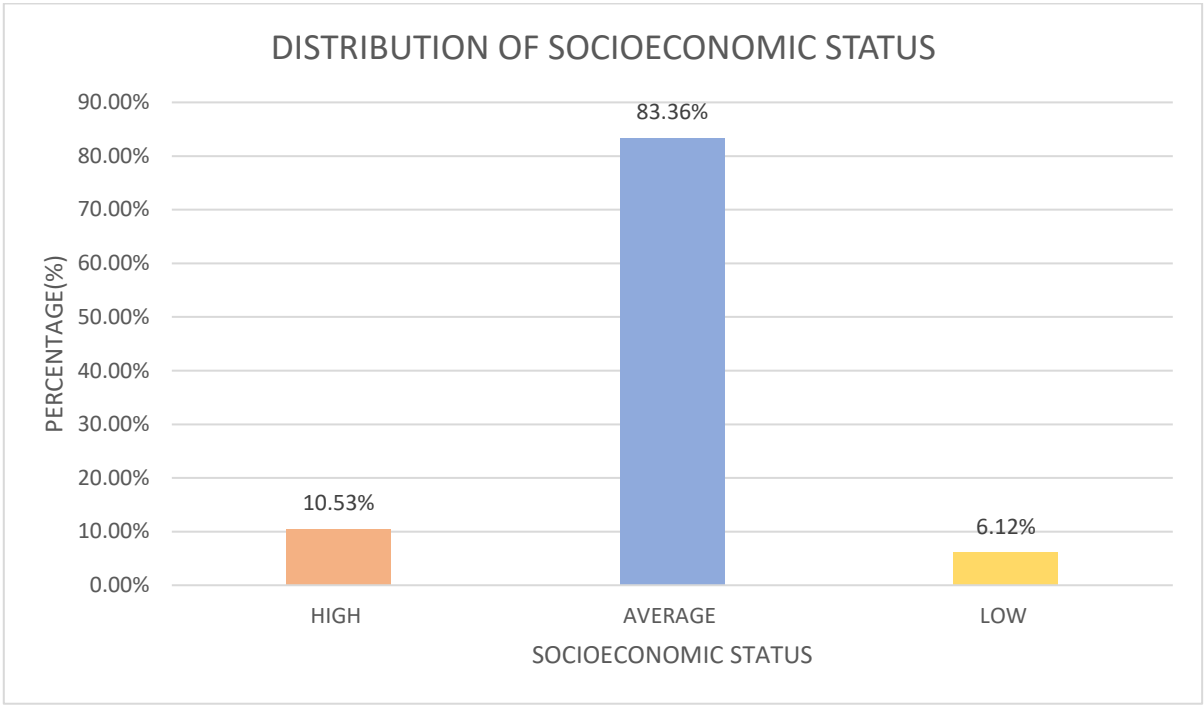

The above graph shows that the total study population is divided into five groups based on the education status in which 59.89% were graduated and 0.85% were illiterate.

**Distribution of residential status**



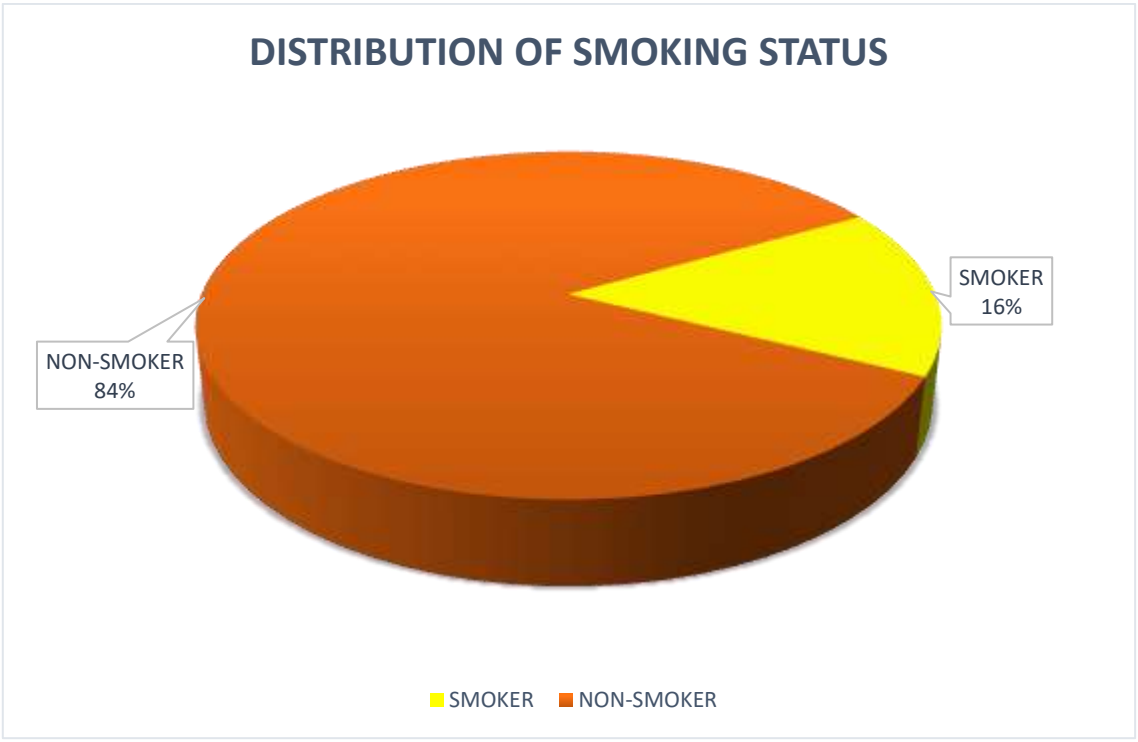

The above graph shows that from the 703 participants, 58.61% were living in the rural areas and 41.39% were living in the urban areas.

**Distribution of socio economic status**



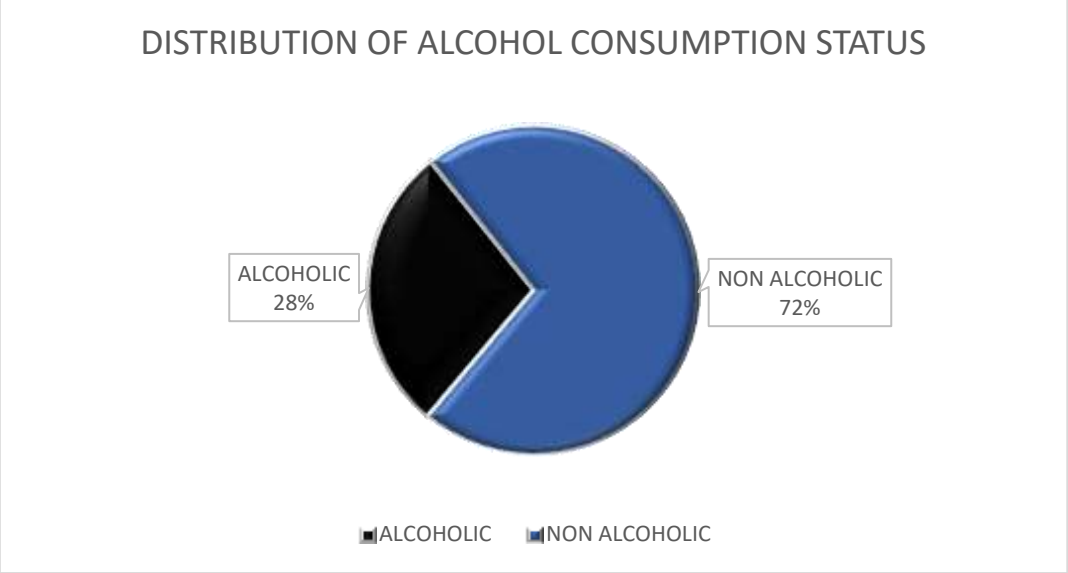

According to the above graph, out of the 703 participants, 10.53% were having high socio-economic status, 83.36% were having average socio-economic status and 6.12% were having low socio-economic status.

**Distribution of smoking status**




According to the aforementioned graph, the total 703 participants were divided into two groups smokers and non-smokers. 84% of the total population were non-smoker's and 16% were smokers.

**Distribution of alcohol consumption**




Out of the 703 people, the aforementioned graph divides the total population into two groups, alcoholic and non-alcoholic. 28% of the total population were alcoholic and 72% were non-alcoholic.

## DISCUSSION

In a study conducted among 703 participants, the majority (63.58%) belonged to the age group of 15–25 years, while only 0.43% were in the 75–85 age group. Among them, 467 were males (66.43%) and 236 were females (33.57%). A large proportion of participants were single (68.14%), while 2.7% were married, 1.28% divorced, and 1.14% widowed. In terms of residence, 41.39% lived in urban areas and 58.61% in rural regions. It was found that 18.7% of the participants had a poor quality of life (QOL). When compared to a study by **Fahad Saqib et al. (2019)** conducted in Abbottabad, Pakistan among 2063 individuals, their findings also showed a negative correlation between advanced age and QOL (12.3%). Similarly, in our study, the older age group (75–85 years), although a smaller portion, showed poor QOL, supporting the notion that older adults often experience lower health-related quality of life (HRQOL).

Gender and educational factors also influenced QOL. According to a study by **Gaurav Jyani et al. (2022)**, conducted among 3548 adults across five Indian states, males had higher QOL (93.6%) compared to females (48.8%). This aligns with our findings, where males (66.43%) had better QOL than females (33.57%). The lower QOL in females can be attributed to biological factors such as hormonal fluctuations (menstruation, pregnancy, menopause), as well as psychosocial elements like stress, anxiety, depression, and a higher prevalence of autoimmune diseases like rheumatoid arthritis and lupus. Educational status also played a significant role; **Fahad Saqib's** study reported better QOL in educated individuals (31.8%) than in those with no education (15.6%). In our study, 59.89% of participants were educated compared to 0.85% uneducated, suggesting greater awareness of health and quality of life among the educated. Additionally, a study by **Fredrik Aberg et al. (2007)** in Finland highlighted that retired individuals had poor QOL (31%), consistent with our findings where retired individuals (4.69%) experienced reduced QOL, primarily due to age-related health issues, chronic illnesses, physical limitations, loneliness, and mental health concerns such as depression and anxiety.

## CONCLUSION

Health-related quality of life (HRQOL) is influenced by an individual's overall health condition and reflects how this impacts their quality of life. Various lifestyle factors—including physical inactivity, unhealthy diet, insufficient sleep, risky sexual behavior, substance use, and medication misuse—were found to negatively affect QOL. The study revealed that HRQOL is more prominently impacted among older adults, who often face multiple challenges that contribute to a diminished quality of life. These include smoking, alcohol consumption, inadequate water intake, limited access to healthcare and social services, transportation difficulties, and financial constraints. It was also observed that elderly participants with existing co-morbidities experienced significantly poorer QOL.

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