

## A Study of Health Related Quality of Life (QOL) among the Population of Gangtok, Sikkim.

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**Abstract:** This study was conducted to find out the "Quality of Life among the Population of Gangtok, a developing town in Sikkim Himalayas". 426 subjects were conveniently chosen from Gangtok (202 males and 224 females). Data was collected on standardized structured interview schedule and self-administered (WHOQOL-BREF). Major findings of the study are that majority (82%) of the subjects belonged to the age group of 15–44 years, 61% of the subjects were married and living as married. 65% of the subjects reported 'Very good' and 'good' quality of life and 75% of the female responders reported 'Very good' and 'Good' quality of life. Majority (57%) of the subjects have studied up to High School and 31% are Post-Graduates, 69% of the subjects are 'Very Satisfied' and 'Satisfied' with their health status, 87% of the subjects reported having negative feelings such as blue moods, despair, anxiety and depression 'Very often', 'Quite often' and 'Always' and 16% of the subjects did not respond to the question 'how satisfied are you with your sex life?'. A significant relationship between age and physical health was found i.e. younger the age group better the physical health. A relationship between educational qualifications, psychological and environmental domains were found. There was also a significant relationship between socio-economic and marital status with the physical, social, psychological and environmental domains. No similar comparative study for the Indian sub-continent was found, our results, however, differ in some aspects from similar studies conducted in the developed world.

**Key Words:** Quality of Life, Physical domain, Psychological domain, Social domain, Environmental domain.

### INTRODUCTION

India is changing fast for a decade or so. India ranked 73 in the quality of life index during 2005<sup>1</sup> and 59 during 2006<sup>2</sup>. We as researchers are concerned about the impact of industrial growth and urbanization, modern technologies, life-styles etc. on QOL of the people of Gangtok. The quality of life satisfaction surveys show that in developed world people with more incomes are more satisfied than those with lower incomes. In 24 out of 28 countries surveyed by Euro barometer, material well being is identified as the most important criterion for life satisfaction<sup>2</sup>. However, there has been only a very modest upward trend in average life-satisfaction scores in the developed nations though income has grown substantially. The level of income has slight impact on levels of life satisfaction beyond a certain point of saturation. Once the basic material needs (Subsistence) nutrition, Shelter, health & economic security are met, more prosperity adds little to the Quality of life satisfaction.

There appears apparent paradox of increasing incomes and stagnant life-satisfaction. Quality of life satisfaction perhaps depends up on related states of mind and aspirations. There are factors associated with modernization that, in part, offset its positive impact. A concomitant breakdown of traditional institutions is manifested in the decline of religiosity, marked rise in socio economic inequality, crime, and alcohol & drug addiction. There is erosion of the institutions of family and marriage. This has also been manifested in increased general uncertainty and an obsession with personal risk. These phenomena have accompanied rising incomes and expanded individual choice. However, stable family life and community are also highly valued and these have undergone severe erosion. The study is an attempt to assess the quality of life of the population of Gangtok and its relation with all the four domains.

### MATERIALS & METHODS

**Content Validity & Reliability of the Study Instrument:** This was a cross sectional study. The survey module on WHOQOL-BREF was taken from the internet provided by the WHO publication by the

global experts prior to the study for ensuring feasibility, acceptability, time management and reliability.

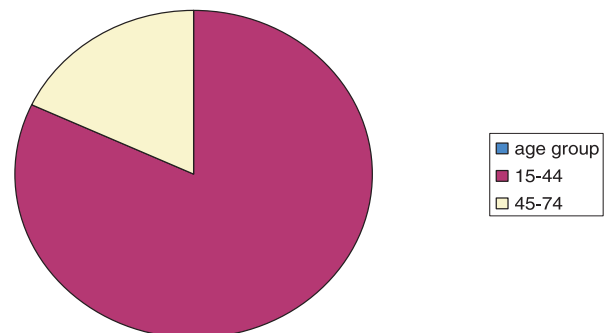
**Data Collection Procedure:** Initially 550 subjects were chosen from adult population of Gangtok and given Structured Questionnaire (WHOQOL-BREF), Version 1995), out of which 426 Subjects (adults – both male and female) responded. The questionnaires were Self-administered and Interview-administered. The standardized instructions were read out to the Interview-administered subjects.

**Statistical Analysis:** Descriptive and Inferential statistics were used. Data was entered in SPSS Syntax file and Analyzed by ICMR (Indian Council Of Medical Research), New Delhi. MS Excel package to seek the relationship between independent variables and the dependent variable was used.

### RESULTS

#### Demographic Data

Fig. No.1: PIE CHART SHOWING THE DISTRIBUTION OF AGE GROUP

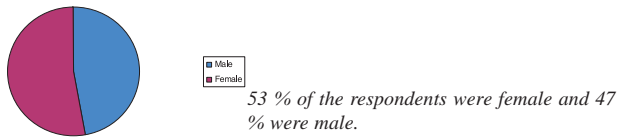


Majority of the subjects (82%) belong to the age group of 15-44 years and 18% were from the age group of 45-74 years.

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Fig. No. 2: PIE CHART SHOWING THE GENDER DISTRIBUTION



**Educational Statics**

Majority of the subjects (57%) studied up to higher secondary level, 31% were post-graduates, 7% studied up to Primary Level and 5% were illiterate.

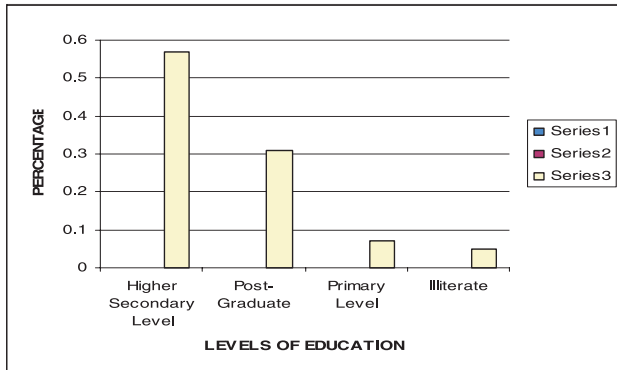


Fig 3: Educational Statics of the subjects

**Marital Status**

61% of the subjects are married and living as married, 36% are single and 3% separated, divorced and widowed.

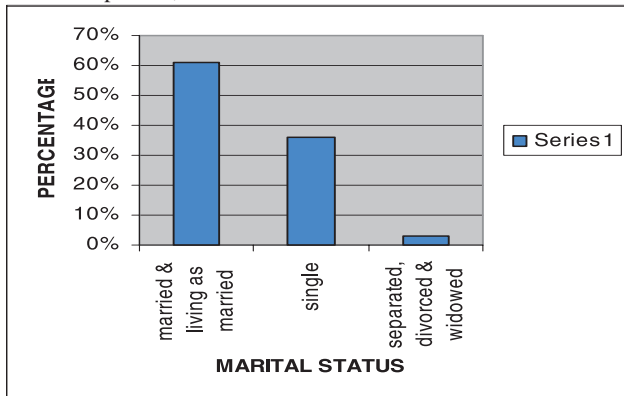


Fig 4: The marital status of the subjects

**Current illness status**

84% of the subjects reported not currently ill and 16% are currently ill.

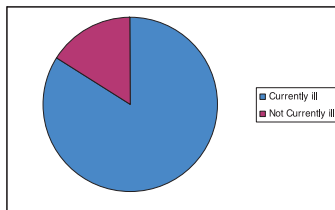


Fig 5: Pie chart showing the current illness status of the subjects

**Quality of life**

Majority of the subjects (65%) reported 'Very Good' & 'Good' quality of life, whereas 28% reported 'Neither Poor nor Good' quality of life, 6% reported 'Poor' and 'Very Poor' quality of life and 1% of the subjects did not responded to the question. Further, 75% of the Female respondent reported 'Very Good' & 'Good' quality of life, whereas, 55% of the Male respondent reported 'Very Good' & 'Good' quality of life.

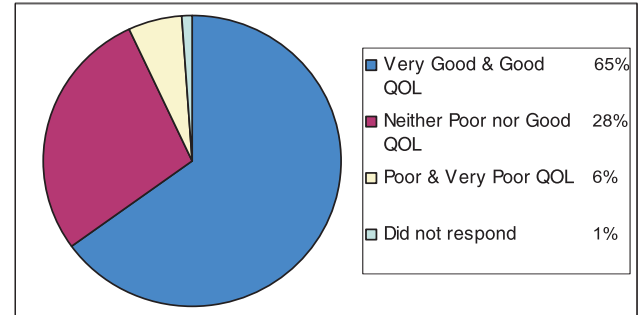


Fig 6: Pie Diagram Showing the Quality of life of the subjects

**Overall Health Status**

As shown in Table No. 1 that, 69% of the subjects are 'very satisfied' & 'satisfied' with their health status, 23% are neither 'neither satisfied nor dissatisfied' and 8% of the subjects are 'very dissatisfied' & 'dissatisfied'. Further, 68% of the male reported 'satisfied & very satisfied' with their health whereas, 69% of the female respondent are 'satisfied & very satisfied' with their health.

Table 1: Relation of sex distribution & satisfaction with their health

| Gender of the subjects | Frequency | Very Dissatisfied & Dissatisfied |     | Neither Satisfied nor Dissatisfied |     | Very Satisfied & Satisfied |     |
|------------------------|-----------|----------------------------------|-----|------------------------------------|-----|----------------------------|-----|
|                        |           | No. of Sub.                      | %   | No. of Sub.                        | %   | No. of Sub.                | %   |
| Male                   | 202       | 24                               | 12% | 41                                 | 20% | 137                        | 68% |
| Female                 | 224       | 12                               | 5%  | 56                                 | 25% | 155                        | 69% |
| Total                  | 426       | 36                               | 8%  | 97                                 | 23% | 292                        | 69% |

**Mood swings**

As shown in Table No.2 that, majority of the subjects (87%) reported 'Very often', 'Quite often' and 'Always' have negative feelings such as blue mood, despair, anxiety and depression and 10% of the subjects 'Never' or 'Seldom' have negative feelings. 3% of the subjects did not responded to the question.

Table 2: Showing respond to the question how often felt or experienced negative feelings such as blue mood, despair, anxiety, depression?

| Gender of the subjects | Frequency | Very often, Quite often & Always |     | Never Or Seldom |     | Did not Respond |    |
|------------------------|-----------|----------------------------------|-----|-----------------|-----|-----------------|----|
|                        |           | No. of Sub.                      | %   | No. of Sub.     | %   | No. of Sub.     | %  |
| Male                   | 202       | 171                              | 85% | 24              | 12% | 05              | 3% |
| Female                 | 224       | 199                              | 89% | 18              | 8%  | 08              | 3% |
| Total                  | 426       | 370                              | 87% | 42              | 10% | 13              | 3% |

## Sex Life

Approximately 16% of the study subjects did not respond to the question 'how satisfied are you with your sex life?' further, from the total male and female respondent, 5% and 26% respectively did not respond to this question.

## Statistical Analysis

- There was a significant relationship between the 'Age' and the physical health ( $p < 0.001$ ). No significant relationship was seen between the Age with psychological, social and environmental domains.
- A significant relationship between the 'Sex' and the physical health, social and environmental domains ( $p < 0.001$ ) was observed, but there was no significant relationship between the 'Sex' and the psychological domain.
- There was a significant relationship ( $p < 0.05$ ) between the 'Educational Qualification' and the psychological and environmental domains.
- A significant relationship ( $p < 0.05$ ) between the 'marital status' of the respondent and the physical health, psychological, social and environmental domain.
- There was observed a significant relationship ( $p < 0.05$ ) between the 'Socio-Economic Status' with all the four domains.
- A statistically significant relationship ( $p < 0.05$ ) between the 'Current illnesses with all the four domains was observed.
- There is a statistically significant relationship ( $p < 0.05$ ) between the "current illnesses" with all the four domains.

## DISCUSSION

Life-satisfaction surveys have been attracting growing interest in recent days. Self reports of overall life satisfaction can be meaningfully compared across nations. Our survey shows that 92 percent of the subjects were satisfied with their health status; more females were satisfied with their health status than males.

Heylighen F. & Bernheim J<sup>3</sup> state that health is the most obvious subjective measures of QOL, since happiness can be defined as the sum of our accumulated feelings of pleasure and displeasure. Thus, pleasurable things, such as sex, food, and companionship, typically correspond to opportunities that are likely to enhance our fitness.

In spite of having good quality of life, 87 percent of the subjects were having negative feelings such as blue mood, despair, anxiety and depression. Nearly 87% participants attained higher secondary and tertiary education level. Among the studied subjects 82 percent are from 15 to 44 years age. Study conducted by EU (Epicurus) reveal that the better educated respondents generally expressed significantly lower levels of satisfaction at work. Wages have a positive impact on job satisfaction but "rising expectations" temper the result<sup>4</sup>. Younger American adults aged 18-24 years, suffered the most mental health distress<sup>5</sup>.

There was a significant positive relationship between the educational qualification and psychological and environmental domains in our study. Education has strong correlation to subjective well being and K-behavior (less risk taking behavior), since educated people know better how to avoid or deal with risky situations. Education is enabling individuals to lead lives of dignity and purpose; construct knowledge and put it to humane ends; and participate as informed citizens in a democratic society. Education has the capability of greatly improving the economic quality of life for those who are able to achieve it<sup>6</sup>.

Nearly 61% of the subjects married or living as married, while 36% are single and only 3% are separated, divorced or widowed. Significantly positive relationship marital status was noted; that being married was associated with subjective well-being. The relation was found to be stronger in younger samples as compared with older ones<sup>7</sup>. One fifth of the participants did not respond to the question of their sexual satisfaction and among them one fourth were female respondents. This, perhaps is indicative that Sikkimese society is still conservative even if it was an anonymous data?

There is a significant positive relationship between the socio-economic status with physical, social, psychological and environmental domain. GATT, L in a project on QOL in New Zealand's six largest cities in 1999 and states that income is a key determinant of individual, family and community wellbeing and is the single most important modifiable determinant related to health and QOL in general. Income levels indicate the ability of citizens to meet their needs and directly correlates with their conditions of health, education, social interaction, housing, leisure and general life style<sup>8</sup>. Research undertaken by the Family Services Centre in Wellington has estimated that around 60% of the median income is necessary for a family to provide the essentials of food, shelter, clothing, health care and transport. Income status of a representative sample of the U.S. population is shown to be associated with self-reported happiness, but with variation. Material Well-being, thus, is shown to be linked to non-material; self reported stress and health conditions<sup>9</sup>.

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