

# A Study to Compare Physical Quality of Life of College going Female Students having Good Nutrition Knowledge and Poor Nutrition Knowledge

Varsha Singh Rajpoot<sup>1</sup> and Dr Vandana Gupta<sup>2</sup>

Research Scholar, Government M. L. B. College, Indore, India  
Professor (Home Science), Government M. L. B. College, Indore, India

**Abstract:** *Physical quality of life is when a person can carry out his daily living activities without any medical support and he has enough energy without fatigue and physical stress. Nutrition knowledge, on the other hand, refers to an individual's understanding of dietary principles, food choices, nutritional requirements, and their impact on health outcomes.*

*Objective of this study was to compare mean scores of Physical quality of life of college going female students having good nutrition knowledge and poor nutrition knowledge. 401 college going Students of Govt. M. L. B. girls PG College, kila bhavan, Indore were taken for the study using convenient sampling. Survey method was used for data collection. For assessing physical quality of life WHOQOL- bref was used and for assessing nutrition knowledge a test paper was developed by the researcher herself. Mean scores of physical quality of life of college going female students having good nutrition knowledge is 26.10 which is significantly higher than that of physical quality of life (24.52) of college going female students having poor nutrition knowledge. It may, therefore, be said that, college going female students having good nutrition knowledge have higher physical quality of life as compare to college going female students having poor nutrition knowledge*

**Keywords:** Physical Quality of life, Nutrition Knowledge.

## I. INTRODUCTION

Quality of life is an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns<sup>1</sup>.

Physical quality of life is when a person can carry out his daily living activities without any medical support and he has enough energy without fatigue and physical stress. Physical quality of life of females is a multifaceted concept that encompasses various dimensions of well-being, health, and socio-economic factors. Achieving and maintaining a high standard of physical well-being is not only essential for individual woman but also crucial for the sustainability and development of societies as a whole. Physical quality of life and nutrition knowledge among females is crucial for promoting overall health and well-being. In today's dynamic world, where lifestyles and dietary patterns are constantly evolving, examining these aspects provides valuable insights into women's health outcomes and helps tailor interventions to address specific needs.

Nutrition knowledge, on the other hand, refers to an individual's understanding of dietary principles, food choices, nutritional requirements, and their impact on health outcomes. For females, in particular, nutrition knowledge is of utmost importance due to unique physiological and reproductive factors that influence nutritional needs and health outcomes across different life stages, such as adolescence, pregnancy, and menopause.

Various researches have been conducted to analyze effects of different approaches, strategies and methods on the quality of life. Sari, p. et al (2022)<sup>2</sup> analyzed relationship between nutrient intake and adolescents' QoL, Wilson(2020)<sup>3</sup>, Auld G et al (2019)<sup>4</sup>, C L Wong (2018)<sup>5</sup>, A Ahuja (2016)<sup>6</sup>, Tulika joshi (2015)<sup>7</sup>, Arbabi (2008)<sup>8</sup> and Trent (2002)<sup>9</sup>, seen effects of different syndrome and diseases on quality of life. Review of literature revealed that a large number of

researches related to quality of life and its correlates were conducted. However researches not available where effect of nutrition knowledge on physical quality of life was studied. To fill this gap the present study was undertaken.

**Objective**

To compare mean scores of physical quality of life of college going female students having good nutrition knowledge and poor nutrition knowledge.

**Hypothesis**

There is no significant difference in mean scores of Physical quality of life of college going female students having good nutrition knowledge and poor nutrition knowledge.

**II. REVIEW OF LITERATURE**

**Sari et al (2022)** studied on the study of nutrient intake and adolescent girls’ quality of life in a rural area of Indonesia. Through simple random sampling, 157 adolescent girls were selected. Nutrition status was assessed using anthropometric measurements. Nutrient intake was collected using the food frequency questionnaire (FFQ). WHOQOL BREF was used to explore adolescent girls’ quality of life. There was a significant positive correlation between the intake of some nutrients and adolescents’ QOL, despite the observation of some significant negative correlations.

**Shin et al (2022)** assessed factors influencing health-related quality of life in adolescent girls: a path analysis using a multi-mediation model. This study examines mechanisms of how social support, dietary habits, sleep quality, and depression contribute to predicting health related quality of life (HRQOL) in relation to menstrual health among adolescent girls. The study results showed that menstrual health, social support, sleep quality, dietary habits, and depression had significant effects on HRQOL. Both sleep quality and depression had significant direct effects on menstrual health. Dietary habits, social support, sleep quality, and depression had significant indirect effects on HRQOL, mediated through menstrual health<sup>10</sup>.

**Auld et al (2019)** assessed the expanded food and nutrition education program’s impact on graduates’ quality of life. Participants reported following healthier dietary and physical activity behaviours and having increased motivation to improve themselves and greater satisfaction with life. All groups noted being a more positive influence on their families and a having willingness to learn and try new things.

**Wu et al (2019)** studied the influence of diet quality and dietary behaviour on health-related quality of life in the general population of children and adolescents. Researcher found that diet quality and dietary behaviour were associated with health-related quality of life in children and adolescents. The positive effect of healthy diets on health-related quality of life was observed for multiple domains of health-related quality of life, including physical, school and emotional functioning, and psychosocial quality of life.<sup>11</sup>

**Khatami et al (2019)** assessed correlation between malnutrition and health-related quality of life (HRQOL) in elderly Iranian adults. Participants were randomly selected in three phases from the most populated cities in Iran using a stratified sampling method. The SF-36 is used to assess HRQOL across eight domains of both physical and emotional health and Mini Nutritional assessment (MNA) tools were used. Analyses revealed the crucial impact of nutritional status on both mental and physical components of HRQOL.<sup>12</sup>

**III. METHODOLOGY**

In the present study survey method was used. Survey was conducted through questionnaire method

**Sample-**

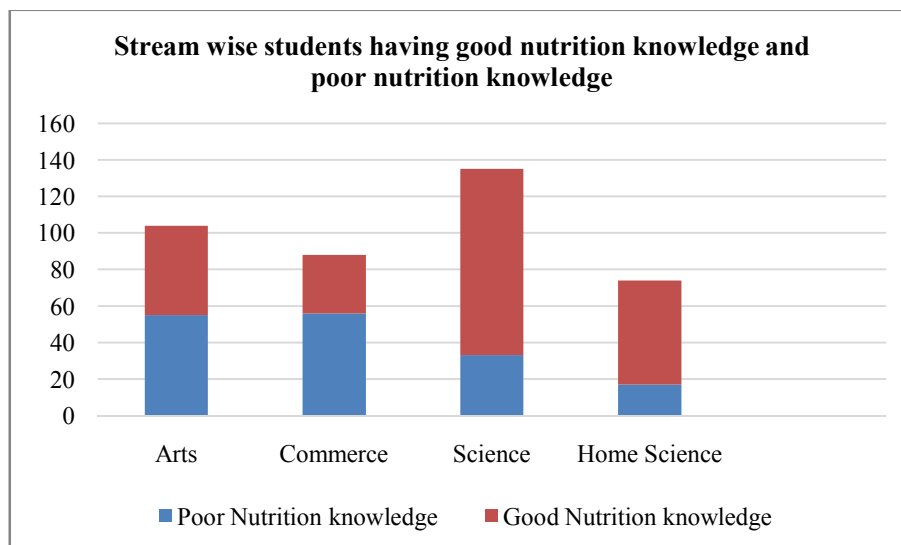
401 college going Students of Govt. M. L. B. girls PG College, kila bhavan, Indore were taken for the study using convenient sampling. Survey method was used for data collection. A composite table showing female students from Arts, Commerce, Science and Home Science as per their nutrition knowledge is given below table no. 1.

**Table no. 1- Nutrition knowledge wise students from different stream**

Stream	Poor Nutrition knowledge	Good Nutrition knowledge
Arts	55	49
Commerce	56	32
Science	33	102

Home Science	17	57
<b>Total</b>	<b>161</b>	<b>240</b>

Graph 1-



#### Tools & Technique-

In the present study variables taken are physical quality of life and nutrition knowledge. For assessing physical quality of life WHOQOL- bref was used. There are 4 domains of quality of life in WHOQOL- bref questionnaire - physical, psychological, environment and social relationship. In the present study Physical quality of life of female students having good nutrition knowledge and poor nutrition knowledge was compared. This questionnaire consists of total 25 questions related to overall QOL, physical QOL, psychological QOL, environment QOL and social relationship QOL. For assessing Physical QOL, questions related to pain and discomfort, dependence on medical treatment, energy and fatigue, mobility, sleep and rest, activities of daily living and work capacity are included in WHOQOL- bref questionnaire.

For assessing Nutrition knowledge a test paper was developed by the researcher herself. This test paper consists of 35 questions related to essential nutrients and their functions, sources of nutrients, food proportion and serving, food groups, deficiency diseases and nutritional facts label. For scoring 1 mark for 1 right answer was given. Students who scored less than 50% were categorised as having poor nutrition knowledge and students who scored above 50% were categorised as having good nutrition knowledge

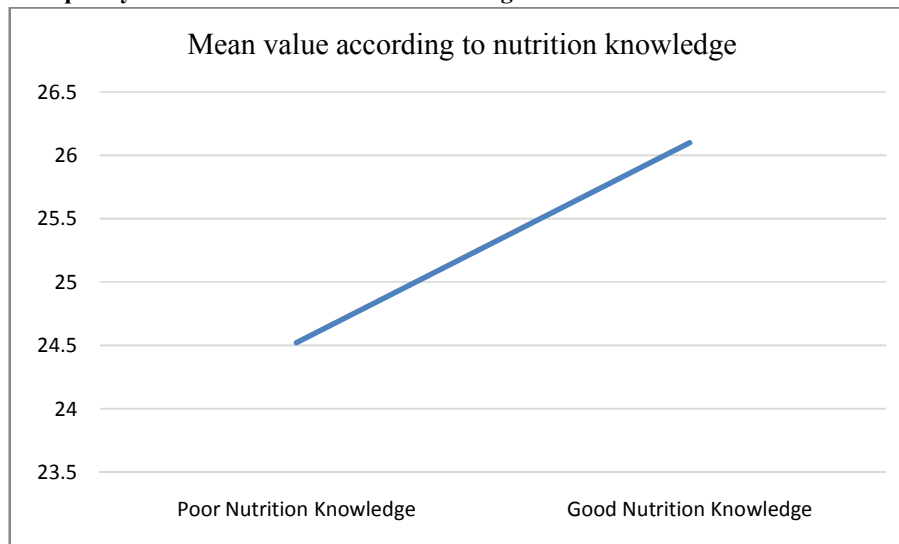
#### IV. RESULT & INTERPRETATION

The objective was to compare mean scores of Physical quality of life of college going female students having good nutrition knowledge and poor nutrition knowledge. There were two levels of nutrition knowledge, namely, good nutrition knowledge and poor nutrition knowledge. The data were analysed with the help of Independent t-Test and the results are given in table 2.

**Table no. 2- Nutrition Knowledge wise M, SD, N and t-value of Physical quality of Life of college going female students.**

Levels of Nutrition Knowledge	M	SD	N	t-Value	Remark
Poor Nutrition Knowledge	24.52	4.12	161	4.11	P<0.01
Good Nutrition Knowledge	26.10	3.50	240		

**Graph 2- Physical quality of life based on nutrition knowledge**



From table 2, it is evident that the t-value is 4.11 which is significant at 0.01 level with  $df=399$ . It shows that the mean scores of Physical Quality of Life of college going female students having good Nutrition knowledge and poor nutrition knowledge differ significantly. Thus the null hypothesis that there is no significant difference in mean scores of Physical Quality of life of college going female students having good Nutrition knowledge and poor nutrition knowledge is rejected. Further, the mean scores of Physical Quality of life of college going female students having good nutrition knowledge is 26.10 which is significantly higher than that of physical quality of Life (24.52) of college going female students having poor nutrition knowledge. It may, therefore, be said that, college going female students having good nutrition knowledge have higher Physical quality of life as compare to college going female students having poor nutrition knowledge.

## V. DISCUSSION

Thus study revealed that having good nutrition knowledge was found to be significantly higher physical Quality of life than having poor nutrition knowledge of college going female students. One reason might be nutrition knowledge directly impacts food choices, dietary habits, and nutrient intake, which in turn influence physical health outcomes. For example, a lack of understanding about balanced nutrition may lead to poor dietary choices, resulting in nutritional deficiencies, weight gain, or chronic health conditions such as obesity, diabetes, or cardiovascular diseases.

## VI. CONCLUSION

Study revealed that having good nutrition knowledge was found to be significantly higher physical quality of life than having poor nutrition knowledge of college going female students. In conclusion, nutrition knowledge significantly impacts the physical quality of life of college going female students by influencing nutritional status, energy levels, immune function, mental health, and longevity. Therefore nutrition education should be promoted in colleges to improve physical quality of life and to overall health status of women worldwide.

## REFERENCES

- [1]. World Health Organization. (2012): WHOQOL: Measuring Quality of Life. <https://www.who.int/tools/whoqol>, 10:30AM, 24 march 2024
- [2]. Sari, P. et al (2022): The Study of Nutrient Intake and Adolescent Girls' Quality of Life in a Rural Area of Indonesia. *Children (Basel)*, 9 (8), 1248.
- [3]. Wilson, N. A. et al (2020): Quality of life in adolescent girls with polycystic ovary syndrome. *Journal of paediatrics and child health*, vol 6, issue 9, p 1351-157.

- [4]. Auld G et al (2019): The Expanded Food and Nutrition Education Program's Impact on Graduates' Quality of Life. *Journal of Nutrition Education and Behavior*, 51 (2), 217-223.
- [5]. Wong, C. L. (2018): Health-related quality of life among Chinese adolescent girls with Dysmenorrhoea. *Reproductive Health*, volume 18, article no. 80.
- [6]. Ahuja, A. et al (2016): Impact of Dysmenorrhea on quality of life of adolescent girls of Chandigarh. *Journal of Child & Adolescent behavior*, 4(3) :295.
- [7]. Joshi, T. et al (2015): Primary dysmenorrheal and its effect on quality of life in young girls. *Int J med sci public health*;4:381-385.
- [8]. Arbabi, M. et al (2008): The effect of premenstrual syndrome on Quality of life in adolescent girls. *Iranian journal of Psychiatry*, vol 3 No 3.
- [9]. Trent, M. E. et al (2002): Quality of life in adolescent girls with polycystic ovary syndrome. *Arch Pediatr Adolesc Med*, 156(6), 556-560.
- [10]. Shin. et al. (2022): Factors influencing health-related quality of life in adolescent girls: a path analysis using a multi-mediation model. *Health and Quality of Life Outcomes*, 20, article no. 50.
- [11]. Wu, X. Y. et al (2019) studied on The influence of diet quality and dietary behavior on health-related quality of life in the general population of children and adolescents: a systematic review and meta-analysis. *Quality of life research*, 28, 1989-2015.
- [12]. Khatami, F. et al (2019): Correlation between malnutrition and health-related quality of life (HRQOL) in elderly Iranian adults. *Journal of International Medical Research*. 48(1) 1–12.