

ABSTRACT

The research titled "Triple Burden of Malnutrition in Young Adult Women (18-21 years) and the Effect of Nutrition Interventions on their Nutritional Status and Nutritional Knowledge" addresses a pressing global health issue. The Triple Burden of Malnutrition, included the dimensions of underweight, overweight, and micronutrient deficiencies. It is expected to affect over 2 billion people worldwide, leading to increased healthcare costs and perpetuating cycles of poverty. The study focuses on young adult women, a neglected demographic in existing research studies, analysing the demographic conditions that contribute to the prevalence of triple burden of malnutrition and educate them about its consequences and develop dietary interventions to improve their nutritional status.

The study was carried out in five phases, starting with a demographic study at Mercy College in Kerala, where 570 young women participated. The assessment of nutritional status utilized anthropometric measurements, biochemical estimations, clinical examinations, and dietary intake evaluations. The study developed and validated nutrition education modules and dietary supplements tailored to address malnutrition. The effectiveness of these interventions was evaluated through pre- and post-assessments of nutritional knowledge and health indicators. Statistical analyses were conducted using SPSS to determine the significance of the interventions. Findings indicated a high prevalence of malnutrition among subjects, with notable deficiencies in micronutrients despite adequate macronutrient intake. Three dietary supplements were formulated and tested for acceptability and cost-effectiveness, revealing significant potential for improving nutritional status among young adult women.

The results demonstrated that the nutrition interventions in the form of Dietary Supplements and Nutrition Education made an impact on the nutritional status and nutritional knowledge of the selected subjects in the Experimental group as the p value is less than 0.05 for the t test which was carried out for the pre and post values for different parameters (viz) Anthropometric measurements and Blood parameters. The results of KAP study shows that there is an effect of nutrition interventions on the nutritional knowledge of the selected subjects in the Experimental group as the t-test showed a p value which is less than 0.05 for knowledge and attitude. The chi-square test and Karl Pearson Correlation showed an association between different parameters (viz) Nutrient intake, Blood parameters, Anthropometric measurements and Socio-economic profile.

Keywords: Triple Burden of Malnutrition, Dietary Supplements, Nutritional intervention