

## **FNH 502 COMMUNITY NUTRITION AND STATISTICS**

**52 Hr (13× 4 units)**

### **Course outcome:**

*At the end of this course the students will be able to-*

- CO 1. Describe the public health aspects of malnutrition.
- CO 2. Identify the cause of malnutrition and its preventive measures.
- CO 3. Know the health care services by Government, health programs in India
- CO 4. Understand the role of international and national organizations in public health various disease.
- CO 5. Apply the various statistical methods and interpretation of the results.

**Unit I:** Public health aspects of malnutrition - Public health nutrition: Principles and concepts in public health nutrition. Types and magnitude of public health problems in India. Community and health Management: Health concept, definition, positive health, and health situation in India, Health indices: fertility indicator, vital statistics, mortality and morbidity, human development index, health care, principles of health care. Protein energy malnutrition- etiology, types, prevalence, metabolic and physiological changes and prevention. Malnutrition prevention programmes, causes, types, control programme in India. Health care services by Government, health programs in India, nutrient deficiency prophylaxis programmes in India (Vitamin A, Iodine, Iron). Assessment of nutritional status; anthropometric, clinical, biochemical, dietary, vital health status. Basic principles of low cost menu planning. Nutrition care process. Corporate Social Responsibility (CSR)

**Unit II:** Role of international and national organizations in public health: FAO, WHO, UNICEF, CARE, NIN, NNMB, ICAR, ICMR, CFTRI, PHC, ESI. Contribution of Melinda and Bill Gates foundation Nutrition education- importance, objectives, methods of nutrition education, nutrition education programme. Mid-day meal programme.

**Unit III:** Nutrition and health of women: Women and health system, women's welfare programme, national nutrition programmes for women, empowerment and role of education for women, national and voluntary agencies in improving women's situation in India

**Unit IV:** Application of Statistics: Analysis of data- measures of central tendencies (mean, median and mode), measure of dispersion (range, mean deviation and standard deviation). Testing of hypothesis. t-test, chi-square test for comparing variance. Analysis of variances, Co-variances and multivariate techniques- concept of ANOVA, one-way and two-way ANOVA, analysis of Co-variance. Correlation analysis, regression analysis, simple linear regress and multiple linear regression. Interpretation: meaning of interpretation, techniques of interpretation, precaution in interpretation- interpretation of tables and figures.

### **REFERENCES**

- Bamji M S, P. N Rao & Reddy Text book of Human Nutrition, Oxford & IBH Publishing Co. Pvt. Ltd.
- Dutt P. R., Primary Health Care Vol I-III, Gandigram Institute of Rural Health & Family Welfare Trust, Ambathurai
- Manelkar R. K., A Textbook of Community Health For Nurses, Vora Medical Publications, Mumbai
- Bhatia A. Health Promotion in Public, Anmol Publications, New Delhi