

Impact and Significance of Nutritional Attitude Assessment: A Review

Tupakula Akhila Srivinatha Sankhya^{1*}, Lakshmi Himaja Bandaru², Tupakula Srivaralakshmi³, P.Subba Rao¹

¹Department of Master of Business Administration, GIET Engineering College, Rajahmundry, Andhra Pradesh, India.

²Department of Pharmacy Practice, GIET School of Pharmacy, Rajahmundry, Andhra Pradesh, India.

³Department of Master of Business Administration, GIET Engineering College (A), Rajahmundry, Andhra Pradesh, India.

ARTICLE INFO

Article History:

Received: 23.09.2024

Revised: 19.10.2024

Accepted: 21.10.2024

Keywords :

Balanced Diet

Malnutrition

Nutrition

Corresponding Author:

Mrs. Tupakula Akhila Srivinatha Sankhya

Dept. of Master of Business Administration

GIET Engineering College

Rajahmundry

Andhra Pradesh, India.

E Mail id: akhilasankhya164@gmail.com

ABSTRACT

Food and nutrition is the basic requirement for the human beings. Balanced diet provides the proper nutrition which plays an important role in maintaining the health of an individual. The nutritional status shows impact on the clinical outcomes of health on the individual. The nutritional status of an individual depends upon the different levels of nutrients available within the human. The nutrients can be classified as essential and nonessential nutrients. Malnutrition is the basic etiology for the development of various deficiency disorders. To avoid that deficiency disorders all the essential nutrients should be replaced within the balanced diet. In some cases excessive or inadequate intake of nutrients leads to malnutrition. So diet should be balanced based upon the nutrient requirement. The importance of this nutritional assessment survey is to identify the level of nutrition within the adolescents and its impact on the individual health care outcomes and physiological growth. If any deficiency disorders are identified at the initial stages they can be corrected at the initial stages of nutritional imbalance, so that the health condition of an individual in future doesn't get complicated. Education regarding nutrition intake and management will be helpful within the community to improve health care outcomes. Awareness programmes regarding the good food and nutrition should be conducted within the community setup to reach the public. Research should be promoted to identify various nutritional deficiency disorders at their initial stages in order to prevent and manage further complications. It's better to improve the quality of food resources and prevent food adulterations that increase the nutritional value so that the public will get balanced nutrition properly.

© 2024 Published by Universal Episteme Publications. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>)

Introduction

Food and nutrition is the basic requirement for the human beings. Balanced diet provides the proper nutrition which plays an important role in maintaining the health of an individual. The nutritional status shows impact on the clinical outcomes of individuals' health. The nutritional status depends upon the different levels of nutrients available within the human. The nutrients can be classified as essential and nonessential nutrients. Examples of essential nutrients include carbohydrates, fats or lipids, water, proteins etc.

There are different factors that affect the nutritional status that includes age, gender and physical activity. Based upon the individual's requirement the diet should be planned. Malnutrition is the basic etiology for the development of various deficiency disorders. To avoid that deficiency disorders all the essential nutrients should be replaced within the balanced diet. In some cases excessive or inadequate intake of nutrients leads to malnutrition. So diet should be balanced based upon the nutrient requirement [1].

World Health Organization categorizes the malnutrition into different aspects of nutritional status. They are under nutrition, over nutrition, imbalance of micronutrients. The clinical presentation of malnutrition can be sudden in onset or takes long time for onset; sometimes the pathological disorders can also play an important role in the development of nutrition related deficiency disorders [2-4]. Hence, it is very essential to evaluate the individuals regarding the aspects of health issues, life style and fitness to get a clear picture of their nutritional status. Mini nutrition assessment scale is one of the assessment scale used for the screening and assessment of the nutritional status using the malnutrition indicator score [5].

Function

For nutrition assessment systematic collection of information and evaluation of nutritional status is required for the collection of the data. It includes nutrition assessment, clinical history, dietary assessment, physical examination, anthropometric measurements and diagnostic tests. As per the international guidelines the diagnosis of malnutrition

can be categorized into starvation related malnutrition, acute disease or injury related malnutrition and chronic disease related malnutrition. The clinical history of the nutritional status of the patient is based on the various aspects such as patient identification markers, patient weight changes, dietary preferences, nutritional choices, symptoms, physiological and psychological illness, life style habits, substance abuse, medications, socioeconomic issues, genetics and family history [1].

Dietary Assessment is based on the nutrition including food and fluid intake. The source of data collection can be the patients themselves, family members or guardians and from case sheets or medical records. Number of meals taken by the patient per day and the meal size should be clearly known [6].

Physical examination is essential for the evaluation of the signs & symptoms of the nutritional status and disorders. The appearance, vital signs, BMI, eyes, skin, oral cavities, hair, nail extremities, odors and mobility status should be clearly examined [7].

Anthropometric Measurements includes the height, weight, mid arm circumference, calf circumference are mainly measured. Height and weight are required for evaluation of fitness level/lipid stores and MAC /CC for understanding the patient protein storage [8].

Diagnostic tests include the laboratory tests and the body composition studies. Lab tests are performed to assess the levels of biological markers such as proteins, lipids, electrolytes, micronutrients, vitamins etc. The body composition studies are required for internally observing the tissues or organs.

Impact

Malnutrition shows greater impact on the health care outcomes of an individual. Different factors are responsible for the changes in the nutritional status. It includes physiological, pathological, and psychosocial factors. Age, gender, growth, pregnancy, and breast feeding are considered as physiological factors. These factors can alter the body metabolism and functioning. Pathological factors include the diseases, disorders, infections, various medications, surgeries and injuries. Genetics and family history can also be taken into consideration. Psychosocial factors includes the socioeconomic status of an individual,

natural calamities or manmade disasters like wars, mental disorders, substance abuse, alcohol intoxication, eating disorders like BED, etc can also be included [1].

Clinical Significance

The importance of nutritional assessment survey is to identify the level of nutrition within the adolescents and its impact on the individual health care outcomes & physiological growth. If any deficiency disorders are identified at the initial stages they can be corrected, so that the health condition of the individual in future doesn't get complicated [9].

According to the Food & Agriculture Organization of the US the two main causes for malnourishment & concomitant diseases worldwide are low economic profile and poor availability of resources. Doing exercises regularly, getting sufficient sleep and maintaining a work-relaxation balance provides a healthy life style. Stress also plays an important role for a balanced life style. Nutrition and stress are always been bridged with each other. An individual with healthy life style and balanced diet is less likely to get stressed compared to a poor diet individual [10,11].

Conclusion

Education regarding nutrition intake and management will be helpful within the community to improve health care outcomes. So, creating awareness by conducting nutrition education surveys or programs regarding the basic dietary needs and portions of their nutritional meal & behaviour is required in the individuals to improve their quality of well being. Self monitoring among the individuals must be implemented in the aspect of dietary intake for better quality of life and positive health outcomes. Counselling regarding the proper balanced diet must be provided among the general population in order to maintain a healthy life style. Awareness programmes regarding the good food and nutrition should be conducted within the community setup to reach the public. Research should be promoted to identify various nutritional deficiency disorders at their initial stages in order to prevent and manage further complications. It's better to improve the quality of food resources and prevent food adulterations that increase the nutritional value so that the public will get balanced nutrition properly.



References

1. Kesari A, Noel JY. Nutritional Assessment. [Updated 2023 Apr 10]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan.
2. Elia M. Defining, Recognizing, and Reporting Malnutrition. *Int J Low Extrem Wounds*. 2017 Dec; 16(4): 230-7.
3. Mueller C, Compher C, Ellen DM., American Society for Parenteral and Enteral Nutrition (ASPEN) Board of Directors. ASPEN clinical guidelines: Nutrition screening, assessment, and intervention in adults. *JPEN J Parenter Enteral Nutr*. 2011 Jan; 35(1): 16-24.
4. Davis JN, Oaks BM, Engle-Stone R. The Double Burden of Malnutrition: A Systematic Review of Operational Definitions. *Curr Dev Nutr*. 2020 Sep; 4(9): nzaa127.
5. Vellas B, Guigoz Y, Garry PJ, Nourhashemi F, Bennahum D, Lauque S, Albarede JL. The Mini Nutritional Assessment (MNA) and its use in grading the nutritional state of elderly patients. *Nutrition*. 1999 Feb; 15(2): 116-22.
6. Reber E, Gomes F, Vasiloglou MF, Schuetz P, Stanga Z. Nutritional Risk Screening and Assessment. *J Clin Med*. 2019 Jul 20; 8(7):1065.
7. McCullough L, Arora S. Diagnosis and treatment of hypothermia. *Am Fam Physician*. 2004 Dec15; 70(12): 2325-32.
8. Nuttall FQ. Body Mass Index: Obesity, BMI, and Health: A Critical Review. *Nutr Today*. 2015 May; 50(3): 117-128.
9. O'Brien KO, Nathanson MS, Mancini J, Witter FR. Calcium absorption is significantly higher in adolescents during pregnancy than in the early postpartum period. *Am J Clin Nutr*. 2003 Dec; 78(6): 1188-93.
10. Webb P, Stordalen GA, Singh S, Wijesinha-Bettoni R, Shetty P, Lartey A. Hunger and malnutrition in the 21st century. *BMJ*. 2018 Jun 13; 361: k2238.
11. Muscaritoli M. The Impact of Nutrients on Mental Health and Well-Being: Insights From the Literature. *Front Nutr*. 2021 Mar 8; 8: 656290.

