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The IAPEN INDIA Association for Parenteral and Enteral Nutrition Chennai Declaration on the Fundamental Right to Nutritional Care of Patients Under Treatment

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Abstract

Malnutrition can be defined as a state of nutrition in which a deficiency or excess or imbalance of energy, protein, and other nutrients cause measurable adverse effects on body tissues, eventually affecting the quality of life and clinical outcome. Malnutrition is associated with many adverse outcomes both in the community as well as in clinical settings; including a suppressed immune system, impaired wound healing, muscle wasting, extended periods of hospital stay, and increased mortality. Undetected malnutrition not only enhances the risk of adverse complications for patients but impacts negatively with an increase in health care costs. This can be prevented if protocol prioritized attention is given to their nutritional care. Achievement of good nutrition is important and is a must in overall healthcare, hence, all stakeholders should be updated regarding the management of malnutrition and challenges encountered. It's time we start, mobilize everyone and engage governments, policymakers, gain national and global cooperation to address the issue of malnutrition in healthcare settings. The objective of this specialist declaration is to provide evidence-based recommendations for the proper management of malnutrition by a multi-parametric approach starting with the screening

of all patients by trained healthcare professionals with easy-to-use validated screening tools. Nutrition screening is the first step towards identifying patients at risk and requiring intervention at the earliest. Only a few accredited hospitals have nutrition screening at the time of reporting as a protocol. The timing of recognizing the presence of malnutrition or at-risk is of paramount importance to reverse the deteriorating nutritional status before the patient becomes cachectic.

Keywords: Nutrition care; Malnutrition; Prevention; Clinical nutrition; Human right to nutrition care; Screening; Assessment; Dietitian

Background

Malnutrition is a condition with inadequate or excess nutrient consumption or impaired nutrient utilization[1]. India is a nation of extremes. Few numbers of families who live in poverty are not able to procure reasonably adequate food requirements. Contrastingly, increasing number of people are suffering from obesity and its consequences. Though the country has made decent progress in addressing the community's nutritional issues, malnutrition in hospital settings goes unnoticed. Malnutrition among hospitalized patients leads to an increased risk of clinical complications and cumulatively increases the burden on healthcare resource utilization[2]. There are not many Indian published data available on the prevalence of malnutrition in hospitalized patients. However, one study found that almost two-fifth of the patients were found to be malnourished at the time of admission to the ICU in this tertiary care hospital in India[2,3]. The Nutrition Day worldwide audits (2014-2016), in five Indian urban, private hospitals observed poor food intake in 59% of older adults and 31% of older adults were at risk of malnutrition and were not provided any additional nutrition support[4]. Malnutrition in patients is compounded by the failure of healthcare administrators and medical practitioners to recognize nutrition as a therapy.

The problem: Failure to recognize nutritional status' impact

The underreported nutritional status has been complicated by a lack of consensus among the stakeholders. Nutritional neglect by the concerned authorities, as a result, is often characterized as failure to thrive in pediatric patients and adults' post-treatment[5–7]. Inadequate therapeutic nutritional care from the time of admission till the complete recovery, nurtures the risk of poor health outcomes. With the subsequent increase in chronic conditions, the rate of those with or at risk of malnutrition is consequentially increasing. Prevalence of co-morbidities like diabetes, hypertension, cancer, and other lifestyle diseases was more common among these malnourished patients[8]. Despite the high prevalence and negative influence of malnutrition on clinical consequences, limited data are available on the magnitude of the economic burden on healthcare resources.

The latest report of the National Family Health Survey 5 (NFHS-5) results among preschool children the prevalence of Severe Acute Malnutrition (SAM) has shown an increase from 7.5% in NFHS-4 in 2015–2016[9] to 7.7% in the recent NFHS-5 survey (2019–2021). These SAM children are at 9–11 times higher risk of mortality and morbidity than well-nourished children. The case fatality rate among SAM children admitted for treatment in hospitals, ranged from 3.4% to 35%[10].

Routine screening of all patients at admission is not done at many hospitals except for a few accredited centres. As a result, nutritional support is often not started for undernourished and high nutritional-risk patients. There is growing evidence strongly indicating malnutrition as an independent risk factor for adverse therapeutic responses, treatment outcomes, morbidity and mortality, and quality of life. It also has an unnoticed negative economic impact in the form of increased treatment costs, decreased productivity, dependency, and overall disease-free survival[11]. The magnitude of hospital malnutrition in India is poorly documented and is further complicated by a lack of consensus on diagnostic criteria for application in clinical settings.

Solution

Nutrition therapy is a systematic process of identifying, collecting, and interpreting nutritional data and translating the information in understanding the cause, nature, and need of nutrition related issues that have an impact on the individual under treatment.

Recognizing the potential role of nutrition

More than 2400 years before, Hippocrates of Kos, stated "The patient ought likewise to be considered, whether he is able to hold out with the prescribed diet, even in the height of the disease; for if the diet is not sufficient, the patient will grow too faint, and be overcome by the disease."[12]. He believed nutrition can prevent diseases and aid in treatment, and gave us a strong statement "Let food be thy medicine and medicine be thy food"

Recognizing, the achievement of good nutritional status is important and is necessary in overall healthcare; hence, all stakeholders should be updated regarding the management of malnutrition and challenges encountered. A country like India, where resources are inadequate, basic training in addressing malnutrition and its management becomes more prerogative.

Adequate and timely implementation of nutritional support has been linked with favorable outcomes such as a decrease in infection rates, length of hospital stays, reduced mortality, reductions in the rate of severe complications[13], as well as improvements in quality of life and functional status.

Nutrition therapy

The solution may be available in the early identification of those patients who are at risk of malnutrition or are already malnourished. This will help the nutritionists/dietitians to start a timely and adequate nutritional intervention. Such nutrition risk screening can be done by available simple screening tools or as suggested in (Table 1) that is simple, easy, and quick and can enable patients to self-screen to detect whether they need nutritional attention. These nutritional screenings should be performed systematically in patients before admission with set protocols to be followed by all healthcare settings. All patients with positive nutritional disturbances or at risk should subsequently undergo a detailed nutritional assessment by a qualified clinical dietitian or nutritionist to identify, quantify and correct specific nutritional issues.

An effective nutritional assessment should include validated assessment tools[14] with subjective and objective parameters including anthropometric measurements, medical history, current and past dietary intake, physical examination with functional and mental assessment, quality of life, medications, and laboratory values.

Hospitals and health care centers should frame policies for an effective nutritional care plan, to maintain and/or improve patients' nutritional status throughout the treatment.

Self-screening tool

The Indian scenario is a complex one. Resources like manpower, funds, technology, etc. are available in limits, making necessary things more difficult to access. IAPEN INDIA expert working group (2022) recommends a malnutrition self-screening tool (IMSST) (Table 1), which is simple and can be translated into multiple languages. The tool does not need any specialised training of the health care professional to use as it is quick, does not need any formulas for calculations as is self-explanatory, easily identifying if patient is at risk or malnourished across different population of adult patients. The initial trial, assessment and evaluation of IMSST has been very encouraging and ongoing analysis and validation of same is progressively underway. However, the IMSST tool needs to be tested at various levels and with various setups. Once patient at risk is thus identified, he can subsequently be referred to a nutritional care professional.

Table 1. IAPEN INDIA Malnutrition Self Screening Tool (IMSST)

No.	Conditions	Answer
1	Is there an unintentional weight loss in the last 3 months	Yes/No
2	Is there unintentional reduced food intake	Yes/No
3	Is there difficulty in chewing or swallowing of food	Yes/No
4	Do you have ascites or edema	Yes/No
5	Do you have any chronic disease e.g. DM, HT, CVD, Thyroid, Renal, Liver disorders, etc.,	Yes/No
6	Are you severely overweight or underweight?	Yes/No

Discussion

World Health Organization (WHO) in its constitution emphasizes on "health for all" which is fundamental to attain peace and security and is dependent on the individuals and States/governments. Governments have an obligation for the health of their people which can be accomplished only by the provision and delivery of adequate health and social measures.

Article 14 of the UNESCO Universal Declaration on Bioethics and Human Rights (2005) considers that "progress in science and technology should advance access to adequate nutrition and water"[15].

The 2021 International Position Paper on clinical nutrition and human rights by the international working group for the patients´right to nutritional care states that everyone should have access to screening, diagnosis, and nutritional assessment, with optimal and timely food and evidence-based medical nutrition therapy (including enteral and parenteral nutrition) in order to reduce the high rates of hospital malnutrition and the associated morbidity and mortality[16].

Article 21 in The Constitution of India 1949: States that, "No person" shall be deprived of Protection of life and article 39.e, states that, "the health and strength of workers, whether men or women, and the tender age of children are not misused and that citizens are not obligated by economic necessity to enter avocations unsuited to their age or strength"[17]. Article 47 states that; it is the duty of the State to raise the level of nutrition and the standard of living and to improve public health as among its primary duties[17]. Article 39.b states that; the ownership and control of the material resources of the community are so distributed as best to subserve the common good[17].

The supreme court in Vincent Vs Union of India, emphasized that a healthy body is the very establishment of all human activities. Therefore, it is the obligation of the government/s to create provisions and ensure sustaining of conditions to attain good health.

Thus, we state that it is the fundamental right of every citizen of this country assured under the above articles from the Constitution of India 1949 and the supreme court's interpretation and observations of the same.

While endorsing what has been stated above, we request the government to issue directives to the Indian Medical Council to make provisions in their Act-2019 to make Nutrition therapy as a fundamental right of all patients visiting a health care unit at outpatient department as well as patients admitted for treatment. The directives should emphasize on following principles stated below.

- Increase awareness of Disease Related Malnutrition (DRM) among physicians and health care professionals.
- Recognize nutritional status of patients as an independent factor impacting on treatment outcome.
- A standard nationwide protocol to be designed for early nutrition screening and comprehensive assessment.
- Patients should be given modified, therapeutic diets along with nutrition counseling should be as a part of medical diagnosis and treatment.
- Qualified dieticians and nutritionists to be appointed to meet the needs of therapeutic diets and nutrition counseling for the patients.
- Recognize hospital nutrition as a therapy and as a fundamental right of the patient getting treated.
- All patients should receive a comprehensive nutritional plan and counseling at the time of hospital discharge.
- It's the ethical responsibility of Health care professionals to assure optimal and timely nutritional care.
- Include nutrition as a mandatory subject in medical and nursing curricula.

India Association of Parenteral and Enteral Nutrition (IAPEN INDIA), an academic non-profit organisation that raises awareness of malnutrition and works to advance the nutritional care of patients and those at risk from malnutrition in the wider community, recently conducted one of the biggest nationwide surveys of almost 500 hospitals and health care centers from nearly 100 Indian cities. The survey results provided information on a sample of nutrition screening patterns across India. It was observed that nutrition screening was more prominent in accredited hospitals (88.2 %) and was grossly neglected in other setups like government, trust hospitals, and other (non-accredited) private hospitals (57%). In accredited hospitals, the dietician-patient ratio was 1:76.4 and in non-accredited hospitals, it was astonishingly 1:205.1. This exhibits a biased approach favoring patients choosing the accredited hospitals that charge a premium for treatments making it a service available only to the economically abled and those visiting government run, public or charitable hospitals are at a lack to avail optimal nutritional care[18,19]. This transfer of supportive information for nutritional care between patient care homes, different hospitals, and in community is many times not well organized and needs to be improved by the development of integrated nutrition pathways of care. IAPEN INDIA aims to provide to be a bridge to patient receiving nutritional care.

While these facts demonstrate tremendous progress, governments and the global healthcare community must allocate sufficient resources and pursue policies and investments that promote equality and aids to overcome challenges of addressing malnutrition in healthcare settings while enlisting full participation at the grassroots level.

Conclusion

It is widely acknowledged across healthcare professionals, especially physicians, that there is a strong relationship between nutrition, disease prevention, and treatment. Very

often physicians fail to address the nutrition issues even with diseases such as cancer, obesity, and diabetes in their patients. Several surveys have found that physicians agree with the importance of nutrition in their medical therapy, but they hesitate to provide or refer them for nutrition counseling to a qualified nutritionist.

Medical diagnosis should include likes of nutritional diagnosis along with nutritional screening and assessment, along with diagnostic parameters like the physical examination, diagnostic tests like laboratory investigation, imaging etc. as individually required for patient care. This will aid to address any issue of nutritional deficiency early on and may be supportive to prevent malnutrition.

Chennai Declaration by IAPEN INDIA Association for Parenteral and Enteral Nutrition is a reach out to all concerned, to join hands and commit themselves to the cause of fundamental rights of nutritional care for the patients across all health care settings.

References

1) Malnutrition. . Available from: https://www.who.int/health-topics/malnutrition#tab=tab_1.
2) Barker LA, Gout BS, Crowe TC. Hospital malnutrition: prevalence, identification and impact on patients and the healthcare system. *Int J Environ Res Public Health*. 2011;8(2):514–527. Available from: https://doi.org/10.3390/ijerph8020514.
3) Chakravarty C, Hazarika B, Goswami L, Ramasubban S. Prevalence of malnutrition in a tertiary care hospital in India. *Indian J Crit Care Med*. 2013;17(3):170–173. Available from: https://doi.org/10.4103/0972-5229.117058.
4) Dutta M, Selvamani Y, Singh P, Prashad L. The double burden of malnutrition among adults in India: evidence from the National Family Health Survey-4 (2015-16). *Epidemiology and Health*. 2019;41:e2019050. Available from: https://doi.org/10.4178/epih.e2019050.
5) Asano T, Narazaki H, Kaizu K, Matsukawa S, Takema-Tochikubo Y, Fujii S, et al. Neglect-induced pseudo-thrombotic thrombocytopenic purpura due to vitamin B12 deficiency. *Pediatrics International*. 2015;57(5):988–990. Available from: https://doi.org/10.1111/ped.12718.
6) Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, et al. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. *American Journal of Preventive Medicine*. 1998;14(4):245–258. Available from: https://doi.org/10.1016/s0749-3797(98)00017-8.
7) Kerr MA, Black MM, Krishnakumar A. Failure-to-thrive, maltreatment and the behavior and development of 6-year-old children from low-income, urban families: a cumulative risk model. *Child Abuse & Neglect*. 2000;24(5):587–598. Available from: https://doi.org/10.1016/s0145-2134(00)00126-5.
8) Burford A, Alexander R, Lilly C. Malnutrition and Medical Neglect. *Journal of Child & Adolescent Trauma*. 2020;13(3):305–316. Available from: https://doi.org/10.1007/s40653-019-00282-0.
9) NFHS-4. National family health survey. Government of India: Ministry of Health and Family Welfare, 2015. 2015.
10) NFHS-5. National family health survey. Government of India: Ministry of Health and Family Welfare, 2020.. 2020.
11) Lenters LM, Wazny K, Webb P, Ahmed T, Bhutta ZA. Treatment of severe and moderate acute malnutrition in low- and middle-income settings: a systematic review, meta-analysis and Delphi process. *BMC Public Health*. 2013;13(S3):S23. Available from: https://doi.org/10.1186/1471-2458-13-s3-s23.
12) Sprengell C. Hippocrates: The Aphorisms of Hippocrates, and The Sentences of Celsus; with Explanations and References to the Most Considerable Writers. to which Are Added. Aphorisms upon Several Distempers, Not Well Distinguished by the Ancients. .
13) Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, De Onis M, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet*. 2013;382(9890):427–451. Available from: https://doi.org/10.1016/s0140-6736(13)60937-x.
14) Kyle UG, Coss-Bu JA. Nutritional assessment and length of hospital stay. *Canadian Medical Association Journal*. 2010;182(17):1831–1832. Available from: https://doi.org/10.1503/cmaj.101256.
15) Liu J, Dorjderem A, Fu J, Lei X, Liu H, Macer D, et al. Water ethics and water resource management. 2011. Available from: https://unesdoc.unesco.org/ark:/48223/pf0000192256.
16) Cardenas D, Correia MITD, Ochoa JB, Hardy G, Rodriguez-Ventimilla D, Bermúdez CE, et al. Clinical nutrition and human rights. An international position paper. *Clinical Nutrition*. 2021;40(6):4029–4036. Available from: https://doi.org/10.1016/j.clnu.2021.02.039.
17) Constitution of India. 2018. Available from: https://legislative.gov.in/sites/default/files/COI-updated-as-31072018.pdf.
18) Mahadevan A, Eswaran H, Sundari M. Nutritional Risk Screening in Hospitalized Adults Using the Malnutrition Universal Screening Tool at a Tertiary Care Hospital in South India. *Cureus*. 2022;14(5):e24681. Available from: https://doi.org/10.7759/cureus.24681.
19) Wright C, Shankar B, Marshall S, Pearcy J, Somani A, Agarwal E. Prevalence of malnutrition risk and poor food intake in older adults in Indian hospitals: A prospective observational nutritionDay study with novel mapping of malnutrition risk to the Malnutrition Screening Tool. *Nutr Diet*. 2020;78(2):135–144. Available from: https://doi.org/10.1111/1747-0080.12641.