Structured Medical Nutrition Training to identify Malnutrition



Shilpa Varma, Mansi Patil, PC Vijayakumar, Biju Pottakat, Shivshankar Timmanpyati, Datta Patel Shilpa Varma (shilpavarma2008@gmail.com) Contact Number- +91 9769373742

Parenteral and Enteral Nutrition

Description of the initiative- Nationwide Capacity building and training of healthcare professionals to screen, monitor and evaluate malnutrition

- Background / context- India bears one of the world's highest burden of malnutrition globally, with an average expenditure of over 10 billion USDs each year. It is
 estimated that 45% of Indian adults are either food insecure or malnourished. This burden overlooks the hidden malnutrition in the community as well as in the
 hospitals. It is thus imperative that Indian healthcare professionals be trained and sensitised towards malnutrition via structured and standardised trainings. There
 has been no formal training for malnutrition assessment among healthcare professionals. India has a dual healthcare system, with both private and government
 systems functioning parallelly and thus a need to introduce training for healthcare graduates, professionals, private and government practioners.
- Rationale for the initiative- Although there are a multitude of screening and assessment tools available, a lack of strong hands-on training often leads to a missed diagnosis of malnutrition. A structured hands-on training will enable the healthcare professionals and policymakers to elicit malnutrition both in the hospital and in the community at earliest, provide an opportunity to identify and diagnose not just undernutrition but micronutrient deficiencies as well saving costs in terms of both health, social system paving way for establishing national best nutrition practices in ICU, OPD, IPD and Community settings. Having already piloted this educative endeavour by national healthcare professionals of IAPEN INDIA in lead hospitals and medical college of excellence, we already have a trained in one center over the year a task force of 136 trained members including doctors, dietitians, nurses, 10 NGO workers looking after IPD and OPD in MultiSpeciality health care settings. With use of MUST and GLIM, this resulted in early addressal and providing of nutrition support for 1076 patients- 314 in ICU and rest IPD both pre and post surgical patients.
- Objectives and scope- The project aims to train 10,000 healthcare professionals over 3 years, across India to identify and diagnose malnutrition via special trained multidisciplinary task force and a structured training module. The training module would encompass definition of malnutrition, impact of malnutrition and tools for screening and assessment of malnutrition (MUST, GLIM, NUTRIC Scores, Dietary Diversity Scores, Handgrip Dynamometry and once a month NUTRITION DAY).

Planned activities & deliverables

- Outline the steps to be taken- Development of a nation specific training module and can begin at the established ESPEN Training centres in India. The modules customised by the local team of experts and provide a robust handson training by the Nutrition Advocacy Team (Trainer-of-trainers) comprising of a Doctor, Dietitian, and a Nurse.
- What are the concrete deliverables of the project?- Within a year the 3500 trained professionals could reach 25,000 patients who would receive early targeted nutrition support care and round 30% reduction in healthcare expenses.
- What achievements are possible in the next 12 and 24 months?- with support of identified 30 training centres, hands-on training availability will create around 3500 trained professionals specifically in nutrition screening and assessment, allowing early detection of malnutrition, bridging the gap between healthcare professionals and policy makers, creating a pathway for integration of nutrition into the curriculum of medical, nursing, and pharmacy faculties. Pan India 30 training centers will cater to 25,000 patient screenings in a year. The organization of additional activities during the Nutrition day will give it an extra local and regional dimension and interface could be included communication with the hospital's nutrition care pathway and food management services.

Created of the control of the contro

Resources & enablers

- Describe personnel, financial needs Trainers/faculty/ experts/ support team and training center physical logistics cost, initial enrolment
- Specify how the grant will be spent- To meet physical training center and workshop cost, to meet academic fees of modules and professional fees for the trainers, travel, other on ground logistics of trainers and support team as well as pan India scalability of the project, Development/dissemination of national policy and training sessions(eLearning & F2F)
- What factors will make it successful?- this encourages us to achieve our future goals:
- To reach more than 10,000 trained professional task force from relevant faculties through the Clinical Nutrition Training organized across India in the next 3 years
- To work with stakeholders to integrate nutrition into the curriculum of relevant faculties with the cooperation of the Council of Higher Education of India. The implementation of this project will contribute to a substantial improvement in quality care and treatment of malnourished patients, ensuring a nondiscriminatory access to medical nutrition for both hospitalized patients and outpatients in order to achieve substantial improvement in quality of care and treatment of malnourished patients, ensuring a nondiscriminatory access to medical nutrition.

omponents of Cost

30 Training Centers, AV and other equipment's e.g. handgrip dynamometry- 8 lakhs

Cost of training inclusive of all faculty travel and other logistics for 3 years- 18 lakhs

Overhead expenses and taxes- 4 lakhs

Results/outcomes & expected impact

- How will the findings be implemented? As a policy recommendation for mandatory training in medical and para medical colleges, hospitals-government and among private practitioners.
- How will this project advance patient care / contribute to optimal nutritional care?- Aid towards effective diagnosis and respective nutritional individualized intervention with an early referral; Obtain robust data on prevalence of malnutrition and health economics like cost-savings of screening programme and medical nutrition recommendation.
- What makes the project innovative?- There are no precedents in our country of a project on cost-effectiveness of nutritional intervention (screening- evaluation-treatment) involving a common platform engaging multidisciplinary healthcare professionals making this is a first of its kind training developed for an Indian scenario for identifying malnutrition in adults, both in the hospital and community. The screening tools like GLIM as well as NUTRITION DAY project which are currently not widely used in Indian healthcare setting will also find natural dissemination and use.
- Will the project be likely to influence national nutrition policy?- Totally. During IAPEN INDIA Annual Congress 2023, we already had onboard the governor, whose address for focus on reducing malnutrition in hospital setting, was published in various regional newspapers and in due course will support change National Health Strategy of Ministry of Health as this project itself is targeted to bring in together government workers at grass root level as well as healthcare professionals. The publication of the findings would likely influence national nutrition policy, prompting to review and update the existing national clinical practice and medical education.
- Is the project transferable to other settings / countries?- This project uses validated tools at hand and with support of evidence based training material which can be tailored to the country specific local context, showcases an ACTION pathway of focussed professionals eventually supporting the PEN Declarations to address malnutrition and can be replicated in all global healthcare centres.



Please tick to confirm the PEN letter of endorsement is attached. Incomplete submissions will not be considered.