Development of a cost-effective system for monitoring iatrogenic malnutrition in selected hospitals in all Indian districts



Subtitle: IAPEN Lifelong Learning Initiative for Fight **Against Malnutrition in India**

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Description of the initiative

- Background / context: It is a known fact that one third of world's malnourished children live in India. IAPEN started its journey after the death of Mr. Nagaraj of Raichur District due to Severe Acute Malnutrition (SAM) in-spite of visiting many hospitals in Raichur City, Karnataka, India. Since then IAPEN aim is to promote lifelong learning in basic and advanced clinical nutrition and empower hospitals with the required tools for treating such severe cases of SAM.
- Rationale for the initiative: The Lifelong Learning Initiative of IAPEN was started in the year 2012 by training dietitians and doctors in various clinical nutrition specializations and guidelines. Out of hundreds of trained individuals throughout India, thirty were selected as National Mentors. The thirty mentors were strategically selected to cover Entire India. IAPEN had also done a study lasting for four years to check possibilities in typical Indian Hospital Settings with the help of One Mentor (Mr Dibyendu Sharma) in one small tertiary care cancer hospital (100 Bed) with a single dietitian who manages over 3000 new and 14000 follow-up patients annually. **2015 - https://www.ncbi.nlm.nih.gov/pubmed/26745056**
- **Objectives and scope:** The main objective of the project is to Implement MUST (Malnutrition Universal Screening Tool BAPEN) for screening all patients on first contact with a healthcare facility. All those patients with high score in MUST will under go further detailed assessment by SGA or similar tools. The hospitals implementing these two steps will be allowed to form a Hospital Nutrition Steering Committee and will get support, fund and help from IAPEN, India and its expert mentors. India has about 735 Districts in 29 provinces and 7 Union Territories. IAPEN aims to expand from existing listed hospitals to many more nation wide committees and district wise chapters and train everybody with these two steps approach

Planned activities & deliverables

Outline the steps to be taken: IAPEN had developed a decentralized toolkit for cost effective implementation of this idea. The open source and free toolkit is available via Android Play Store (IMW Toolkit) or Web App (http://www.iapen.co.in/imw). The toolkit requires few minutes of special training to understand its true potential. Advanced features of this toolkit will also help in further research. This will help the mentors to train and monitor the progress of the application of the toolkit inside any hospital or clinics. The first step is to train doctors and dietitians by conducting workshops and awareness campaigns with the help of Mentors. The next step is to form Hospital Nutrition Steering Committee with the help and support from doctors and dietitians and recognizing and dietitians and recognizing them as Chairpersons of Hospital Nutrition Steering Committee inside that hospital and preparing a database of experts.



- What are the concrete deliverables of the project?1. Formation of Hospital Nutrition Steering Committees in at least two or three Hospitals per one Indian district. (2205 Committees).
- Promotion of clinical nutritionists and nutrition support clinicians in India at every forum and constituting state wise awards.
- 3. Preparing a Database of experts in Clinical Nutrition so that in future nobody will die of Severe Acute Malnutrition (SAM) like Nagaraj of Raichur District in any Indian District.
- Assessing the prevalence and extent of iatrogenic malnutrition for early intervention.

What achievements are possible in the next 12 and 24 months?

First three months, we plan to promote IMW APP by training as many clinical nutritionists and nutrition support clinicians as possible. IAPEN assures that at least 2000 hospitals and clinics throughout India will be trained and equipped to handle the IMW APP in 12 months. IAPEN is also training dietitians from other developing nations- Nepal, Bhutan, Kenya, Nigeria, Bangladesh and other neighboring countries for implementing the same in next 24 months.

Resources & enablers

- Describe personnel, financial needs: The finances are required for conducting awareness campaigns, closed group workshops with the help of 30 National Mentors throughout India.
- Specify how the grant will be spent: We are planning to conduct 100 awareness campaigns and workshops throughout India with ESPEN and IMW Logo with a simple initial budget of EURO 300. (100 * Euro 300 = Euro 30000).

What factors will make it successful?

- The tool is absolutely free of cost and easy to implement. It was already tested in typical Indian hospital for four years. 1.
- The tool requires training and further help and guidance and this will help IAPEN to promote Lifelong Learning.
- Enough data will be generated with the help of the dietitians and nutrition support clinicians to develop guidelines.
- Nutritionists inside hospital will get the unique recognition as Chairperson of Hospital Nutrition Steering Committee and will work with more enthusiasm and ultimately this will also help us getting funds from Government and Other Funding Agencies.

Results/outcomes & expected impact

How will the findings be implemented?

The data generated from each and every Hospital Nutrition Steering Committee will be published in Journal of Nutrition Research (IAPEN Official Journal - http://www.jnutres.com) or IAPEN Magazine (http://nutrition.iapenIII.com/ - In case the dietitians or Nutrition Support Clinicians do not have enough time to write Full Length Manuscripts).

How will this project advance patient care / contribute to optimal nutritional care?

IAPEN will perform data mining of the above data with the help of experts and will develop Indian specific guidelines with a focus on BMI.

What makes the project innovative?

The project is completely decentralized system and requires very less financial resources and man power.

Will the project be likely to influence national nutrition policy?

Currently there is paucity of data on iatrogenic malnutrition in India. The unique feature of this project is that it can be implemented in the community as well as a clinical setting and hence bring into focus the need of changing National Nutrition Policy. This project also establishes a support system for the existing National Nutrition Policy and thus can be integrated into the existing system easily.

Is the project transferable to other settings / countries?

Yes. We believe that this model can be applied to all Developing and Developed Countries. IAPEN is happy to help and support.

