

# NUTRITIONAL ASSESMENT AND SUPPORT IN PRIMARY HEALTH CARE

Taja Jordan MD<sup>1</sup>, Milena Kovač Blaž MD PhD<sup>2</sup>, Antonija Poplas Susič MD PhD<sup>2</sup>, Denis Mlakar-Mastnak<sup>1</sup>, Nada Rotovnik Kozjek MD PhD<sup>1</sup>

<sup>1</sup>Department for clinical nutrition, Institute of Oncology Ljubljana, Ljubljana, Slovenia,

<sup>2</sup>Community health center Ljubljana, Ljubljana, Slovenia.

Endorsed by Slovene society for Clinical nutrition

## Brief description

With the goal of integrating the clinical nutrition pathway into all levels of the health system, we are now trying to bring a comprehensive nutritional assessment and support in community health centers and in the patients' homes with help from community nurses.

The aim is to make a nutritional assessment and nutritional support a parallel therapeutic way for patients with chronic diseases, which enables us to treat nutrition disorders earlier, including obesity, while they are still reversible.

## Rationale

Data shows that by limiting the screening for malnutrition only to hospitalized patients we are missing a great percentage of population living at home. The exact numbers of community-living adults being at risk for malnutrition is unknown due to the fact that the only data we have is from hospitalized patients. Therefore the systematic screening for malnutrition and nutritional disorders followed by nutritional assessment, appropriate treatment and monitoring must be implemented in all levels of the health system.

## Activities

In September 2015 we started with a project *Upgraded comprehensive patient care* which was founded by Norway grants. Systematic nutritional screening, assesment and treatment was started as part of a comprehensive prevention and treatment programme for chronic noninfectiuos diseases (CND) in Community Health Centre Ljubljana. The study was a part of the DNV-GL approval system as a quality service standard. The study included patients treated in Community health center Ljubljana, Slovenia.

## Implementation

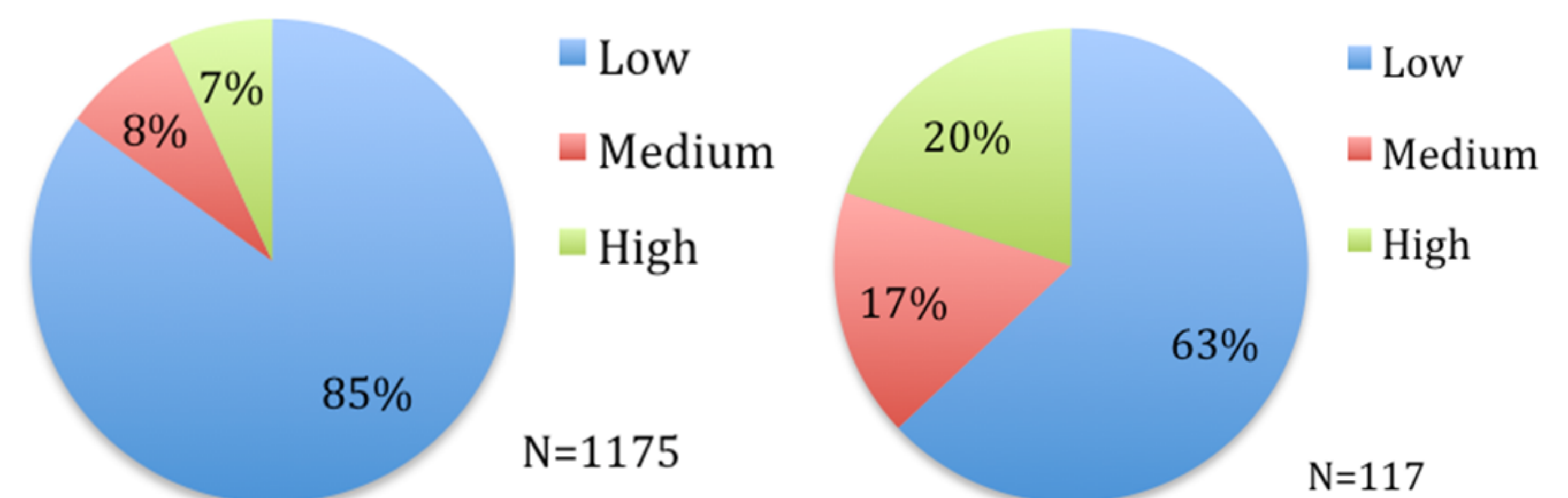
Validated nutritional screening tool MUST, based on BAPEN recommendation was translated and implemented as a pilot model. Extensive training on malnutrition, including overnutriton and obesity (knowledge, screening, assesment, care planing) was executed for general practitioners (GPs), registered nurses and community nurses. Working with community health centers enables us to reach the entire population, including working with patients in their own living environment. GPs are familiar with their patients' general health condition in relation to their nutritional status. Registered nurses conducted the nutritional screening at their primary health centers and when needed they also provided early nutritional intervention. Community nurses followed through the same process at their patients' homes.

## Results/ Outcomes

From January 2016 till May 2016 1175 patients from Community health center Ljubljana were included. Our pilot study showed that 15% of patients were at risk for malnutrition, and 7% of these were at high risk (Chart 1). When looking only at chronic patients, there were 37% of patients at risk for malnutrition, with 20% of these at high risk (Chart 2).

Chart 1: Nutritional risk MUST – all visits

Chart 2: Nutritional risk MUST – chronic patients



The results showed that a screening program and early intervention at primary health level can provide nutritional support to the most vulnerable groups of the population.

## Conclusion

With this study we have showed that nationwide nutritional screening on a primary health care level is needed, alongside with the integration of clinical nutrition pathway and a nutritional support system at all levels of the healthcare system. The Ministry of health and National Health Insurance Company have already approved to continue the project including 25 more health centers in Slovenia, which will cover approximately 1/2 of the adult population in Slovenia. The National Health Insurance Company is now recognizing the importance of early recognition and treatment of malnutrition and is trying to enable a multimodal approach of nutritional support by including clinical dietitians in multidisciplinary teams in primary health care centers. The National Health Insurance Company is also recognizing that the initiation of treatment with oral nutritional supplements when indicated in the GP's office is an important part of nutritional treatment in terms of reducing malnutrition in the community.

## Contact:

Taja Jordan  
Department for clinical nutrition, Institute of Oncology Ljubljana, Ljubljana, Slovenia  
email: [taja.jordan@gmail.com](mailto:taja.jordan@gmail.com)

## References:

[1] Elia M. *The "MUST" Report. Nutritional Screening of Adults: A Multidisciplinary Responsibility*. Redditch, UK: British Association for Parenteral and Enteral Nutrition; 2003. [2] Bavelaar JW, et al. *Diagnosis and treatment of (diseaserelated) in-hospital malnutrition: the performance of medical and nursing staff*. Clin Nutr 27, 431–8. 2008. [3] Council of Europe. *Food and Nutritional Care in Hospitals: How to Prevent Undernutrition*. Strasbourg Cedex. 2002



Slovensko združenje za klinično prehrano - Slovenian society of clinical nutrition  
Zaloška cesta 2, 1000 Ljubljana, tel.: 01/58 79 523, faks: 01/58 79 407

### *Letter of endorsement*

Slovenian Society for clinical nutrition served as a basic platform for organizational and educational activities in the field of clinical nutrition in Slovenia. As a partner in Optimal Nutritional Care Activities we would like to integrate nutritional care in all levels of the health system. In cooperation with Community Health Center Ljubljana we created Nutritional Care Approach as a pilot project which is presented in our poster.

The results of our pilot study already showed the evidence of improved patient outcomes with effective screening and treatment pathways in primary health care. We proved that nutritional evaluation could and should be integrated in primary health care. Even more, this can be integrated with nutritional support clinical pathway at secondary and tertiary level of the health system.

With progressive collaborations of various partners across health system and integration of the knowledge of nutrition into the medical curriculum, we can enable optimal nutritional care at all levels of health system.

*Nada Rotovnik Kozjek, MD, PhD*

*President of Slovenian Society for Clinical Nutrition*

Ljubljana, June 15, 2016