Editorial

iMedPub Journals
www.imedpub.com

Journal of Clinical Nutrition & Dietetics
ISSN 2472-1921

2020
Vol.6 No.1:2

DOI: 10.36648/2472-1921.6.2.1

GLIM Criteria for the Diagnosis of Malnutrition – An Important Tool for the Dietetic Profession

Elisabet R*

Associate Professor, Department of Nutrition, Kristianstad University, Sweden

Received: June 30, 2020; **Accepted:** July 04, 2020; **Published:** July 11, 2020

***Corresponding author:**
Elisabet Rothenberg

elisabet.rothenberg@hkr.se

Associate Professor, Department of Food and Meal Science, Kristianstad University, Sweden.

Tel: +46 44 250 38 34

Citation: Elisabet R (2020) GLIM Criteria for the Diagnosis of Malnutrition – An Important Tool for the Dietetic Profession. J Clin Nutr Diet. Vol 6 No.1:2

Editorial

One of the most prevalent nutritional problems in health care is malnutrition. It is devastating for the patient, with diminished physical and mental function and impaired clinical out- come [1] and with significant costs for society [2]. Diagnostic criteria have been discussed for a long time. Based on medical specialty, dietitians and physicians have different views on relevant diagnostic criteria [3]. With the aim to respond to the need for a global consensus of defining and characterizing malnutrition in the clinical nutrition and medical communities the Global Leadership Initiative on Malnutrition (GLIM) was established in January 2016 [4]. GLIM is founded on several of the global clinical nutrition societies; ASPEN (www.nutritioncare.org), ESPEN (www.espen.org), FELANPE (www.felanpeweb.org) and PENSA (www.pensa-online.org). The core GLIM leadership committee has been supported during the process by a larger working group in order to bring additional global diversity and expertise to the consensus effort. A series of face-to-face meetings, and larger meetings on the following ESPEN and ASPEN congresses have been held and gradually consensus was achieved in 2018 [4].

The principle of the GLIM criteria is a two-step model for risk screening and diagnosis assessment. Risk screening to identify "at risk" status could be performed by different validated screening tools as the NRS-2000, MNA-SF, MUST and SGA [5-8]. Screening, usually performed by nurses, should be followed by the second step for diagnosis and severity grading of the condition. An important remark here is that risk screening is not equal to diagnosis. Often health care staff makes this mistake and mix up result of screening as a diagnosis.

To diagnose a patient as malnourished the diagnostic criteria consist of three phenotypic; Weight loss (%) Low body mass index (kg/m^2) Reduced muscle mass and two etiologic; Reduced food intake or assimilation: and Inflammation. Cut-offs is suggested for weight loss, BMI and reduced food intake. For reduced muscle mass validated body composition techniques are recommended. Depending on setting the choice of method of course may vary and in its simplest form rely on anthropometry. Inflammation should be interpreted as acute disease/injury, or chronic disease-related. C-reactive protein may be used as a supportive laboratory measure; however there is no clear cut-off for the degree of inflammation.

The diagnosis of malnutrition requires at least 1 phenotypic and 1 etiologic criterion, meaning that for different individuals the possible combination of criteria may vary. The severity of malnutrition could be categorized into Stage 1/Moderate Malnutrition and Stage 2/ Severe Malnutrition according to one phenotypic criterion that meets the grade 2.

An important next step to establish GLIM globally is to get engagement and support from dietetic and nutrition professional societies and to promote dissemination, validation studies, and feedback [9]. Even if many studies provide clear evidence that the present criteria for diagnosis of malnutrition are highly relevant and that each of them alone can predict adverse clinical outcomes there are some important scientific as well as clinical questions that need answers; e.g. which combination of criteria that best predict outcomes and severity with respect to various unhealthy conditions? What is the most effective treatment associated with a specific unhealthy condition considering different combinations of criteria? Furthermore, how should e.g. inflammation of less degree be assessed since there are not yet cut-offs for laboratory indicators? Another issue to explore is criteria for monitoring therapy; for example, when is a treated patient not malnourished anymore?

To fill these knowledge gaps, contributions from the dietetic profession have an important role. Studies are needed from different parts of the world, in various health care settings and within different groups of patients. In 3 - 5 years the GLIM criteria

will hopefully be re-evaluated and refined based on clinical experience and scientific studies with different designs.

The GLIM criteria offer the dietetic profession a great opportunity moving the scientific as well clinical knowledge of malnutrition forward. With these globally recognized and accepted criteria, a well-founded diagnosis can be made and thus also the choice of treatment strategy for the good of the patient.

Not at least in the ongoing Covid-19 pandemic widely spread worldwide, the need and importance of dietetic support and care has been clearly shown and addressed by many health care professionals [10-12]. For patients in all care settings from ICU, to care homes and the own home malnutrition is an obvious risk indicated by the typical symptoms as altered eating patterns, loss of taste and smell and poor appetite. Furthermore, most ICU patients lose considerable amounts of muscle mass which seriously affects their prognosis and ability to rehabilitate [1]. Not only in hospital but through the complete journey hopefully over rehabilitation and recovery, dietitians are needed to support patients´ nutrition and hydration needs, ensuring that nutritional requirements are assessed correctly and that nutritional support is delivered in a safe and effective manner.

In this context, the GLIM criteria are valuable for determining diagnosis, etiology and severity. ESPEN together with its´ member associations are working in collaboration with the WHO to achieve an ICD code for malnutrition, an important step to convince the general medical community of this common and serious, not only nutritional, but also medical problem.

References

1 Sobokta LE (2019) Basics in clinical nutrition. (5th edn). Prague: Galen pp: 676.

2 Elia M, Russell CA, Stratton RJ (2010) Malnutrition in the UK: Policies to address the problem. Symposium 2: The skeleton in the closet: Malnutrition in the community Malnutrition in the UK: Policies to address the problem. Proc Nutr Soc 69(4): 470-6.

3 Cederholm T, Bosaeus I, Barazzoni R, Bauer J, Van Gossum A, et al. (2015) Diagnostic criteria for malnutrition - An ESPEN consensus statement. Clinical nutrition (Edinburgh, Scotland) 34(3): 335-40.

4 Cederholm T, Jensen GL, Correia M, Gonzalez MC, Fukushima R, et al. (2019) GLIM criteria for the diagnosis of malnutrition - A consensus report from the global clinical nutrition community. Clinical nutrition (Edinburgh, Scotland). 38(1): 1-9.

5 Kondrup J, Allison S, Elia M, Vellas B, Plauth M (2003) ESPEN Guidelines for Nutrition Screening 2002. Clinical nutrition (Edinburgh, Scotland) 22: 415-21.

6 Rubenstein LZ, Harker JO, Salva A, Guigoz Y, Vellas B (2001) Screening for undernutrition in geriatric practice: developing the short-form mini-nutritional assessment (MNA-SF). The Journal of Gerontology Series A: Biological Sciences and Medical Sciences 56(6): M366-372.

7 Stratton RJ, Hackston A, Longmore D, Dixon R, Price S, et al. (2004) Malnutrition in hospital outpatients and inpatients: prevalence, concurrent validity and ease of use of the 'malnutrition universal screening tool' ('MUST') for adults. The British Journal of Nutrition 92(5): 799-808.

8 Detsky AS, McLaughlin JR, Baker JP, Johnston N, Whittaker S, et al. (1987) What is subjective global assessment of nutritional status? JPEN Journal of Parenteral and Enteral Nutrition 11(1): 8-13.

9 Keller H, Van der Schueren MAE, Jensen GL, Barazzoni R, Compher C, et al. (2020) Global Leadership Initiative on Malnutrition (GLIM): Guidance on Validation of the Operational Criteria for the Diagnosis of Protein-Energy Malnutrition in Adults. JPEN Journal of Parenteral and Enteral Nutrition E published202/06/13 DOI 10.1002/jpen.1806.

10 EFAD (2020) EFAD recognises the important role of dietitians and appropriate dietetic care during each phase of the Covid-19 journey [Press release].

11 The European Federation of the Associations of Dietitians (2020) Role of Dietitians in the fight against COVID-19 EFAD Briefing Paper. De Molen 93, 3995AW Houten, The Netherlands.

12 Handu D, Moloney L, Rozga M, Cheng FW (2020) Malnutrition care during the COVID-19 pandemic: Considerations for registered dietitian nutritionists. Journal of the Academy of Nutrition and Dietetics 2: 1.