

Amendment code for malnutrition in ICD-11 – “Malnutrition in adults”

This is a concerted action from the global clinical nutrition community. The aim is to provide an ICD-11 proposal for an “adding entity” of “Malnutrition in adults” in order to complement the ICD-11 system with a diagnosis code that fills a gap and meets the requirement of the clinical nutrition community.

Background

Malnutrition is a devastating condition with adverse outcomes in terms of complications, prognosis and quality of life [1-5]. Malnutrition aetiologies include starvation, disease, or other dysfunctions of food intake or assimilation, alone or in combination. Malnutrition in adults is defined as “a state resulting from lack of intake or uptake of nutrition that leads to altered body composition (decreased fat free mass) and body cell mass leading to diminished physical and mental function and impaired clinical outcome from disease”. Caring for adults with malnutrition in clinical settings requires attention to prevention, diagnosis and management of nutritional and metabolic alterations, and involves the interaction between food deprivation and/or catabolic processes related to disease-related inflammation or other causes.

International Classifications of Diseases

Standardised evidence-based terminology accepted in the professional nutrition community is crucial to meet the nutritional challenges of today’s clinical settings. International Classifications of Diseases (ICD) is the foundation for the identification of diseases and statistics globally.

Urgent need of a clinically relevant diagnosis code for malnutrition in adults

The clinical nutrition community needs an ICD coding of “Malnutrition in adults” that works practically. The pending ICD-11 does not provide that. Currently, there are two ICD-11 codes relating to malnutrition in adults. “Underweight in adults” (5B54) appears to be the major malnutrition concept for adults, that is described by $BMI < 18.5 \text{ kg/m}^2$. Malnourished adults in healthcare in many regions of the world now rarely fulfil this criterion. On the contrary, many are in fact overweight or obese and still face serious adverse outcomes without appropriate diagnosis and care. Moreover, there is a code “Unspecified undernutrition (5B7Z) without any description.

Diagnostic criteria currently used

Malnutrition core diagnostic criteria in clinical settings have evolved to account for better understanding of malnutrition in the setting of disease-related inflammation and to encompass malnutrition across the spectrum of BMI (1-5). Approaches to malnutrition diagnostic assessment are now based on a combination of phenotypic and etiologic criteria shared by all the leading constructs. This is the case for nutrition screening tools; i.e. Nutrition Risk Screening 2002, Malnutrition Screening Tool, Malnutrition Universal Screening Tool and Mini Nutritional Assessment – Short Form. Diagnostic assessment tools like Subjective Global Assessment, Mini Nutritional Assessment and the Academy of Nutrition and Dietetics-ASPEN approach use similar combinations of criteria to diagnose malnutrition (1-5).

Recently, the Global Leadership Initiative on Malnutrition (GLIM), that includes representatives of four major global nutrition societies with reach that spans Europe, North America, Latin America and

Asia agreed on criteria to diagnose malnutrition [6,7]. The GLIM effort is based on a unanimous desire to reach a global consensus on how to combine the etiologic and phenotypic criteria. GLIM advocates that the first step is screening for malnutrition risk using any validated screening tool, followed by diagnostic assessment and confirmation based on the combination of one of three phenotypic criteria; i.e. weight loss, underweight or low muscle mass, with one of two etiologic criteria; i.e. reduced food intake/food assimilation or high disease burden/inflammation. Over the first 18 months after the introduction of the GLIM concept the original papers have been cited >300 times and >25 validation studies (mainly for criterion validity and predictive validity) have been published, with findings supporting suitable GLIM validity.

Proposed amendment – “Malnutrition in adults”

We, representatives of the global nutrition community, including patient representatives, propose the following amendment to the current ICD-11:

“Malnutrition in adults” inserted under Nutritional disorders – Undernutrition, and on a similar hierarchical level as “Underweight in adults”, e.g. on the next available slot 5B72.

Furthermore, three entities specifying the condition should be added as children, and these will have post-coordination options.

The addition would likely not influence the current statistics, as the current ICD-11 does not have a relevant code for malnutrition in adults.

Proposed entities and post-coordination options

The search line for ICD-11 for Mortality and Morbidity Statistics should then be

05 Endocrine, nutritional or metabolic diseases

- Nutritional disorders

- Undernutrition

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5B54 Underweight in adults

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5B72 Malnutrition in adults

5B72.0 Malnutrition related to acute or chronic disease, injury or infection with moderate to severe inflammation

Post-coordination: XS0T Moderate
XS25 Severe

5B72.1 Malnutrition related to disease with non-discernible or low level of inflammation.

Post-coordination: XS0T Moderate
XS25 Severe

5B72.2 Malnutrition related to pure starvation

Post-coordination: XS0T Moderate
XS25 Severe

Descriptions for suggested entities

5B72 Malnutrition in adults

Definition

When malnutrition is confirmed by the presence of a combination of phenotypic criteria; e.g. weight loss, low body mass index or reduced muscle mass, and etiologic criteria; e.g. reduced food assimilation (intake/digestion/absorption) or disease burden/inflammation.

5B72.0 Malnutrition in adults related to acute or chronic disease, injury or infection with moderate to severe inflammation

Definition

When malnutrition is confirmed by the presence of a combination of phenotypic criteria, e.g. weight loss, low body mass index or reduced muscle mass, and the presence of a high disease burden with inflammation

Post-coordination: XS0T Moderate XS25 Severe

5B72.1 Malnutrition in adults related to disease with non-discernible or low level of inflammation

Definition

When malnutrition is confirmed by the presence of a combination of phenotypic criteria, e.g. weight loss, low body mass index or reduced muscle mass, and the presence of reduced food assimilation (intake/digestion/absorption) usually due to disease as the major etiologic criterion.

Post-coordination: XS0T Moderate XS25 Severe

5B72.2 Malnutrition in adults related to pure starvation

Definition

Presence of one of three phenotypic criteria; e.g. weight loss, low body mass index or reduced muscle mass that is related to reduced food intake due to hunger or food shortage associated with socio-economic or environmental factors.

Post-coordination: XS0T Moderate XS25 Severe

5B72.Y Other specified malnutrition in adults

Post-coordination: XS0T Moderate XS25 Severe

5B72.Z Malnutrition in adults, unspecified

Post-coordination: XS0T Moderate XS25 Severe

Suggested options for post-coordination

Suggested post-coordination options are moderate malnutrition and severe malnutrition. The options are defined by the magnitude of aberration in the phenotypic criteria.

References

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