



International Journal of Medical and All Body Health Research

Article: The impact of hospital malnutrition on patients in Somalia

Mowlid M. Isse

Independent Researcher, USA

* Corresponding Author: Mowlid M. Isse

Article Info

ISSN (online): 2582-8940

Volume: 06

Issue: 02

April-June 2025

Received: 09-03-2025

Accepted: 13-04-2025

Page No: 58-60

Abstract

Background. Poor diet-related feeding is a common problem in Somalia, primarily due to cultural issues, such as food selection, knowledge, and beliefs. The primary goal of this case study was to determine the malnutrition status of hospitalized patients in Somalia as well as the feeding of patients on diet. **Methods.** This case study was conducted in five main hospitals in Somalia between March 25 and April 5, 2025, and included 150 respondents.

This thesis used a semi-structured questionnaire and a Subjective Global Assessment Form (SGA) as nutrition assessment tools. The Statistical Package for the Social Sciences (SPSS) was used for data analysis.

Results. The most common foods consumed by hospitalized patients or given to them by their caregivers were (70.6 %) porridge and milk (13.7%), bread, rice, and spaghetti; (12.7%) organ meats such as liver, kidney, or heart such as lamb, goat, or camel; (2%) biscuits and cookies; and (1%) food for people on special diets. However, 62.7% of people chose food because of their softness and digestibility, despite doctors or physicians recommending only 19.6% of them. The nutritional status of most respondents was mildly or moderately malnourished (63.7 %), well-nourished (19.6%), and severe (16.7%). There is a significant research gap regarding the relationship between food selection and knowledge status. **Conclusions.** There are significant gaps in the literature regarding the nutritional status of patients in hospitals across the country.

DOI: <https://doi.org/10.54660/IJMBHR.2025.6.2.58-60>

Keywords: Hospital, Malnutrition, Nutrition, Screening, Assessment, and Diagnosis

Introduction

The Somali people consume a limited number of nutritious foods such as vegetables and fruits; however, the main staple commodities are canjeelo, maize, sorghum, rice, wheat, and pasta. Because of its affordability and accessibility, most Somali populations consume energy-based diets more frequently, consisting primarily of starchy carbohydrates, which have minimal nutritional value. (October 7, 2020, Somalia, nutrition-conscious diet) Poor diet-related feeding is a common problem in Somalia, primarily due to cultural issues, such as food selection, knowledge, and beliefs. Some foods, such as the liver, are not given to children under the age of five because it is thought that the child will develop speech problems; however, research has shown that when hospitalized patients do not receive a balanced diet, this can lead to a life-threatening situation or for patients to be hospitalized for an extended period of time, which can cause common problems, such as immune system depression, reduced wound healing, muscle wasting, and higher treatment costs. Inadequate dietary intake also leads to weight loss, lowered immunity, mucosal damage, attack of new pathogens, and impaired growth and development in children. If a sick person's nutrition is further compromised, other complications will develop, such as diarrhea, malabsorption, loss of appetite, diversion of nutrients for the immune response, and urinary nitrogen loss, all of which led to nutrient loss and further damage to defense mechanisms.

The primary goal of this work was to determine the malnutrition status of five main Hospital patients, as well as the feeding of patients on a poor diet. categorized common foods for inpatient feeding and provided key recommendations.

The study took place in Garowe and Mogadishu, Somalia, between March 25 and April 5, 2025, and included 102 respondents from Garowe general hospital, Qaran hospital, Arafat private hospital, Alhayat hospital and Shaafi Hospital. During data collection, a semi-structured questionnaire, and a Subjective Global Assessment form (SGA tool) were used as nutrition assessment tools. This instrument had enabled the diagnosis of malnutrition and categorized patients as either: A denotes good nutrition, B mild or moderate malnutrition, and C severe malnutrition.

Review of literature

In Somalia there was no preview Hospital Malnutrition study but according to other studies conducted in Africa the Malnutrition among individuals admitted to hospitals worldwide ranges from 11-74% (Álvarez-Hernández *et al.*, 2012) [5]. Nutritional screening is not frequently undertaken in Africa, and there are no credible statistics to show the scope of the problem. Knowing the prevalence of malnutrition and identifying at-risk patients as soon as possible should be a priority, as malnutrition is linked to an increase in hospital-related complications and infections (morbidity), a longer length of stay (LOS), increased treatment costs, and higher mortality. Malnourished patients are more likely to be readmitted after release, and they have higher rates of morbidity and mortality. However, efficient screening and referral of at-risk patients and prompt implementation of nutritional support have the opposite impact and improve clinical outcomes (Amaral *et al.*, 2008) [6].

Based on numerous reports worldwide, an estimated 13% to 69% of hospitalized patients are malnourished. Even though hospitalized patients are more prone to malnutrition; Clinical nutrition and nutritional assessment are often neglected components of the health service practice.

Research gap:

In Somalia, there was no search based on hospital malnutrition. This study will help to better understand the state of hospital malnutrition in Somalia and open up new avenues for further research.

Key concepts and definitions

According to the World Health Organization Malnutrition is defined as a lack or excess of nutrients, an imbalance of critical nutrients, or poor nutrient use. Malnutrition carries a double burden, including undernutrition, overweight and obesity, and diet-related noncommunicable diseases.

Malnutrition has been linked to increased consequences, including longer hospitalization, longer recovery times, and greater death. Malnutrition is common in hospitalized elderly people, as well as individuals with chronic and acute disorders. Malnutrition can have multiple causes. It is directly caused by insufficient nutrient intake, low nutrient bioavailability, and high needs. As a result, patients frequently fail to satisfy their daily calories, protein, and nutritional requirements.

Methodology

Purposive methodologies were used in the study, with all focus groups falling into the same category. The study took place in Garowe & Mogdishu, Somalia, between March 25 and April 5, 2025, and included 102 respondents from Garowe general hospital, Qaran hospital, Arafat private hospital, Alhayat hospital and Shaafi Hospital. During data collection, a semi-structured questionnaire, and a Subjective Global Assessment form (SGA tool) were used as nutrition assessment tools. This instrument had enabled the diagnosis of malnutrition and categorized patients as either: A denotes good nutrition, B mild or moderate malnutrition, and C severe malnutrition. For data analysis, we used the Statistical Package for the Social Sciences (SPSS), which is a powerful statistical software platform. The researcher met hospital management teams, explained to them the objectives of the study, key findings, and the importance of improving the services.

Findings / Analysis /Discussion

The most common foods consumed by hospitalized patients or given to them by their caregivers were (70.6%) porridge and milk, (13.7%) bread, rice, and spaghetti, (12.7%) organ meats like liver, kidney, or hearts, such as lamb, goat, or camel, (2%) biscuits and cookies, and (1%) food for people on special diets.

Sex of the responders: Most of the respondents were female (76, or 74.5%), and male (26, or 25.5%). The age of respondents was grouped as 20–35 (56.9%), 35+ (35.3%), and lowermost, 15–20 (7.8%). The respondents' highest level of education was college (54.9%), followed by basic education (43.1%), and no school (2%).

However, 62.7% of people chose food because of their softness and digestibility, despite doctors or physicians only recommending 19.6% of them. Softness and digestibility were the main factors in meal selection. It is cost-effective; 10.8% of respondents said their food had good nutrition, especially porridge; 5.9% believed it had good nutrition; and 1% believed it had both. Cooking is sometimes easy.

The nutritional status of most respondents was 63.7 percent mildly or moderately malnourished, 19.6 percent well-nourished, and 16.7 percent severely malnourished.

Table 1: Respondents by Gender

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
Female	76	74.5 %	74.5	74.5
Male	26	25.5%	25.5	100.0
Total	102	100 %	100.0	

Table 2: Age of Respondents

Age group	Frequency	Percent
15<20	8	7.8%

20<35	58	56.9 %
35+	36	35.3 %
Total	102	100 %

Table 3: What is the highest grade of the respondents' education?

	Frequency	Percent	Valid Percent	Cumulative Percent
Basic Education	44	43.1%	43.1	43.1
No School	2	2 %	2.0	45.1
College	56	54.9 %	54.9	100.0
Total	102	100 %	100.0	

Table 4: Which food do you normally use? (patient), Which food do you normally give this patient? (Caretaker)

	Frequency	Percent	Valid Percent	Cumulative Percent
Bread, rice, spaghetti,	14	13.7 %	13.7	13.7
Biscuits, cookies,	2	2 %	2.0	15.7
Liver, kidney, heart, or other organ meats like, Lamb, goat, camel, or other meat,	13	12.7%	12.7	28.4
Porridge and Milk	72	70.6 %	70.6	99.0
food for special dietary users	1	1 %	1.0	100.0
Total	102	100 %	100.0	

Table 5: What made you decide to consume this food? (patient), What prompted you to feed this food? (caretaker)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Doctors or physicians recommend	20	19.6%	19.6
	It is soft and digestible.	64	62.7 %	82.4
	Cooking can be simple.	1	1 %	83.3
	It is affordable	11	10.8 %	94.1
	It has good nutrition	6	5.9 %	100.0
	Total	102	100 %	100.0

Table 6: Malnutrition status

Malnutrition status	N	Percent
A: means well-nourished,	20	19.6 %
B: means mildly or moderately malnourished,	65	63.7 %
C: means severely malnourished.	17	16.7 %
Total	102	100 %

References

- Barker LA, Gout BS, Crowe TC. Hospital Malnutrition: prevalence, identification and impact on patients and the healthcare system. *International Journal of Environmental Research and Public Health*. 2011;8(2):514-527. <https://doi.org/10.3390/ijerph8020514>.
- Tesfaye E, Hailu M, Haile A. Prevalence and associated factors of malnutrition among adult hospitalized patients at Amhara National Regional State Referral Hospitals, Ethiopia. *Integrative Obesity and Diabetes*. 2015;1(3). <https://doi.org/10.15761/iod.1000117>.
- Norman K, Pichard C, Lochs H, Pirlich M. Prognostic impact of disease-related malnutrition. *Clinical Nutrition*. 2007;27(1):5-15. <https://doi.org/10.1016/j.clnu.2007.10.007>.
- Gout BS, Barker LA, Crowe TC. Malnutrition identification, diagnosis and dietetic referrals: are we doing a good enough job? *Nutrition & Dietetics*. 2009;66(4):206-211.
- Álvarez-Hernández J, Planas Vila M, León-Sanz M, García de Lorenzo A, Celaya-Pérez S, García-Lorda P, Araujo K, Sarto Guerri B. Prevalence and costs of malnutrition in hospitalized patients; the PREDyCES Study. *Nutrición Hospitalaria*. 2012;27(4):1049-1059. <https://doi.org/10.3305/nh.2012.27.4.5986>.
- Amaral TF, Antunes A, Cabral S, Alves P, Kent-Smith L. An evaluation of three nutritional screening tools in a Portuguese oncology centre. *Journal of Human Nutrition and Dietetics*. 2008;21(6):575-583. <https://doi.org/10.1111/j.1365-277x.2008.00917.x>.
- Asiimwe SB, Muzoora C, Wilson LA, Moore CC. Bedside measures of malnutrition and association with mortality in hospitalized adults. *Clinical Nutrition*. 2014;34(2):252-256. <https://doi.org/10.1016/j.clnu.2014.03.013>.
- Kyle UG, Kossovsky MP, Karsegard VL, Pichard C. Comparison of tools for nutritional assessment and screening at hospital admission: A population study. *Clinical Nutrition*. 2005;25(3):409-417. <https://doi.org/10.1016/j.clnu.2005.11.001>.
- Velasco C, García E, Rodríguez V, Frias L, Garriga R, Álvarez J, García-Peris P, León M. Comparison of four nutritional screening tools to detect nutritional risk in hospitalized patients: a multicentre study. *European Journal of Clinical Nutrition*. 2010;65(2):269-274. <https://doi.org/10.1038/ejcn.2010.243>.