Identifying Malnutrition in Hospital

December-28-18

Alberta Health Services

Nutrition & Food Services

Presentation Overview

- What is malnutrition?

- Case Study

- Prevalence of Malnutrition

- Canadian Nutrition Screening Tool

What is malnutrition?

- Malnutrition = "Undernutrition"

- Inadequate intake of energy, protein and other nutrients

- Long term needs to functional impairment
  - Muscle loss
  - Weakness

Malnutrition

- Occurs in all body types
- With or without fat loss

- Different from cachexia

A case of malnutrition in hospital

Mrs. Smith

- 83 year old female, widowed
- Living alone following the loss of her husband; Few supports
- Unable to grocery shop and prepare meals
- Diet: Mainly tea, crackers and canned items
- Significant weight loss

A case of malnutrition in hospital

Mrs. Smith (continued)

- Suffers a fall and resulting hip fracture

- No history on weight or food intake

- Focus only on rehabilitation and physiotherapy

- Appetite and weight decrease in hospital

- Length of stay: 197 days; eventual need for replacement

Mrs. Smith is never able to return home.

A case of malnutrition in hospital

Mrs. Smith was at risk for malnutrition and was not seen by a dietitian

If she was screened properly upon admission she would be identified as eating poorly and losing weight; information that could have changed her recovery
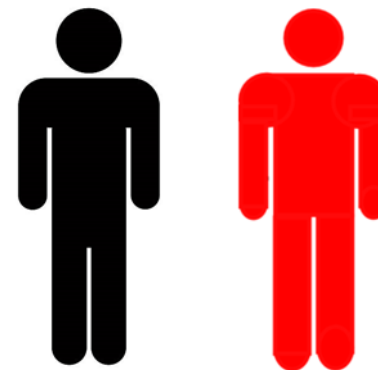
Prevalence of malnutrition

About __% of patients are malnourished at admission in hospitals across Alberta

a. 12

b. 47

c. 26

d. 65

Prevalence of malnutrition

Almost **50%** of adult patients
are malnourished at admission
in hospitals across Alberta

Nearly **1 in 2** patients

Prevalence of malnutrition

Only **1 in 4** of those entering the hospital malnourished are detected.

75% of malnourished patients are **missed.**

Impact of malnutrition

↑ Morbidity

↓ Wound Healing

↑ Infections

↑ Complications

↑ Convalescence

Increasing healthcare costs

Impact of malnutrition

↑ Mortality

↑ Treatment

↑ Length of stay in hospital

Decreasing patient quality of life

Hospital consequences

- **3 day** longer stay in hospital

- **$2000** average additional cost/ patient

- **2X** more likely to be readmitted

How to identify malnutrition?

Nutrition Screening

Ensures detection of all patients at risk for malnutrition within 24 hours

State of dietitian referrals

- 1 of 18 hospitals had a standardized screening program

- Dietitians saw 23% of patients (typically referral)

  - 45% of these patients were well nourished

  - 36% had mild/moderate malnutrition

  - 19% had severe malnutrition

- **75% of mild/moderate and 60% of severely malnourished patients were missed**

Source: Nutrition Care in
Canadian Hospitals Study
(2010-2013)

How can we improve?

We **need a process** that

- Is quick and simple
  - Conducted by admitting or front line staff

- Ensures the **right** patients are seen by the dietitian

Canadian Nutrition Screening Tool

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What is the Canadian Nutrition Screening Tool (CNST)?

- A valid and reliable tool to assess malnutrition risk in adult acute care

- Questions can be asked of family or friends or patient

- Can be completed by admitting or front-line staff

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Canadian Nutrition Screening Tool (CNST)

Affix patient label within this box

Date (yyyy-Mon-dd)	Weight
Patient Phone Number	Clinic/Unit

Identify patients who are at risk for malnutrition
Ask the patient the following questions

Have you lost weight in the past 6 months without trying to lose this weight?
(If the patient reports a weight loss but gained it back, consider it as a NO weight loss)
☐ Yes
☐ No

Have you been eating less than usual for more than a week?
☐ Yes
☐ No

Two "YES" answers indicate nutrition risk.
Patients at nutrition risk need an assessment to confirm malnutrition. Refer to a Registered Dietitian.

Comments *(Optional)*

Signature	Date (yyyy-Mon-dd)

* If the patient is unable to answer the questions, a knowledgeable informant can be used to obtain the information. If the patient is uncertain regarding weight loss, ask if clothing is now fitting more loosely.

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- Consists of 2 questions:
  - Weight loss in last 6 months
  - Appetite in last week

0-1 Yes answers:

- Full nutrition assessment does not need to be completed

- Proceed as usual for further patient treatment

2 Yes answers:

- Initiate process of RD referral

- RD assessment determines type of nutrition treatment or intervention

- Proceed as usual for further patient treatment

Will this affect treatment and intervention?

- No, nutrition treatment and intervention should not change

Where and when should CNST be used?

- The first pre-admission visit, the pre-admission clinic, or upon admission

Who will do the screening?

- Admitting or front-line staff
  - Nursing, Registered Dietitian

Will this affect my workload?

- More patients may be referred to the registered dietitian

- Fewer patients may be missed in malnutrition screening

When will the change happen?

- Consult your unit dietitian for more information

CNST – Screening standard

- Will help to standardize:
  - Malnutrition screening at all adult acute care site
  - The dietitian referral process
  - Provincial order sets

Summary

- **Malnutrition**
  - About 1 in 2 adult hospital patients
  - Negative impacts to healing and LOS

- **Canadian Nutrition Screening Tool (CNST)**
  - Standardized for adult acute care
  - Two questions – weight loss & appetite
  - 2 "yes" answers
    - Patient at malnutrition risk
    - Send Dietitian consult

Questions?

References

- Canadian Malnutrition Task Force. Canadian Malnutrition Screening Tool. 2014. Retrieved from http://nutritioncareincanada.ca/sites/default/uploads/files/CNST.pdf

- Allard JP, Keller H, Jeejeebhoy KN, Laporte M, Duerksen DR, Gramlich L, et al. Malnutrition at hospital admission-contributors and effect on length of stay: a prospective cohort study from the Canadian Malnutrition Task Force. J Parenter Enteral Nutr 2015 [cited 2018 March 14].

- Curtis LJ, Bernier P, Jeejeebhoy K, Allard J, Duerksen D, Gramlich L, Laporte M, Keller HH. Costs of hospital malnutrition. Clinical Nutrition. 2017 Oct 1;36(5):1391-6.