

Can We Increase Patients' Dietary Intake in Hospital?

Dwi Budiningsari

Presented in IFS Excursion, Aalborg Sygehus, 14 September 2012

Background

- More than 40% of hospital food was wasted, resulting in energy and protein intake of patients being less than 80% of that recommended.
- Inadequate nutrient intakes leads to a decline in nutritional status, even malnutrition, among hospitalized patients.
- The widespread problem of malnutrition in patients has been relatively stagnant at 20-60% over the last 30 years.

Problem Formulation: Objective 1

There are still unclear about a communication link and interaction between the kitchen and the wards



How to improve communication between the wards and the kitchen to ensure fulfillment of patients' nutrient requirements



To get feedback from patients and health care staff on their perspectives about practices to monitor food intake, local food, and communication with the hospital food service



Problem Formulation:

Objective 2



There also lacks validated methods for monitoring food intake of patients during their hospital stay in a simple & cost-efficient manner.

It is necessary to optimize and validate methods used to monitor dietary intake during patients' hospital stay

To measure the validity of an automated ICT method for monitoring dietary intake in hospitalized patients.

Problem Formulation:

Objective 3

There are also current efforts to promote local foods in terms of environmentally sustainable food systems & self-reliant food economies



It is important to test the effect of an intervention providing better hospital food in terms of local food and experience rich products to improve patients' nutritional intake



To assess the impact of an intervention based on local, experience rich foods on energy and protein intake of hospitalized patients



Theoretical Framework (Hartwell et al, 2006)

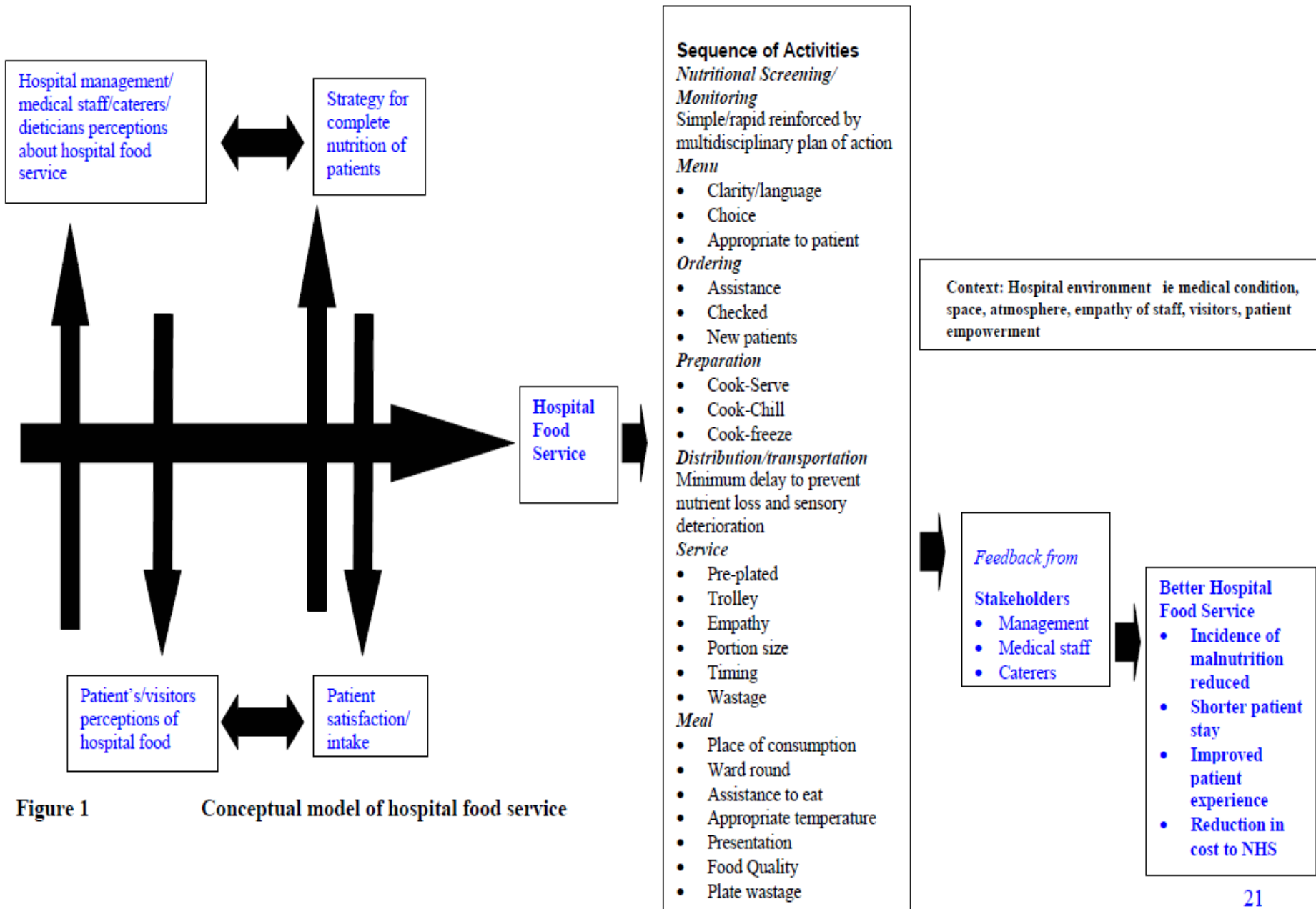


Figure 1 Conceptual model of hospital food service

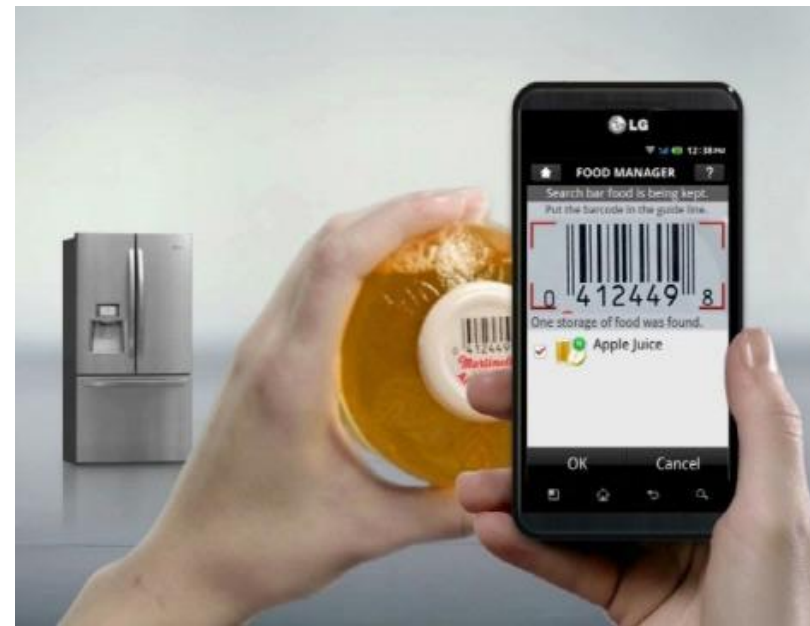
Methods

Baseline Study

- Focus group discussions (health assistants' perspectives):
 - provide food for patients;
 - strategies to increase patients' food intake;
 - local food issues.
- A structured quantitative questionnaires (patients' perspectives):
 - current food service practice data based on patients' characteristics (age, gender, nutritional status, ethnic background);
 - perception of food served by the hospital, their food preferences, the weeks menu/food choices, portion size, and local food issues.



Methods (cont')



Baseline Study

- Develop an automated ICT method to monitor patients' food intake as well as a patient interface ordering system--allows each patients to enter and track what they consume and how often they eat.
 - This methods will be tested by patients to get their feedback to enhance performance.
- Determine suitable method for validating automated monitoring tool.

Methods (cont')

Baseline Study

- Compare the new automated ICT method to monitor dietary intake to the 24-hour food record as current practice VS 24-hour weighed food record (researcher as a gold standard).
- Test a local and experience rich foods in a number of patients.
 - The most preferred menus will be used in the interventional study.



Methods (cont')

Interventional Study



O1

X

O2

- O1 : observation before intervention
(energy & protein intake)
- X : intervention
(local & experience rich foods)
- O2 : observation after intervention
(energy & protein intake)

Subjects of study

All adult patients in nutritional risk.

The exclusion criteria:

- unable to communicate coherently (e.g dementia, severely mentally and physically impaired);
- receiving non-oral feeding during hospital stay (enteral or parenteral nutrition only);
- do not provide informed consent.

Thank you very much for attention

