A snapshot on nutrition care

an initiative to improve healthcare

supported by

nutritionDay 2010
unit number

Gastroenterology and hepatology
an initiative to improve healthcare

supported by

NAME national project coordinator

Netherlands Society for Clinical Nutrition and Metabolism

Michael Hiesmayr international project coordinator

Medical University Vienna, Div. CTV Anaesthesia & Intensive Care
Aim and methods

• Aim
  – Increase awareness
  – Decrease barriers
  – Increase knowledge
  – Allow comparison of individual units with national and international reference bases
nutritionDay 2010 / **General Idea**

### Aim and methods

- **Methods**
  - One day cross-sectional audit
  - Get information from caregiver & patients
  - Hospital outcome evaluation
  - Unit report for participating units for comparison with specialty
nutritionDay 2010 / General Idea

Questionnaires harmonisation in 30 languages

One functional unit
an individual ward

caregiver
environment
patient

unit structures
1 page
caregiver’s view
1 line/patient:
patient’s view
1 page double sided
Unit ... Caregiver ... Patient

- Unit's perspective
  - Manpower
  - Resources
  - Patient population characteristics

- How do similar units work and perform?
Unit ... Caregiver ... Patient

• Patients interests
  – Will I recover?
  – When will I recover?
  – What enhances recovery?
  – How long will I have to stay in hospital?
Patient's interests

History
Risk factors

nutritionDay

Dependency
Disability
Death

How much am I eating?
Why am I eating less?

What will happen?
Worldwide’s public health view: economic & social progress

Resources allocation
Outcomes

Dependency
Disability
Death

History
Risk factors

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How much am I eating?
Why am I eating less?

What will happen?

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- 30 languages
- 40 countries
- 2441 units/wards
- 74903 patients
nutritionDay 2010 / Worldwide participation

Specialities of participating units

- Others
- Pediatrics
- Psychiatry
- Infectious diseases
- Trauma
- Long-term-care
- Gynecology
- Neurosurgery
- Cardiothoracic surgery
- Nephrology
- Ear Nose Throat (ENT)
- Cardiology
- Orthopedic surgery
- Neurology
- Oncology and Radiotherapy
- Gastroenterology and Geriatrics
- General internal medicine
- General surgery

456 Reference Units
nutritionDay 2010 / **Resources (worldwide vs your unit)**

**Unit Size & unit manpower**

- **Actual number of beds**
  - 36%
  - 28%
  - 18%
  - 6%
  - 6%
  - 6%
  - 0%
  - 6%

- Your unit is in this category: [Diagram showing the category]
nutritionDay 2010 / **Resources (worldwide vs your unit)**

### Unit Size & unit manpower

- **Patients / medical doctor**
  - 19%
  - 24%
  - 22%
  - 19%
  - 24%
  - 22%
  - >10

- Your unit is in this category.
nutritionDay 2010 / **Resources (worldwide vs your unit)**

**Unit Size & unit manpower**

![Pie chart showing distribution of patients to nurses](chart.png)

- 29% (6% and 2% combined)
- 20%
- 2%
- 4%
- 6%
- >8%

*© nutritionDay 2010*

**your unit is in this category**

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**supported by**
Nutrition team & guidelines

Nutrition support team in your hospital?

- 21% NO
- 79% YES*

* your unit is in this category
Is someone interested in Nutrition Support in your unit?

- 70% YES*
- 30% NO

* your unit is in this category
Recruitment

The recruitment proportion is calculated as number of patients participating divided by number of actual beds. In most units nearly all patients present were recruited and this increases the validity of the results for this unit.

* your unit is in this category
nutritionDay 2010 / Demographics (worldwide vs your unit)

Gender

Female gender proportion

- <20
- 21-40
- 41-60*
- 61-80
- 81-100

* your unit is in this category

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nutritionDay 2010 / Demographics (speciality vs your unit)

Age distribution

% patients

![Age distribution bar chart showing comparison between speciality and your unit across different age categories.](chart_image)
nutritionDay 2010 / **Speciality vs your unit**

**Affected organs**

- no affected organs
- pregnancy
- nose, throat
- ischaemia
- skin
- eye, ear
- blood, bone marrow
- skeleton, bone, muscle
- brain, nerves
- infection
- others
- lung
- kidney, urinary tract
- heart, circulation
- endocrine system
- cancer
- liver
- gastrointestinal tract

% patients

- speciality
- your unit
nutritionDay 2010 / **Speciality vs your unit**

**Comorbidities**

- no comorbidities
- myocardial infarction
- stroke
- COPD
- cardiac insufficiency
- diabetes I/II
- others

% patients

- speciality
- your unit

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nutritionDay 2010 / Speciality vs your unit

Weight loss before admission

17/17 patients (100%) answered this question in your unit, in your speciality (77%)
Weight loss before admission

100% = all patients with weight loss
nutritionDay 2010 / **Speciality vs your unit**

**Last weeks eating**

17/17 patients (100%) answered this question in your unit, in your speciality (80%)
Body Mass Index

**Worldwide:**
- BMI (Med) 24.4
- BMI ≤ 20 14.6%
- BMI > 30 14.7%

**Your unit:**
- BMI (Med) 27.1
- BMI ≤ 20 7.7%
- BMI > 30 15.4%
nutritionDay 2010 / Speciality vs your unit

BMI

% patients

- missing
- >40
- 30-40
- 25-30
- 18.5-25
- <18.5

speciality

your unit

0 20 40 60 80

<18.5
18.5-25
25-30
30-40
>40
missing

% patients

speciality

your unit
Nutrition given to patients

- Hospital food
- Special diet
- EN
- PN
- EN+PN
- Protein supplement
- Others
- missing

% patients

<table>
<thead>
<tr>
<th></th>
<th>speciality</th>
<th>your unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital food</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Special diet</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>EN</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PN</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>EN+PN</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
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<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>missing</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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Please tick a circle for each meal to indicate how much you ate and drank today (see example):

| ~ 200ml | all | 1/2 | 1/4 | nothing | I did not eat everything because (please tick):
|---------|-----|-----|-----|---------|------------------------------------|
| 2       | 1   |     |     | X       | ○ I was not hungry
|         |     |     |     |         | ○ I had nausea/vomiting
|         |     |     |     |         | ○ I was not allowed to eat
|         |     |     |     |         | ○ I could not eat without help
|         |     |     |     |         | ○ I had an examination/surgery and missed my meal
|         |     |     |     |         | ○ I ordered a smaller portion

Please indicate for one meal:

| all | 1/2 | 1/4 | nothing | I did not eat everything because (please tick):
|-----|-----|-----|---------|------------------------------------|
|     |     |     |         | ○ I was not hungry
|     |     |     |         | ○ I was tired
|     |     |     |         | ○ I had nausea/vomiting
|     |     |     |         | ○ I normally eat less
|     |     |     |         | ○ I was not allowed to eat
|     |     |     |         | ○ I did not like the smell
|     |     |     |         | ○ I cannot eat without help
|     |     |     |         | ○ I did not like the taste
|     |     |     |         | ○ I had an examination/surgery and missed my meal
|     |     |     |         | ○ I ordered a smaller portion

This meal was:

<table>
<thead>
<tr>
<th>Lunch</th>
<th>Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Do you think you have your usual appetite today?

○ YES  ○ NO

If NO, ○ I am not hungry ○ I have problems with chewing/swallowing
○ nausea ○ others ____________

Do you eat any food apart from hospital food?

○ YES  ○ NO

If YES, what do you eat?

○ cakes, biscuits ○ fresh fruits ○ sandwich ○ dairy products
○ my favorite dish ○ sweets ○ fruit juice ○ others ____________
Please tick a circle for each meal to indicate how much you ate and drank today (see example):
I did not eat everything because:

(please tick)
- I was not hungry
- I had nausea/vomiting
- I was not allowed to eat
- I did not eat without help
- I had an examination/surgery and missed my meal
- I ordered a smaller portion
- I was tired
- I normally eat less
- I did not like the smell
- I did not like the taste
Reference cohort (speciality): outcome ≥ 75%

17/17 patients (100%) answered this question in your unit, in your speciality (77%)
Lunch eaten on nutritionDay

Specialty

Death in hospital before 30 days following ND

Specialty

Reference cohort (speciality): outcome ≥ 75%
nutritionDay 2010 / Outcome (speciality vs your unit)

Hospital discharge?

Reference cohort (speciality): outcome $\geq 75\%$

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**Remark:**
Length of stay (LOS) calculated from ND relates only to the patients actually present in the unit and thus does not match mean LOS as known by the hospital administrators for all their patients.

Please use only to determine which group of patients predominates within your patient population compared with the reference specialty.

**Patients still in hospital are excluded.**
nutritionDay 2010 / **Conclusion**

**nutritionDay 2010 in worldwide Hospitals**

- ND increases awareness
- ND information:
  - High prevalence of weight loss & reduced intake before admission in hospitalised patients
  - Large effect on hospital resource utilisation
  - High variability between units
- Please use this information to review and, perhaps, change practice in your unit
Decreased food intake is a risk factor for mortality in hospitalised patients: The nutritionDay survey 2006 (Clin Nutr 2010 28 (4))


The first nutritionDay in nursing homes: Participation may improve malnutrition awareness (Clin Nutr 2010 28 (2), 109-116)

nutritionDay 2010 / Future

nutritionDay 2010 in worldwide Hospitals

- Consider repeating nutritionDay data collection on a regular basis (every year) to monitor changes or stability in your practice
- or changes in your speciality

More information about nutritionDay on:
http://www.nutritionday.org
email:office@nutritionday.org