



# Dehydration in Long Term Care: The Nurse's Role in Guiding the Interdisciplinary Team

*Welcome to the  
Elizabeth McGown  
Training Institute*



# Disclosures to Participants

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Title of Activity:

Dehydration in Long-Term Care: The Nurse's Role in Guiding the Interdisciplinary Team



# Disclosures to Participants

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### Requirements for Successful Completion:

The purpose of this education activity is to enhance the knowledge of the long-term care and assisted living registered nurse in the area of dehydration among patients in long-term care facilities by addressing hydration habits among these patients, appropriate care planning for patients in long-term care, and how to instruct and guide the interdisciplinary team in the management of hydration in an effort to improve outcomes related to hydration for patients in the long-term care setting as evidenced by the RN's achievement of the activity learning objectives and a passing score on the activity post-test.



# Disclosures to Participants

- The objectives of this education activity are:
  1. The participant will identify the four major hydration habits among residents in long-term care.
  2. The participant will list ten essential conditions that must be addressed on a resident's plan of care to guide the interdisciplinary team in addressing hydration requirements for residents.
  3. The participant will be discuss how to guide and direct caregivers to recognize and report signs and symptoms of dehydration.
  4. The participant will identify five areas for intervention that should be addressed by the multidisciplinary team.
  5. The participant will explain issues associated with withholding fluids at end of life.

# Presenter

Maria Wellisch, RN, BBA, LNFA



Contact Maria

Email: [mariaw@mmlearn.org](mailto:mariaw@mmlearn.org)



# Disclosures to Participants

- To receive contact hours for this continuing education activity, the participant must:
  - » Complete and submit an evaluation form
  - » Achieve a passing score of 80% on the activity post-test
- Once successful completion has been verified, a “Certificate of Successful Completion” will be awarded for 1.2 contact hours.

# Disclosures to Participants


- Conflicts of Interest
  - » **Explanation:** A conflict of interest occurs when an individual has an opportunity to affect or impact educational content with which he or she may have a commercial interest or a potentially biasing relationship of a financial nature. All planners and presenters/authors/content reviewers must disclose the presence or absence of a conflict of interest relative to this activity. All potential conflicts are resolved prior to the planning, implementation, or evaluation of the continuing nursing education activity. All activity planning committee members and presenters/authors/content reviewers have submitted Conflict of Interest Disclosure forms.
- The planning committee members and presenters/authors/ content reviewers of this CNE activity have disclosed the following relevant financial relationships related to the planning or implementation of this CNE activity.
  - » Person's Name: Elizabeth Woods, BSN, RN
  - » Name of Commercial Interest: Lilly USA
  - » Nature of Relationship: Consultant Nurse Educator



# Disclosures to Participants

- This activity expires: 8/3/2016
- Reporting of Perceived Bias:
  - » Bias is defined by the American Nurses Credentialing Center's Commission on Accreditation (ANCC COA) as preferential influence that causes a distortion of opinion or of facts. Commercial bias may occur when a CNE activity promotes one or more product(s) (drugs, devices, services, software, hardware, etc.). This definition is not all inclusive and participants may use their own interpretation in deciding if a presentation is biased.
  - » The ANCC COA is interested in the opinions and perceptions of participants at approved CNE activities, especially in the presence of actual or perceived bias in continuing education. Therefore, ANCC invites participants to access their "ANCC Accreditation Feedback Line" to report any noted bias or conflict of interest in the education activity. The toll free number is 1(866) 262-9730.

# Want to ask a question or make a comment?

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- If you are watching this presentation live you may phone in a question to  
(210) 734-1133.

# Dehydration

- A serious problem for long-term care facility residents
- 1/3 of residents in Long Term Care facilities experience a dehydration episode in a 6 month period

# Way More Than Fluid Rounds



# How Serious?

- The most serious consequence of dehydration is death.
- Dehydration is a “sentinel event”



# Sentinel Event

- A sentinel event is an unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof.

# Objective 1

- Participant will identify the four major hydration habits among residents in long term care

# Four Major Categories for Hydration Habits for Residents in LTC

1. Can Drink-
  - » *Functionally capable of accessing and consuming but may be cognitively impaired, forget to drink, don't know importance*
2. Can't Drink
  - » Physically incapable of accessing or safely consuming
3. Won't Drink
  - » Concerns about reaching the toilet
4. End of Life
  - » Terminally ill



## Objective 2

- Participant will list ten essential conditions that must be addressed on a resident's plan of care to guide the interdisciplinary team in addressing hydration requirements for residents.

# Causes For Dehydration in the Elderly

- Age- increased age increased risk
- Decreased content of body water
- Decreased thirst response
- Physical or mental inability to consume fluids
- Depression, alteration in mood or cognitive status



# More Causes

- Renal changes
- Dysphagia
- Poor dietary intake
- Lack of available fluid
- Warm environmental temperature



# Important Contributing Factors to Inadequate Hydration

- Fever
- Infection
- Nausea, Vomiting, Diarrhea
- Excessive activity
- Excessive perspiration
- Wound Drainage



# More Contributing Factors

- Medications that cause fluid loss
- Tube feedings
- Uncontrolled Diabetes
- Shortness of breath/mouth breather/ventilator
- Enemas



# Can We Identify Residents at Greatest Risk?

- Female
- Bedridden
- Acute Illness
- Age 85 or older
- Resident takes four or more meds per day
- 4 or more chronic illnesses



# Risk Assessment Tool

## DEHYDRATION RISK APPRAISAL CHECKLIST

Patient  
ID \_\_\_\_\_

The greater the number of characteristics present, the greater the risk for hydration problems. Please check all that apply.

☐ >85 years

☐ Female

☐ BMI <21 or >27

[BMI=weight(kg)/height(m)<sup>2</sup>]

### Significant Health Conditions

☐ Dementia/+screen for cognitive impairment

☐ Depression/+screen for depression

☐ CVA

☐ Diabetes

☐ Urinary Incontinence

☐ Renal Disease

☐ Cardiac Arrhythmias

☐ Malnutrition

☐ History of Dehydration

☐ History of repeated infections

### Medications

☐ >4 medications  
Laxatives

☐

☐ Steroids

☐ ACE Inhibitors

☐ Diuretics

☐ Psychotropics: Antipsychotics,  
Antidepressants, Anxiolytics

### Intake Behavior

☐ Requires assistance to drink

☐ Has difficulty swallowing/Chokes

☐ Can drink independently but forgets

☐ Poor eater (eats <50% of food)

☐ Semi-dependent with feeding

☐ Fluid intake of <1,500ml/day

☐ Spills

☐ Receives tube feedings

### Laboratory Indicators

☐ Urine specific gravity >1.020

☐ Urine color dark yellow

☐ BUN/Creatinine>20.1



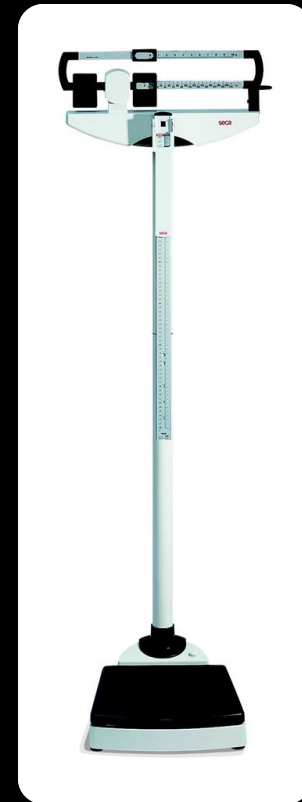
## Objective 3

- Participants will be prepared to instruct and guide direct care givers to recognize and report signs and symptoms of dehydration.



# Signs and Symptoms

- Sunken cheeks
- Sunken eyeballs
- Dry, brown tongue, mucous membranes
- Dry, inelastic skin
- Weight loss
- Concentrated urine
- Constipation and impaction



# More Signs and Symptoms

- Nausea and anorexia
- Abnormal lab values- elevated hemoglobin and hematocrit, potassium, chloride, sodium, albumin, BUN-

# Signs and Symptoms


- Postural hypotension
- Hypotension\
- Increase pulse
- Elevated temperature
- Weakness- upper body
- Mental Confusion



# Even More S&S

- Greater than 3 pound weight loss within 7 days
- Delusions, dizziness, delirium
- Unsteady gait
- Headache
- Flushed appearance

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# Interventions to Prevent Dehydration

## Objective 4

- Participant will identify five areas for intervention that should be addressed by the interdisciplinary team.

# Cultural Differences

- Social Service and Dietary Departments
  - » Interviews with residents regarding preferences and input into care plan
    - Examples here are afternoon tea
    - Warm liquids
    - Concerns about incontinence
    - Food/ fluid preferences

# Effect of Food on Hydration

- Lettuce – (96%)
- Asparagus- (92%)
- Chicken- (63%)
- Potatoes- (80%)
- Bread- (36%)





# Medication Passes

- RN, LVN, Medication Aides



# Med Passes

- Policy and consistent amount of fluid to be administered with each med pass.



# Special Note

- Antipsychotic medications may blunt thirst response
- Residents with dysphagia – poor palatability of thickened liquids
- NPO- fasting too long for procedures

# Medications

- The body uses water as a diluent and vehicle for medications.
- MEDICATION TOXICITY IN RESIDENTS WHO ARE DEHYDRATED?
- Diuretics
- Laxatives

# Providing Liquids Between Meals

- Nursing Assistants and Activity Coordinators





# Interventions

- Be Creative









# Working with Dietician

- Resident likes and dislikes
- Beverages and snacks with activities
- Jello, soup, sherbet



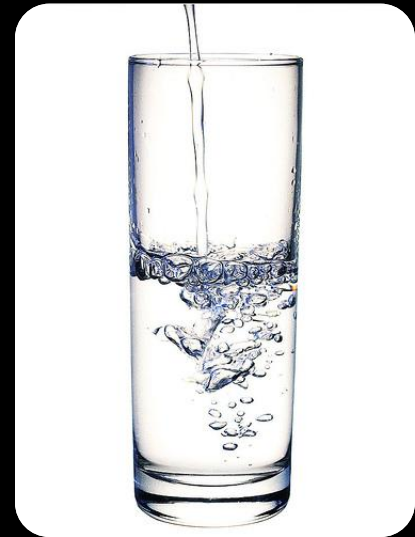
# Training

- Water Pitchers at the bedside
- Within reach of the resident
- Feeding assistance
- Weighing accurately
- Observation for signs and symptoms of dehydration



# Fluid Intake Includes:

- All fluids consumed
  - Includes fluids on meal trays
  - Fluids given during medication pass
  - Fluids consumed during activities



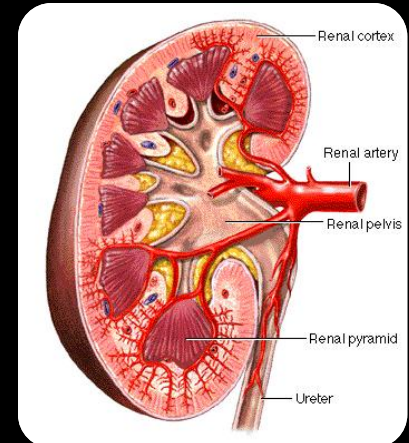
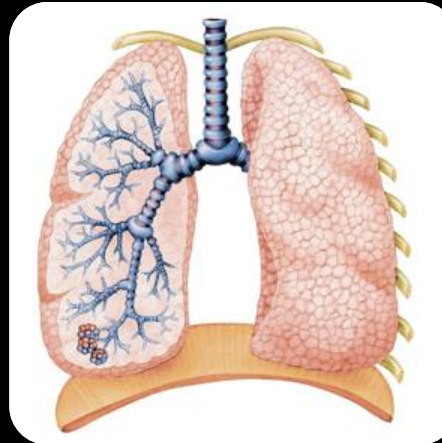
# Residents with Physical Disabilities

- Unable to reach fluids
- Difficulty opening containers



# Minimum Fluid Needs to Prevent Dehydration

- Daily requirements
  - » Intestines 125 mL
  - » Breathing 335 mL
  - » Lungs 500 mL
  - » Skin 500 mL
  - » Kidneys 1, 375



# I&O Monitoring

- All residents receiving tube feeding
- Residents with catheters
- Residents with Urinary Tract Infections
- Physician orders
- Residents with known dehydration or at risk
- Certain Kidney/Renal Conditions
- Residents receiving IV fluids

# I&O

Any Resident with:


- Fever
- Vomiting
- Diarrhea
- with a non-febrile infection
- Unexplained weight loss or gain

# Quality Assurance

- Trends to identify risks for dehydration
  - » Noted infections
  - » UTI's
  - » Falls
  - » Pressure Ulcers
  - » Quality Indicators
  - » MDS



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## Objective 5

- Participant will discuss one issue associated with those who elect withholding fluids at end of life and one issue associated with opponents for withholding fluids at end of life.

# End of Life Issues

- Withholding fluids at the end of life is still a controversial issue
  - » Proponents-dehydration in terminally ill is not painful and lessens excessive pulmonary secretions, nausea, edema and pain
  - » Opponents-suggest that associated symptoms of dehydration, such as confusion, delirium are stressful and reduce quality of life

# Residents with Dementia

- Forget to drink
- Need cueing
- May consume more sweet fluids
- May have excessive locomotion and increase needs for more fluids

# Evaluation

Live (onsite)

Complete the evaluation provided to you.

Online (self-paced)

Click on the link provided to you via email for the post-test and complete test/evaluation.



# Resources

- Texas Department of Aging and Disability Services, Quality Assurance and Improvement, Quality Monitoring Program Resources, Dehydration
- <http://qmweb.dads.state.tx.us?Dehydration.asp>
- Dehydration in terminally ill patients. Perceptions of long-term care nurses. Chritchlow J, Bauer. Pub Med, [www.ncbi.nlm.nih.gov/pubmed/12567824](http://www.ncbi.nlm.nih.gov/pubmed/12567824)

**Thank You!**



## De Clerck tries to dehydrate Marcel Vervloesem to death

Jacqueline de Croÿ - 24 décembre 2009

While the Belgian Prime Minister requests an "ongoing effort" to fight against corruption and for the implementation of Human Rights from the new AFGHAN government and he renews the mission of his minister of justice to murder Marcel Vervloesem, jailed for having provided the evidence of the corruption that covers-up the sexual exploitation of children and the massive swindling. The doctors have instruction to "avoid the hospitalisation", which means at this hour, to ensure a diabetic coma by dehydration, and destroy his kidneys, for if ever he survives to his heart failure.

Marcel Vervloesem presents the clinical signs of dehydration that requires urgent intensive care: when the patient goes blind and his skin loses its elasticity, to the point that when it is pulled-up, it shape folds in the skin that does not flatten when it is released. He has lost eight kilos in three weeks and the glucose level of his blood exceeded the threshold of diabetic coma for twelve days. He vomits and hardly can stand up.

The control of the press has achieved a massive psycho-economical lobotomy. More the civil servants are assigned responsibilities, the greater is the distance between the prisoners, the more they dehumanize. The brainwash shows-up by the same sentences they repeat one after the other, from one office to the other. Only the prison warders and the prison nurses are furious. Their job is to ensure a fair and humane community life to the prisoners, and not to monitor a man's murdered by dehydration.

In 2005, Laurette Onkelinx, then Minister of Justice and now Minister for Health, had failed in a first murder attempt by forbidding the hospitalisation of Marcel Vervloesem. At the request whether if it was normal to wake-up a heart patient every fifteen minutes, a civil servant had replied: "No, we do not wake him up every quarter of an hour: we just check if he is not dead."



Skin with decreased turgor remains elevated after being pulled up and released

ADAM.



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## Dehydration



[Dehydration Slideshow](#) 

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### What is dehydration?

The majority of the body is made up of water, with up to 75% of the body's

FONT SIZE



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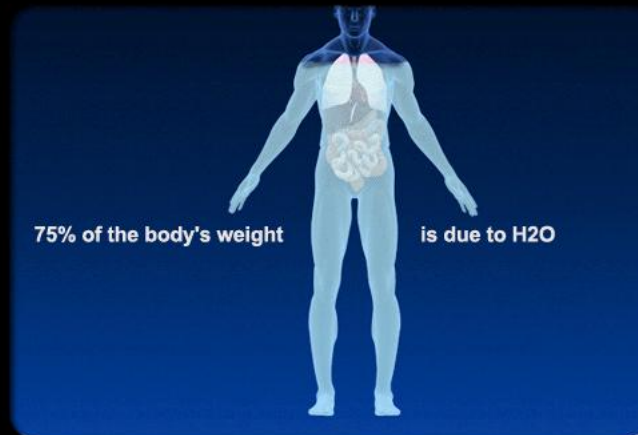
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Doctor to Patient



Exercise-Associated Hyponatremia:

## Dehydration Pictures Slideshow: Causes, Symptoms and Tips to Stay Hydrated



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### Our Body of Water

The majority of the body is made up of water with up to 75% of the body's weight due to H<sub>2</sub>O. Most of the water is found within the cells of the body (intracellular space). The rest is found in the extracellular space, which consists of the blood vessels (intravascular space) and the spaces between cells (interstitial space).

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Reviewed by Melissa Conrad Stöppler, MD on September 25, 2009



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Thank you!