TITLE:  Prevention of Dehydration in Geriatric Patients in Long-Term Care: Guidelines

DATE:  17 July 2014

RESEARCH QUESTION

What are the evidence-based guidelines regarding the prevention and identification of dehydration in geriatric patients in long-term care?

KEY FINDINGS

Four evidence-based guidelines were identified regarding the prevention or identification of dehydration in geriatric patients in long-term care.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (July 2014, Issue 7), University of York Centre for Reviews and Dissemination (CRD) databases, CINAHL, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, and guidelines. Where possible, retrieval was limited to the human population and English language documents. No date limits were applied. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by based evidence-based guidelines.

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Four evidence-based guidelines were identified regarding the prevention or identification of dehydration in geriatric patients in long-term care. No relevant health technology assessments or meta-analyses were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

Four evidence-based guidelines\(^1-4\) were identified regarding the prevention or identification of dehydration in geriatric patients in long-term care.

The Hartford Institute for Geriatric Nursing produced guidelines that highlight the importance of identifying acute situations that may lead to dehydration such as episodes of vomiting, diarrhea, and fevers.\(^1\) To assess the risk of dehydration, these guidelines recommend using the Dehydration Appraisal Checklist tool\(^1\) along with identifying physical signs and symptoms, observing both fluid intake and output, and performing tests to assess the blood urea nitrogen/creatinine ratio (BUN/Cr).\(^3\) In addition, they recommend that the prevention of dehydration be achieved by maintaining fluid and electrolyte balance through the administration of a minimum of 1,500 to 2,500 mL/day of fluid from food or liquids to adults weighing from 50 to 80 kgs.\(^2\)

The American Medical Directors Association guidelines on dehydration and fluid maintenance in the long-term care setting\(^4\) focus on several aspects related to the risk factors associated with the development of dehydration such as altered thirst, decreased cognitive function, increased fluid losses, and limitations in oral intake. These guidelines also list potential indicators of increased dehydration risk, the signs and symptoms requiring the need for clinical evaluation, and the requirement of performing laboratory tests (as a verification measure) as quickly as possible in those suspected of being dehydrated.\(^4\) Reasonable efforts should be made to prevent dehydration and should include strategies such as, but not limited to, emphasizing the importance of hydration, proper communication, discussing factors responsible for causing dehydration, the management of urinary incontinence, the use of juice carts or frozen juice bars, and swallowing exercises.\(^4\)
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Guidelines and Recommendations

   See: Nursing Care Strategies, A. Risk identification, no. 2

   See: Nursing Care Strategies

   See: Parameters of Assessment, A. Assess for risk factors, no. 6 Nursing Care Strategies, B. Eliminate or minimize risk factors, no. 3


   See: Recognition: Step 1 (Tables 1 & 2), Step 2 Assessment: Steps 3-6 Monitoring and Prevention: Steps 9 and 10

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**APPENDIX – FURTHER INFORMATION:**

**Systematic Reviews and Meta-analyses – Setting Not Specified**

   PubMed: PM12801253  
   Structured abstract available from:  

**Non-Randomized Studies**

   PubMed: PM24521507

   PubMed: PM21469538

   PubMed: PM20509595

   PubMed: PM10570686

**Clinical or Best Practice Guidelines – Methodology Uncertain**

    [http://rgp.toronto.on.ca/torontobestpractice/Policyprocedurehydration.pdf](http://rgp.toronto.on.ca/torontobestpractice/Policyprocedurehydration.pdf)

**Setting or Target Population Not Specified**


    Summary available from:  

See: Signs/Symptoms of Dehydration and the Treatment Thereof
Guidelines for Nursing Homes

Review Articles


Additional References


See: Section on Hydration