

Quality Is No Accident

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DID YOU KNOW?

An analysis of Emergency Room (ER) visits for DDS clients between Oct. 2011-Sept. 2012 revealed that UTI's, dehydration, and constipation accounted for 9% of ER admissions.

About 50% of adults supported by DDS regularly take medications that can result in constipation.

Constipation may be an underlying cause for behavioral issues. In a study of adults with intellectual disabilities admitted to the hospital for psychiatric care due to significant behavioral issues, over 60% were found to also have constipation.

(Charlot, L., Abend, S., & Ravin, P., et al (2011), Non-psychiatric health problems among psychiatric inpatients with intellectual disabilities. JIDR, 55: 199-209.)

Preventable Hospital Use: Dehydration, Constipation, and UTI

Dehydration, constipation, and urinary tract infections (UTI's) are medical conditions that can usually be treated in the community or avoided altogether. Without proper care and management, they may lead to other health conditions, pain, behavioral issues, unnecessary emergency room use, hospitalizations, and even death.

This brief provides information and focuses on recognizing risk factors for these conditions and strategies to prevent them. The final section presents information about how frequently these conditions are seen in people served by DDS.

Support staff, care providers, and health care providers play an important role in managing a person's risk for developing these conditions. Sometimes minor changes in a person's behavior or mood is the best early warning sign. Careful review of risk factors and development of plans to monitor for these conditions is a cornerstone of quality care.

Conditions

Dehydration: When a person does not have enough fluid in their body to maintain blood pressure and other bodily functions.

Constipation: Occurs when a person has trouble moving their bowels – either straining to go or not moving their bowels regularly. Constipation is the result of food taking too long to pass through the intestines or because a person has difficulty pushing the stool out of the rectum.

UTI: An infection occurring when bacteria grow in the bladder. UTI's are more common in women.

- Baldor, Robert, MD. "The Fatal Four." Powerpoint presentation at the DDS Be Aware – Take Care Prevention Conference, Devens, MA. October 2012.

Strategies for Managing Risk

People who cannot talk are at a higher risk of developing dehydration, constipation, or an UTI because they may have difficulty communicating thirst or other early warning signs like pain or discomfort. People who depend on others for food or fluid intake are also at high risk for these conditions, as are people who depend on others for reminders or assistance with toileting.

Risk factors to consider:

DEHYDRATION

- Frequent refusal of foods or fluids
- Dysphagia with coughing and/or choking during meals
- High blood pressure medications
- Antidepressants
- Use of laxatives
- Dependency on others for assistance with drinking or access to fluids
- Episodes of vomiting and/or diarrhea

ACTION STEPS:

- Use hydration programs that offer a variety of fluids, frequently
- Include fruits (especially watermelon), vegetables, and soups that are mostly water-based in diets
- Review medications for side effects

CONSTIPATION

- Nerve or muscle problems like Spina Bifida or muscle weakness
- Lack of fiber in diet
- Poor swallowing with aspiration risk
- Antipsychotic medications like clozapine, thioridazine, olanzapine, and chlorpromazine
- Antidepressants
- Calcium supplements
- Lack of regular exercise
- Wheelchair use or limited mobility
- Ingestion of non-food items or Pica
- Prior history of constipation

ACTION STEPS:

- Increase fiber (up to 20g/day)
- Miralax, fiber-acting agents, or laxatives may be prescribed
- Drink enough fluids, check with your health care provider
- Establish a toileting routine with enough time in an upright position
- Record daily bowel movements which may include amount, character, associated blood, and discomfort

UTI's

- Wheelchair use/immobility
- Kidney problems
- Diabetes
- Prior history of UTI infections
- Kidney stones
- Women
- Dehydration
- Being sexually active
- Having urinary tract abnormalities
- Older Men
- Use of incontinence undergarments or catheter
- Improper perineal cleaning technique

ACTION STEPS:

- Ensure adequate fluids
- Establish toileting routine for regular voiding to avoid holding urine
- Change incontinence undergarments frequently
- Use proper perineal cleaning technique
- Unsweetened cranberry juice may help with prevention
- Track daily fluid and urine outputs including color

Remember: Low Fluid Intake contributes to dehydration, constipation, and UTI's. Left untreated, conditions can worsen to require hospitalization or even cause death.

Prevention

The number one strategy for prevention is to maintain consistent hydration:

- Offer drinks regularly and before a person becomes thirsty (an early indicator of dehydration)
- Each time staff take a drink, remember to also offer a drink to those dependent on staff for fluids
- People on psychotropic medications or laxatives (ex. Miralax, ducosate) may require additional fluids
- People should be encouraged to drink 8-10 glasses of fluid every day; If the person is reluctant to drink fluids, offer foods high in fluid content
- Provide drinks not only at mealtimes, but in between meals too

Tip: Offer a **variety** of beverages. Taste buds change with age and can be affected by medication, so a beverage that someone used to enjoy may no longer taste right.

Tip: A person's sense of thirst becomes less acute as they age. Many people have difficulty communicating thirst! If you are thirsty, chances are so are the people in your care.

Recognize Symptoms Early:

Be alert to subtle signs and symptoms, which can look differently in different people.

UTI's: Frequent trips to the bathroom or avoiding urinating, increased touching or itching of the genital area, crying during or immediately following urination, new onset or incontinence in someone who uses the bathroom independently, decrease in appetite, fever. Sudden changes in behavior, such as an increase or an onset of irritable or aggressive behaviors. Sudden confusion, for example, not being able to do tasks that the person could easily do a day or two before. UTI's can make dementias temporarily worse for people suffering from Parkinson's, Alzheimer's, or other dementia.

Constipation: Stomach bloating or tenderness, small stools, hard stools, grunting or straining during bowel movements, decreased appetite for food or drink, irritable or aggressive behaviors. Infrequent or irregular bowel movements (less than 3 per week with lumpy or hard stool that is difficult to pass). Sometimes loose watery stools can be a sign of severe constipation as well.

Dehydration: Dry skin, dry cracked lips, problems with walking or falling; dizziness or headaches; tiredness or sleepiness; dark urine; decreased urination; dry or sticky mouth and tongue; sunken eyes; low blood pressure or constipation. One can check for a decrease in skin fluid by pulling up the skin on the back of the hand; if it does not return to normal within a few seconds, the person is likely dehydrated.

Resources:

DDS factsheets for observing signs and symptoms of illness:

<http://www.mass.gov/eohhs/consumer/disability-services/services-by-type/intellectual-disability/provider-support/health-promotion/developmental-services-hpci-signs-of-illness.html>

How frequently do we see these issues?

Constipation:

- DDS health care records show that about 45% of adults served by DDS are either reported to have chronic or recurrent constipation, or have medications prescribed to prevent it.
- In a recent 7-month period, about 25% of Medicaid-eligible adults purchased over-the-counter or prescription Laxatives/ Cathartics. The use of these medications is higher than the general population, and higher than the use seen in the elderly.

Dehydration:

- DDS health care records show that about 25% of adults served by DDS require assistance to eat, and likely to drink – putting them at higher risk for dehydration.

Emergency Room Visits

Emergency Room Visits between Oct. 2011 – Sept. 2012 of adults receiving DDS services and whose incident information is recorded in HCSIS. UTI's, dehydration, and constipation are among the top 15 diagnoses for ER visits.

ER Visits Top 15 Diagnoses¹

Rank	Diagnosis	Oct 2011- Sept 2012	
		# Incidents	% of diagnoses
1.	Physical injuries (non-burn)	2129	31.0%
2.	Seizures	482	7.0%
3.	Respiratory infections	452	6.6%
4.	Urinary Tract Infection	365	5.3%
5.	G/j-tube related	243	3.5%
6.	Skin Infections	186	2.7%
7.	Cardiovascular Symptoms	179	2.6%
8.	Infection (systemic)	172	2.5%
9.	Psychiatric	144	2.1%
10.	Gastroenteritis & Other Gastro	141	2.1%
11.	Dehydration	127	1.8%
12.	Constipation	122	1.8%
13.	Choking/Aspiration	86	1.3%
14.	Diabetes-related	74	1.1%
15.	Anxiety	56	0.8%

¹ In the Oct 2011- Sept 2012 data, 488 or 6.5% of ER visits did not have enough information to discern the reason for the visit.

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