

The DMAT

Dementia Mealtime Assessment Tool

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What I Will Cover...

- Overview of feeding difficulties in dementia
- Background of my involvement
- Explain the DMAT
- Describe the DMAT in practice
- Feedback & questions



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Food For Thought

- 80% of respondents caring for someone with dementia were worried about some aspect of eating.
- More worryingly most of these had not sought advice because they did not know who to turn to or how to contact professionals who could help
- In hospital it was felt there was not enough **suitable choice of food & insufficient help** was given to those needing help to feed



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Feeding Difficulty in Dementia

- Reduced cognitive ability means it is harder to initiate or continue effective feeding strategies, for example....
1. Recognise food and eating utensils
 2. Effectively use these utensils to get food into the mouth
 3. Effectively control chewing & swallowing food



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Unable to Self Feed

- Intake then becomes dependant on skills of the feeder
- Relationship between feeding assistant & patient is a predictor of food intake
- Best response = personal, interested, involved, flexible, calm & cooperative feeder



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Food Refusal

- Qualitative study found while some nurses thought food refusal was the patients way of saying they didn't want to eat, other nurses interpreted the behaviour as a lack of understanding it was a mealtime.
- 86% of advanced dementia develop feeding problems with onset associated with 39% mortality at 6 months



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Measuring Mealtime Difficulties

- As dementia progresses, problematic eating, feeding and meal behaviours can emerge, having a negative impact on nutritional status & subsequently leading to malnutrition, dehydration & decreased quality of life.
- Tools that measure these concepts are scarce
- Only one valid and reliable tool (Watson,1996)
- Effective treatments for behavioural feeding difficulties are even rarer



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Mealtimes can be difficult for people with dementia

Let's not forget about the environment.....



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Morning.....



Herrman D ; Improving Mealtimes for People with Dementia

Afternoon.....



Herrman D ; Improving Mealtimes for People with Dementia

Evening!!!!



Herrman D ; Improving Mealtimes for People with Dementia

Summary

Behavioural feeding difficulties in dementia:-

- Very common
- Lead to malnutrition & decreased quality of life
- Hard to measure
- Involve environmental & social interactions
- Lack of effective treatments
- Under researched



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A little bit about me....

- NHS Dietitian last 5 years
- Speciality Interests: Irritable Bowel Syndrome, Learning Disabilities, Malnutrition & Dementia
- Currently a Research Dietitian at King's College London
- Voluntary Chair for social enterprise in Hackney: East London Food Access (ELFA)



Homerton University Hospital 
NHS Foundation Trust

Why feeding difficulties?

Back track to May 2011..... Homerton University Hospital 
NHS Foundation Trust

- Nursing Home 98 Bed (Registered Dementia Care)
- Many referrals stating resident doesn't eat lunch
- Decided to witness a mealtime
- Observed many problems associated with the mealtime and issues with the environment
- Needed to do something!



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Creating DMAT

- Assess the current state of feeding difficulties on a nursing home floor & provide suggestions to overcome these
- Designed an audit capture form using information from Caroline Walker Trust (CWT) Older People & Dementia Guidelines
- Called the audit tool **DMAT** (Dementia Mealtime Assessment Tool)
- Sample of 5 people; common feeding difficulties were observed & notes were made on potential changes to the environment



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What is the DMAT

- The Dementia Mealtime Assessment Tool (DMAT) is an observational checklist tool & resource where you witness someone with dementia or cognitive impairment during their mealtime and record your observations on the DMAT.
- The DMAT provides a list of 34 common behavioural feeding difficulties that may affect the ability of someone to consume their food. Then provides suggestions on how to overcome these behaviours.



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The DMAT (example)

Style of Eating & Pattern of Intake	Yes > 2x	No/Not Seen	Yes ~1x
Incorrectly uses spoon, fork or knife			
Unable to cut meat			
Difficulty getting food onto utensils			
Difficulty identifying food from plate			
Eats desserts/sweets first or prefers sweet food			
Plate wanders on table			
Resistive or Disruptive Behaviour	Yes > 2x	No/Not Seen	Yes ~1x
Stares at food without eating			
Verbally refuses to eat or states: "No More, Finished, Not Hungry"			
Shows agitated behaviour (before/during)			
Oral Behaviour	Yes > 2x	No/Not Seen	Yes ~1x
Prolonged chewing without swallowing			
Holds food in mouth			
Spits out food			

DMAT in Practice

- Previously trial in a nursing home
- Propose trial in acute setting. Aim:

“Can the DMAT identify common behavioural feeding difficulties on Elderly Care Unit when used by non medically trained staff”

- Method: Sample 13 people. HCA observe and record feeding difficulties using DMAT

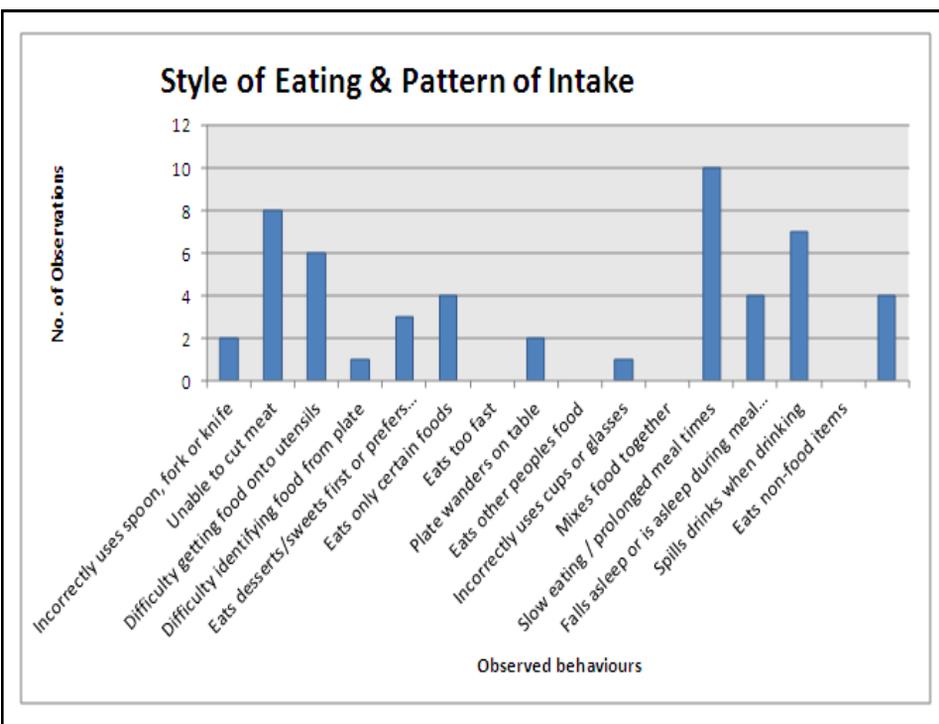
Results.....



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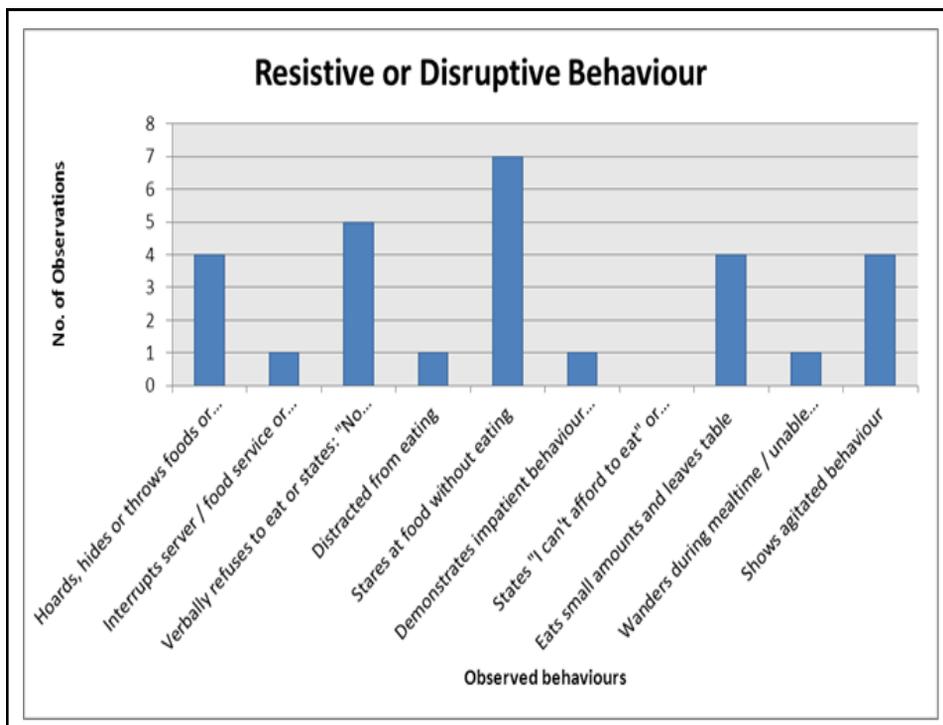


The DMAT: Interventions

Style of Eating & Pattern of Intake	Suggestions for dealing with the behaviour:
Slow eating / prolonged mealtimes	Serve food on warmed plates. Offer smaller portions more often. Allow 1 hour to eat & re-warm if needed.
Unable to cut meat	Provide cut meats, soft meats or finger foods . Special knives may help if reduced grip strength is identified.
Spills drinks when drinking	Offer a straw or a two-handled cup if acceptable. Offer small amounts of fluid at a time in suitable cup.
Difficulty getting food onto utensils	Try a plate guard or lipped plate, use a deeper spoon. Trying finger foods may take the pressure off cutlery use.
Incorrectly uses spoon, fork or knife	Use custom or large handled utensil. Try verbal cues & show correct use. Try finger foods . Refer to OT.
Incorrectly uses cups or glasses	Offer cup with handles or straw. Use verbal or manual cues and show correct use. Trial coloured cups & liquids.

The DMAT example

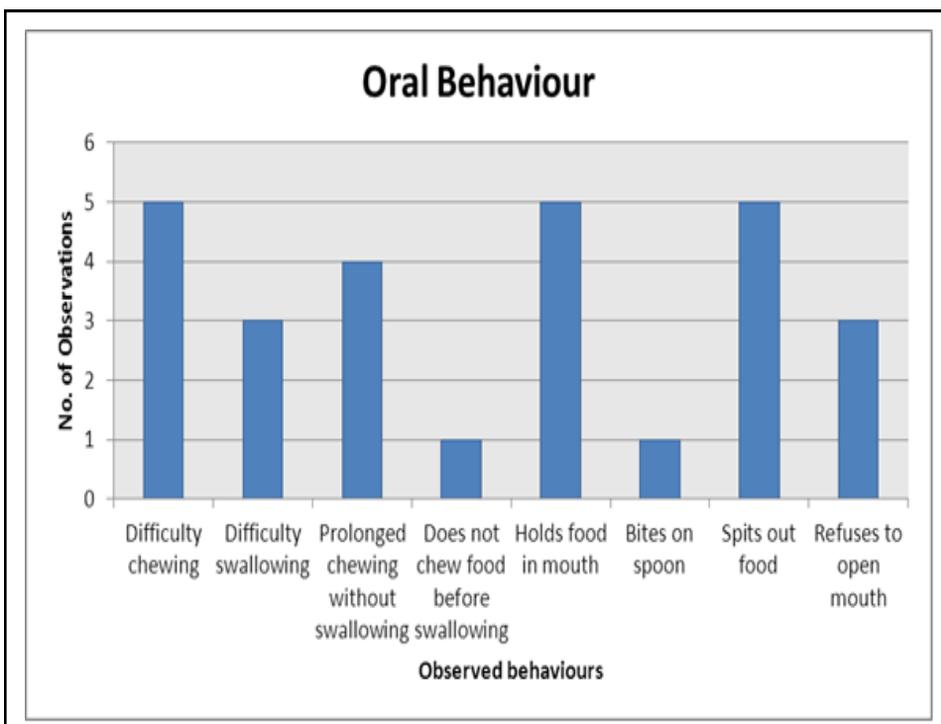
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Resistive or Disruptive Behaviour	Suggestions for dealing with the behaviour:
Stares at food without eating	Use verbal cueing & prompting to encourage self-feeding & demonstrate eating motions so the patient can imitate. Lighting - make sure adequate light over meal place / move patient to or away from window bed.
Verbally refuses to eat or states: "No More, Finished, Not Hungry"	Remove meal for 5-10 minutes & then serve again. Investigate cause e.g. food preferences (esp. cultural foods) or food consistency; consider soft & possibly single textured food. Check for underlying physical or swallowing difficulties. NOTE: Person may benefit from receiving assistance from one specific carer or have consistency in feeding practices
Shows agitated behaviour / irritability	Check the environment* Calming music may help reduce agitation (esp. verbal & physically non-aggressive behaviours). If patient is being fed consider using the same carer to feed rather than using different carers. Check pain assessment
Eats small amounts and leaves table &/or wanders / unable to sit still for meals	Encourage the use of finger food to take away or have while wandering. Check environment* is calm. Walk person before meal & plan route that ends with the mealtime. Ensure good intake at more appropriate times e.g. breakfast <i>*Negative environmental influences at mealtimes include visual overstimulation in a crowded room, poor lighting, lack of visual contrast when objects are close together or on top of each other, auditory confusion secondary to background noise.</i>

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Oral Behaviour	Suggestions for dealing with the behaviour:
Difficulty chewing	Provide softer food options. Check dental health
Holds food in mouth	Use verbal cue to chew. Massage cheek gently. Experiment with different food textures & flavours. Try foods with heightened sensory input e.g. salty, cold, carbonated, spicy, crunchy. Liaise with SLT.
Spits out food	Check for bites that are too big or food is liked, or temperature or texture is appropriate. Reassess if this food is still liked - if you don't like a food you spit it out! Check seasoning & cultural / religious preferences.
Prolonged chewing without swallowing	Use verbal cue to chew & swallow. Provide soft, easy to swallow foods. Liaise with SLT
Doesn't open mouth	Use verbal cue to open mouth. Touch lips with spoon. Manually assist with food. Try straws for drinks. Softly stroking someone's arm & talking to them about the food can help.
Difficulty swallowing	Liaise with speech & language therapist. Stroke throat to encourage swallowing.

Summary of DMAT Trial

- The majority of feeding difficulties observed were in the style of eating & pattern of intake
- All of the oral behaviours were observed
- DMAT was filled in correctly with hardly any missing data! Plus no training provided to the staff on how to use the DMAT
- Volunteer feedback: DMAT was very easy to use, took 7 minutes on average to administer and does not require training to be used.



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Conclusion

- The DMAT has shown it can identify common feeding difficulties (not valid or reliable).
- DMAT has the potential to provide a baseline measurement of feeding difficulties
- Suggests potential cost effective solutions to overcome these feeding difficulties.
- Shown effectiveness in a community nursing home and acute setting
- Needs to be trialled by carers in the home



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Key Message....

The longer someone is able to maintain their independence at mealtimes the less likely they are to become malnourished & experience decreased quality of life

Goals of care must always be directed towards providing / increasing **quality of life**



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References

- Available on request;
-  @TheDMAT
-  @LeeMartinRD
- findthedmat@gmail.com
- Lee Martin – LinkedIn
- Watch an extended version of this talk here:
'Can a simple tool be used to identify and treat behavioural feeding difficulties in people with dementia?'
<http://nutritionandhydrationweek.co.uk/webinars/>



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