The DMAT

Dementia Mealtime Assessment Tool

What I Will Cover…

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

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

(Alzheimer's Society, 2000)

Feeding Difficulty in Dementia

- While feeding oneself is one of the first ADLs (activity of daily living) to be mastered it is one of the last ADL lost & is a common problem
- Cognitive impairment associated with dementia means you do not have the cognitive ability 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

(taken from Chang & Roberts, 2008)

Unable to Self Feed

- Not being able to bring food to the mouth independently & to chew food have the closest correlation with weight (Berkhout et al, 1998)
- 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

(taken from Smith & Greenwood, 2008)

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.

  (taken from Barratt, 2004)

- 86% of advanced dementia develop feeding problems with onset associated with 39% mortality at 6 months
  (Hanson et al, 2011)

Mealtimes can be difficult for people with dementia

Let’s not forget about the environment……

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

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
- Tools that measure these concepts are scarce
- Only one valid and reliable tool (Watson,1996)
- Effective treatments for behavioural feeding difficulties are even rarer

(taken from Aselage, 2010)

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

A little bit about me….

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

Homerton University Hospital NHS
NHS Foundation Trust

ELFA
EAST LONDON
FOOD ACCESS

Nutrition & Hydration week 2014

My research interest….

…..Behavioural Feeding Difficulties in Dementia & the Social & Environmental Interactions at Mealtimes

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

Why feeding difficulties?

Back track to May 2011……

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

First Step: Audit

- 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

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 dementia related behaviours that may affect the ability of someone to consume their food and then provides suggestions on how to overcome these behaviours.

Nutrition & Hydration week 2014

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			

The DMAT intervention examples

Style of Eating & Pattern of Intake	©LeeMartinRD 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 or 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, refer to OT. Try **finger foods**
Incorrectly uses cups or glasses	Offer cup with handles or straw, use verbal or manual cues and show correct use, use coloured cups & liquids

Resistive or Disruptive Behaviour		©LeeMartinRD 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 & Wanders / unable to sit still for meals		**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.* 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

Oral Behaviour		©LeeMartinRD 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.

DMAT in Action!

- Homerton Trust 'Divisional Den' – Innovative Service Development Scheme
- Propose **DMAT** idea for use in acute setting

- Aim: Can DMAT identify common behavioural feeding difficulties on Elderly Care Unit (ECU) when used by non medically trained staff
- Method: Sample 13 people; HCA observe and record feeding difficulties using DMAT

- Results……

Homerton University Hospital NHS
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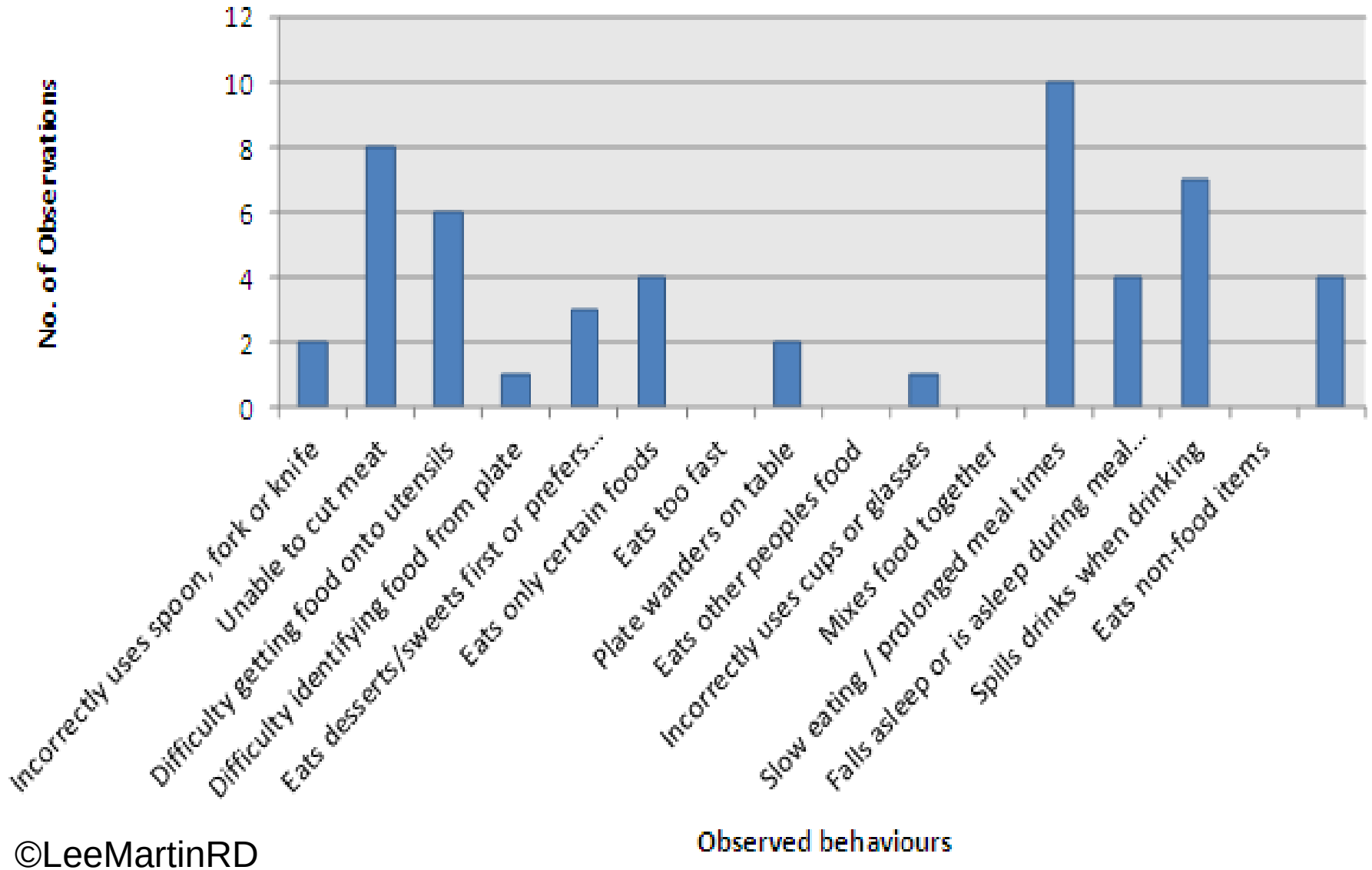
Style of Eating & Pattern of Intake



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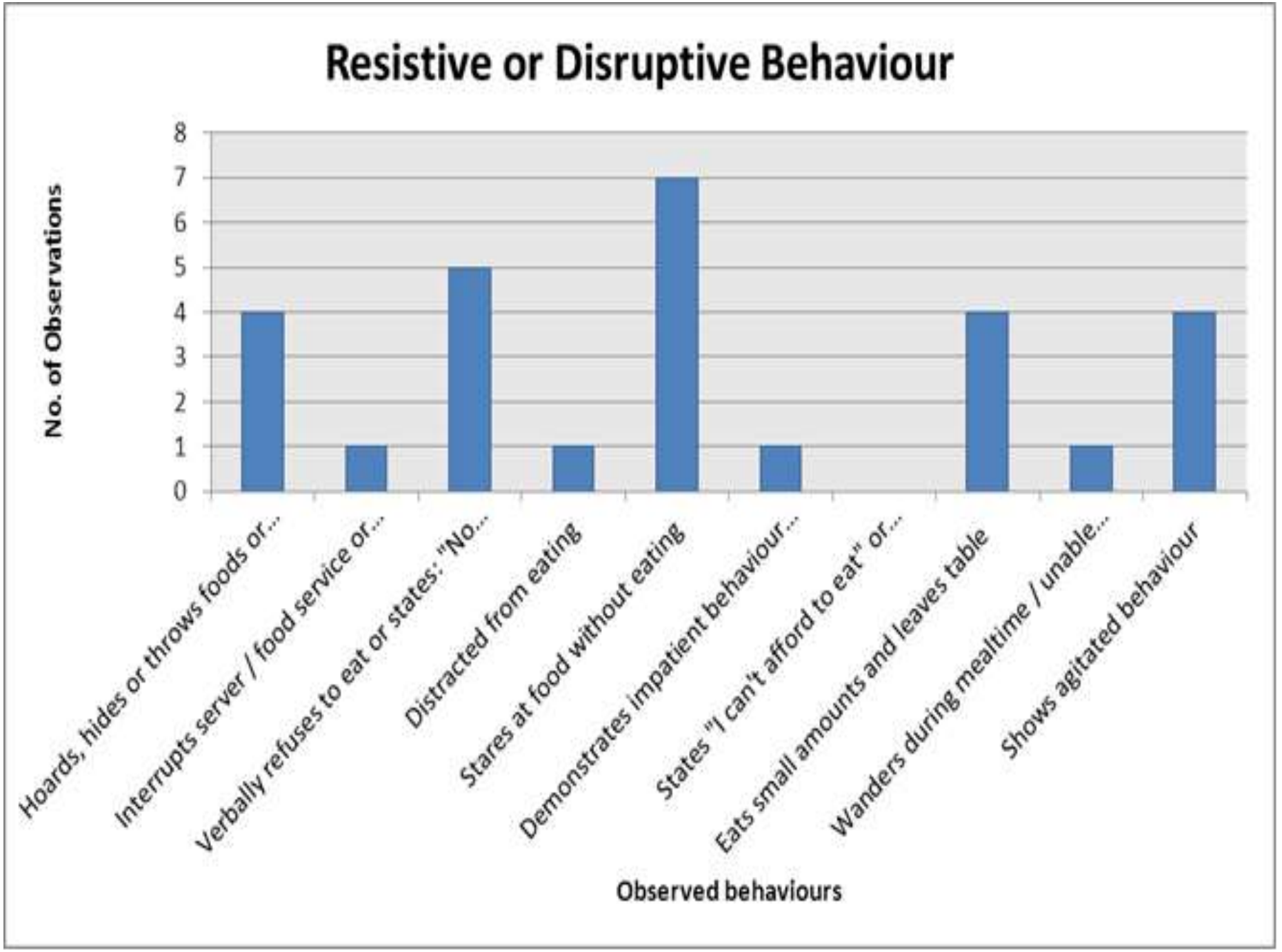
Resistive or Disruptive Behaviour
No. of Observations
0
1
2
3
4
5
6
7
8
Hoards, hides or throws foods or...
Interrupts server / food service or...
Verbally refuses to eat or states: "No...
Distracted from eating
Stares at food without eating
Demonstrates impatient behaviour...
States "I can't afford to eat" or...
Eats small amounts and leaves table
Wanders during mealtime / unable...
Shows agitated behaviour
Observed behaviours

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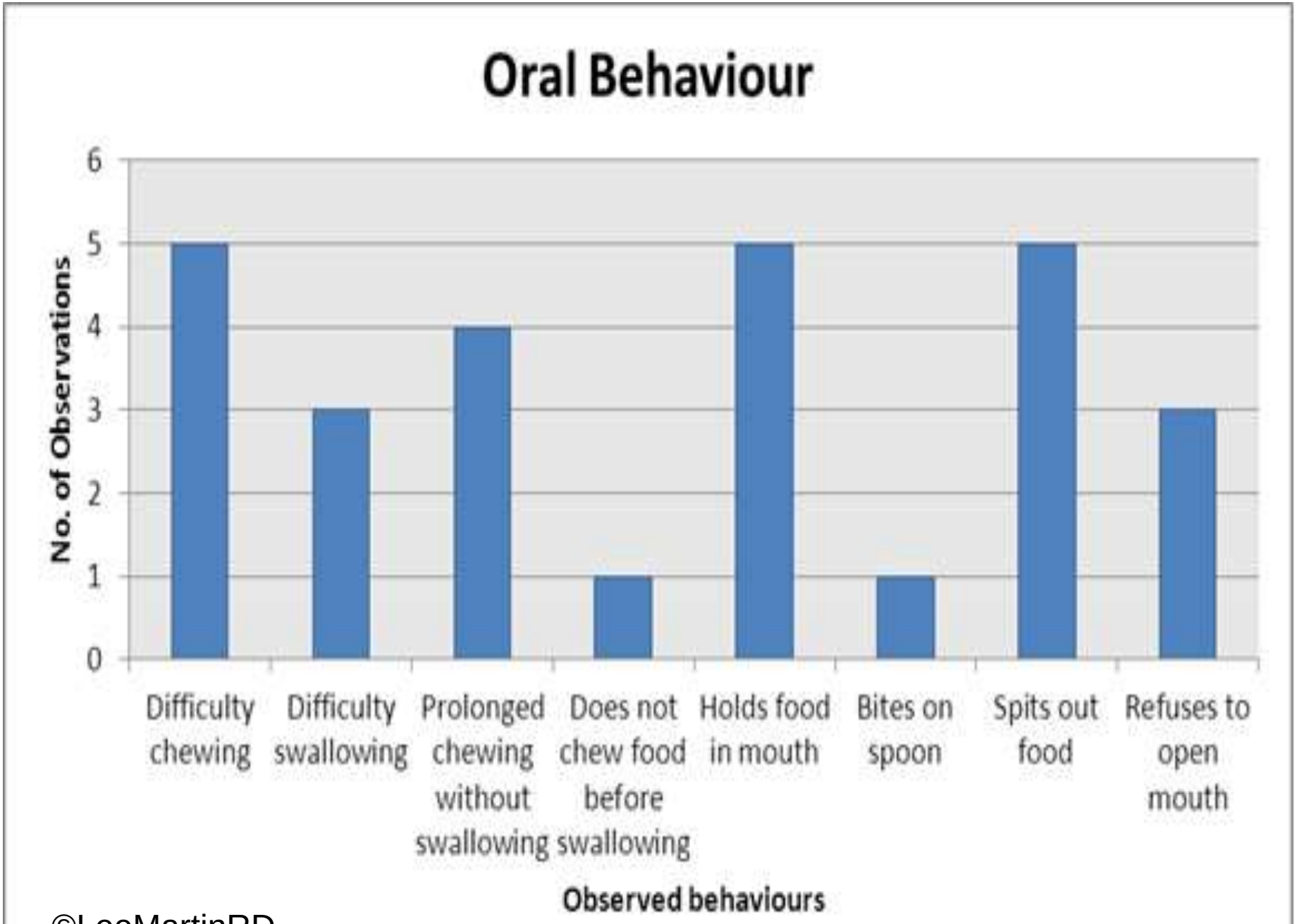

Discussion

- The majority of feeding difficulties 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.
- The coloured tray phenomenon

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.
- Improving social and environmental parameters through adherence to the Protected Mealtimes policy & Coloured Tray policy is recommended.

Next Steps….

- It would be interesting to see if the DMAT can lead to improved health outcomes and improvements in the practices for the treatment of people with dementia & feeding difficulties
- DMAT may need expansion to cover environmental & social aspects
- For a change in clinical practice high quality research is needed
- But this takes time…….something needs to be done now….

Collaboration

- Homerton NHS Foundation Trust
- Compass Group & Medirest
- King's College Hospital
- Private Care Home
- Hopefully more to come…..

"Often a few inexpensive measures combined with knowledge of the person and an understanding of how dementia affects them is all that is needed to help provide nutritious food for people with dementia"

(Alzheimer's Society, 2009).

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

References

- Available on request;
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