Processes of identifying and managing eating problems among nondemented elderly residents in a nursing home: A preliminary report

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Abstract

The purpose of this multi-part qualitative study is to describe the range and patterns of staff-identified problem eating behaviors, and the process of managing these eating problems among 10 non-demented elderly residents in a nursing home. Previous research has described several causes of eating problems, but has not focused on the actual process of managing eating problems. Data were collected over a 6-month period by conducting general and resident-specific mealtime observations, resident, family member and staff interviews, and record review. Preliminary findings have identified higher frequencies in the diminished eating competency areas of dentition, physical-motor function, depression, and environmental areas of drug-induced anorexia, and inadequate feeding assistance and food choices. Two approaches to eating problem interventions, general and specific, have been identified from the data. Processes used for preventing and managing eating problems need to include holistic resident and environmental assessment, and timely reassessment by staff to recognize eating problems early and differentiate root causes.

Background

Eating is a complex biological, social, cultural, behavioral, and symbolic phenomenon[1]. Many independent eating functions may be lost, impaired, or misdiagnosed in Nursing Home (NH) residents, who typically have multiple chronic health problems. Problematic eating behaviors in NH residents may result in dehydration, malnutrition, significant weight loss, and feeding tube placement--all significant clinical issues. Research has described: a) several causes of eating problems such as physical problems, medication side effects, puree diets, dementing

illness, diseases causing weight loss, unnecessary diet restrictions or unappetizing food, and lack of personnel to assist residents[1,2,3,4,5]; b) caregiver-resident interactions and a chaotic mealtime environment not conducive to eating[6,7,8,9,10]; and c) assessments of resident capabilities for self-feeding as non-specific, often not followed during mealtime, and as resulting in rapid decline to total dependence[11,12,13,14].

Most nursing literature concerning processes for recognition and management of eating problems is anecdotal and previous investigators have not focused on the actual process of recognizing, evaluating, and treating resident eating problems. Only one anthropological investigation described a complex constellation of factors influencing eating problems over time and the decision-making processes that led to giving tube feedings. Factors such as poor oral health, undiagnosed swallowing disorders, medications, lack of ethnic food, and lack of staff sensitivity to individual needs were described as influencing resident eating[12].

Purpose

This research is part of a larger qualitative study of the multiple health, social, cultural, and environmental factors that influence eating behavior, self-feeding, and oral consumption in nursing homes. Specific aims of this abstract are to describe: a) the range and patterns of problem eating behaviors; b) caregivers' processes of identifying, and managing eating problems.

Methods

Research design

Grounded Theory method[15] is guiding this multidisciplinary research team's immersion into the world of one purposely selected nursing home to view the perspective of the NH residents. In the first phase, observations were focused on the general nature of staff-and-family resident interactions during meals: how eating problems are recognized, what happens when they occur, and the norms for managing eating problems. In the second phase, in-depth additional open-ended interviews of each resident's caregiver staff and family, observations of mealtime interactions (between 7 am and 7 p.m.), and reviews of health records are being conducted.

Participant selection

The participants were purposefully selected at one large nursing home (439 beds) to reflect diversity in functional status and length of stay. Staff identified residents

with eating problems. For this research, an eating problem was defined by one or any combination of the following criteria: resident a) is eating 75% or less of most meals for 2-3 days; b) experiences an unplanned weight loss of 10% in 180 days, 5% in 30 days, or 1-2% in 1 week; c) shows ineffective or slow eating self-performance or must be physically assisted to ingest food or fluids; d) receives a mechanically altered diet (pureed, all food chopped, thickened liquids); e) is consuming 25% or less of prescribed dietary supplement. All potential participants who scored 24 or greater on the Mini-Mental State Exam (MMSE)[16] were then selected for inclusion. Twelve were recruited and ten agreed to participate in the study.

Data collection

Multiple, open-ended interviews of ten non-demented residents (65+ years), identified by staff as having eating problems on 2 NH units, have been conducted and are on-going over 6 months to explore in detail their experiences, ways of coping with eating problems, and what interventions and outcomes occur. Additional followup interviews of residents and staff are continuing to be conducted.

Coding and analysis

Data from resident-participants and staff were treated as one data set. Interview tapes with transcripts were reviewed to identify incidents, ideas, and events in the data. This process generated an initial concept list used for coding the data. Coding is progressing using constant comparisons between residents and between NH units to identify categories and components of the processes, roles, and outcomes of managing eating problems. The results identify steps and components from the data thus far.

Results

Sample

Preliminary results are reported for a sample consisting of five core residentparticipant cases. All were women, ranging in age from 68-88 years. All were Caucasian and lived in the same northern New Jersey county in which the population is predominantly white. Two were recent admissions to the NH (< 6 mos.), the other three had been at the NH for 1-3 years. All spoke English as their first language. Only one expressed strong ethnic (Italian) food preferences. All scored 24 or higher on the Mini-Mental Status Exam16. The primary caregivers and family members (5-7 participants per resident-case) were also interviewed several times.

Figure 1. A nursing research fellow sharing a mealtime experience with a nursing home resident.

Findings

All eating problems identified (Table 1) were reported during the 14 month investigation by residents and staff and then confirmed by observations, record review and additional interviews. Preliminary comparisons across cases indicate high frequencies in the diminished eating competency areas of dentition, physical-motor function, depression and the environmental areas of drug induced anorexia and inadequate feeding assistance and food choices. Continuing analysis of interviews are clarifying the staff perspective that anorexia, food refusal, and problem behaviors at mealtimes are most problematic. Preliminary analysis has also identified several

processes and their components for managing eating problems (see Table 2). Several resident- related factors that influence variation in the processes are listed in Table 3. In addition, two approaches to eating problem interventions, general and specific, have been identified from the data. General approaches are typical interventions implemented upon recognition of an eating problem, and specific approaches are designed to address a particular cause of an eating problem, or are individualized to meet a resident's special needs.

Discussion

The variety of eating problems identified and the progressive nature of chronic diseases are indications of the constantly changing multi-dimensional nature of eating problems experienced in the NH. The changing nature of the problems suggests that processes used for preventing and managing eating problems need to include holistic resident and environmental assessment and timely reassessment components conducted by members who are able to recognize eating problems early and differentiate root causes. Several of the eating problems identified (Table 1) have been described as modifiable by Abbasi and colleagues[17]. Their description suggests improvement opportunities within the processes of eating problem management to reduce undernutrition. Based on the eating problems identified and approaches in place at the NH, systematic screening for depression, early psychiatric evaluation of undiagnosed eating problems, regular review of diet restriction effectiveness and drug assessments for effects on intake, and communication to increase awareness of specific eating problems, new diagnoses, and planned interventions show some promise for reducing undernutrition in the NH setting.

Analysis using constant comparisons is continuing across the data from additional resident-participants and caregivers. Coding is now centered on resident representations of eating problems, environmental factors, and their outcomes. Future investigations will be needed to clarify the influence resident and staff representations and environmental factors have on eating problem management and undernutrition in NH's.

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Endnotes

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Table 1. Case frequency (N=5) of reported eating problems in the nursing home

I. DIMINISHED EATING COMPETENCY RESULTING IN LOW INTAKE

A. Physical/Motor Function

Case

1. *Upper Body* *1. Anorexia* Frequency

Manual DexterityParalysis/Contraction 12
Tremors 3

PostureSlow Movement
Distress[a] 3

PainFatigue/Strength
Confusion/ Depression 3

2. *Oral*
Dentition[a] 5
Pain 1
Salivation/Dry Mouth 2
Mastication 2

3. *Swallow Disorders* DMDementia
Physical/Neurogenic 3

4. *Sensory Losses*
Visual/Smell/Taste 2

B. Impaired Cognitive Ability

1. Easily Distracted 1

2

2Withdrawn. Needs Stimulation/Socially

3. Unable to Learn/Remember Apraxia 1
4. Agitation/Behavior Problem 1

C. Affective

Case

Frequency

Food Preferences, Habits, Tastes, Representations 3
Anorexigenic Drugs[a] 2

22 Drug Induced Depression/ Somnolence/GI

11 Transitory Illness/Event Leading to

Refusal to Eat on Purpose 3

2. Chronic Medical Disorders
Parkinson's Disease 1
Depression[a] 4
Stroke(s) 2

II. ENVIRONMENTAL FACTORS RESULTING IN LOW INTAKE

A. Food Preparation

1. Consistency, Portions, Timed Offerings 1
2. Appearance of Pureed Foods 2

B. Mealtime Atmosphere

1. Noisy/Chaotic 1
2. Low Social Interaction 1

C. Inadequate Feeding Assistance/ Devices/Cues/Time to Eat [a] 3

D. Excessive/Total Feeding Leading to ADL Decline [a] 1

E. Limited Menu Choices/Ethnic Foods/Variety [a] 2

F. Inappropriate Diet Restrictions[a]

1. Delayed Diet Changes 1
2. NIDDM, Fat, or Na Restrictions 1

G. Undiagnosed, Confounding, Psychomedical Problems 2

H. Low Physical Activities 4

I. Weight Loss During Hospitalization 1

J. Staff Awareness of Eating Problem or Strategy 3

K. End Stage Disease: Pulmonary, Cardiac, Renal or Hepatic

III. HEALTH PROBLEMS CAUSING INCREASED NUTRITIONAL DEMANDS

(Occult/Untreated)[a]

B. Pressure Ulcers

C. Malignancy

[a] Undesirable and modifiable (Abbasi, 1994).

A. Infections

Table 2: Process of eating problem management in the nursing home

I. Resident Admission [a]	**II. Discovery**[b]	**III. Figuring Out**[c]
Nurse's aide observes eating behavior, and reports to RN.	1. Meal monitoring and Observations by nursing Staff.	1. Recheck weight, 1. follow-up with weekly weight checks (i.e. if on diuretics).
2. Start initial assessment. observations at mealtime.	2. Rehabilitation staff	2. Calorie counts and fluid calculations
3. Rehabilitation screenrecord review.		3. R/O physical (i.e. infection, diseases), and Psychogenic causes via diagnostic testing.
4. History, physical and MMSE by NP/MD.		4. OT evaluation of functional hand-to-mouth positioning. 5. Swallow testing and oral motility.
5. Height, weight, VS. 6. Dental screening.		
7. Dietary/Nutrition History by RD.		

IV. Interventions

1. General Approaches[d]	*2. Specific Approaches*	
	Problem Specific[e]	**Resident Specific**[f]
a. Change diet consistency.	a. Change/discontinue medications.	a. Cues to eat/swallow.
b. Provide supplements.	b. Psychiatric evaluation.	b. Preferences/choices.
c. Restrictions: dietary, food, and fluids.	c. Feed vs. teach.	c. Meal monitoring.
d. Safety issues (i.e., thickened liquids).	d.	d. Encourage patient to eat.
e. Provide substitutions.	e. Enteral/parenteral nutrition.	e. Behavioral approach: teach, contract.
f. Conduct quarterly screens.	f. Change environment at mealtime.	f. Special ways of assisting to eat.
	g. Therapy Program specific	g. Remove restrictions/ provide comfort measures.

[a] The systematic assessment process conducted with each resident upon admission to facility. [b] The process of ways by which staff become aware of an eating problem. [c] The assessment of resident's eating behavior to determine if eating problem is transient, and/or significant or lasting. [d] Typical interventions implemented upon recognition of an eating problem. [e]

Interventions designed by staff to help resolve the root cause(s) of the eating problem. [f]
Strategies modified to the specific behavior of the resident.

interventions.

Table 3: Patient clinical information/behaviors that influence the process of eating problem management

A. Known high-risk factors
1. Parkinson's Disease
2. Stroke
3. Aphasia
4. Choking
5. Aspiration

B. Severe weight loss in hospital

C. Panic laboratory values

D. Prior therapy program orders

E. Severe behavior problems