Doing Things Differently in Dementia

Montessori Methods for Dementia:
A Focus on the Person & the Prepared Environment

Presented by:

Gail Elliot, BASc, MA
Assistant Director
Gilbrea Centre for Studies in Aging
McMaster University
elliottg@mcmaster.ca
www.aging.mcmaster.ca
Purpose of this Presentation

• To explore new approaches to finding and working with the person behind the dementia

• The focus will be on presenting an overview of Montessori Methods for Dementia
So . . . since these numbers are based on people . . .

• Let’s focus on the person – one person at a time!
Montessori Methods for Dementia

- **FOCUS ON:**
- **THE PERSON**

And, most importantly,

- **The Person behind the dementia**

A Person: With a Past

- **A Present**
  - **A Future**
BECAUSE . . .

• The Memories Ain’t Gone . . .
Montessori for dementia focuses on

- Supporting the person
- Supporting the environment
Who was Dr. Maria Montessori?

- Maria Montessori was a physician – a pioneer – who had unique ideas that changed the way we think about children and learning.

- She lived from 1870 - 1952
Dr. Montessori’s Philosophy:

- To enable individuals to:
  - be as independent as possible,
  - to have a meaningful place in their community,
  - to have high self-esteem, and
  - to have the chance to make meaningful contributions to their community.
The man who discovered the connection between Montessori’s pedagogy and principles and dementia care:

• **Dr. Cameron Camp**
Montessori for Dementia

• As a philosophy of care
  • Places emphasis on the environment, including activities designed for each individual’s level of ability
  • Emphasis is placed on meaning & purpose (including roles & routines)
Dr. Maria Montessori believed

- When you support the environment – the individual functions at his/her highest level of ability

- When engaged in life behavioural challenges/excesses are eliminated

Goal: Find the NORMAL person
Engaged in life . . .

When

- **Social**
- **Physical**
- **Emotional**
- **Spiritual needs are met**

Outcomes: Behavioural excesses are eliminated
But First a Bit about Dementia

• “First - In / Last Out” Theory
• Coombs & Smith (1973) introduced the “First In, Last Out” model.
  ▫ posits that abilities that are acquired first in childhood remain for a long time in persons with dementia and abilities that are acquired later in childhood are the first abilities lost in persons with dementia.
  ▫ Dr. Reisberg calls this developmental pattern of loss of abilities “retrogenesis” (Reisberg developed the Global Deterioration Scale)
Alzheimer’s Disease is Most Common form of Dementia

• “Dementia is a syndrome consisting of a number of symptoms that include loss of memory, judgment and reasoning, and changes in mood and behaviour.”

(Canadian Alzheimer Society, 2006)
Dementia & Behaviour: A Response to Unmet Needs (Cohen-Mansfield, 2000)

- The Lexicon of Dementia Behaviour:
  - "DIFFICULT" OR "CHALLENGING"
  - "Responsive behaviours"

- For more information visit the ehealthontario website and MAREP, University of Waterloo)
## Top Ten Responsive Behaviours
(Dupuis, et al., 2003)

### Top 10 Challenging Behaviours (Intensity Scale)

<table>
<thead>
<tr>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant unwarranted request for attention or help</td>
</tr>
<tr>
<td>Pacing or wandering</td>
</tr>
<tr>
<td>Repetitive sentences or questions</td>
</tr>
<tr>
<td>Trying to get to a different place</td>
</tr>
<tr>
<td>General restlessness or agitation</td>
</tr>
<tr>
<td>Making strange noises</td>
</tr>
<tr>
<td>Screaming</td>
</tr>
<tr>
<td>Complaining or whining</td>
</tr>
<tr>
<td>Grabbing onto people</td>
</tr>
<tr>
<td>General restlessness or agitation</td>
</tr>
</tbody>
</table>
Dr. Maria Montessori said:
(1966, page 162)

“But if we observe them closely, we notice that they do not listen to the answers given them, but simply keep repeating the questions. What seems to be an eager curiosity is in reality a means of keeping a person they need near at hand.”
Montessori for Dementia can address responsive behaviours

Which benefits both the person with dementia and the providers of care.

You’ll no longer need this sign on your door!
As will be discussed shortly - ask over and over . . .

• **What is happening?**

• **WHY the behaviour?**
Dr. Montessori’s Philosophy:

- To enable individuals to be as independent as possible,
- to have a meaningful place in their community,
- to have high self-esteem, and
- to have the chance to make meaningful contributions to their community.

A perfect fit for a mission statement in dementia care.
Dr. Maria Montessori saw activities as the basis for intervention in all aspects of living.

Quality of life is largely defined by what activities are available.

Children avoided activities that they considered “babyish”
THE FOCUS IS ON PURPOSEFUL & MEANINGFUL DOING!
"The child, making use of all that he finds around him, shapes himself for the future."

Maria Montessori

How does “doing for” affect a person’s future & independence?
Excess Disability

- **Actual disability** is the disability associated with the disease.
- **Excess disability** is not a result of the disease. It **arises from the disuse of remaining abilities**.

(Dawson, Wells & Kline, 1993)
Dr. Cameron Camp made an important connection to Dr. Montessori’s Philosophy . . .

- To enable individuals to be as independent as possible, to have a meaningful place in their community, to have high self-esteem, and to have the chance to make meaningful contributions to their community.

Mission Possible
Montessori Methods Adapted for Dementia

- This method of intervention focuses on rehabilitation where the goal is to *enable individuals to circumvent existing deficits to achieve higher levels of functioning.*
- In the Montessori-based context, the resident is *engaged in more meaningful activity.*
- Activities are *matched with interests and needs and abilities.*
Research supports the need to match abilities and interests and needs with doing (Cohen Mansfield, 2004)

- Don’t tell the sky is the limit
- When there are footsteps on the moon!
Montessori-Based Dementia Programming™

Method of **CREATING** and **PRESENTING** activities based upon models of **learning** and **rehabilitation** *(based on abilities, strengths, interests and needs of the person with dementia)*.
Dementia: Why the Behaviour?

• What is happening?

• Why is this happening?

Look at:

Environment
• Social
• Physical
• Emotional
• Intellectual/cognitive

Plaques and Tangles responsible for changes in brain activity
Can help to explain changes in behaviour and mood

WHY?
Why is this happening?

- Why the behaviour?
- When is this not happening?
What is happening?

Why is this happening?
SOLUTION:
ACTIVITIES, ROLES & ROUTINES

- Activities targeted at the individual’s level of ability, *based on needs, strengths and abilities*

- “Activities are a fundamental component of Alzheimer care. They provide structure, security and a sense of belonging for the person with dementia.” (Fazio, Chavin and Clair (1999) page 149)

**Outcomes:**
*reduce agitation, improve mood & prevent apathy.*
*(Volicer, 1997; Volicer, et al, 1999)*
Montessori Methods Focus on Supporting the Environment

• Build supports to support memory loss . . .
Memory
Squire (1994)

DECLARATIVE MEMORY
- Facts
- Vocabulary
- Events
- Knowledge

PROCEDURAL MEMORY
- Skills
- Priming
- Habits
- Classical conditioning
Declarative Memory

- When we talk about “remembering” or “our memory”, we are referring to **declarative memory**.
- This is the **conscious recollection** of “facts & events”, including memory for **words, scenes, faces and stories** (Squire, 1994).

How are you at playing Trivia games?
Let’s Play Jeopardy!

• *The JACK BENNY PROGRAM*, debuted in what year?
1932 and spanned 23 years, growing and developing as it progressed.
1952, and lasted 2 years
1972, and lasted 3 years
How did George Burns end every show?

- A. “Tell ‘em all good night and let’s go home.”
- B. “Well, looks like we’re done. Bye!”
- C. “Say good night, Gracie.” Gracie would reply, “Good night, Gracie.”
KEY POINT: Declarative memory is impaired in dementia

• So we need to put the information into the environment to trigger/help the memory
Information in the environment helps all of us - the lanyard used in the Montessori workshop is an example of this - if we can’t remember everything we were taught, we can refer the information provided.
Declarative memory
(environmental support required)

• How? With cueing (remember the elephant?)
  (e.g. – memory book)

Your daughter is coming to visit today at 2:00 p.m.

This is your daughter and her family
Memory supports must be:

- Visible
- Recognizable
- Accessible
- Have meaning for the person using the memory cue
Procedural Memory

SPARED IN DEMENTIA
Just like riding a bike – or doing the dishes

- Skills
- Priming
- Habits
- Classical Conditioning
The moral of the (priming) story:

- The more they do something – the better they get at doing that something.
Montessori Methods for Dementia
Combat Invasive Memory Loss

- **Focuses on spared capacity**

**Procedural Memory**

**&**

**Environmental Supports that build on existing abilities**
Where can you use these techniques?

• Anywhere!

- LTC
- Day Programs
- Assisted Living
- At Home
- Hospitals
Who Can Use These Techniques?

• Anyone who has been trained!

- Professionals (OT, PT, SW, RN’s, Recreation)
- Paraprofessionals
- Volunteers
- Family
But always check to make sure you are following Montessori principles
Montessori Principles: A focus on the person & the prepared environment

- **Independence** is fostered through the activities provided in the environment, including the creation of roles and implementation of routines.
- **Freedom of choice** is integral to enhancing self-esteem and independence.
- **Environment is adapted** to meet the needs of the participant, and materials are easily recognizable and visible.
- Materials are familiar to the individual and aesthetically pleasing.
- **Activities are always demonstrated, one component at a time**, to ensure that each step is understood and can be replicated.
- The environment allows learning to progress in a sequence.
- Activities are created in a manner that allows them to progress from simple (but never “babyish”) to more complex AND from concrete to abstract and, vice versa, as needed, according to needs, interests and level of ability.
- Take advantage of spared capacity by placing emphasis on procedural memory (forms of learning and memory that are relatively unconscious, automatic and effortless) and environmental cueing (to support declarative memory).
- Introduce activities that are meaningful to the client.
- **Activities contain a control of error** through the use of materials that allow for error and are thus self-correcting and free of unimportant detail that creates clutter and confusion.
Maria Montessori believed in supporting the environment. This applies to dementia.
Environmental Design is Included in Preparing the Environment

- Let’s take the case of “Exit seeking”

- WHY THE BEHAVIOUR?
BKRC Art Effects
www.bkrcartoeffects.com

Whether your choice is to
train your mind
Mahatma Gandhi

Testimonials

having something that is original to
display to guests in the home or the
office, murals can have the effect of
enlarging a room by making the wall
“disappear” into a much larger space
visually. Studies have shown that
colours and images can have a positive effect on
health by contributing to a sense of well-being.

Mural, Clifftop Ruins 3m x 2.4m

Trompe l’œil scene, Dental Practice,
St. Marys 3m x 2m

About Us
Karen and Brian Romeril are a team
who both design, draw and paint — with
Brian specializing in perspective
drawing techniques and Karen as the
principle painter.

Karen and Brian Romeril have been
free-lancing their artwork as Art Effects
for more than 20 years and have left
their mark with many painted in
Another example of supporting the environment:

Restraints can be removed without adverse consequences (Capezuti, 2000, Camp, Cohen-Mansfield, in press)

- rockers (sliding rocker best)
The Principles **must** be followed each and every time you put the Montessori Methods into Practice
Montessori Principles for Dementia

CREATION OF ACTIVITIES
(CREATE)

Consider the needs, interests, skills and abilities of the program participant & create activities accordingly.
___ Collect information from files, assessments, family, friends, staff and client with the purpose of creating activities that are meaningful to the client.

Remove unnecessary markings & clutter & ensure materials can be clearly seen.
___ Remove unnecessary marking and clutter on the materials and on the table upon which the activity is planned.

Error-free
___ Activities contain a built-in control of error that permits the person to self-correct. The objective is to focus on process, not outcomes of the activity. The focus is on maintaining or improving function, enhancing self-esteem &/or having a good time.

All materials required for the activity are provided & self contained. Materials are attractive & real life.

Templates & Manipulatives
___ Provides templates or manipulatives as part of the activity when necessary.

Evaluate
___ Evaluate to determine whether you have created an activity based on interests, skills, abilities and needs of the client and ask whether it needs to be modified vertically or horizontally.
**PRESENTATION OF THE MONTESSORI PROGRAM**

(PRESENT)

**PREPARATION**

*Prepare environment*
___Make sure the activities that have been created are accessible and ready for use. If possible provide a choice of two activities.

*Room set-up*
___Remove any distractions & prepare seating area as needed (for group or individual activity).

**Implementation**

*Extend Invitation*
___Ask the participant if he/she would like to help you with something or if they would like to join you.

**Show what to do by demonstrating.**
___Demonstrate then suggest that they try. Repeat if necessary and simplify or make more difficult as needed. When demonstrating, use as few words as possible.

**Error Free**
___The focus is on enjoying the activity. There is no right or wrong. However, you can offer assistance by asking what they would think about doing it differently (to see if they want to do the activity as per the way it was created).

**Needs**
___Needs of client are central to the activity, thus client has physical and cognitive capacity to participate in the activity. Modifications re simple to complex, concrete to abstract are made, activity is structured to be performed left to right, top to bottom and helper is on the dominant side.

**Thank you**
___Thank client for participating in the activity and ask if he/she would like to help you/work with you again some time.
PLEASE ENGAGE ME IN LIFE
Zeisal and Raia (2002)

- “Structured therapeutic activities are the **motor** that drives the entire treatment model . . . Therapeutic activities should not be considered valuable merely because they fill time....Activities are therapeutic because they quickly change negative emotions and promote feelings of purpose and accomplishment”

(P338-339)
The NEW Culture of Dementia Care

(Hellen, 1998; 2001)

OLD CULTURE

Activities are for entertainment; one size fits all

AKA – Pick an activity
Any activity will do

Large groups
Don’t repeat activities

NEW!

✓ Activities are therapeutic
✓ They affect wellness
✓ Activities should match
✓ Strengths & personal history

✓ Small groups foster friendships
✓ Repetitive activities afford
✓ Better participation
✓ Meaningful activities &
✓ Roles important
Program at the level of capability

Mrs. Talksalot
THE PRACTICE MODEL

MONTESSORI METHODS FOR DEMENTIA

- FACT FIND FIRST
- GATHER INFORMATION ABOUT THE CLIENT

OBJECTIVE
THE PRACTICE MODEL
Montessori Methods for Dementia

WHAT & WHY IS THIS HAPPENING?

FACT FIND FIRST
GATHER INFORMATION ABOUT THE CLIENT

CREATE MONTESSORI ACTIVITIES

PRESENT MONTESSORI ACTIVITIES

EVALUATION
What worked, what needs to be changed?
A MODEL: Montessori Methods FOR DEMENTIA

FIRST QUESTION: WHY IS THIS HAPPENING?

ASSESS Client using Program Participant Profile Questionnaire

Complete Montessori for Dementia Assessment: Observe, set goals & program

CREATE ACTIVITIES

SELECT ACTIVITIES BASED ON ASSESSMENT OF INTERESTS, STRENGTHS, ABILITIES & NEEDS

WOULD you like to help me with something?

PRESENT ACTIVITIES

Demonstrate

Thank you. Would you like to do this again some time?

Evaluate Success
When Creating Activities

- The focus is on putting all required information into the environment
- Capitalize on preserved abilities (particularly procedural memory)
- Modify physical and social environment based on needs (physical, social and cognitive), interests and abilities of the individual

**FOCUS ON ENABLING**
When Presenting Activities

- Empower (give choice)
- Adjust to their level of ability

Circumvent Disability

Normalization
CREATE
• Activities
• Programs
• Roles
• Routines
(always apply the principles)
Find Remaining Abilities & Link to Goals
Overarching Theme: The Prepared Environment

- When designing activities for persons with dementia, consider a person’s abilities according to Dr. Montessori’s four classes of activities:

<table>
<thead>
<tr>
<th>Area 1:</th>
<th>Practical Life (ADL’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 2:</td>
<td>Culture &amp; Social Connections</td>
</tr>
<tr>
<td>Area 3:</td>
<td>Sensorial</td>
</tr>
<tr>
<td>Area 4:</td>
<td>Cognitive</td>
</tr>
</tbody>
</table>
Montessori’s Classes of Activities Adapted for Dementia

- **Cognitive:**
  - Memory, Reasoning, problem solving & attention

- **Practical Life (ADL’s):**
  - Range of motion, grasping & gripping, fine & gross motor abilities, balance & coordination

- **Sensorial:**
  - Ability to use the 5 senses for identification & discrimination

- **Social & Cultural:**
  - Appropriate behaviour within the context of the present environment
Case Examples

• Know the person
• Gabby Wandersalot
• She asks to go to the washroom about once every 5 minutes

• Follow the steps in the Montessori for Dementia model
• Use the lanyard to check “to do’s” and principles
FIRST QUESTION?

Why is this happening?

You could ask WHAT, WHEN, WHERE . . .

guiding you to WHY!
### Responsive Behaviours
(Dupuis, et al., 2003)

<table>
<thead>
<tr>
<th>Top 10 Challenging Behaviours (Intensity Scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant unwarranted request for attention or help</td>
</tr>
<tr>
<td>Pacing or wandering</td>
</tr>
<tr>
<td>Repetitive sentences or questions</td>
</tr>
<tr>
<td>Trying to get to a different place</td>
</tr>
<tr>
<td>General restlessness or agitation</td>
</tr>
</tbody>
</table>
How do we address these RB’s?

• An assessment needs to done to discover her strengths and interests
• Some of her behaviours seem to be due to boredom
In search of the perfect match

Skills/abilities

Interests

Needs

Activities
Roles
Routines
Environmental Supports
What are her strengths and abilities - what do we want to focus on when we begin?

- **Area 1:** Practical Life (ADL’s)
- **Area 2:** Culture & Social Connections
- **Area 3:** Sensorial
- **Area 4:** Cognitive
Motor activities

**Fact Finding:**

- Mrs. Talksalot has mid to more **advanced** dementia. She worked at a bank, has 2 daughters, 4 grandchildren and lost her husband 6 years ago. She loved to cook, read, garden and entertain. She is quite arthritic, and there is a tendency to do things for her as she is very slow. She wanders/exit seeks. *(ASK WHY! – She is bored)*

**Key Issue:** Trips to bathroom

- Montessori-Based Programming for Dementia could help to address **physical function** while also giving her something to do
Brainstorming

• She needs a **schedule/routine for bathroom behaviour** (a check list with times that she will go and she will check it off after she goes to remind her she has gone)

• For **Motor Function**: Scooping exercises, pouring exercises, squeezing exercises and fine motor activities

• For **Cognitive Stimulation**: She could sort coins (as she was a banker & enjoys working with money); She loved to read so could participate in a reading program or magazine scavenger hunt
SCOOPING ACTIVITIES
(includes physical and cognitive objectives)
Scavenger Hunt
Group programs/activities
Memory Bingo
Group or social activities

- Mrs. T loved to read

(Carry on Reading in Dementia: Reading books with appropriate sized print and group discussion questions)
After you CREATE activities, based on the facts you have discovered . . .

- PRESENT the activities following the Principles
OUTCOMES of MBPD

REDUCED PROBLEM BEHAVIOURS

- Problematic behaviour is rarely seen since being engaged and displaying problematic behaviours generally are two mutually exclusive categories of behaviour.
Why Use Montessori Principles in Dementia Care?

• Results of research shows benefits as follows:
  ▫ Enhanced function
  ▫ Increases level of engagement with their environment
  ▫ Less time spent sleeping during daytime hours
  ▫ Increased display of pleasure (smiling, laughing)
  ▫ Enhances conversation abilities
  ▫ Decrease disruptive behaviours (wandering, repetitive questioning)
  ▫ Decrease “non-engagement behaviours” (sleeping)
  ▫ Decrease “self-engagement behaviours”
  ▫ Improve family member visitor satisfaction, and decreases family member’s sense of frustration

Interventions for Dementia from the Neurosciences

- Montessori Methods for Dementia
- Spaced Retrieval Techniques for Dementia

- Developed by Dr. Cameron Camp and colleagues (previously at Myers Research Institute, Cleveland, OH)
Spaced-Retrieval (SR)

AKA: Memory Enhancement

• SR involves the use of shaping technology from behavioral therapy applied to memory.

Examples of information/tasks that can be learned:
Names of family, friends and staff.
Finding destinations (washroom, bedroom, kitchen).
Helping the individual to remember when the next meal is and what time of the day it is (information finding).
Finding items such as clothing, memory books, purse or watch.
Remembering his/her own name.
The ultimate goal is retention of and ability to recall information over very long time intervals (e.g. months, etc.)
To Summarize

• Montessori Methods for Dementia focus on spared capacity including . . .

• Montessori Methods are based on a set of clearly articulated Principles – and these are used for
  • CREATING
  • PRESENTING

Focus on supporting the environment
Giving people something meaningful to do
Outcome: Engaged in LIFE!
“A social change of this type cannot come from the ideas or energies of individual reformers but from a slow and steady emergence of a new world in the midst of the old . . .

(Montessori, 1966 (1914 re-print), p. 207)
For More Information

Gail Elliot, BASc, MA
Assistant Director
Gilbreath Centre for Studies in Aging
McMaster University

• phone: 905-525-9140 ext. 24449
• email: elliotg@mcmaster.ca