The Impact of Adaptive Interaction Training on Nursing Staff in Advanced Dementia Care

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Objective: We examined the impact of AI Training on communicative behaviours of nursing staff on a specialized geriatric dementia unit (GDU).
Methods

• 6 staff from GDU were paired with 6 non-verbal PWD

• Staff video recorded a brief interaction with patients before training

• Staff used videos to identify the non-verbal communication repertoire of patient and to evaluate and adapt their communication
Methods

• 2-day training:
  • Day 1 - Fundamentals of Communication, initiated communication strategy;
  • Day 2 - ABCs, continued adapting communication
• 4-week adoption period (AI into practice)
• 1-day follow up session (final videos, reviewed communication repertoires, group discussion)
Analysis

• Videos were examined to compare dyad communication pre and post

• Frequency and/or duration of non-verbal communication fundamentals

• Clinical scenario responses were used to examine changes in awareness & knowledge uptake
Results

Communicative repertoire of **caregivers** at baseline and after training.

In general, staff showed reduced reliance on verbal communication and utilization of functional “care” in their interactions, while increasing the use of non-verbal fundamentals.

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Behavior</th>
<th>2001 Pos</th>
<th>2001 Post</th>
<th>2002 Pos</th>
<th>2002 Post</th>
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</thead>
<tbody>
<tr>
<td>Eye gaze</td>
<td>Partner’s eye face</td>
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<td></td>
<td>Elsewhere</td>
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<tr>
<td>Facial Expressions</td>
<td>Neutral</td>
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<td></td>
<td>Other/Unknown</td>
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<tr>
<td>Bodily Position</td>
<td>Face to face</td>
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<td></td>
<td>Other position</td>
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<tr>
<td>Silence</td>
<td>Other vocalization</td>
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<tr>
<td>Vocalization</td>
<td>Vocalization</td>
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<tr>
<td>Physical Contact</td>
<td>No physical</td>
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<tr>
<td>Initiation</td>
<td>Verbal</td>
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<td></td>
<td>Non-verbal</td>
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<tr>
<td>Gestures</td>
<td>Face to face</td>
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<td></td>
<td>Other position</td>
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<tr>
<td>Functional Behaviour</td>
<td>Feeding/Blood Pressure Beads</td>
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<td>Initiate Vocalization</td>
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<td>Turn Taking</td>
<td>Respond to Vocalization</td>
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</table>

Results

Communicative repertoire of participants with dementia at baseline and after training.

Patients exhibited unique communication repertoires, however, in general more eye contact and positive emotions were expressed, and greater initiation of communication seen.
Results – Dyad 1 Pre
Results – Dyad 1 Post
Results – Videos

Staff Feeding/Providing Care During Interactions

Number of Staff Members

Pre  Post

5  0
Putting adaptive interaction into practice
Clinical Scenario – Themes Pre

- Determine Triggers or Cause of Behavior (4)
- Seek History (3)
- Treatment (6)
- Verbal Communication (5)
- Non-verbal Communication (4)
Clinical Scenario – Themes Post

- Determine Triggers or Cause of Behavior (2)
- Seek History (3)
- Treatment (2)
- Verbal Communication (4)
- Non-verbal Communication (5)
Clinical Scenario

Non-Verbal Sub-Themes
Pre & Post Training

Sub-Themes

No. of Staff

Eye Contact  | Touch  | Presence  | Mirroring Behaviour  | Diversity of Strategies  | Assessing Responsiveness

0  | 1  | 2  | 3  | 4  | 5  | 6  | 7

Pre  | Post
Clinical Scenario

Non-Verbal Sub-Themes
Pre & Post Training

No. of Staff

Sub-Themes

Eye Contact  Touch  Presence  Mirroring Behaviour  Diversity of Strategies  Assessing Responsiveness

Pre  Post

0  1  2  3  4  5  6  7
Clinical Scenario

Depth of Analysis of Vignettes

<table>
<thead>
<tr>
<th>Staff Participant</th>
<th>Average Rating</th>
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<tbody>
<tr>
<td>D1S1</td>
<td>3</td>
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<tr>
<td>D1S2</td>
<td>2</td>
</tr>
<tr>
<td>D2S1</td>
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<tr>
<td>D2S2</td>
<td>1</td>
</tr>
<tr>
<td>D3S1</td>
<td>6</td>
</tr>
<tr>
<td>D3S2</td>
<td>4</td>
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</table>

- Pre
- Post
Conclusions

• Staff learned to recognize, reciprocate and adapt their communication
• Staff show greater awareness and utilization of non-verbal communication
• This can support greater engagement and enable a therapeutic relationship with non-verbal patients
Questions?
Adaptive Interaction Training: Experiences of Nursing Staff in Advanced Dementia Care
Adaptive Interaction

- **Staff:**
  - Katelyn Cossar, RPN
  - Chris Kask, RN
  - Laura Gianfriddo, RPN

- **Funding:**
Adaptive Interaction – Getting Started
Adaptive Interaction – Learning the Ropes