Communication Partner Training in Aphasia: A Review of Treatment Approaches

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Evidence-Based Practice

“an approach in which current, high-quality research evidence is integrated with practitioner expertise and client preferences and values into the process of making clinical decisions” (ASHA, 2005)
Why worry about EBP?

- Clinicians want to offer the best possible services
- Policy makers want to promote programs that are useful and effective
- Funding sources want to fund services with demonstrated effectiveness
What is involved?

- A systematic review of the treatment research literature
- Evaluation of the strength of the evidence available
- Development of clinical practice guidelines
- Implementation by clinicians who apply the EBP findings to suit individual clients
A Systematic Review is a careful, formal literature review that includes a thorough search, analysis and synthesis of the literature on a particular topic. This typically involves a “critical” review in which the quality of available research is evaluated.
Clinical Practice Guidelines

‘systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances’. Their purpose is ‘to make explicit recommendations with a definite intent to influence what clinicians do’ (AGREE, 2001).
Systematic Reviews in Aphasia

Examples:

- Robey, 1998
- Greener et al, 2000
- Beeson & Robey, 2007
- Cherney et al., 2008
Social approaches are defined by an explicit focus on personally relevant outcomes such as meaningful life change, enhanced life participation or improved life quality.
Reviewing Evidence for Social Approaches to Aphasia
Simmons-Mackie, Kagan & Conklin
CAC 2008
Definition: Communication

Partner Training

An intervention that provides training to a person or persons other than the person with aphasia, with the intent of improving language, communication, participation and/or well-being of the person with aphasia.
Definition: Communication Partner

Individual(s) in the environment with whom the person with aphasia might interact, including, but not limited to, family members, friends, volunteers or health care providers.
Basic premise of partner training in aphasia
Goals

- Describe aphasia intervention practices that fit within partner training
- Determine the strength of evidence available to support partner training in aphasia
- Suggest clinical recommendations
Questions Regarding Effects on Person(s) with Acute Aphasia

In persons with acute aphasia, what is the influence of communication partner training on measures of:

- *language impairment*?
- *communication activity/participation*?
- *psychosocial adjustment/identity*?
- *quality of life*?

What treatment outcomes are *maintained*?
Questions Regarding Effects on Person(s) with Chronic Aphasia

For persons with chronic aphasia, what is the influence of communication partner training on measures of:

- *language impairment*?
- *communication activity/participation*?
- *psychosocial adjustment / identity*?
- *quality of life*?

What treatment outcomes are *maintained*?
Questions Regarding Effects on Communication Partners

For communication partners of people with aphasia, what is the influence of communication partner training on partner:

- communication skills/activity/participation?
- psychosocial adjustment?
- quality of life?

What treatment outcomes are maintained?
Search Criteria

- 13 different databases using 23 search terms related to communication partner training in aphasia
- Articles published in English
- 1975 to April, 2008
- 3519 potential citations were identified
Exclusion Process

These were narrowed by eliminating articles that were:

- Duplicate articles
- Not written in English
- Not original data
- Not peer reviewed
- Did not address aphasia
Second Round of Exclusions

- 5 member review team
- Categorized 89 articles according to their relevance to the study questions
- 31 articles were subjected to a full review
Research Reviews

- Articles were randomly assigned to 2 team members

- Reviews were conducted independently
The Review Process

1. Descriptive analysis
2. Classification of evidence strength using American Academy of Neurology (AAN) criteria
3. Translation into recommendations for clinical practice
1. Descriptive Analysis

- Communication partner characteristics
- Person with aphasia characteristics
- Treatment characteristics
- Outcome measures
- Description of results
2. American Academy of Neurology Classification

**Class I.** Evidence provided by a randomized, controlled clinical trial or meta-analysis.

**Class II.** Evidence provided by a prospective matched group cohort study in a representative population that meets class I criteria OR a randomized controlled clinical trial that lacks one class I criterion.

**Class III.** All other controlled trials

**Class IV.** Evidence from studies not assessing outcomes independent of treatment, uncontrolled studies, case series, case reports, or expert opinion.
3. Translation into Clinical Recommendations

- Based on AAN Recommendation formula
- Tied to AAN Classes
- Levels:
  - No Recommendation
  - This intervention may be considered for...
  - This intervention should be considered for
  - This intervention should be done for...
AAN Classification

Class I     2
Class II    0
Class III   5
Class IV    23

Total       31
What Did We Learn from the Review of Partner Training in Aphasia?
Types of Intervention

- Education: 65%
- Communication: 19%
- Counseling: 16%
What types of partners were trained?

- Family Members: 22
- Caregivers: 2
- Volunteers: 3
- Friends: 1
- Other Health Care Providers: 1
- Doctors: 1

Total: 30
Was the Person with Aphasia included in Training of Partners?

16 PWA Included
15 PWA Not Included
Counseling Approaches
to Communication Partner
Training in Aphasia
Counseling Approaches to Partner Training in Aphasia

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Purpose of Counseling

Address the psychosocial adjustment and emotional issues associated with aphasia
Counseling Approaches to Partner Training in Aphasia

- Targeted regular communication partners: family and caregivers
- 2 - partners only; 4 - partner plus PWA
- 2 - individual dyad tx; 4 - group therapy
- Tended to be relatively short duration or limited number of sessions
Examples of Counseling Interventions

- Family therapy
- Counseling & support
- “Rural Camp” with counseling groups
- Adult learning principles
- Solution focused therapy
Expected Outcomes

- Decreases in depression, stress and other emotional issues
  - For Person with Aphasia
  - For Communication Partner
- Improved communication of the dyad
Measures

- **Psychosocial**
  - Analysis of interviews with partner and/or PWA
  - Questionnaires
  - Personal Questionnaire Rapid Scaling Technique (Mulhall, 1978)
  - *Hospital Anxiety & Depression Scale*

- **Communication of the dyad**
  - Ratings of conversation (e.g. repair, strategy use) & ASHA FACS
Did Counseling Work?

5 out of 6 studies showed improved psychosocial adjustment of partners

4 out of 4 studies showed improved psychosocial adjustment of PWA

2 studies showed improved communication within dyads

HOWEVER
The data are insufficient to make clinical recommendations!

WHY???
AAN Classifications

All Counseling Studies were Classified as CLASS IV Lowest Level of Evidence

Class IV: Evidence from studies not assessing outcomes independent of treatment, uncontrolled studies, case series, case reports, or expert opinion
Why all Class IV?

All of the studies lacked requirements of higher AAN classifications such as:

1. **Experimental Control** (e.g. randomization, control group)

2. **Independent Assessment** (person administering outcome measure not otherwise involved in the study)
Counseling Approaches to Partner Training in Aphasia

- No recommendations regarding counseling approaches to partner training in aphasia
- Further research is needed
Partner Training in Aphasia: Education

5 studies
# Partner Training in Aphasia: Education

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Partner Training in Aphasia: Education

Targeted:

- Family members/caregivers of
  - Individuals with acute aphasia (1 study)
  - Individuals with chronic aphasia (1 study)
  - Individuals with aphasia where chronicity varied from 2-23 months (1 study)
- BOTH family members and PWA (chronic) (2 studies)
Partner Training in Aphasia: Education

- Variable length of training
  - Single session (1 study)
  - Weekly sessions over 4 weeks (1 study) and 12 weeks (1 study)
  - 2-3 day workshop (2 studies)
Educational Interventions: Example

- 2-hours per week for 12 weeks
- Weekly topics:
  - Video – Why me?
  - Video – Say the words that matter
  - Discussion – Issues proposed by group
  - Discussion – Issues proposed by group
  - PT – Role of …..
  - Social worker – Support agencies
  - DHSS officer – Form filling and benefits
  - Psychologist – Grief response
  - OT – Role of …..
  - Spouse of an aphasic person – Holiday advice
  - Discussion
  - CHSA rep – Future plans – Buffet supper

Rice et al., 1987
Educational Interventions: Example

- Single session
- Video: “Communication Disorders following Stroke” (16.5 minutes long)
  - Effect of stroke explained in simple terms using diagrams
  - Do’s and don’ts of communicating with stroke patients reinforced with cartoons and graphics
- Lecture (20 minutes – to reinforce info from video)
- Booklet (16 pages – to clarify info in video)

Bevington, 1985
Educational Interventions: Example

- 2-hours per week for 4 weeks
- Included “education, psychological support, and skill training”
- Topics covered:
  - Impact of stroke and managing the resulting life changes
  - Communication strategies
  - Relaxation and stress management
  - Managing emotions
  - Coping skills for depression and anxiety
  - Accessing community services
  - Relapse prevention strategies

Draper et al., 2007
Educational Interventions: Example

- 2-day workshop in a conference format
- Overall themes: “Communication Partners” and “The Power of Peers”
- Included lecture, small group discussions, hand-outs
- Core topics
  - Communication issues
  - Vocational issues
  - Driving
  - Coping
  - Parenting
  - Legal and Medical Issues
  - Simulations of aphasia
  - Communication strategies

Hinckley et al., 1995, 2001
Expected Outcomes

- Improved knowledge of topics taught
  - For Communication Partner
  - For PWA (if included in the intervention)

- Psychosocial Improvements (e.g. decreased stress)
  - For Communication Partner
  - For PWA

- Increased Activity/Participation
  - For PWA
Measures

- **Knowledge Questionnaires**
- **Psychosocial Measures**
  - Social support questionnaire
  - Depression scale
  - Relative stress scale
  - Behavior and Mood Disturbance Questionnaire
  - Personal Questionnaire Rapid Scaling Technique
  - McMaster Family Assessment Device
  - General Health Questionnaire
Measures

- **Activity/Participation**
  - Measure of social and recreational activities
  - Frenchay Activities Index
  - Communication Integration Questionnaire
  - Edinburgh Functional Communication Profile
Did the education interventions work?

For Partners

- Improved knowledge: 3 of 3 studies
- Improvement in at least one psychosocial measure: 4 of 4 studies

For PWA

- Improved knowledge: 2 of 2 studies
- Improvement in at least one psychosocial measure: 2 of 2 studies
- Increased activity/participation: 2 of 2 studies
BUT

The data are insufficient to make clinical recommendations!

WHY???
AAN Classifications

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Why all Class IV?

All of the studies lacked requirements of higher AAN classifications such as:

1. **Experimental Control** (e.g. randomization, control group)

2. **Independent Assessment** (person administering outcome measure not otherwise involved in the study)
Partner Training in Aphasia: Education

- Data inadequate or conflicting. Given current knowledge, treatment is unproven
- No recommendations regarding education approaches to partner training in aphasia
- Further research is needed
Communication Training Approaches for Partners of Individuals with Aphasia:

Teaching Effective Communication Strategies

20 studies
Communication Approaches to Partner Training in Aphasia

- Targeted several potential communication partner groups:
  - family members/caregivers (14)
  - volunteers (students) (4)
  - medical professionals (2)

- Usually took place over the course of several training sessions
Communication Approaches to Partner Training in Aphasia

- Varied in how training took place:
  - 8 - Partner plus PWA training in dyad
  - 6 – Partners Group Training
  - 3 – Group Training for Partners and PWA
  - 3 – Individual partner training

- Often used videotaped examples/analyses
### Partner Communication

#### Training for PWA

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Expected Outcomes

- Improved ability of partners to provide appropriate supports in communication interactions with persons with aphasia.

- Improved ability of the person with aphasia to participate in communication interactions.
Measures

- Communication in the dyad - conversations
  - Scores of partner in use of supportive multimodal strategies, repairs, speaking rate
  - Scores by PWA in participating in conversations more effectively, words/minutes
  - Overall ratings of the communicative effectiveness in the dyad
Measures

- **Impairment - PWA**
  - Standardized aphasia tests (e.g., BDAE, WAB)

- **Communication activity/participation of the PWA**
  - Standardized tests (e.g., CADL)
  - Questionnaires
  - Ratings of conversation (e.g. gesture, strategy use)
Measures

- Psychosocial
  - Partners: Scales and interviews pertaining to Self-esteem, Depression
  - PWA: Scales and interviews about Well-being, Anxiety, Depression, Affect
Examples of Communication Interventions

- **Group:** Workshops/classes about aphasia and effective communication strategies; include video observations and role-playing

- **Dyads & Individuals:** Conversational coaching; participate in conversation and video analysis about effective communication and repair strategies
Some communication strategies…

- Maintain eye contact
- Avoid noisy places
- Keep communication tone natural and not patronizing
- Give PWA opportunities to express ideas
- Give plenty of time to respond
- Verify to ensure message accurate
- Ask general questions about the topic main idea
- Use paper/pencil/books/materials during conversation
Some communication strategies…

- Write down key words
- Write down confirmed information
- Confirm yes/no questions on paper
- Summarize information as you go and in the end
- Encourage circumlocutions
- Give options
- Disregard minor errors
- Encourage alternative modes of communication such as gestures/drawing
Did communication interventions work for partners?

**Improvements in psychosocial adjustment**
- 2 of 3 studies

**Use of conversational supports – strategy**
- 14 of 14 studies
  - use – repairs – speaking rate by partners
Did communication interventions work for persons with aphasia?

Improvements in:

- Psychosocial adjustment: 3 of 5 studies
- Standardized aphasia test scores: 4 of 7 studies
- Activity/participation measures: 5 of 5 studies
- Conversational dyad measurements: 10 of 10 studies
AAN Classifications
Communication Training Studies

Included 2 AAN Class I studies:
Kagan et al. 2001; Legg et al. 2005
Prospective, randomized, controlled clinical trial with masked outcome assessment, in a representative population.

Also.....2 Class III studies
17 Class IV studies
Communication Approaches: Clinical Recommendations

- This approach is **effective** for improving partner use of effective communication strategies.
- This approach is **effective** for improving the communication of individuals with aphasia.
- Of course, further research is needed.
Summary

Counseling and Education
- Findings are generally positive within and across studies
- Quality of studies lack sufficient experimental rigor to allow clinical recommendations

Communication Training
- Effective for improving partner use of communication strategies
- Effective for improving the communication of individuals with aphasia