THE IMPACT OF COMMUNICATION IMPAIRMENTS ON THE SOCIAL RELATIONSHIPS OF OLDER ADULTS

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Andrew Palmer, PhD, CCC-SLP
NW Center for Voice & Swallowing, Dept. of Otolaryngology-Head & Neck Surgery, OHSU
Email: palmeran@ohsu.edu

OVERVIEW
- Background
- Findings from Preliminary Investigation
- Findings from a Recent Study
- Potential Contributions & Limitations
- Discussion / Q&A

THE IMPORTANCE OF SOCIAL RELATIONSHIPS
- Ever since Berkman & Syme (1979) published their pioneering study, a significant body of evidence has emerged to show that social relationships are associated with physical and mental health across the life-course.
- Studies show consistent relationship between the quantity and quality of our social relations and:
  - Health, disease, & risk of mortality.
  - Psychological well-being and mental health.
  - Use of formal services & risk of institutionalization.
  - Outcomes after rehabilitation.

SOCIAL RELATIONSHIPS AND MORTALITY
HOLT-LUNSTAD ET AL. (2010)
- Meta-analytic review compiled data on social relationships & mortality:
  - Compiled data from 148 studies with over 300,000 participants and found a 50% increase in survival for individuals with stronger social relationships.
  - These effects remained significant even after controlling for age, sex, initial health status, cause of death, and the length of the follow-up period.
  - “The magnitude of this effect is comparable with quitting smoking and it exceeds many well-known risk factors for mortality (e.g. obesity, physical inactivity).”

IF SOCIAL RELATIONSHIPS ARE SO IMPORTANT FOR WELL-BEING, WHAT IS THE IMPACT ON ADULTS WITH A COMMUNICATION IMPAIRMENT?
COMMUNICATION IMPAIRMENTS

- Communication impairments include a wide variety of disorders related to speech, language, hearing and cognitive function for communication.
- It is estimated that 1 in 6 Americans has a communication impairment of some kind.

AGING & COMMUNICATION IMPAIRMENTS

- Studies of communication have shown that the conversational skills of normally aging older adults tend to remain well-preserved.
- With increasing age, there is an increase in the prevalence of conditions that interfere with communication.
  - In older adults, hearing disability is the most common, with an estimated prevalence of around 35%.
  - 55% of Medicare beneficiaries estimated to have some type of communication impairment (over 16 million).

IMPACT OF COMMUNICATION IMPAIRMENTS

- Communication impairments are associated with increased risk of depression, social isolation, loneliness and poorer quality of life.
- But, it is difficult to estimate the relative impact of a communication impairment because they often co-occur with other health problems & functional limitations.

THE SOCIAL LIFE OF OLDER ADULTS

- Previous stereotypes of aging were that older adults lived lives of social isolation and exclusion, but research has shown that this is not the case:
  - Most older adults remain active participants in the lives of their friends, families and communities.
- In normal aging, there are changes in social relationships of older adults.
  - Older adults seem to show a preference for relationships with individuals that they have deeper personal connections with, rather than more casual acquaintances.
  - As a result, the social networks of older adults become smaller and more emotionally close over time.
- Individuals become more positive about their social relationships as they age.

THERE ARE A WIDE VARIETY OF SOCIAL MEASURES THAT CAN BE EXPLORED

- Social isolation = An objective measure of reduced size of an individual’s social network or the frequency of contact with others.
- Social network characteristics = The density, type, size, or the number of (supportive) social contacts in an individual’s life
- Social support = A measure of the adequacy of support often in a variety of domains (e.g. emotional, practical, informational)
- Social participation = ability of an individual to participate in social roles, relationships, activities and functions.
- Negative social interactions = interpersonal conflict, arguments, criticism, and unwanted intrusions.
- Loneliness = A subjective measure of feeling of the lack of certain types of relationships or missing a certain quality in those social relationships.
**Prevalence of Loneliness & Social Isolation in Older Adults**

- Evidence suggests that only a minority of community-dwelling older adults are “severely” lonely or isolated:
  - 10% of community-dwelling older adults.
- Risk factors include:
  - Loss of a partner, having no (surviving) children, living alone, and poor health.
  - The risk of these life events occurring increases with age.

**Communication & Social Relationships**

- Findings vary across populations:
  - Studies of community-dwelling older adults – negligible association.
  - Studies of older adults with hearing impairments – inconsistent association.
  - Studies of some populations with communication impairments – more consistent relationships (very limited data).
- Discrepancies may relate to differences in study design, covariates, measurement of variables, and differences between groups.

**Communication Impairments & Mental Health**

- Some evidence for a causal relationship between communication impairments & well-being.
- Intervventional studies for a range of different types of communication impairments have shown improvements in loneliness, depression, and QOL.
- These findings have been shown not just in individuals with communication impairments themselves but also spouses & family members.

**Questions**

- So, if “communication forms the foundation of social interaction”…
  - How important is communication for maintaining social relationships?
  - For those with a communication impairment, can we make a statement about the impact on social relationships, regardless of the etiology of that impairment?
  - And, if so, what are the implications of those changes in social relationships for mental health?

**Secondary Analysis of Existing Dataset**

- Used data from the Later Life Study of Social Exchanges (LLSSE), an NIA-funded study that has formed the basis for a number of publications.
- Participants were a representative, national sample of older adults aged 65 or more, from all 50 states, who were living independently in the community (n = 742).
- Participants asked questions about demographics, health, well-being, and social relationships.
- 3 items related to communication used to create communication impairment variable.
RESULTS

- A series of multiple regressions was performed.
- Communication impairment was significantly associated with a number of social measures.
- Even after controlling for other characteristics (age, partnership status, health, and disability), communication impairment was a significant predictor of:
  - A smaller social network
  - Less frequent participation in social activities
  - Experiencing fewer positive social exchanges
  - Higher levels of loneliness
- There was no significant difference in negative social exchanges.

CHARTS STUDY

- **Purpose:**
  - To provide detailed information about the health, communication status, and social relationships of a sample of community-dwelling older adults using well-validated measures.
- **Mixed Methods Design:**
  - Phase 1: Quantitative survey of a larger sample
  - Phase 2: Face-to-face interviews in selected participants
- **Rationale:**
  - Mixed methods is particularly valuable in studies of social phenomena that must take many different factors into account.

STUDY RECRUITMENT

- Possible reasons for inconsistencies in previous studies:
  - Studies of community-dwelling older adults: Low prevalence of communication impairment
  - Studies of older adults with communication impairments: High rates of comorbidity & disability
- Targeted recruitment method used to ensure variability on these measures.
- Older adults recruited with conditions that affect:
  - Communication alone
  - Communication & functional abilities
  - Functional abilities only
  - And older adults without any significant health problems.

FOLLOW-UP STUDY

CONCEPTUAL FRAMEWORK

(Adapted from Berman et al., 2000)

- Social networks provide the structure (Mezzo) which provide opportunities for interpersonal contact (Micro) which, in turn, affect mental health and well-being.

PHASE 1: QUANTITATIVE

- Participants were asked to complete a survey either by mail or online with questions relating to:
  - Demographics
  - Communication
  - Health & disability
  - Social relationships
  - Mental health & well-being
- A total of 240 individuals completed the survey and were eligible for inclusion.
PHASE 2: QUALITATIVE

- Purposive sampling was used to select 14 individuals from Phase 1 to take part in face-to-face interviews.
  - Interviews were recorded, transcribed, and coded for analysis.
- Integration of findings from Phase 1 & 2:
  - Illustration: descriptive information provided additional detail and insight into quantitative results.
  - Exploration: way of trying to explain unexpected results in the quantitative data.

COMMUNICATION PREDICTED KEY ASPECTS OF SOCIAL RELATIONSHIPS & WELL-BEING

- After controlling for demographic characteristics, health, and disability, communication significantly predicted:
  - Significantly fewer friends in the social network
    - Not predictive of total social network size nor the number of family in the social network
  - Two aspects of social support:
    - Social integration (“belonging support”) and
    - Reassurance of worth (“esteem support”)
  - Social participation:
    - Frequency of social participation and
    - The number of social activities engaged in.
  - Social self-efficacy, loneliness, and symptoms of depression.

LOSS OF FRIENDS & REDUCED SOCIAL INTEGRATION

- Those with greater communication difficulty had significantly fewer friends in the social network.
- In addition, communication impairment was a significant predictor of a related form of social support: Social Integration.
- Social integration relates to a sense of “belonging” which is derived from membership in a group of individuals with similar interests, concerns, and/or recreational activity and is most often provided by friends.

THE IMPORTANCE OF SOCIAL RELATIONSHIPS

- Continuity of relationships with friends and family over time emphasized during interviews.
- The importance of companionship and close friendships (people who “look at the world like I look at it”) was acknowledged by almost all.
- Many went to great lengths to maintain friendships over long periods & distances.
- Some reported a reduced interest in group membership with those that they did not feel a close connection with.

CHANGES IN SOCIAL RELATIONSHIPS

- Some life transitions, such as relocation and retirement, resulted in the sudden loss of close friends.
- Some members of the social network “fell by the wayside” following the diagnosis of a disability.
- Due to increased reliance on a spouse/partner, some individuals felt “out of the loop” in planning social events and had less control over who they socialized with.
SOCIAL PARTICIPATION

- Poorer communication was significantly associated with less frequent social participation and a reduced number of social activities.
- Interviews highlighted some of the problems with social participation:
  - Difficulties occurred in a wide range of social contexts and this made participation in some of these types of social events less rewarding.
  - The difficulties that they experienced, particularly in group settings, often resulted in feelings of wearing an “invisibility cloak” or being “alone in a crowd.”

INSIGHTS FROM INTERVIEWS: 
THE IMPORTANCE OF SOCIAL PARTICIPATION

- For most people, however, there were reasons to continue social participation.
  - Some individuals continued to attend in order to maintain their social connections.
  - Others “made the effort” on behalf of their spouse or partner.
  - In some cases, individuals went to great lengths planning participation in social events, including choosing in advance who to go with and how long to stay.

SOCIAL ISOLATION

- Social isolation was rare occurring in only 12% of the sample. This is consistent with other estimates from studies of older adults.
- In an interview, one participant described his progression from being “alone in a crowd” until finally: “You just end up being alone off by yourself and do things just by yourself.”

REASSURANCE OF WORTH

- Communication impairment was a significant predictor of a second form of social support, namely reduced Reassurance of Worth.
- Reassurance of worth is the sense that the competence, skill, talents, and abilities of an individual are recognized by others. Also known as “esteem support” or “affirmation.”
- During interviews, a variety of experiences were described that appeared to have taken a toll on self-perceptions of competence and worth.
- In some cases a relatively “mild” communication impairment resulted in a significant change in social roles and responsibilities. This was often associated with considerable psychological distress.

REASSURANCE OF WORTH

- Role losses: Role losses secondary to no longer being able to perform “adequately” or assume “leadership positions.”
  - These were coupled with societal messages reinforcing a sense of irrelevance, such as taking “forced retirement” or being signed up for disability despite a desire to continue working.
- Changes in self-perception: Some individuals perceived themselves differently as a result of their communication changes.
  - Participants tended to judge themselves as appearing less “confident,” less “interesting,” felt “more self-conscious” and described a loss of a sense of self.

SOCIAL SELF-EFFICACY

- Poorer communication was the only variable that was associated with significantly reduced social self-efficacy. A novel finding.
- Social self-efficacy is a belief in one’s ability to deal effectively with others.
  - Social self-efficacy a predictor of mental health in older adults.
- Some interviewees reported reduced ability to make new friends, even when they were in social contexts with opportunities for doing so.
Changes in Social Self-Efficacy

- In Phase 1 survey, respondents asked if social self-efficacy had changed over time and, if so, how and why?
- The majority of respondents reported no changes (62%).
- Of those who reported changes in social self-efficacy:
  - Most common reason for positive changes in SSE: increased self-confidence/maturity.
  - Most common reason for negative changes in SSE: communication impairments.
- Consistent with findings from the multiple regression:
  - Communication impairment was the only significant predictor of social self-efficacy.

Role of Social Self-Efficacy Consistent with Other Research

- Other studies have found that hearing impairment is associated with decreased mastery and self-efficacy.
  - Hearing impairments may not only limit participation in activities but also lead to declines in the sense of control, competence, and self-confidence leading, in turn, to increased distress, anxiety, and depression.
- Some previous research has shown that other types of communication impairments have a similar impact.
- Self-efficacy hypothesized to be an important factor in negotiating access to social support which in turn influences health (“support-efficacy model”).

Summary

- Findings support an association between communication impairment and the social relationships of older adults.
- Not all aspects of social relationships were affected equally.
  - Particular impact on relationships with friends, two subtypes of social support (social integration and reassurance of worth), and social self-efficacy.
- Communication impairment also independently predicted higher levels of loneliness and symptoms of depression.

Implications

- Feasible to conduct research in older adults with a variety of communication impairments using a single measure of functional communication.
- Psychological impact of communication impairment not necessarily associated with objective “severity”.
  - Need to consider social context as much as the severity of the impairment.
- Communication impairments affected self-perception and self-concept. Pathway of impact on psychological well-being may be through self-efficacy.
  - Is this amenable to intervention?
  - If so, what is the impact of treatment?

Limitations

- Cross-sectional:
  - Not possible to describe longitudinal changes.
  - Causal relationships cannot be proven, only inferred.
- Characteristics of the sample:
  - Volunteer bias in any survey research.
  - Oversampling of communication impairments.
  - Lack of racial and ethnic diversity in sample.
**Potential Contributions**

- A better understanding of which social relationships are affected and in what ways might:
  - Identify which types of social relationships should be measured future investigations regarding the efficacy of interventions and treatment.
  - Enable better counseling of individuals and their families about the importance of seeking intervention for communication impairments.
  - Support advocacy to third-party payers about the importance of funding these types of interventions.

**Targeting Participation**

- The World Health Organization's ICF model (2001) encourages us to think beyond "body functions and structure" but at the level of Activity and Participation.
- Improving communication does not necessarily mean improving participation in communication situations (Simmons-Mackie, 2000). It is likely that this needs to be targeted specifically:
  - "Life participation approach" to rehabilitation
  - New assessment tools such as Communicative Participation Item Bank (Baylor et al., 2013) & Social Networks Communication Inventory (Blackstone & Berg, 2003)

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**Questions & Discussion**