Critical Review:

Do person-centered communication strategies for individuals with dementia residing in long-term care settings enhance staff-resident interactions and quality of life for these individuals and their caregivers?*

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This critical review examines the efficacy of person-centered communication strategies when implemented with individuals with dementia in long-term care in order to improve staff-resident interactions and the quality of life of these individuals and their formal caregivers. Seven articles were included in this review: three randomized control trials, two single-group pre-posttest designs, and one single-group post-test design. Overall, the results of these studies provide strongly suggestive evidence that person-centered communication strategies enhance communicative interactions between residents and their formal care providers as well as the quality of life of both groups of individuals.

Introduction

In the field of biomedicine, it is a well-established, although false, truism that dementia results in the *loss of self* (Ryan, Byrne, Spykerman, & Orange, 2005). Since 1997, Kitwood's seminal work entitled "Dementia Reconsidered: the Person Comes First" has been spearheading the changing face of care for people with dementia, with the hope of improving quality of life and well-being for these individuals and their caregivers. Central to this change is the belief that preserving the *personhood* of individuals with dementia can be achieved by improving the social interactions with those around them, which in a long-term care or nursing home setting, is largely determined by formal care providers (Ryan et al., 2005). According to Kitwood (1997), personhood need not depend on the capabilities of the person with dementia, but is "a standard or status bestowed upon one human being by others, in the context of relationship and social being. It implies recognition, respect, and trust." (Ryan et al., 2005).

According to the *Communication Predicament Model of Aging*, an individual perceives old age cues, which trigger stereotyped expectations about older adults, and cause the individual to modify his/her communicative behaviour; although the intention of modifying one's communicative behaviour may be to accommodate the older adult's needs and improve communication, it typically inhibits communication and is perceived as patronizing and disrespectful by older adults (Bradford, 2009). This modified speech behaviour, which may consist of childish terms (e.g., "that's a good girl"), over-inclusive pronoun modifications (e.g., "let's take our bath"), use of terms of endearment in place of formal names (e.g., "sweetie"), along with vocal modifications such as a higher pitch, has been referred to as *elderspeak*, *patronizing speech*, and *secondary baby talk* in the literature (Bradford, 2009). Person-centered communication strategies have been brought forth to counteract the task-focused, directive style of communication typical of staff-resident interactions in long-term care settings. Examples of person-centered communication strategies are those based on Kitwood's positive personwork: (a) validation, acknowledging a resident's feelings; (b) recognition, acknowledging a resident as a person, affirmed uniquely by name; (c) negotiation, consult about desires and preferences; and (d) facilitation, to involve resident's initiative in shared task (Savundranayagam, 2014).

To further reinforce the need for a change in the delivery of care for older adults, the current projected population of individuals over the age of 60 living with dementia is 6-7%, and this number is expected to double over the next twenty years (Price et al., 2013). It is imperative that the current climate of long-term care shift to accommodate this increase, and prioritize the quality of life of these individuals.

Objectives

The primary objective of this paper is to critically evaluate the existing literature regarding the implementation of person-centered communication strategies for individuals with dementia in long-term care facilities, and the impact of these strategies on interactions between caregivers and residents, as well as resident and caregiver quality of life (QOL). The secondary objective is to provide a rationale for speech-language pathologists and other professionals desiring to implement staff training programs to improve communication and QOL in these facilities.

** This paper was created as a required assignment for the CSD9639 Evidence Based Practice for Clinicians course at Western. While it has been evaluated by course instructors for elements of accuracy and style, it has not undergone formal peer-review.*

Methods

Search Strategy

Articles related to the topic of interest were found using the following computerized databases: PubMed, SCOPUS, and CINAHL. Keywords used for the database search were as follows: (dementia) AND (person-centered) AND ((communication) OR (quality of life)). Reference lists of articles were manually searched for additional studies relevant to this critical review.

Selection Criteria

Studies selected for inclusion in this critical review were limited to articles that included communication skills intervention or similar interventions that were consistent with the principles of person-centered communication outlined by Kitwood (1997). Studies were also limited to those that included residents in long-term care or nursing facilities with a suspected diagnosis of dementia. Primary research was included and no limits were set on publication date or geographical location of participants.

Data Collection

The literature search revealed six articles that aligned with the selection criteria. Articles consisted of three randomized control trials, two single-group pre-posttest designs, and one single-group post-test design.

Results

Randomized Control Trials (RCTs)

Burgio et al. (2001) conducted a mixed method randomized control study examining the effects of communication skills training and the use of memory books on the verbal interactions between 64 certified nursing assistants (CNAs) and 92 residents with moderate cognitive impairment in five nursing homes during care routines. A staff motivational system was implemented to encourage performance and maintenance of skills. Two units in each of the five nursing homes were randomly allocated to either the no-treatment control (NTC) group or the treatment group; both the NTC and treatment groups were demonstrated to be similar at baseline. All staff in the intervention condition received training of the use of memory books and communication strategies such as using positive statements and increasing the amount of communication opportunities. Training methods included didactic teaching, active role play, and discussion of real-life examples and written vignettes. Thirty-nine CNAs on the intervention unit were taught to monitor and record their performance as a means of tracking data and as a regular reminder of the desired communication skills. A variety of outcome measures were collected to provide a comprehensive assessment of treatment effects, including the CAN Communication Skills Checklist, and the Computer-assisted Behavioural Observation System. Descriptive statistics were employed to assess treatment delivery and enactment, and a 2 x 3 mixed-factor analysis of variance (ANOVA) was conducted to determine if an initial behavior change was made in staff and residents after implementation of the intervention. Finally, a 2 x 2 mixed-factor ANOVA was conducted to determine maintenance of behavior-change at 2-month follow-up. Statistical analyses of this nature were appropriate for the study design.

Compared to staff on control units, trained CNAs spoke more with residents, used positive statements more often, and gave more specific instructions to residents. Importantly, changes in staff behavior did not result in increased time providing care to residents. Moreover, staff behavior change was maintained at 2-month follow-up. Contrary to the authors' hypothesis however, the intervention did not result in an increase in resident verbal communication.

The limitations of Burgio et al. include an elevated Type I error rate due to the absence of individual adjustments made to statistical analyses such as a Bonferroni correction. The authors suggested that exact probability levels are reported instead so that the reader may make adjustments as he/she sees fit. Furthermore, assessors and participants were not blind to their group assignment, nor was allocation concealed, tasks that would have likely proved difficult given the nature of the work in the nursing home setting. Furthermore, a potential limitation that Burgio et al. discussed is the extremely high national turnover rate for CNAs at 97% (American Health Care Association); this could pose serious challenges for the implementation of such a program in the long-term. Overall, this study presents compelling evidence that person-centered communication strategies can improve staff-resident interactions with individuals with dementia residing in long-term care. It also provides compelling evidence that these strategies do not facilitate an increase in resident verbal communication.

In Magai, Cohen, and Gomberg (2002), 91 individuals with mid-late state dementia and 20 staff caregivers in three nursing homes participated in determining whether educating staff in nonverbal communication could enhance mood and reduce symptoms in residents, and enhance well-being in caregivers. Participants were randomly assigned to either a nonverbal sensitivity group, a behavioral placebo group (received training in

the cognitive aspects of dementia), or a waitlist control. The ten training sessions in the intervention and placebo conditions were taught by a clinical psychologist who was blind to the treatment conditions and research hypotheses. Resident behavioral and symptom data were measured by the Behavioral Pathology in Alzheimer's Disease Rating Scale (BEHAVE-AD), the Cohen-Mansfield Agitation Inventory (CMAI), and the Cornell Scale for Depression in Dementia (CDS) by research assistants who were blind to treatment conditions and hypotheses. Facial expressions of emotion were also evaluated during semi-structured interviews with residents. Caregiver psychological well-being was measured by the Brief Symptom Inventory (BSI). Notably, good reliability and validity were reported for all measures.

A repeated measures analysis of variance (ANOVA) was used to compare baseline with point measures of 3 week intervals up to 12 weeks, an appropriate statistical design for a mixed measure RCT. There was a significant difference with respect to race between the intervention and the control groups at baseline, and thus race was treated as a covariate in subsequent analyses.

Results revealed that resident measures of depression, agitation and other psychological symptoms did not differ between groups, however facial affect did; residents who were cared for by staff whom had received training in emotional validation showed more positive affect (joy). Furthermore, there was a decrease in negative affect over time for all groups, and for the caregivers, a decrease in psychological symptomatology in both of the groups that received training (intervention and placebo). Notably, this study obtained a 91% completion rate.

Limitations of Magai et al. (2002) include assessing residents during a semi-structured interview as opposed to a naturalistic environment, thus detracting from the study's ecological validity; it is important to consider however that this allowed for better inter-rater reliability. Moreover, the authors suggested that it may have been more desirable to assess actual staff behavior change as opposed to relying on observer reports. Overall, this study provides compelling evidence that communication interventions such as the one demonstrated in Magai et al. improve quality of life for residents with dementia and their formal caregivers.

McCallion, Toseland, Lacey, and Banks (1999) examined the effectiveness of a Nursing Assistant Communication Skills Program (NACSP) in improving the well-being of residents with dementia, and increasing knowledge of dementia, knowledge of caregiving responses, and decreasing rates of turnover among caregivers in two skilled-care nursing homes. In each home, two units were randomly assigned to either the NACSP or the wait-list control (WC) condition. 105 residents with moderate-severe dementia as identified by the Mini Mental State Exam (MMSE), and 88 nursing assistants participated. Nursing assistants in the treatment and control conditions did not differ significantly at baseline, however significant differences were found between residents in the treatment and control conditions with respect to marital status and Global Deterioration Scale (GDS) scores. To account for these differences, three-way interaction effects (i.e., Condition x Time x Marital Status and Condition x Time x CDS) were examined in the analyses. This study employed a nested design, meaning they assigned all NAs and residents in a unit to either the NACSP or control condition in order to decrease contamination of NAs between the two units. It is important to note that with a nested design, confidence can be lowered. The authors accommodated for this with a partial crossover design; after a 6 month assessment period, the WC group was provided with the NACSP and then participants in both arms of the study were assessed for change in the outcome variables at 9 months, thus increasing the confidence associated with a nested design. Every effort was made to keep data collectors blind to the hypotheses and the group assignment. Outcome measures of the NAs included: Knowledge of Alzheimer's Test (KAT), Penn State Mental Health Questionnaire (MHQ), and turnover rates at baseline, 3, 6, and 9 months. Outcome measures of the residents were as follows: Cornell Scale for Depression in Dementia (CSDD), Cohen-Mansfield Agitation Inventory (CMAI), Multidimensional Observation Scale for Elderly Subjects (MOSES), and psychotropic medication and restraint use. Random effects regression models (RERMs) were employed to analyze outcome variables, which can offer advantages over repeated measure designs or nonparametric tests, as they allow all subjects to be included in the data for the length of time they participated, as well as allowing random subject effects to control for subject-to-subject differences.

Results indicated improved well-being/QOL in the residents whom were cared for by NAs who had received the NACSP compared to those in the control group, and an increase in knowledge of caregiving responses and reduced turnover rates in NAs who had received the training.

The main limitations that must be considered are a small and homogeneous sample size (across two nursing homes), the use of a nested design, and the assumption that staff turnover rates were directly attributed to the intervention or lack-there-of; a suggestion for further

research is to examine this potential link. Overall, McCallion et al. contributes compelling evidence that PCC strategies improve staff-resident interactions and resident and caregiver QOL.

Pre-post-test designs

The Passalaqcua and Harwood (2012) study was conducted in a for-profit long-term care centre that specializes in memory issues, where residents live in cottages together with others whose functional abilities are similar, and a consistent staff caregiver. 26 caregivers participated in the study, all of whom attended at least 2 out of 4 workshops that focused on Kitwood's communication skills and centered around Dawn Brooker's four elements of person-centered dementia care: (a) Valuing people, (b) Individualized care, (c) Personal Perspective and (d) Social Environment (VIPS). A communication measure was established in the form of a self-report questionnaire, which caregivers completed pre- and post-intervention. Items on the questionnaire were developed from existing literature and included the categories empathy, happiness, burnout, attitudes about aging, quality communication, and amount of time spent doing chores, personal care of residents, and leisure activities with residents. The objective of including this last measure was to determine if caregivers increased their time spent engaged in socio-emotional care of residents verses routine personal care post-intervention. In addition, a questionnaire was administered at the end of the workshop to obtain feedback from the caregivers regarding the usefulness of the workshop, with largely positive results. Results indicated a decrease in resident depersonalization, increased empathy and hope for residents, and increased communication strategy use following the intervention. Furthermore, the intervention was determined to be highly feasible based on successful implementation and positive caregiver feedback.

Appropriate paired t-tests were employed to compare pre-test and post-test scores. Furthermore, authors clearly demonstrated which outcome variables achieved significance (almost all), and which were approaching. A repeated measures analysis of covariance (ANCOVA) was completed post-hoc on the *time spent doing specific activities* data. Methods were modified post-hoc once it became evident that estimated time spent in the majority of activities significantly increased over time; to control for this, average time spent during all activities was treated as a covariate to examine change in time spent on each specific activity. In addition to this post-hoc modification, additional limitations include a small sample size (n = 26), lack of a control group to determine if effects were due to the intervention, reliance on self-report as opposed to coded observational data, low reliability for multiple outcome variables, and the fact that caregiver report questionnaires were shortened before being given at post-test due to literacy constraints of the participants. Overall, this study provides suggestive evidence that person-centered communication strategies improve staff-resident interactions and QOL.

Ripich, Wykle, and Nyles (1995) examined a communication skills training program based on the FOCUSED strategies for communication maintenance with individuals with Alzheimer's Disease (AD). 17 nursing assistants in a long-term care facility in Cleveland, Ohio participated in this study. The nursing assistants received the training program in 6 two-hour sessions which included role-play, videotaped vignettes, and discussion. Pre- and post-test assessments of knowledge of AD and communication satisfaction attitudes were conducted.

Limitations of this study include an absence of reported reliability or validity of assessment tests, the lack of a control group, a small sample size (n = 17), and a reliance on self-report to demonstrate attitudinal change as opposed to behavioral observation. Furthermore, the results suggest that the FOCUSED program helps nursing assistants provide better care and thus improve quality of life in individuals with AD, however it does not provide evidence that its outcome variables knowledge of AD and communication satisfaction attitudes translate to actual staff behavior change. Overall, this study provides equivocal evidence that the FOCUSED communication skills program enhances staff-resident interaction or quality of life of residents with AD.

Post-test design

Savundranayagam, Ryan, Anas, and Orange (2007) examined the impact of two communication-enhancing strategies (a) personhood (vs. directive and (b) clause-simplification with repetition (vs. complex) on persons with dementia. Participants included 71 staff-members from 5 long-term care facilities, most of whom were female nursing aides or personal support workers, as is typical of the long-term care workforce. Scripted staff-resident conversations were depicted in paired vignettes during two different dining situations. For each of the two dining situations, participants compared a pair of conversations, one in which the staff-member's communication style was directive and task-focused, the other person-centered, based on Kitwood's (1997) indicators of personhood. Furthermore, each dining situation was manipulated to include staff language that was either complex or simplified, so that each pair of conversations (person-hood vs directive) contained the

same level of language complexity. The resident's utterances remained constant across both speaking situations, and included dementia-related language impairments such as word-finding problems and repetition.

After reading each pair of conversations, staff were asked to rate the extent to which the staff member in the first conversation depicted a certain behavior or characteristic compared to the staff member in the second conversation using various composite variables on a scale of 1-7. Composite variables for staff included: affirming vocal features, nonverbal patronizing behavior, nonverbal affirming features, competence, satisfaction, helpfulness, and respectfulness. Participants were then asked to complete the same rating for the resident; resident composite variables included: competence, satisfaction, and abilities. An effort was made to reduce social desirability effects by including a combination of positive and negative adjectives. Reliabilities of composite variables were reported and ranged from 0.64 to 0.93.

Appropriate one-sample t-tests were employed to assess the communication style main effect on comparison ratings. Main effects reached significance on all perceptions of staff and residents after Type-I error Bonferroni corrections. The two language conditions were analyzed using MANOVAS, revealing statistically significant differences for multiple composite variables.

Results supported the authors' hypotheses and revealed that staff whose communication was person-centered were perceived as more competent, respectful, helpful, affirming, and satisfied compared to staff whose communication style was more directive. Furthermore, the resident in the personhood condition was also viewed more positively (competent, respected and satisfied). In addition, simplified grammar and repetition served to improve personhood perceptions in some conditions.

A limitation of this study is its small sample size. Further research is needed to determine if the improvements in staff perceptions translate to an increase in person-centered communicative behavior. Overall, this study provides compelling evidence that person-centered communication strategies enhance staff perceptions of residents with dementia.

Discussion

Overall, the evidence that person-centered communication strategies enhance staff-resident interactions and QOL for residents and their caregivers in long-term care indicates a positive effect. Of the six studies examined in this review, all suggest a positive effect, four provide compelling positive evidence, one provides suggestive and one provides equivocal evidence due to design or methodological flaws.

An overall limitation of all but one of the above studies is the reliance on self-report measures to indicate attitudinal, behavioral and psychological changes of the staff caregivers. With the exception of Burgio et al., the studies did not observe whether the communication strategies trained carried over into daily caregiving of the residents. By the same token, Burgio et al. and McCallion et al. were the only two studies that collected follow-up data. The fact that Burgio et al. found staff behavior change to be maintained at 2 month follow-up is promising evidence that the attitudinal shifts reported by all the studies may in fact translate into long-term behavior change; more research is needed however in order to validate this conclusion.

An additional limitation of all the studies was the absence of qualitative data on the residents' perspectives. Although one may anticipate challenges with reliability and validity when obtaining data from individuals with moderate to severe cognitive impairment, it would be an interesting and important contribution to this body of research to obtain discourse measures from the residents to determine whether or not their personhood has been preserved. Further research in this area may be warranted.

Common themes were found throughout the design of the six studies. In terms of the communication skills training programs, all included similar delivery modes: didactic teaching, discussion of scripted vignettes or personal experience, and a practical component such as role play. Some differences were found between the design of the training programs such as the addition of the use of memory books with residents, a focus on nonverbal communication, and the inclusion of a staff motivational system. It did not appear however, that these differences in design or mode of training delivery had a significant impact on the effect of the intervention.

The fact that person-centered communication strategies did not result in an increase in resident verbal communication is an interesting point to consider. It raises the question: what is it about communicative interactions that helps to preserve personhood in these individuals? One might make the conclusion based on this finding that it is the social connectedness and genuine respect and acknowledgement from another person, rather than the act of expressing oneself through speech, that makes an individual feel valued.

Clinical Implications

Based on this critical review of the evidence, it can be concluded that person-centered communication strategies, when taught to formal caregivers in long-term care facilities, can have a positive impact on multiple aspects of both staff-resident interactions and QOL of caregivers and residents with dementia. It is also important to note that this type of intervention appeared to be feasible, as it did not result in increased time to provide care to residents while using person-centered communication strategies as opposed to a directive task-focused communication style (Burgio et al., 2001). It is believed that this evidence is sufficient to provide a rationale for a speech-language pathologist or other professional to implement such an intervention in long-term care settings.

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