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Feature Article

Identification of hearing loss among residents with dementia: Perceptions of health care aides

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ABSTRACT

Effective communication can be difficult when working with individuals with dementia and hearing loss. Given the high prevalence of both dementia and hearing loss among individuals in long term care, direct care providers in this setting, will almost certainly confront frequent communication challenges. To understand health care aide perspectives of caring for residents with dementia and hearing loss, 12 health care aides from five nursing homes participated in audio-recorded, semi-structured interviews. Transcripts were coded and themes were identified. Health care aides reported the difficulties in distinguishing the relative contributions of hearing loss and dementia to communication breakdowns. They reported that familiarity with residents helped them differentiate between sensory versus cognitive impairments in conversations with residents. Although able to identify strategies to support communication, communication difficulty complicated both their provision of care and support of quality of life for residents with dementia and hearing loss. Suggestions for practice and education are provided.

Introduction

Communication is an essential component of patient-caregiver relationships. In health care situations, communication involves both instrumental and affective interactions.[1] Instrumental communication involves the assessment and management of health-related problems such as giving explanations or providing cues during physical care activities,[1] whereas affective communication involves the establishment or maintenance of a relationship with the patient.[2] In nursing homes both aspects of communication are necessary to provide quality, individualized care based on respect, compassion, promotion of self-determination, as well as optimal comfort and contentment.[2,3]

Effective communication is challenging when working with individuals with dementia and hearing loss and the challenges are exacerbated when dementia and hearing loss co-occur.[4,5] The incidence of dementia has been associated with the severity of hearing loss,[6] and among nursing home residents hearing loss and dementia both have a high prevalence: the prevalence of hearing loss has been estimated at approximately 90%[7–9] and the prevalence of dementia has been estimated at approximately 60%.[10,11] Difficulties with communication increase with the progression of dementia and are manifested as word-finding problems, repetitiousness, difficulty initiating and maintaining a conversational topic and, ultimately, significantly restricted verbal output.[12,13] Dementia also impairs one's ability to understand spoken language, likely because the individual forgets what has been said[14,15] or experiences difficulty encoding information.

The added negative effects of hearing loss superimposed on the negative effects of dementia have been referred to as excess disability.[16] The communication challenges stemming from both hearing loss and dementia are associated with negative mood and affect,[17,18] reduced ability to perform activities of daily living,[19,20] resistance to care,[18] and social isolation.[21] Although severe-to-profound hearing loss is unmistakable, mild-to-moderate hearing loss also interferes with communication but may mistakenly be assumed to be a normal, unavoidable part of aging[22] or part of the communication difficulties associated with dementia.[23]

When dementia and hearing loss co-exist there are important implications that can go unrecognized. When people cannot hear normally, their confusion associated with hearing loss may be mistakenly attributed to dementia[23,24] because many of the behaviors caused by hearing loss (e.g., often asking people to repeat what they say or not staying on topic) are also behaviors caused by

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dementia.[25] As such, it can be difficult to identify hearing loss in people with dementia, which leads to a missed opportunity to address hearing issues that may be remediable. Hearing loss can be an important target for treatment if it is identified by caregivers. A range of interventions can be useful to facilitate communication including the manner of speaking,[26] removal of cerumen from the ear canal,[27] environmental approaches[28] and assistive technology.[29,30]

Given the high prevalence of dementia and hearing loss in the nursing home population, health care aides who are the direct care providers in nursing homes will almost certainly confront these challenges on a daily basis. Therefore, health care aides require the knowledge, skills and attitudes to effectively communicate with these 'communication vulnerable'[5] nursing home residents. Entry-to-practice training in communication is available for health care aides but it tends to be limited in scope and varies across jurisdictions. For example, Canadian health care aide certification programs,[31,32] ranging from 16 to 29 weeks, include a module on communication. The commonly used textbook, *Mosby's Canadian Textbook for the Support Worker*,[33] has chapters dedicated to 'interpersonal communication,' 'hearing and vision problems' and 'confusion, delirium and dementia,' yet the information provided does not refer directly to how to manage the combination of hearing loss and dementia. Although numerous in-service training programs have been developed to enhance the communication of nursing home staff with residents who have dementia, in two recent systematic reviews of such training programs[34,35] only one of the 22 included articles highlighted the important impact of hearing loss on communication.

Because health care aides communicate with nursing home residents more often than other health care providers, they are in a unique position to potentially reduce the effects of excess disability caused by hearing loss among nursing home residents with dementia. After searching the professional caregiving literature the authors were unsuccessful in locating any previous research in which health care aides provided their perspectives on hearing loss and dementia related to the care or quality of life of residents. To address the gap in knowledge and assist in understanding of how to better meet the needs of nursing home residents, this study involved examination of the following research questions: 1) What are health care aides' perceptions of hearing loss in nursing home residents with dementia? and, more specifically, 2) What are health care aides' perceptions of the relevance of residents' hearing loss for day-to-day care and participation in social activities?

Methods

The study reported here was part of a larger mixed methods study to determine the contribution of hearing loss to excess disability in residents with dementia living in nursing homes. In the quantitative component of the study, the hearing and cognitive-communication abilities of residents with mild-to-moderate hearing loss were measured, while in the qualitative component, health care aides' perceptions of issues associated with combined hearing loss and dementia were explored. This study was carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans. All participants provided informed written consent and the study received ethical approval from the Health Research Ethics Board at the University of Alberta.

Sample

The researchers used purposive sampling in the current study. Health care aides were eligible to participate if they met the following inclusion criteria: knew and worked regularly (a minimum of three weeks) with nursing home residents with dementia who had mild-to-moderate hearing loss (as previously assessed by an audiologist), and were permanent staff members for at least six months, to ensure they had a sufficient understanding of how the unit environment might affect the residents' quality of care and quality of life.

Procedures

Recruitment

From March 2011 to April 2012 the lead investigators (SES, TH) met with nursing home administrators to obtain administrative approval for the study. Then the research assistant (CI) approached health care aides during meetings scheduled by nursing unit managers, provided them with study information, and obtained their informed written consent to participate in the study. The majority of health care aides in the participating facilities met the inclusion criteria. The first 12 health care aides who were approached agreed to participate in the study. No one refused to participate.

Interviews

Using a semi-structured interview guide, the third author (CI) conducted interviews with as many health care aides as necessary to achieve saturation.[36] Saturation was assessed through concurrent data collection and data analysis. Recruitment stopped when the content of the interviews did not include new information. Interviews were conducted in a quiet room in the nursing home during the health care aides' regularly scheduled day or evening shifts. Replacement health care aides were available to provide resident care during the time that the research participants were occupied in interviews. Administrators were compensated for these staff replacement costs.

The research assistant recorded fieldnotes following each interview to describe the context of the data-gathering episode, and included reflective memos about her observations and impressions of the interview.[37] The interview was organized into questions that were not resident specific (e.g., How do you know when a resident with dementia has trouble hearing?) and questions that were specific to particular resident participants (in the quantitative study) who were assessed to have mild-to-moderate hearing loss (e.g., How does Mrs. X's hearing problem affect your ability to provide her care?). Topics included perceptions/recognition of hearing loss, awareness of interventions for hearing loss, the relevance of communication for providing care, and implications of hearing loss for resident well-being. Health care aides completed demographic information sheets immediately prior to the interview.

Data analysis

Interviews with staff members were transcribed verbatim, checked for accuracy, and imported into ATLAS.ti to facilitate data management. Data were analyzed based on principles of interpretive description.[37,38] Interpretive description is intended for "smaller scale qualitative investigation of a clinical phenomenon… for the purpose of capturing themes and patterns within subjective perceptions and generating an interpretive description capable of informing clinical understanding."[38] In contrast to traditional methodologies (e.g., grounded theory, phenomenology, ethnography) interpretive description does not have a specific set of analytic techniques that must be adhered to at all times. We followed the recommendations of Thorne et al[38] to use techniques that facilitate repeated immersion in the data prior to beginning coding, classifying, and creating linkages. Codes were inductively derived