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Experiences of Nursing Staff Using Dementia-Specific Case Conferences in Nursing Homes

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Abstract

Background: Dementia specific-case conferences with the Innovative dementia oriented assessment tool (CC-IdA) could be an important tool with which to analyze and manage challenging behavior. The study gives an insight into nursing staff' experiences using CC-IdA in dementia care. **Methods:** Qualitative interviews were conducted with 18 nursing teams from 12 nursing homes alongside a quasi-experimental study. In addition, observational field notes were taken. Interviews and observational field notes were analyzed using the thematic content analysis. **Results:** CC-IdA contributed to a reflective handling of challenging behavior, to changes in the communication with residents and to the identification of potentially triggers of challenging behavior. Factors influencing the implementation of CC-IdA were among others a lack of moderation skills, limited knowledge of dementia, a lack of biographical information and a lack of involvement by other professionals. **Conclusions:** CC-IdA represents an important tool in the management of challenging behavior of people with dementia. For the successful implementation of these case conferences, both structural and personal resources are needed.

Keywords

dementia, behavioral and psychological symptoms of dementia, case conference, nursing home, experiences

Introduction

Health services for nursing home residents with dementia require the expertise of highly educated nursing staff. In particular, dealing with the challenging behavior of people with dementia, such as physical and verbal aggression, apathy, or agitation, is demanding and stresses nursing staff.[1] The prevalence rates of challenging behavior in nursing homes vary between 80% and 89%.[2,3] Psychosocial interventions are the first-line treatment, but these types of interventions yield only moderate effects on residents' challenging behavior.[4,5] The success of psychosocial interventions seems to depend on the individual factors and available resources of the person with dementia.[5] Thus, case-specific interventions are needed that are individually tailored to each case. The specific triggers and the reasons for residents' challenging behavior must be analyzed before psychosocial interventions are introduced.[6] Because the challenging behaviors of people with dementia may have multiple causes, various explanatory hypotheses must be examined.[7] Case conferences may be important tools for enabling nursing staff to analyze the various triggers for the challenging behavior of residents with dementia.[8] Case conferences are defined as meetings that bring together relevant health professionals and the resident's primary decision makers to discuss current health issues and to agree on a person-centered management plan.[9] Studies investigating case conferences in dementia care are scarce and have mainly focused on their effect, showing divergent results.[8] Promising results were reported regarding reductions in residents' challenging behavior[10] and antipsychotic drug prescriptions, along with increases in the skills and knowledge of the nursing staff.[11] No changes were found regarding either the residents' quality of life or the nursing staff's stress.[11,12] Hardly any study assessed the experiences of nursing staff using case conferences in the daily care of residents with dementia. Knowledge regarding the experiences of nursing staff provides important information about the usefulness and feasibility of case conferences, along with the contextual factors that promote and inhibit their implementation. Thus, this study

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aimed to explore nursing staff's experiences with a dementia-specific case conference concept[13] in combination with the Innovative dementia-oriented Assessment tool (IdA).[14]

The study was nested within a quasi-experimental study to examine the effects of dementia-specific case conferences with the IdA on residents' challenging behavior and nursing staff's stress. The results of the quasi-experimental study indicate a decrease in the prevalence of residents' challenging behavior and a partial reduction in the nursing staff's stress.[2,15] Thus, the qualitative study has a 2-fold aim: first, the study was used to gain insight into the experiences of nursing staff using dementia-specific case conferences with the IdA and to explore the contextual factors that promote or hamper the implementation of those dementia-specific case conferences with the IdA. This evaluation provides information to aid implementation processes. Concurrently, the qualitative study was used to gain a deeper understanding of the effects of the intervention and to analyze whether a connection between the intervention and the observed outcomes exists (internal validity).

The 2 research questions for the following study were

(a) What are the nursing staff's experiences regarding the application of dementia-specific case conferences with IdA?
(b) What factors facilitate or hinder the implementation of dementia-specific case conferences with IdA?

Dementia-Specific Case Conference With IdA

The dementia-specific case conference concept includes 4 phases, (1) problem description: the first phase begins with a clear specification of the challenging behavior that is understood in terms of its nature, duration and frequency, and the context in which the behavior usually occurs. It will be further clarified for whom the behavior is a problem and which events are caused by the behavior. (2) Body of knowledge: the second phase aims to become acquainted with the resident with dementia and his or her biography. Although biographical information about the resident exists, participants in the case conference mostly have different information, or information is only rudimentarily known. Against the backdrop of this extended knowledge, new ways of forming relationships with the residents can be disclosed, and explanations for residents' challenging behavior (triggers) may be generated. (3) Reflection on hypotheses: in the third phase, explanatory hypotheses for the challenging behavior will be gathered, discussed, and evaluated in relation to the biography of the resident. (4) Development of hypothesis-driven interventions: in the fourth phase, common hypothesis-driven interventions are developed to alter the resident's challenging behavior, and the responsibilities for the implementation of those interventions are determined.[13] Alongside the nursing staff, relatives (family members) are seen as important partners within this case conference concept.[13]

Innovative dementia-oriented Assessment tool is a structured assessment tool that was developed to guide nursing teams systematically through the process of describing the challenging behavior of residents with dementia and analyzing its potential triggers and causes,[16] although IdA does not provide information regarding possible interventions. Innovative dementia-oriented Assessment tool was tested with respect to its practicability, content validity, and construct validity.[14]

Through merging the dementia-specific case conference concept with IdA, the abstract phases 1 to 3 of the case conference concepts are linked with practical guiding questions from IdA. In particular, in phase 1, IdA supports the nursing staff in describing challenging behavior most objectively without valuating or judging the behavior prematurely (IdA: A-D) (figure 1). In phase 2, IdA broadens the views of the possible triggers and causes of residents' challenging behaviors that are not primarily nested within the biography of the person with dementia. In addition to "personality and lifestyle prior to the dementia," IdA also considers "health status and independence in everyday life," "communication," "moods and emotions," and "environmental influences" as possible triggers of residents' challenging behavior (IdA: E-I). Hence, the reflection on hypotheses in phase 3 also takes place with the backdrop of the information regarding the 5 dimensions (E-I) of IdA.

Methods

The study uses a qualitative design and was conducted between February and September 2009 in different nursing homes in Germany.

Setting and Participants

A total of 12 nursing homes with 18 nursing wards including 18 nursing teams were recruited. Nursing homes were included if they were located in the cities of Witten and Dortmund (Northrhine-Westfalia) due to logistical reasons. Nursing wards were included if 50% of the residents living in the ward had a diagnosis of dementia (Mini-Mental State Examination $\leq$ 24). None of the nursing teams performed case conferences on a regular basis or had experiences with IdA prior to the study. All participants for the qualitative study were recruited via the quasi-experimental study.[17]

During the quasi-experimental study, between February and August 2009, each nursing team performed an average of 5 case conferences (min 3; max 7) with a median duration of 60 minutes. Relatives participated in 2 conferences for 1 nursing team (team L1). Moreover, social workers participated in 2 case conferences (team D1, team H1), and a psychiatrist took part in 1 case conference (team L1).

Data Collection

The data collection consisted of semistructured telephone interviews, observational field notes, and problem-centered group interviews, all of which complement one another to derive a more comprehensive picture of the different objects under investigation.

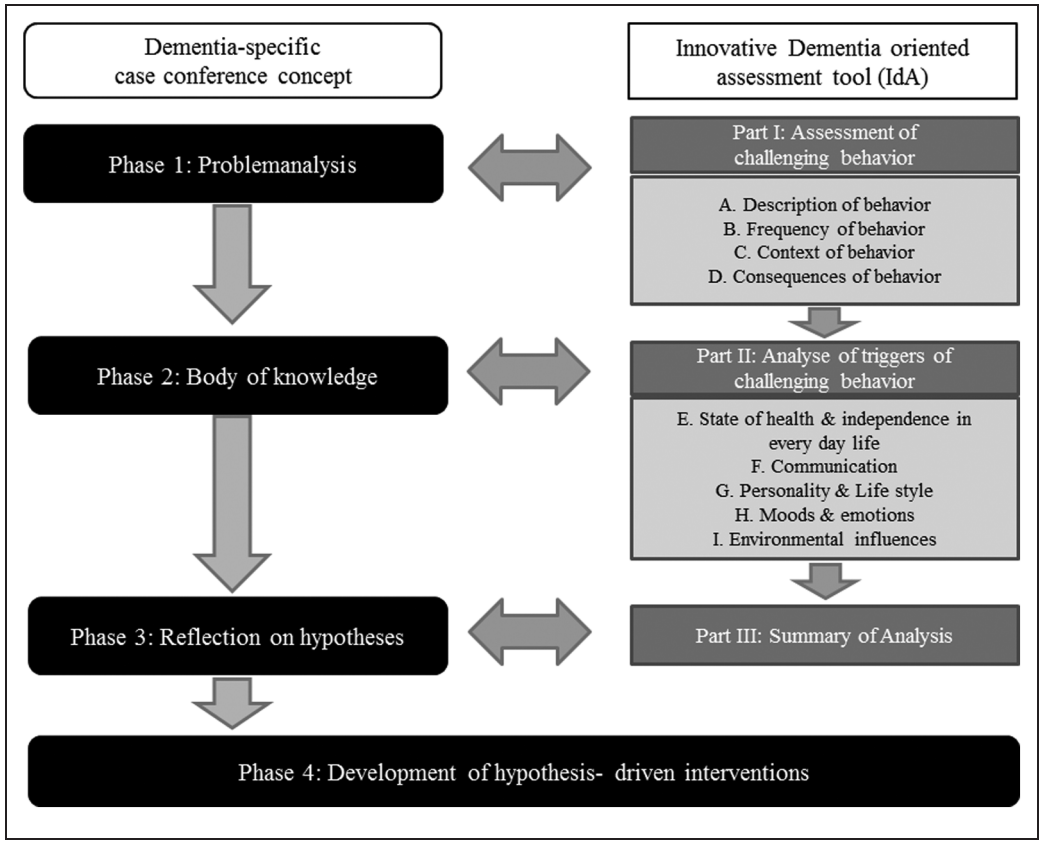

Figure 1. Merging of the dementia-specific case conference with Innovative dementia-oriented Assessment tool (IdA).

Telephone interviews. A total of 29 semistructured telephone interviews[18] were conducted in the aftermath of every second dementia-specific case conference with IdA to assess the immediate experiences of nursing staff using those case conferences. The first interview started after the second case conference. All interviews were performed by DH, CK, or MH, with 1 registered nurse per nursing team. The selected nurses were those persons who were responsible for the coordination of the case conferences on each ward. In 10 of the 18 wards, this person was the head nurse of the ward (Table 1). Each interview lasted an average of 10 minutes (min 4; max 18).

Observational field notes. Observational field notes[19] were collected during every second dementia-specific case conference with IdA. The first field notes were taken during the first case conference and included the observations and subjective impressions of the research team (DH, CK, and MH) regarding the conduction of the case conferences and factors that facilitated or hindered the implementation of the case conferences.

Problem-centered group interviews. Finally, 17 problem-centered group interviews were conducted with 17 nursing teams. In 1 nursing team (D1), only the head nurse took part in the interview (Table 2). Problem-centered interviews focus on the experiences, perceptions, and reflections of an interview partner on a predefined topic. The central questions of a problem-centered interview should stimulate for a free narrative of the interviewee. Simultaneously, a problem-centered interview offers the interviewer an opportunity to draw on the narratives and to focus the interview on the predefined topic.[20] An interview guideline was created by the research team and was piloted in 3 nursing homes. In total, 84 individuals participated in 17 group interviews (2-8 per team) and 1 single interview.

The interviews lasted an average of 41 minutes (minimum 17; maximum 86), and each interview was conducted by DH/CK or DH/MH.

Data Analysis

All interviews were transcribed verbatim and analyzed using thematic content analysis.[21] This method focuses on the identification of themes that emerge from interviews and the structuring of them into a categorical system. The analyses were performed in 4 steps: (1) interview transcripts were read and notes were taken throughout the reading on general themes that appeared in the transcript; (2) the reading was repeated to generate open coding headings with which to describe all aspects of the data; (3) codes that were so similar that one of the codes can be discarded were merged and other codes that represented different facets of 1 common topic were lumped together under higher order codes; and (4) the interviews were reread as a whole while constantly comparing the categories and codes to adjust and

Table 1. Participants in Telephone Interviews.

Team	Number of Telephone Interviews	Participant
A1	2	Representative of head nurse
B1	1	Head nurse
B2	2	Registered nurse
C1	3	Head nurse (2 interviews), registered nurse (1 interview)
D1	3	Head nurse
D2	2	Representative of head nurse (1 interview), head nurse (1 interview)
E1	1	Head nurse
G1	1	Registered nurse
G2	1	Representative of head nurse
H1	1	Head nurse
J2	1	Registered nurse
K1	1	Head nurse
L1	1	Head nurse
M12	1	Head nurse
M4	3	Registered nurse
M5	3	Head nurse
P1	2	Registered nurse
In total	29	

Table 2. Participants in Problem-Centered Group Interviews.

Team	Number of Participants in Problem-Centered Group Interviews			
	Head Nurse	Registered Nurses	Nursing Assistants	Total
A1	1	5	1	7
B1	1	1	1	3
B2	–	2	–	2
C1	1	2	3	6
D1	1	–	–	1
D2	1	2	3	6
E1	1	1	–	2
G1	1	1	3	5
G2	1	1	4	6
H1	1	3	3	7
J1	1	3	2	6
J2	1	1	–	2
K1	1	2	3	6
L1	1	1	3	5
M12	–	1	1	2
M4	1	2	4	7
M5	1	1	2	4
P1	–	6	1	7
Total 18	15	35	34	84

strengthen the categorization. Observational field notes were subsequently included in the analyses and used for the interpretation of the interview data. Group interviews were coded by a second person (ES) to improve the intersubjectivity and comprehensibility of the results. All interviews were conducted and primarily analyzed in the German language. For the reporting of the findings, individual German quotations were translated into English and were proofread by an English native speaker to add transparency and trustworthiness to the findings.[22]

Ethics

The study was approved by the ethics committee of the School of Nursing Science at Witten/Herdecke University.

Results

In line with the research questions, the data analysis revealed 2 separate but related themes, (1) experiences of nursing staff according to the application of dementia-specific case conferences with IdA and (2) promoting and inhibiting factors for the implementation of dementia-specific case conferences with IdA. These themes included 7 and 6 categories, respectively (Figure 2):

Experiences of Nursing Staff

Considering and reflecting on the views and experiences of colleagues. Discussions in the dementia-specific case conferences with IdA regarding the challenging behavior of residents with dementia indicated that participants became acquainted with the different perceptions and experiences of their colleagues in relation to the specific behaviors of their residents. This understanding was traced back to different observations of the residents:

> Everyone has different opinions about each resident. Everyone has different personal experiences with the residents [. . .]. Everyone has specific things on which he places special emphasis [. . .]. (group interview, team P1, interviewee 1)

The participants realized that residents showed different behaviors toward different professional caregivers. Differences in observations were attributed to the fact that because the nursing staff works in shifts, they do not have a comprehensive picture of a resident's behavior. Furthermore, organizational approaches that were task oriented rather than person oriented led to limited knowledge of residents' challenging behavior.

Gathering the different information and experiences related to the specific behaviors of residents with dementia further led the nursing staff to reflect on their own observations and their behavior toward the residents. They compared their experiences with those of their colleagues and the residents' family members. In particular, differences in perceptions of behavior caused the nursing staff to think about the reasons for this behavior. They realized that their own behavior often triggered the challenging behavior of residents with dementia.

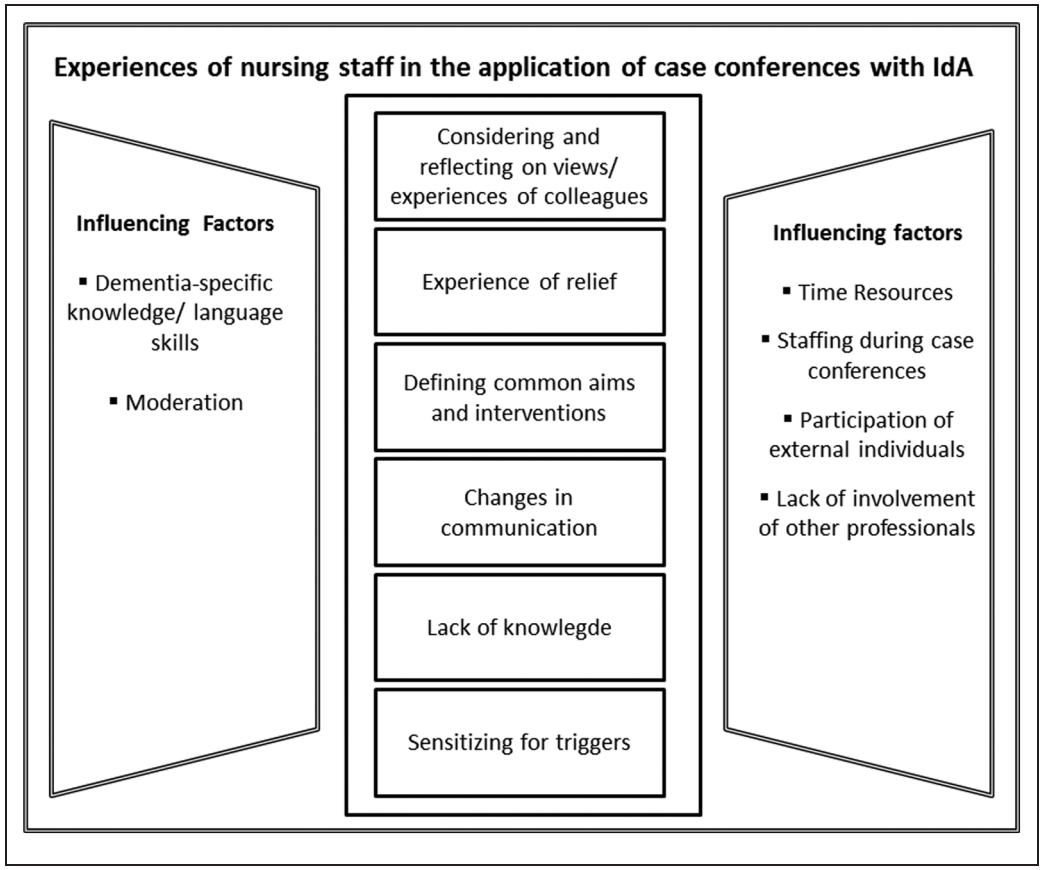

Figure 2. Nursing staff's experiences, including influencing factors in the implementation of case conferences with Innovative dementia-oriented Assessment tool (IdA).

Experiences of relief. The nursing staff experienced interpersonal changes within their teams due to difficulties with the challenging behavior of residents with dementia. Antipathy toward residents with dementia that had previously been suppressed in daily practice could be stated openly. Members of the nursing staff felt relieved because their colleagues reported similar difficulties with the care of residents with dementia.

> The team has become more open (). In the past, you would not have mentioned that you disliked a resident. Currently, it's quite all right to do so, and the colleagues know that, too. (group interview, team E1, interviewee 1)

Therefore, the nursing staff no longer took the behavior of residents with dementia personally. In addition to gaining reassurance for themselves and their work, some nurses became less action oriented as they began to understand challenging behavior as an unavoidable and untreatable symptom of dementia.

Defining common aims and interventions. Common aims and interventions are another issue that nurses raised in relation to their experiences. They reported that it was important to decide together which goals should be pursued in relation to the challenging behavior. Nurses also considered the joint establishment and implementation of interventions important.

> Everyone has different demands. One carer would like the resident to be quiet, to sit still, and preferably not to talk at all. Someone else says, let her shout, this is the way she expresses herself. That you clarify misunderstandings in the team, that you all pull together and achieve the same goal. (group interview, team G1, interviewee 4)

This diversity of opinion is why the participation of part-time workers was considered important for the case discussions. Nurses whose teams were represented by only 2 or 3 people within the dementia-specific case conferences with IdA reported that they had difficulty when their colleagues did not implement the interventions they adopted.

Changes in communication with residents. The reflection of the nurses and nursing teams regarding the residents' challenging behavior led to changes in communication with residents with dementia. Nurses reported that they discussed less with residents having dementia about their behavior and became calmer when communicating with these residents.

> In the past, the colleague would argue with the resident: don't take off your shoes, I have already told you several times. This is not the case anymore. Currently, colleagues pay more attention to what they say. (group interview, team H1, interviewee 2)

More precise description of behavior after answering the questions in the IdA. Nursing staff were able to describe the behavior of residents with dementia as well as the circumstances of this behavior more precisely after answering the questions in the IdA. General statements were replaced with detailed descriptions of behavior in certain situations that were helpful in searching for potential triggers for the challenging behavior. The case of 1 resident illustrates this situation. According to the nurses, the resident "always screamed". Using IdA, the nurses were asked to describe the specific situations in which the resident screamed. When they realized that this occurred only when the resident was provided with incontinence materials in the bathroom, the nursing staff began asking relatives for possible explanations for this behavior. Finally, the nurses were informed that as a punishment in his childhood, the resident had to pull off his trousers in the bathroom.

Innovative dementia-oriented Assessment tool was further perceived as an advantage in communicating with physicians. Given more accurate descriptions of the challenging behavior, doctors were able to prescribe medication more precisely.

> Before, one never thought about what kind of information concerning a resident's behavior would be important for the doctor to know. Now, I pay more attention to that, thanks to the assessment. In the past, one wasn't that specific about a resident's behavior. You would say the resident is agitated and screaming—do something. (group interview, team G1, interviewee 4)

Lack of biographical knowledge. Participants reported a lack of knowledge regarding the residents in response to questions in the IdA. This lack of knowledge was apparent in responses to questions concerning the behavior of residents with dementia before moving to the nursing home as well as to questions regarding the personality and lifestyle of the resident prior to the onset of dementia.

> The most challenging thing for me was to assess the onset of the behavior because many residents move in and we do not have any information about their past. () (group interview, team J2, interviewee 1)

The low priority placed on obtaining biographical information in the institutions and the absence of relatives were mentioned as reasons for the lack of knowledge. Biographical information was not an important aspect of nursing records. In some institutions, biographical information was documented by social workers rather than nurses, and information was not distributed throughout the nursing team. Nursing staff also reported that they avoided talking with family members to avoid conflicts with residents' relatives. However, when they did talk with the family members, the staff received positive feedback from relatives for "showing more interest" in the resident.

Search for possible triggers of challenging behavior. The preoccupation with the challenging behavior of residents with dementia on the basis of dementia-specific case conferences with IdA prompted nursing staff to deal critically with various triggers of challenging behavior. Central themes that were identified by the participants for further clarification were lifestyle and personality before dementia, cognitive skills and the related dementia diagnosis, review of depression, potential pain, side effects of drugs, and lack of occupation. Assessments for screening the vision, hearing, and reading skills of residents with dementia were also planned. In 1 case, the analysis of the data showed that residents' challenging behavior was perceived as a possible resource for the person. Thus, the "constant reordering" of goods in the living room by 1 resident was classified as a valuable occupation that should be supported rather than abandoned.

Although many triggers were discussed during the dementia-specific case conferences with IdA, the data do not clearly indicate whether the findings led to any consequences or changes within the treatment or organization. In the few cases in which nurses checked possible triggers, they reported very different effects. Sometimes triggers could be identified and challenging behavior could be reduced, and other times, there was no change at all. Limitations were especially reported if there was a need for collaboration with other professionals.

Promoting and Inhibiting Factors

Dementia-specific knowledge and language skills. Interviews and observations indicate that the professional and language skills of nursing staff affect the application of the dementia-specific case conferences with IdA. In many nursing homes, participants in those case conferences were not well educated in nursing. They reported a lack of specific knowledge regarding dementia, which made it difficult to establish a link between the issues in IdA and the challenging behavior of residents with dementia.

> There is a lack of specific knowledge about dementia in this ward . . . () we do not have that any more. Our daily routine is very much simpler. (group interview, team D1, interviewee 1)

Some nurses were able to answer the IdA questions but could not link the information with residents' challenging behavior. In the dementia-specific case conferences with IdA that were accompanied by the research team, the relationship between the IdA questions and the residents' challenging behavior often had to be explained by 1 person on the research team. Moreover, several participants with migration backgrounds noted that they had difficulties with the German language, which limited them in discussions about residents with dementia. In 1 ward, nursing staff with very low language skills did not even participate in the dementia-specific case conferences with IdA.

Moderation of case conferences. The results of the interviews and observations during participation in the dementia-specific case

conferences with IdA revealed that nursing staff had difficulties with the moderation of those case conferences. These difficulties were demonstrated by a lack of conversation discipline, failure to listen, and a lack of concentration among the participants. Case conferences were partially unstructured, and the nursing teams drifted off topic.

> We have to be careful not to digress from the topic () That is difficult because we often wander from one topic to the other and get lost in conversations. (telephone interview, team K1, interviewee 1)

One explanation given for the lack of concentration was the difficulty in moderating a case conference for someone who was personally involved in the care of the person being discussed. Small groups of 2 to 3 people or case conferences in teams with a moderator who was specifically identified in all meetings were easier to manage. Participants also appreciated case conferences that were moderated by 1 member of the research team.

Time resources. Another factor that affected the implementation of the dementia-specific case conferences with IdA was the available time resources of nursing teams. Nurses had significant time pressure due to high workloads. Therefore, they could not attend monthly case conferences with durations of 90 to 120 minutes. For this reason, nurses often asked at the beginning of the case conferences to limit the duration of the conference to 1 hour. The time provided for those case conferences was subtracted from the time used for the care of the residents. Nursing staff further substantiated the lack of time due to persistent disease outbreaks, additional staff reductions, and unexpected events that led to unforeseen additional activities. In addition to a lack of time, nurses also identified limitations in the application of IdA within the dementia-specific case conference. They rated IdA as too long in relation to the time available for case conferences, particularly because additional time had to be considered for the receipt of information from relatives or doctors following those case conferences. Due to lack of time and resources, no preparation or follow-up was possible.

Staffing during case conferences. Another factor was the staffing of the nursing wards during the dementia-specific case conferences with IdA. In most cases, participants in the case conferences were also responsible for the care of residents with dementia in the wards. Therefore, case conferences were often interrupted by incoming calls or the ''ringing'' of residents. On 2 occasions, physicians came for their rounds. In addition to these interruptions, some team members had to leave the case conferences early to fulfill tasks in the wards (eg, coffee had to be served to residents at a specific time). Due to the lack of staffing, case conferences were often held in the rooms of the nursing service, so a spatial separation from the working area was not available. Participants also reported that management promised them additional staff during the dementia-specific case conferences with IdA, but this promise was not realized during the course of the study.

Participation of external individuals. The analysis of the telephone and group interviews indicated that the participation of individuals who did not belong to the nursing team also affected the content of the dementia-specific case conferences with IdA. Staff reported that they discussed personal experiences with residents as well as difficulties within the team in those case conferences; this was information that they did not want to disclose to people such as general practitioners or neurologists.

> When I think about it, we have revealed a lot about ourselves. Things about the team and private issues. I'm not happy about saying I have problems () when a doctor is present. (group interview, team M4, interviewee 1)

However, the nurses regretted that physicians did not participate in the case conferences, although they were invited. The nursing staff also expressed reservations about the family members of residents with dementia. They explained that they discussed aspects about the resident that the relatives disliked hearing; therefore, the nursing staff suppressed unwanted discussions. It is remarkable that a psychiatrist and the relatives of a resident with dementia participated in only 1 nursing home. However, the analysis revealed that the conversations in the case conferences were often taken over by the external individuals; nursing staff listened and did not complain.

Lack of involvement of other professionals in the decision-making process. The lack of involvement of other professionals who were not immediately care related in the decision process was another influencing factor. Interventions that were adopted by the nursing staff in relation to the challenging behavior of residents with dementia in the dementia-specific case conferences with IdA were rejected by staff working in administration or domestic management or at the reception desk of the nursing home. These staff members pointed to the breach of duty of care and the legal responsibility to care for the resident. Nursing staff could not withstand the pressure from the other professionals and reversed their decisions.

Discussion

This study aimed to gain an insight into the experiences of nursing staff using dementia-specific case conferences with IdA and to explore those factors that promote or hamper the implementation of that intervention. In addition, the study intended to analyze whether a connection existed between the intervention, the reduction in residents' challenging behaviors, and a partial decrease in stress among the nursing staff.

The application of dementia-specific case conferences with the IdA enabled nursing staff to share their perspectives and experiences regarding the challenging behavior of residents with dementia, which is an important prerequisite for the diagnostic process within case conferences.[23] This exchange is

important because nursing staff work in shifts, and the care of people with dementia is often organized in a manner that is more task oriented than person centered. At the same time, the various divisions of labor often hindered the implementation of case conferences, and nursing staff had to put considerable effort into integrating different information on a resident's challenging behavior. The intervention also stimulated self-reflection and external reflection by the nursing staff. This potential for reflection is an important prerequisite for developing personal and professional skills that can be used to improve the quality of care.[24] The results of the study further show that the combination of dementia-specific case conferences with IdA supported participants in describing the residents' challenging behavior and its circumstances more accurately. As a result of this development, other professionals, such as physicians, also received more precise information about residents' challenging behavior. With the support of IdA, attention was also drawn to a variety of possible triggers of the challenging behavior, in addition to the dementia itself. That understanding enabled the nursing staff to develop purposeful interventions that partly reduced residents' challenging behavior. The dementia-specific case conferences with IdA further contributed to the relief of the nursing staff. Mutual notifications of difficulties in dealing with the challenging behavior of people with dementia helped the nurses to feel that they were not alone in facing this problem. Similar results have been reported in relation to the use of supervision in nursing homes.[25,26] Thus, the experiences of nursing staff indicate that merging the dementia-specific case conference with IdA seems to be a useful method for dealing with the challenging behavior of people with dementia in nursing homes.

At the same time, the results of this study indicate that the application of the dementia-specific case conferences with IdA was influenced by several contextual factors. Nursing staff experienced significant knowledge gaps because they were not able to answer the IdA questions or even to link the IdA questions with the challenging behavior of residents with dementia. Above all, they complained that they could not answer questions about the personality and lifestyle of their residents with dementia prior to the onset of dementia.

Nurses justified this lack of information by the low status of biographical information in their facilities, the lack of family involvement in patient care families, lack of personnel and time resources, and the fact that biographical work has been outsourced to social workers. These findings are sobering, especially because the knowledge of residents' biographical information is not only important for explaining their challenging behavior but also the starting point for case-specific interventions.[27] Accordingly, the introduction and use of IdA requires the attainment of biographical information, which should be communicated to the institutions prior to the introduction of case conferences with IdA.

A further challenge in the implementation of dementia-specific case conferences was the moderation of conferences. Nursing staff expressed great uncertainty in taking on the moderator role. This hesitance may have occurred because participants had little skill in moderating case conferences. The concept of dementia-specific case conferences also includes the participation of family members. Family members represent a vulnerable group, and their involvement in the care of residents with dementia can lead to conflicts with nursing staff,[28,29] which makes the moderation of case conferences even more difficult.

Limited time was referenced as another inhibiting factor in conducting dementia-specific case conferences. Nursing staff complained that the time spent for case conferences was too long, and that's why they mostly didn't realize case conferences with a duration of 90 to 120 minutes.

To overcome those barriers and to optimize the implementation process, dementia-specific case conferences with IdA should be accompanied by additional training in dementia-specific knowledge that will help the nursing staff to link the questions in IdA with the residents' challenging behavior. Thus, IdA might serve as a useful tool to detect any knowledge gaps. Second, further training should be provided to facilitate the nursing staff in moderating the case conferences. Family members should only be involved in the dementia-specific case conferences with IdA if the staff feels secure in the organization and moderation of the case conferences. The involvement of external individuals, such as general practitioners, also requires nursing teams to have sufficient confidence in participants outside their teams; otherwise, nursing staff are not likely to discuss their personal problems with residents in case conferences. The implementation of the dementia-specific case conferences with IdA further requires that biographical information be obtained, which should be communicated to the institutions prior to the implementation. An alternative to overcome the limited time resources would be to shorten the duration of the dementia-specific case conferences with IdA and to conduct the conferences more frequently. However, it is important for nursing staff to have sufficient time to accomplish the desired reflection process during a case conference. In addition, the use of IdA takes time. Therefore, it is recommended that case conferences should not be shorter than 60 minutes. Finally, the dementia-specific case conferences should be conducted in a separate room apart from the nursing services room to avoid interruption, which would also function to save time.

When the results of the qualitative study are combined with the results of the quasi-experimental study, it can be concluded that the reduction in the prevalence of residents' challenging behavior resulted from an actual decrease in residents' challenging behavior and a change in the nursing staff's perception of residents' challenging behavior; both can be interpreted as a success of the intervention. The partial reduction in the nursing staff's stress can be explained by the relief the nursing staff experienced in the dementia-specific case conferences with IdA. Apart from that factor, the realization of the significant knowledge gaps regarding resident with dementia and dementia-specific knowledge might also have resulted in additional stress on the nursing staff.

This might be an explanation for why the quantitative results for the nursing staff's stress were not as obvious as the reduction in the residents' challenging behavior.

Future research should investigate and confirm the effects of the dementia-specific case conferences with IdA on the residents' and the nursing staff's outcomes in a cluster-randomized controlled trial (CCT) designed to take into account the valuable results of this qualitative study. The results of this qualitative study can be further used to develop an implementation strategy to be used alongside the CCT to optimize implementation processes.

Authors' Note

DH, CK, and MH conceptualized and wrote the paper. DH, CK, and MH conducted the data collection. DH and ES analyzed the interviews. SB supervised the study. All co-authors proofread, edited, and approved the final manuscript.

Declaration of Conflicting Interests

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