Universiteit Leiden
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Exercise and physiotherapy for nursing home residents with dementia: practices and preferences

Boer, D.E.

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Chapter 6:

Novel barriers and facilitators were identified for family involvement in physiotherapy and exercise for aged care facility residents with dementia: a qualitative study.

Dennis Boer, Charlotte Schmidt, Shanty Sterke,Leti van Bodegom-Vos, Wilco Achterberg, Thea Vliet Vlieland,

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Abstract

Questions: This study aimed to identify barriers and facilitators for involving family members of aged care facility residents with dementia in physiotherapy and exercise.

Design: reflexive thematic analysis with semi-structured interviews to explore the subjective experiences of physiotherapists and aged care staff, grounded in a constructivism ontology.

Methods: We conducted 28 semi-structured interviews with 19 physiotherapists and 9 aged care facility staff members concerned with family participation. Participants were selected from Dutch aged care facilities providing care for residents with dementia. Interviews were recorded and transcribed and subsequently analysed using inductive thematic coding.

Results: The perceived barriers included the burden placed on family caregivers, particularly during the transition to an aged care facility, and the need for adequate information and guidance to ensure successful involvement. Additionally, it was found that an unwelcoming environment fostered by physiotherapists and staff hinder family members participation. Facilitators included a proactive approach of physiotherapists regarding the collaboration, and information provision on practical aspects of exercise, particularly when supported by technology or exergaming. Other facilitators were the family caregivers' prior healthcare experience and cultural factors emphasizing the importance of family support.

Conclusion: The study identified barriers to family caregiver involvement, such as perceived caregiver burden and role unclarity, alongside facilitators like prior caregiving experience, culturally rooted family values, and strong social or religious networks. Physiotherapists and aged care facilities could improve collaboration by proactively discussing family caregiver roles, adopting flexible approaches, and employing inclusive (digital) communication methods to support ongoing caregiver engagement.

Introduction

Aged care facilities play an essential role in providing care for individuals with dementia, particularly those in advanced stages of the condition.[1] After institutionalization, family caregivers often continue to provide care for their loved ones, collaborating with formal caregivers to deliver integrative care.[2,3] This collaborative approach, grounded in the principles of person-centred care, is recognized as the gold standard for high-quality dementia care, offering benefits to residents, families and formal caregivers.[4–6] Despite international variation in dementia care practices,[5,6] research consistently demonstrates the importance of family caregivers' involvement in aged care facilities, particularly in mobility support and socio-emotional care.[3,7]

Physiotherapy is a commonly used intervention for individuals with dementia, both in the community and in aged care facilities.[8–10] Multiple reviews have reported positive or promising effects of regular exercise on physical performance,[10] cognition,[11] and activities of daily living (ADL).[10,12] Additionally, there is also emerging evidence, both from effectiveness trials and qualitative studies, that family caregiver involvement in physiotherapy and exercise programs may be desirable[13] and potentially beneficial in reducing caregiver burden.[12]

However, studies investigating physiotherapy in other care contexts reveal barriers to meaningful family engagement. For example, two studies focused on post-stroke care[14] and transitional care from hospital to home[15] found that while family members were willing to assist with exercise delivery, their involvement was rarely structured or formally supported. Although these studies were not conducted in aged care or dementia-specific settings, their findings highlight systemic and contextual factors that may similarly affect caregiver collaboration in residential dementia care. A recent study on transitional care emphasized the importance of respecting family members' autonomy in deciding whether and how to participate in therapy.[16] In the only qualitative study to date that directly explored family caregiver perspectives of physiotherapy in aged care settings, caregivers expressed a desire for greater engagement, not only in exercise supervision, but also in care planning and evaluation.[13]

In addition to understanding family perspectives, the views of healthcare professionals are critical to understanding collaborative dynamics. Prior research on staff–family relationships highlights various challenges: healthcare professionals may find family involvement demanding,[17,18] may make limited efforts to facilitate engagement, [2] and formal mechanisms for family participation are often lacking.[2] In many Western aged care systems, where staffing is increasingly reliant on paid care workers, collaboration with family members can be especially complex. [6] As the cost of institutional care continues to

rise, and greater caregiving responsibility shifts to families,[6] these challenges are likely to intensify.

Although evidence suggests benefits in favor of involving family caregivers in physiotherapy and exercise, collaboration remains difficult in practice. Limited research has explored how physiotherapists and aged care staff themselves perceive this collaboration. Understanding the barriers and facilitators from their perspective is essential for informing more effective and inclusive care practices. This study therefore aimed to explore how physiotherapists and aged care facility staff perceive the barriers and facilitators to involving family caregivers in physiotherapy and exercise for residents with dementia.

Materials and Methods

This study employed a reflexive thematic analysis approach as outlined by Braun and Clarke[19] utilizing semi-structured interviews with physiotherapists and aged care facility staff. Reflexive thematic analysis is a flexible method for identifying and analysing patterns of meaning across qualitative data and is particularly well-suited for applied health research exploring participants' subjective experiences. The study is grounded in constructivism ontology[20], which assumes that knowledge is co-constructed through the interaction between researcher and participant. This perspective aligns with our aim to understand the meanings participants assign to their experiences and practices related to caregiver collaboration.

Besides physiotherapists, we interviewed staff members not employed as physiotherapists but involved in overseeing family involvement in the care facility or managing/leading physiotherapy and exercise services. This selection was done since family involvement in aged care facility is strongly influenced by organizational structures.[2,3] As the study consisted solely of single, minimally invasive interviews, it was exempted from the requirements of the Medical Research Involving Human Subjects Act (WMO) and review by a designated regional Medical Ethical Research Committee. To ensure the quality and feasibility, the research board of the organization Kennemerhart approved the study protocol. Informed written consent was obtained from all participants, The privacy of the participants was protected in accordance with the Dutch General Data Protection Regulation. All findings were reported according to the COnsolidated criteria for REporting Qualitative research checklist (COREQ).[21]

Participant Recruitment

Participants were recruited through the professional and personal networks of the researchers. A generic purposive sampling strategy was employed, with participants

selected a priori based primarily on geographical location within the Netherlands, and secondarily on age and work experience. This approach differs from theoretical purposive sampling, which is more closely aligned with grounded theory methodology, where participant selection is guided by the emerging need to develop categories, their properties, and theoretical relationships.[20] Eligibility criteria: Able to understand and speak Dutch, being able to use an online videoconferencing program Microsoft Teams (Microsoft Company 2024), and willing and able to spend at least 45 minutes on the interview.

A recruitment e-mail containing an information leaflet with the background, aims and methods of the study was sent to eligible individuals within the networks of the authors, with a request for referrals to other potential participants.

Initially, physiotherapists and staff from various provinces across the Netherlands were approached. After conducting interviews with participants from at least 10 of the 12 Dutch provinces, and at least 5 physiotherapists and 5 staff, an initial analysis of interviews was done to determine whether saturation had been reached. If needed, additional interviews were conducted.

Data Collection

An interview topic guide (supplement Appendix 1) was developed based on the framework of Grol and Wensing, which identifies barriers and facilitators for implementing evidence-based practice in healthcare.[22] To ensure the guide's comprehensibility, six pilot interviews were conducted with physiotherapists and staff, leading to minor adjustments for a better interview flow. The pilot interviews were not included in the analysis. All interviews were conducted online platform to eliminate geographical barriers in scheduling and conducting the interviews. Given the platform's wide acceptance, it was anticipated that both interviewers and participants would feel comfortable using it. All video and audio data of the interviews were recorded. These recordings were securely stored in a network folder that was protected and only accessible to the project team. Video recordings were fully transcribed, and any identifying information was removed to ensure anonymity. Transcripts were not returned to participants for comment or correction, in part to reduce the likelihood of socially desirable responses or retrospective editing. Instead, clarification and validation of meaning occurred during the interviews themselves through active probing and participant reflection (e.g., member checking in real time).[20,23] This decision is also consistent with our interpretive approach, which understands meaning as co-constructed during the research process, rather than as a fixed account that participants can later confirm or correct.[19] All interviews were conducted in Dutch, with relevant quotes and data translated into English for this paper. No financial compensation was offered to participants.

Research team and reflexivity

Two members of the research team, DB and LG, conducted all interviews. DB is a male physiotherapist and PhD student with prior experience in qualitative research while LG, also a male physiotherapist, is pursuing a Master's degree in Geriatric Physiotherapy. He received training in interview techniques prior to this study. DB primarily provides physiotherapy to aged care facility residents with dementia and their families, while LG's clinical work focuses mainly on stroke rehabilitation. To support reflexivity, a field journal was maintained throughout data collection to capture initial impressions and potential assumptions. These reflections were revisited and discussed within the research team, aligning with Braun and Clarke's view that "the researcher's subjectivity is a resource, not a problem to be managed.[19]

Data Analysis

Inductive thematic coding was used to analyse interview data, using a professional account of ATLAS.TI Web software [v8.4.1-2024-08-12]. Two researchers (DB and CS) independently coded all transcripts, and in case of disagreement, a third reviewer (SS) was consulted. An open coding method was used, allowing codes to be created directly from the text without pre-determined themes.[19] These codes were then grouped, and merged into broader themes by DB and LG, with regular process evaluations by CS and SS. Data collection and analysis were conducted iteratively until theoretical sufficiency was achieved. Theoretical sufficiency indicates the point at which according to the researchers interviews no longer generated new insights relevant to the research question.[24] Initially, the perspectives of physiotherapists and staff members were analysed independently. However, during the initial stage of data analysis, it became evident that there were no notable discrepancies between their viewpoints. Consequently, the interview data were subsequently analysed collectively to provide a comprehensive and integrated overview. Back-translation of the quotes was performed with the help of an external native English-speaking scientific colleague and reviewed by multiple members of the research team to ensure the intended meaning was preserved and no nuances were lost in the translation process.

Results

A total of 28 interviews were conducted, including 19 with physiotherapists and 9 with aged care facility staff. Participant characteristics are summarized in Table 1. On average, staff members were older and had more years of professional experience in the aged care sector compared to physiotherapists. Staff roles included manager of allied health professional services (*n*=3), location manager (*n*=2), advanced practice nurse (*n*=2), manager of innovation and paramedical services (*n*=1), and board member (*n*=1).

Table 1: Demographic characteristics of the study participants

	Physiotherapists	Staff
n (Total = 28)	19	9
Mean age in years (SD)	40 (11)	48 (11)
Number of females (percentage)	13 (68%)	5 (56%)
Mean years of experience in aged care facilities (SD)	13 (10)	25 (16)
Scale of the facility		
Small	8	5
Large	3	1
Small & large	8	3
Culture of the facility		
General	8	6
Mixed	7	2
Rural	2	1
Catholic	1	
Reformed	1	
Mean interview duration in minutes (SD)	48 (9)	43 (7)

Participants were employed in care facilities providing care to residents from diverse geographical, cultural, and religious backgrounds, including urban and rural facilities with residents from Dutch, Turkish, Moroccan, Cabo Verdean, Pakistani, Surinamese, Syrian, Islamic, Christian, Reformed, Hindustani, and Jewish communities. Data saturation was reached after 26 interviews, but in addition the 27th and 28th interviews were conducted as they had already been scheduled, further confirming data saturation.

Thematic analysis revealed three major themes: The physical, personal, emotional and relational dimensions of family involvement; the importance of information sharing; practical aspects of involving family caregivers. Participant' quotes are displayed in Table 2.

The Physical, Personal, Emotional and Relational Dimensions of Family Involvement

Barriers

A frequently mentioned barrier was the concern that involving family caregivers in physical activity programs might place an additional burden on them, particularly during the emotionally and logistically challenging transition to residential aged care. Physiotherapists and aged care facility staff expressed hesitation to initiate collaboration out of fear of overwhelming family members at an already difficult time. Furthermore, if their involvement includes performing exercises similar to those in physiotherapy sessions,

Table 2: Participant quotes on the barriers and facilitators for family involvement in physiotherapy and exercise for aged care facility residents with dementia, categorized by theme.

Theme	Barrier or facilitator	Participant	Quote
The Physical, Personal, Emotional and Relational Dimensions of Family Involvement	Barrier	Physiotherapist 4	*'If the exercises are not very intensive, it should be fine. However, there are times when we need to explain to family caregivers that certain exercises are not safe for their father.'*
	Barrier	Physiotherapist 5	*Uh, yes, and I notice that caregivers are often already exhausted. Many of them are older, so it is sometimes unrealistic to expect too much from them.'*
	Facilitator	Aged care facility staff 3	*'I also find that, particularly with residents with dementia, maintaining a connection can sometimes be incredibly challenging. In such cases, engaging in an activity together is both valuable and deeply meaningful.'*
	Facilitator	Aged care facility staff 9	*'Yes, and it's also wonderful to have a team that genuinely supports and encourages families to get involved. It's important to give them the opportunity to take charge of certain aspects and make decisions.'*
The Importance of Information Sharing	Barrier	Physiotherapist 8	*'But during the studies, no attention was given to that at all. For us, there was actually no focus on family members or informal caregivers. I wanted to work in this field, and it is clearly important.'*
	Barrier	Aged care facility staff 4	*'Sometimes, things appear very black and white on paper, but when you explain them in person, they become completely grey. Yes. So, I would definitely see that as a disadvantage.'*
	Facilitator	Physiotherapist 3	*'What you notice more with them is that they are better informed about what's going on. They're not caught off guard as easily. They don't ask, "Why is this happening? Why do I suddenly need to arrange different clothing? I don't understand" Yes, it shouldn't come as a surprise.'*
	Facilitator	Physiotherapist 11	*'But yes, I do explain that... I always try to put a positive spin on it, highlighting that they can actually do something together, rather than just sitting in their parent's room.'*
Practical Aspects of Involving Family Caregivers	Barrier	Physiotherapist 7	*'The caregiver needs to make time for this in their schedule. And, yes, they have to be there at the agreed-upon time. That can certainly be difficult for them.'*

Table 2: Participant quotes on the barriers and facilitators for family involvement in physiotherapy and exercise for aged care facility residents with dementia, categorized by theme. (*continued*)

Theme	Barrier or facilitator	Participant	Quote
	Barrier	Physiotherapist 1	*'I'm not going to contact the entire network, and you often notice that the legal representative isn't in touch with other family members either. Yes, I find that challenging. Because perhaps someone else, like a neighbour or an old school friend, might want to be involved. It doesn't necessarily have to be family at all.'*
	Facilitator	Physiotherapist 11	*'Yes, what we do is ask the caregivers to get involved as well. We have an exercise room, and the residents are housed in separate wards, so moving back and forth to the practice room takes up a lot of time. (...) Therefore, we ask if they can be involved in that process. This way, we can use our time more efficiently, rather than constantly walking back and forth. I also think that some exercises can be delegated to them.'*
	Facilitator	Physiotherapist 16	*'Yes, it's important that both of them feel good about it, that they can experience something together. For example, with exergaming on a virtual route. Shared experiences can also include activities like listening to music. We even have a wooden box that plays music when you move your hand over it.'*

it may give the impression that physiotherapy is unnecessary, potentially undermining the physiotherapists' role. Participants also expressed concerns about the well-being and safety of the resident when involving family caregivers in physical activities.

According to the participants, family caregiver involvement can be hindered by the caregiver's own health issues, language barriers with the therapist, or a lack of interest in physical activity. Participants also noted that complex care needs of the resident, particularly those associated with behavioural and psychological symptoms of dementia, may present significant barriers. Additionally, it was mentioned that a lack of proactivity from physiotherapists in fostering collaboration or a perception that such collaboration offers no benefits further impedes involvement. Moreover, it was expressed that some physiotherapists may find it challenging to adapt to a role that places greater emphasis on communication.

Facilitators

Participants in our study pointed out several advantages of collaborating with family caregivers. For residents, this involvement could increase physical activity and provide more comfort through the presence of a familiar and recognizable caregiver. For family caregivers, participation may offer an enjoyable and meaningful way to connect with

their loved ones. Participants stated that exercising together can reinforce their sense of actively contributing to the resident's care and overall well-being, rather than being a passive observer as a family member.

A strong social network and a positive relationship between residents and family caregivers were identified as key facilitators for family involvement by the participants. An additional described facilitator was family access to care resources such as the exercise gymnasium. Creating a welcoming environment where family caregivers are treated as active participants rather than as guests was reported by our participants to facilitate collaboration. Furthermore, participants expressed that having a non-Western cultural background and some level of healthcare knowledge were supportive factors.

The Importance of Information Sharing

Barriers

Participants identified the absence of clear policies regarding family caregiver involvement as a barrier. For example, uncertainty about the identity of the resident's legal representative was mentioned. Additionally, a lack of clarity regarding the roles and responsibilities of family caregivers may also hinder their involvement. Physiotherapists in specific reported insufficient information and support from societal and educational institutions regarding family caregiver involvement. According to them, professional physiotherapy networks, physiotherapy education programs, and policymakers do not give enough attention to family caregiver involvement.

Participants noted that physiotherapists report in patient files, which are frequently accessible by family caregivers, are sometimes perceived as "rigid" or overly filled with medical terminology, which can cause confusion or come across as impersonal.

Facilitators

Participants viewed physiotherapy and exercise as enjoyable and accessible opportunities for family members to enhance their involvement in care. According to them, engaging family caregivers helps them to stay informed about their loved one's well-being, reducing the risk of being surprised by changes in health status. Participants furthermore mentioned that this involvement promotes a more holistic approach, as family caregivers can provide valuable feedback on physiotherapy and exercise practices.

Participants considered family caregivers as a valuable source of information about the resident. Early collaboration and information exchange were seen as crucial for fostering family caregiver involvement. Participants mentioned that family caregiver participation could be supported through various channels, such as informational leaflets, family eve-

nings, and regular team meetings with family caregivers. Participants emphasized that family caregiver involvement could be further facilitated by presenting information in a positive manner, highlighting potential benefits rather than focusing on challenges.

Practical Aspects of Involving Family Caregivers

Barriers

The additional task for physiotherapists to inform and prepare caregivers to exercise in a safe manner was deemed a burden according to our participants. Participants additionally shared the experience that it is often difficult for family caregivers to commit to fixed-time responsibilities.

Physiotherapists indicated that collaborations with a family caregivers were sometimes short-lived, lasting only a few weeks due to the residents' fragile health. Other barriers indicated by the participants included the geographic distance of family caregivers and situations where the resident's legal representative is not a family member, such as an appointed mentor. Participants had mixed views on the impact of the privacy legislation on communication with family caregivers. Some physiotherapists reported that the General Data Protection Regulation (GDPR) posed a significant obstacle, as they were unable to share information with family members who visited the resident most frequently but were not legal representatives. Some participants suggested that the GDPR was not perceived as an obstacle in their practice because they did not fully adhere to its regulations.

Facilitators

Participants expressed that from a practical standpoint, family caregivers could assume certain exercise-related tasks, helping to reduce the workload of physiotherapists. This would allow physiotherapists to focus more on their strict physiotherapy responsibilities. Participants reported that clarifying the roles and tasks of family caregivers prior to aged care facility placement is helpful in facilitating a smooth transition and ensuring continuity of care during and after the placement.

According to the participants, family caregiver involvement could be supported by providing practical tools, such as exercise instruction manuals and user-friendly exercise equipment. Several participants identified exergaming as a facilitator for creating shared exercise opportunities between caregivers and residents. Furthermore, having an easily accessible physiotherapist or designated contact person, particularly someone who is physically present, was noted as a factor in further facilitating family caregiver involvement.

Discussion

This study explored the barriers and facilitators perceived by physiotherapists and aged care facility staff regarding family caregivers' involvement in physiotherapy and exercise for residents with dementia. Perceived barriers included the burden placed on family caregivers, particularly during the transition to an aged care facility, as well as unclear family caregiver roles, lack of guidance for effective engagement and concerns about resident safety. Facilitators included the meaningful role family caregivers can play in supporting residents with exercise, particularly when aided by technology or exergaming. Prior caregiving experience and/or supportive cultural, religious or social influences of family caregivers were also expressed as facilitators for successful involvement. Furthermore, an inviting and welcoming atmosphere fostered by physiotherapists and staff was seen as essential for encouraging collaboration.

Regarding barriers, participants expressed concern about unclear family responsibilities and their role, as well as boundaries and liability, while families were inconsistently informed or engaged. The lack of structured opportunities and formal recognition for family caregiver collaboration reflects a broader care issue. Studies in post-stroke care[14] and transitioning to home after hospital admission[15] found that while families are often willing to assist with exercises, they are rarely involved in a formal or sustained way. Syntheses of the literature[3,18] encompassing 64 studies published between 1988 and 2016, have consistently highlighted the barriers of unclear caregiver roles and the absence of formal policies supporting family caregiver involvement. Similarly, the importance of creating a welcoming environment, previously reported in both older and recent reviews,[3,18] and a 2021 qualitative study,[25] was reaffirmed by the physiotherapists and staff members in the present study.

Another perceived barrier was the fear of overburdening family caregivers, especially in the period immediately following their loved one's transition to the care facility. Participants expressed caution about initiating involvement in physiotherapy or exercise during this sensitive time, stating that families were already navigating emotional stress and adjustment demands. To address this concern, participants suggested a facilitating strategy: engaging family caregivers in conversations about the roles they held prior to placement and allowing them to choose which responsibilities they wished to maintain and which they preferred to relinquish. This aligns with a 2023 study that emphasized the importance of respecting family caregivers' autonomy in deciding whether, and to what extent, they wish to participate in therapy.[16] Previous literature suggests that family caregivers often prefer engaging in leisure activities, supporting mobility and providing socioemotional support.[2,3] Participants in the present study noted that exercise sessions, particularly those incorporating exergaming or care technology, could fulfil this shared

interest, making them an appealing activity for both parties. Another facilitator was prior caregiving experience or supportive cultural influences, particularly among non-Western family caregivers. While language barriers were recognized as obstacles, both in our study and previous research,[26] a non-Western background was also seen as a facilitator due to the strong family-centred cultural values. Interestingly, while earlier studies framed non-Western ethnicities as potential barriers to collaboration,[2,17] our findings suggest a more nuanced perspective, where cultural influences can also serve as facilitators. Beyond ethnicity and social background, religion was identified as a potential facilitator for collaboration. Participants observed that residents belonging to religious communities often benefit from larger, more engaged social networks, which can facilitate family caregiver involvement.

Mutual access to a digital patient file was another facilitator, allowing physiotherapists to document their findings while simultaneously keeping family caregivers informed about the resident's progress. However, the style of reporting remains an area for improvement,[13] as some family caregivers perceive the language used by physiotherapists as too rigid or technical. Shared digital patient files have recently been introduced in some Dutch aged care facilities, and two prior qualitative studies indicated that family caregivers expressed a desire for greater access to these files to stay informed about residents' care.[13,25] This aligns with international research highlighting the importance of transparent, reciprocal information-sharing in long-term care settings to support family involvement and trust.[2] Digital tools that enable two-way communication can enhance caregivers' sense of partnership in care, reduce uncertainty, and foster continuity between formal and informal care providers.[27] Nonetheless, successful implementation depends not only on technical access but also on the clarity, tone, and relevance of the content shared, underscoring the need for inclusive and plain-language communication.[28]

A strength of this study is the diversity of the participant sample, which included a broad range of geographical regions, age groups and experience levels, within aged care facilities in the Netherlands. Despite the absence of financial incentives, recruitment proceeded smoothly, with many participants highlighting the relevance of family caregiver collaboration as a pressing issue in clinical practice. This underscores the practical significance and external relevance of the study. However, a key limitation is that, while the qualitative design was well-suited to explore perceived barriers and facilitators, it does not provide evidence on the most effective strategies for enabling collaboration between family caregivers and physiotherapists or other staff in the context of exercise. Moreover, given the variability among aged care facilities and regional practices, the transferability of findings may be constrained. Despite this, several themes that emerged, such as concerns about overburdening caregivers and the positive influence of culturally ingrained family values and strong social or religious networks, are likely to be relevant across

different institutional care settings internationally. These insights could also benefit practices in other care environments, such as rehabilitation services, where enhancing family caregiver involvement remains a central goal.

Conclusions

This study explored the perceived barriers and facilitators to family caregiver involvement in physiotherapy and exercise for residents with dementia, as experienced by physiotherapists and aged care facility staff. Key barriers included concerns about overburdening family caregivers, especially during the transition to aged care facilities, unclear family roles, and insufficient guidance for engaging caregivers. Facilitators encompassed strategies such as consulting caregivers about their preferred involvement, fostering a welcoming environment, and leveraging care technologies such as exergaming and shared digital patient records. Additional factors that supported collaboration included prior caregiving experience, culturally rooted family values, and strong social or religious networks.

While transferability may be limited due to the national context, the findings from this study offer practical implications for physiotherapists working in aged care settings. Specifically, physiotherapists may enhance collaboration by proactively discussing roles with family caregivers and incorporating flexible approaches. Digital tools and structured communication channels may serve as effective supports for sustaining engagement. Recognizing these perceived barriers and facilitators can guide physiotherapists in tailoring their practice to foster family caregiver involvement.

What was already known on this topic:

Providing care in collaboration with relevant stakeholders, in alignment with the principles of person-centred care, is widely recognized as the gold standard for high-quality care and yields benefits for all involved.

What this study adds:

This study explored the barriers and facilitators of family involvement in physiotherapy and exercise for aged care facilities residents with dementia, as perceived by physiotherapists and staff members.

Several previously unidentified barriers and facilitators were uncovered, providing new insights. These findings create opportunities for physiotherapists and researchers to both implement and further investigate integrated physiotherapy and exercise interventions for residents with dementia.

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Supplemental file

Supplemental file 1: Topic guide for the interviews

Innovation	Benefits of involvement	What is your opinion on involving family caregivers of aged care facility residents with dementia? Do you believe it has benefits? *Previously identified benefits include:* • *Establishing a good relationship.* • *Gaining previously unknown information through the caregiver.* • *Caregivers contributing to therapy by performing exercises themselves.* *Are there any disadvantages to involving family caregivers, in your opinion?* *Previously identified disadvantages include:* • *Do caregivers take over part of your work?* • *Are you concerned about losing your job if caregivers take on more tasks typically performed by physiotherapists?*
	Feasibility	Is it feasible to involve family caregivers in physiotherapy?
	Trust/Confidence in Implementa-tion	
	Accessibility	Is it easy to collaborate with family caregivers? If so, why is it easy? If not, why is it difficult? (For example: frequent contact, caregivers are easy to work with, etc.)
	Attractiveness	Is involving family caregivers appealing? Do you think effective collaboration with family caregivers adds value to patient care? Do you believe that collaboration with family caregivers adds value to your/the role as a physiotherapist? Does it have added value for other aspects, such as for the organisation?
Individual Professional Context	Awareness	How does involving family caregivers fits in your daily practice?
	Experience/Routine	What has your experience been so far in involving family caregivers? What is your usual routine when involving family caregivers?

	Motivation to change	To what extent are you willing to adjust your approach to enable more intensive collaboration with family caregivers?
Family caregiver context	Knowledge	What do you think are the wishes of family caregivers? Do they want to be closely involved, or do they prefer not to be? Do caregivers possess knowledge about the resident that supports or hinders the treatment of aged care facility residents with dementia? (Skip this if already addressed under benefits of involvement.) Is there a difference between family members as caregivers (children, partner, niece/nephew) and professional mentors as caregivers?
	skills	Are family caregivers capable of collaborating effectively with the physiotherapist? Should caregivers acquire new skills, such as through training, to be more effectively involved in physiotherapy?
	Attitude	What is the family caregiver's attitude toward collaboration with the physiotherapist? Do you feel that family caregivers are open to improved collaboration or communication?
	Commitment	-
Social context	Colleagues' opinions	How do your colleagues view the involvement of family caregivers within your organisation?
	Organisational culture and collaboration	Do you think your organisation is open to change? Do you think other disciplines are also involved in engaging family caregivers? If so, how do they influence this process? (For example: client advisors, team leaders, welfare staff, management. Family caregivers might already be contacted by other colleagues, requiring interdisciplinary collaboration.)
	Leadership	Who do you think should take the lead in involving family caregivers?
Organisational context	Care process organisation	-
	personnel	-
	Capabilities	-

	Resources	Are there specific resources you use in your daily work that influence how family caregivers are involved? *For example, I've heard it is sometimes possible to communicate with caregivers via a digital record. What impact does this have on involving family caregivers?*
	Structures	Are there existing procedures that influence how family caregivers are involved? (e.g., multidisciplinary meetings - MDMs). Do physiotherapists participate in MDMs? Is physiotherapy discussed?
Economic and political context	Financial	Is it feasible for you to involve family caregivers in physiotherapy within your working hours?
	Regulations	Are there external protocols or guidelines for contact with family caregivers? Does the current General Data Protection Regulation (GDPR) impact how family caregivers are involved? If so, could you describe how?
	Policy	Does the policy of encouraging older adults to live at home longer affect how family caregivers are involved? *(For instance, consider how the patient's and caregiver's advancing age might affect this dynamic.)*