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A tension between surrendering and being involved: An interview study on person-centeredness in clinical reasoning in the acute stroke setting

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ABSTRACT

Objective: To explore how stroke survivors experience and prefer to participate in clinical reasoning processes in the acute phase of stroke care.

Methods: An explorative qualitative design was used. Individual interviews were conducted with 11 stroke survivors in the acute phase of care and analyzed using reflexive thematic analysis.

Results: The analysis identified five themes: What's going on with me?; Being a recipient of care and treatment; The need to be supported to participate; To be seen and strengthened; and Collaboration and joint understanding. Conclusion: Stroke survivors experience many attributes of person-centeredness in the acute phase of care but, according to their stories, their participation in clinical reasoning can be further supported. The tension between surrendering and the desire to be more actively involved in the care needs to be considered to facilitate participation in clinical reasoning.

Practice Implications: Stroke survivors' participation in clinical reasoning in the acute phase can be facilitated by health professionals noticing signs prompting a shift towards increased willingness to participate. Furthermore, health professionals need to take an active role, sharing their expertise and inviting the stroke survivors to share their perspective. The findings can contribute to further develop person-centered care in acute settings.

1. Introduction

Person-centered care (PCC) is a suggested way to enhance the quality of care and involves awareness of individual needs and preferences, patient participation, and a holistic perspective in coordination of care [1,2]. However, these aspects are not implemented in all domains of care [3,4] due to barriers at different levels [5]. Implementation of PCC in acute settings, such as stroke care, is challenging due to the need for rapid decisions and priorities of short-term treatment [6], which may hinder patient participation in clinical reasoning and shared decision-making [7,8]. Given that clinical reasoning is fundamental to the practice of health professionals [9], the incorporation of person-centered attributes into the reasoning process is crucial for PCC. Clinical reasoning refers to health professionals' thinking and decision-making guiding actions in clinical practice [10]. Information gathering, assessment/diagnostics, goal-setting, and care and treatment

decision-making are core components of the reasoning process [11,12]. Traditionally, clinical reasoning was seen as a cognitive process of health professionals [13]. Recently, a broader view has evolved where clinical reasoning is seen as a context-dependent and shared process between the professional(s) and the patient [14,15], which aligns with PCC. To improve clinical reasoning as a means towards PCC, we need to further understand what person-centeredness in clinical reasoning implies from a patient perspective.

PCC aims to support a meaningful life, which emphasizes consideration of the whole life of the patient beyond biomedical considerations [1]. PCC stresses empowering patients to actively participate in their care and treatment and ensuring that the patient's values guide clinical decisions [5,16]. The Gothenburg Centre for Person-Centered Care has proposed an evidence-based framework in which patient narratives, partnership, and documentation for PCC are emphasized [17]. Moreover, PCC requires that the patient is supported to make decisions and

Abbreviations: PCC, person-centered care.

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participate in the care [18,19] and that participation should be based on the patient's preferences [20]. Implementation of PCC in different domains is associated with positive health outcomes, e.g., better functional ability, well-being, and quality of life [3,21,22].

Person-centeredness is widely reported and advocated in stroke care [23-26]. Psychosocial factors, e.g., motivation, and environmental factors, e.g., support of staff, are important determinants of patient participation in this context [27]. Moreover, a person-centered culture, sufficient time [28], and interventions including meaningful activities [29] facilitate participation in clinical reasoning in the rehabilitation context. Research on patient participation in care and treatment within acute stroke care is rare and warranted [7,8]. Busetto et al., [6] explored patients', relatives', and health professionals' patient-centeredness in acute stroke care and found that fast decisions often were preferred over patient-centered decision-making in the most acute phase after having stroke. However, the study does not provide insights regarding person-centeredness connected to health professionals' clinical reasoning. Evidence founded in stroke rehabilitation context suggests that the level of patient participation is not always sufficient, e.g., in goal-setting [30,31], decision-making [32,33], and receiving information [33]. Shared decision-making and goal-setting, as components of clinical reasoning, are associated with improved patient motivation, adherence [30], and functional capability [34].

As most research within the stroke context has focused on PCC in the rehabilitation phase PCC in the acute phase is left largely underexplored. Questions are even raised if PCC can be applied in this context [35]. Furthermore, insights from research on clinical reasoning is not fully connected to PCC approaches. The present study explores how stroke survivors experience and prefer to participate in clinical reasoning processes in the acute phase of stroke care.

2. Methods

2.1. Study design

This study is part of a larger project focusing on professional and patient perspectives of person-centeredness in clinical reasoning in stroke settings. The current study has an explorative qualitative design performed as an interview study with a narrative presentation with stroke survivors in the acute phase of care and treatment.

2.2. Sample and setting

The setting was a specialized 12-bedded stroke ward at a hospital in a middle-size city in Sweden. Stroke survivors arrive in the ward after treatment at the emergency department, are cared for by multiprofessional teams and, in general, discharged to home rehabilitation or a rehabilitation ward.

A purposive sample of stroke survivors was selected to enable variability regarding sex, age, and severity of stroke. Inclusion criteria were ischemic or hemorrhagic stroke 1–14 days ago. According to the aim we wanted the informants to consider and share their experiences of different situations related to their care and treatment including their own participation, which required abilities to remember and elaborate on their situation in a conversation. Therefore, persons with severe cognitive impairments, aphasia and persons who lacked the ability to speak Swedish were excluded. A designated healthcare provider checked the criteria in the patient medical record, informed eligible informants about the study, and asked if they were interested in participating. After 11 interviews, sufficient richness in data was achieved [36] meaning that the specificity and quality of the interviews provided a depth and breadth of data that were sufficient to fulfill our research aim.

2.3. Data collection

To get acquainted with the setting, the first author (ME) made observations at the ward for two days. ME conducted two pilot interviews, which were audio-recorded and took place in a separate room at the ward, to test the interview guide, resulting in minor reformulations of questions. The interview questions revolved around participation in assessment, goal-setting, treatment, and rehabilitation at the stroke ward, see the Appendix. The informants were asked about individual characteristics such as age and occupation before the interview started. The mean time for the interviews was 27 min (range 11–38). Data were transcribed verbatim and personal identifiers were removed. A physician assessed the severity of stroke using the National Institutes of Health Stroke Scale (NIHSS) (ranging from 0 = no symptoms of stroke to 42 = very severe stroke) [37] within two days after arrival at the hospital. The Montreal Cognitive Assessment (MoCA) (ranging from 0 to 30, where higher scores represent milder cognitive deficits) [38] was conducted by an occupational therapist within a week.

2.4. Ethical considerations

The informants were informed verbally and in writing about the study, that their participation was voluntary, and that data were treated confidentially. Written informed consent was obtained before the interviews. The setting and time for the interview was decided in collaboration with responsible health care staff and the patient to identify a room where the interview could be carried out undisturbed at a time when the patient was alert and able to complete the interview. The informants were given the opportunity to take breaks in the interview if they needed to rest and to continue the interview the following day if necessary. The study was approved by the Swedish Ethical Review Authority (Dnr 2021–02926).

2.5. Data analysis

A reflexive thematic analysis, positioned within an interpretivist research tradition, following Braun and Clark [39] was performed to explore, interpret, and report relevant patterns of meaning (e.g., concepts, ideas, or experiences) across the dataset. The analysis comprised of six phases, including constant moving back and forth between data and theme creation taking the diverse perspectives of the research team into account. ME made reflexive notes to capture thoughts, elaborate on ideas, and facilitate insights during the analysis process. Phase 1: ME listened to the recordings, read the transcripts several times, and made brief notes about insights of relevance for the study aim. Phase 2: ME in discussion with coauthors IKH and SE systematically coded the data to capture segments of data that appeared interesting and relevant for the study aim. The coding was discussed several times to enhance understanding, interpretation and arrive to the final coding. NVivo software [40] was used to manage data and facilitate the coding process. Phase 3: ME identified clusters of codes that shared a core idea and developed initial themes and subthemes. Phase 4: ME, IKH, and SE critically reviewed the themes and subthemes in relation to the coded extracts and the full dataset, and further developed them in a collaborative process. This process also resulted in the development of the overarching theme. Phase 5: ME refined, defined, and named the themes and subthemes. Phase 6: The analysis was further refined during the writing of the manuscript, meaning that names of themes and subthemes were refined to capture the theme essence.

3. Results

The sample included five women and six men. Four were between 52 and 65 and seven were between 66 and 80 years of age. Two were working, eight were retired, and one was unemployed. Severity of stroke, measured with NIHSS ranged between 1 and 9 (mean 4.2),

indicating minor and moderate stroke. Cognitive function, measured with MoCA, ranged between 20 and 29 (mean 25.5), indicating no or mild cognitive impairment. The interviews were held 2–12 days (mean 6) after having the stroke. Average length of stay at the ward was 13 days (range 3–30).

Five themes and 12 subthemes, underpinning one overarching theme, were identified (see Table 1).

3.1. Overarching theme: A tension between surrendering and being involved in the care

The stroke survivors shared many experiences, both positive and negative, regarding participation. Their narratives displayed tension between surrendering to care in the acute and rapidly changing situation and being involved whenever possible and seen as a person with specific needs. This shift from being cared and treated without active involvement in the very first days to being noticed, asked, and involved later is a sensitive and important phase to enable participation in the acute care according to the stroke survivors.

3.2. What's going on with me?

The stroke survivors perceived a *lack of information and follow-up* about their care and treatment. They asked questions to make the health professionals aware of their needs, but experienced that their questions were not sufficiently answered, which resulted in the loss of control. They also lacked information regarding the care plan including discharge and short- and long-term prognosis. The unclear information resulted in frustration and anxiety and hindered them to take initiatives and participate in the care. These experiences were further reinforced by the lack of follow-up from the healthcare providers.

I asked the nurse what to do about the high blood pressure, but I have not received an answer [...] I asked the physician yesterday, when I was going for an X-ray, "No, I don't know anything about that but I will come back to you" he said. But he never did. I haven't talked to anyone about myself, my current situation, about the stroke and what has caused this. (5)

The stroke survivors didn't really understand the collaboration among the health professionals in the team. The physician was perceived as an exclusive person and expected to provide quality medical information. However, the stroke survivors expressed a *lack of biomedical information provided by the physician*, including ambiguity regarding their medical diagnosis and its consequences. They perceived that the physician did not participate in communication about their care and treatment to the extent they desired. Consequences were disappointment and lack of trust in decision-making.

Table 1 Overarching themes, themes, and subthemes.

Overarching theme: A tension between surrendering and being involved in the care	
Theme	Subtheme
What's going on with me?	Lack of information and follow-up Lack of biomedical information provided by the physician
Being a recipient of care and treatment	Self-determined nonparticipation Feelings of being excluded No space for personal goals
The need to be supported to participate	The desire to share stories if asked
	The desire to be more involved in management planning
To be seen and strengthened	Creating relationships Considering the person's resources
Collaboration and joint understanding	Sharing of knowledge and experiences Relatives as spokespersons

It's usually the assistant nurses you meet, but there are medical issues... It was the same at the ward round, I didn't meet a physician who talked about my situation during the first days. So, I told them, "Are you not allowed to see a physician here"? (11)

3.3. Being a recipient of care and treatment

The stroke survivors shared that having a stroke is a shattering experience and they surrender themselves to care initially. They became compliant recipients of care and treatment implying gratefulness to be in the hands of experts and an acceptance of not participating in decision-making. They lacked the medical and rehabilitation professional knowledge and put deep trust in stroke care. Together, being exhausted and relying on health professionals' expertise resulted in *self-determined nonparticipation*.

In the beginning I just want the treatment they offer. Since I don't know much about either the illness, its treatment or anything... right now I'm just grateful for everything I receive through their knowledge and experience. (4)

The stroke survivors' curiosity and engagement in the care aroused after the first days. However, they experienced they were not being heard and involved in treatment and rehabilitation as desired and they gradually experienced *feelings of being excluded*. For example, rehabilitation exercises were given without explanation, which reduced their possibility to understand and affect the decision. When they talked about their previous experiences of rehabilitation and physical exercise these resources were not noticed and utilized by the staff to the extent they wished. Furthermore, the stroke survivors experienced that their own training goals was an important means in their recovery, but these were seldom used in the rehabilitation. Anxiety about the new situation was sometimes expressed but not noticed by the staff. Together with a lack of confidence in how to influence the care and perceived ambiguous professional roles, these experiences contributed to exclusion.

I must act myself and grab a nurse or physician who wants to talk. It's not like I'm invited to any meetings or planning, it does not feel like I'm involved. (11)

There was *no space for personal goals* or goal discussion at the stroke ward as experienced by the stroke survivors.

Have goals for your care been discussed? No, I don't think so, goals? No. (3)

3.4. The need to be supported to participate

The desire to share stories if asked included the stroke survivors' will to share their feelings, experiences, and wishes with the team. However, feelings of disturbing the staff, taking their time, and being demanding were experienced as barriers. The health professionals' questions and interest were key to make them share their stories.

When someone asks... It really feels like you are involved by telling your experiences, what your wishes are and so on. (6)

The stroke survivors expressed *the desire to be more involved in management planning* in the acute stroke ward. They wanted meetings with the team to be scheduled and predictable to allow them to prepare. The information needed to be adapted to individual prerequisites, e.g., tiredness and level of medical competence.

He [the physician] said, "the clot is on the right, therefore you are weakened in the left side". I did not really understand what he meant. And I have not asked about either, because I have not had the opportunity. (5)

The stroke survivors also stressed a wish to more actively participate

in discussions and decisions about their rehabilitation. They wanted to be encouraged to influence the frequency of rehabilitation exercises and have better possibilities to self-practice based on personal needs, and some mentioned goals to guide their exercise.

But if I have had goals, it would have been clearer how much I should exercise. (10)

3.5. To be seen and strengthened

Creating relationships was experienced as a foundation for participation in the care and treatment. Valuable relationships were created by smiling, saying hello, turning towards the stroke survivor in a team conversation, and talking about personal interests and hobbies. The relaxed approach, used by some health professionals, with small talk and jokes was appreciated as it facilitated coping with the new stressful situation and enabled involvement through supporting a personal relationship. They experienced that the health professionals were encouraging, asked about their condition, needs, and wishes, and supported them to bring up concerns, which generated self-confidence to affect their care and treatment.

I don't know, but I have gained such confidence... I have met him [the physiotherapist] three times, and we connected at the first time, that feels very good. Because he sees me and I see him, and we have a communication. (4)

Considering the person's resources was emphasized, and the stroke survivors experienced that praise and cheering strengthened their efforts in the rehabilitation, thereby increasing participation. A positive experience was when health professionals introduced reasonably challenging exercises that they performed successfully. Attention to individual characteristics, such as one's fighting spirit and previous activity levels, empowered them to make efforts in the rehabilitation.

3.6. Collaboration and joint understanding

Sharing of knowledge and experiences between the stroke survivor and the health professionals was appreciated and increased participation in the clinical reasoning. The health professionals listened carefully, cared about their situation, and considered their experiences in the decision-making. For example, testing procedures were adjusted to fulfill the needs of both parties, and stroke survivor's wishes guided treatment decisions. Furthermore, many assessment and treatment procedures were well explained, which increased the stroke survivors' understanding and involvement. Participation was further strengthened when the reasons behind management decisions were explained, as this increased motivation.

You feel that they take you seriously, they just not throw out "Now we are going to exercise, come on". Instead they say, "Now we are going to train to do this", and explains why. You feel motivated ... You don't feel so stupid. (4)

The stroke survivors sometimes experienced a close collaboration with the health professionals, for example when health professionals considered their ideas about a problem or a solution. When knowledge and experiences from both parties were brought into the problem-solving aspects of the clinical reasoning, mutual contributions benefitted the outcome. These situations were often related to the more challenging rehabilitation exercises that required joint input to identify problems and find solutions.

She [the occupational therapist] said "You should practice lifting your arm like this", but I didn't manage to do so. But, when I was lying in my bed, I managed to get my arm straight up over my head /... / She thought it was a good way. So, she said "I have learned too, that's good". (1)

Some stroke survivors emphasized the value of relatives as

spokespersons as they experienced that relatives could collaborate with the team. When their ability was limited, relatives could provide information regarding the stroke survivor's situation and express their needs.

4. Discussion and conclusion

4.1. Discussion

This study explored how stroke survivors experience and prefer to participate in clinical reasoning processes in the acute phase of stroke care. The main finding showed that participation in clinical reasoning was experienced as a tension between surrendering to professional knowledge and the stroke team's decision-making and being more actively involved in the care through information exchange and shared decisions about care and rehabilitation.

The stroke survivors' experiences reflect different levels and dimensions of engagement, respect, communication, collaboration, and mutual understanding that lay the ground for PCC [1,2]. A functional partnership is driving PCC in practice. Narratives is the starting point for the partnership and documentation safeguards the process [16,17]. This study focuses mainly on the partnership concerning clinical reasoning, i. e., a shared reasoning process between two or more experts: the health professional(s) and the stroke survivor. It also focuses on the narratives as part of information gathering in the clinical reasoning process.

Small talk, friendly body language, and being heard contributed to the establishment of a relationship. Being seen and heard are attributes of genuine interest and contribute to feelings of being respected as a person [1]. This is fundamental for participation as it contributes to human connection at the beginning of a collaborative process [20]. Thus, a trustful relationship facilitated for the stroke survivors to participate in the clinical reasoning process, e.g., to express needs and preferences. However, the stroke survivors only shared their stories if asked, which stresses the need for health professionals to take a more active role to invite the patient early in the clinical reasoning process. Ekman et al. [41] emphasize that health professionals need to explicitly convey their willingness to collaborate with the patient from the very outset of their interaction.

Essential in partnership is the sharing of experiences and learning from each other [16]. As described in the theme What's going on with me?, the perceived unclear and infrequent information counteracted joint understanding. Similarly, Last et al. [29] and Busetto et al. [6] identified lack of information to be a barrier to patient participation in stroke care. By contrast, knowledge and experiences were sometimes shared as described in the theme Collaboration and joint understanding. Listening and confirming each other, and collaborating in problem-solving and decision-making characterized some encounters and supported the partnership. Thus, the findings point to communication that supports and counteracts a partnership. Pettersson et al. [42] described two communication approaches: talking to the patient and talking with the patient where the latter involves person-centeredness. Such communication approach was described to be present in some encounters, but inconsistently. Carefully listening about the person's illness and tailoring information to suit the needs and capacities of that person would optimize the prerequisites for participation [43], thus strengthening partnership in clinical reasoning. Possibility for this partnership can be more actively sought and encouraged by the personnel in the post-acute phase. Local person-centered competence as well as organizational challenges has been identified and need to be countered [44].

Engaging and empowering the patient are essential in PCC [5] and partnership building [17]. The theme *To be seen and strengthened* stresses that the stroke survivors appreciated when the health professionals encouraged their progress and paid attention to their health resources. For patients from different healthcare contexts, PCC implies tailored treatment based on their health history and current health status [45].

Thus, empowering the stroke survivor by considering their resources in clinical reasoning transfers the focus from disease-oriented towards health-focused care. By contrast, the theme *Being a recipient of care and treatment* outlined how the stroke survivors trusted professional expertise and left assessments and decisions to the team. Even though there was self-determined nonparticipation, the stroke survivors did not express this preference, rather it was a passive consent, which Thórarinsdóttir and Kristjánsson [20] call constrained patient participation. Furthermore, the experiences of being excluded reflect clinical reasoning only belonging to the professional, irrespective of the patient's perspective, thus the opposite of a partnership that includes shared deliberation and decision-making [16].

Patient participation in clinical reasoning has been elaborated within goal-setting and treatment decision-making [3]. This study shows that patient participation is connected to all core components of clinical reasoning and that the stroke survivors wished to contribute according to their preferences and make decisions based on a respectful relationship. Tonelli and Sullvian [46] propose collaboration in all aspects of care and argue that collaboration must begin at the earliest part of the clinical interaction where patients can share how the disease affects their body and their health and life. Our findings point to that this conceptualization is valid in the stroke context in which patient participation in clinical reasoning can be strengthened, also adding issues to consider specifically in the acute context.

One issue relates to information gathering and assessment including a holistic and individualized perspective in accordance with PCC [1,47]. The stroke survivors were often asked about needs and sometimes also preferences, which support consideration of their personal views of the condition and life situation. The biomedical perspective emerged through physical and medical examinations, but the results were rarely shared with the stroke survivors. Psychosocial aspects were less considered, e.g., anxiety and involvement of relatives. Thus, the findings indicate consideration of the individualized perspective but a weaker holistic perspective in the clinical reasoning process, a result shared with studies conducted on the rehabilitation setting [3].

The lack of goal-setting in the acute phase could be explained by the challenges of using goals in stroke settings, specifically person-centered goals [30,31]. Goal-setting is a central component in clinical reasoning as goals guide treatment based on individual preferences and can serve as motivators [14]. The value of goals as support in the rehabilitation was also expressed by some of the stroke survivors. To achieve a more person-centered clinical reasoning, meaningful goals [1] need to be in focus, which requires that the staff invite the persons to share their stories and express what is important in their lives under the new conditions.

Shared decision-making is key for person-centeredness in acute stroke care [6]. Moore and Kaplan [48] describe shared decision-making as a collaborative decision including exchange of information and discussion of treatment options considering patient's circumstances, values, and preferences. In this study, the stroke survivors' participation in care and treatment decisions varied due to their personal preferences, but they also wished to be more encouraged to share their views. Such a mismatch between stroke survivors' participation in decisions and their preferred participation has been shown previously [49], which stresses the need for improved shared decision-making including emphasis on interaction rather than only taking part in decisions.

Future research should explore possibilities for staff to find early opportunities to invite stroke survivors into the clinical reasoning process. Another needed topic is a more in-depth focus on person-centered goal-setting in the acute stroke setting.

4.1.1. Methodological considerations

The trustworthiness [50] of findings were considered in several ways in the data collection and analysis [51]. The need for credibility was ensured by excluding one of the authors who was employed at the ward in the data collection and analysis to reduce the influence of own

professional bias. The risk of social desirability in the responses was countered by emphasizing the value of the informants' experiences, confidentiality, and that the interviewer was not part of the care team. The thorough coding process and making use of the research group's diverse perspectives in the reflexive approach to analysis ensured credibility of the themes and subthemes. Furthermore, the interviews were rich in content and the stroke survivors expressed gratitude to talk about their experiences, which improved the credibility of data. Dependability. i.e., stability of data over time, was ensured by the research group's iterative analysis process including a constant moving back and forth between the data set and the interpretative findings. Confirmability was enhanced by using quotes to demonstrate the grounding of the findings in the data. To strengthen transferability, demographic aspects of the stroke survivors and the context of data collection were described. Some limitations of the study need to be highlighted. Data was collected during the COVID-19 pandemic, which could have affected the care and should be considered when interpreting the results. The study was limited to a specific context and experiences of participation at discharge were not included; hence, the findings may not be representative of practice elsewhere or at the time for discharge. The exclusion of persons with severe cognitive impairments, aphasia, or lack of ability to speak Swedish implies a sample that is not representative of the wider stroke population. The rather small sample size needs to be considered when interpreting the findings as some patterns and themes might not have been noticed. However, the sample was limited to a specific target group and data was rich and relevant for the study aim, which supported achievement of sufficient data quality [36].

4.2. Conclusions

Stroke survivors experience many attributes of person-centeredness in the acute phase of care, but, according to their stories, person-centeredness is inconsistently integrated into the clinical reasoning processes. The acute stroke setting requires attention to the tension between self-determined nonparticipation and participation in clinical reasoning, and possible progression towards participation. Thus, person-centeredness in clinical reasoning requires health professionals' awareness of variations in persons' preferences to participate and sensitivity to signs prompting a shift towards increased willingness to participate.

4.3. Practice implications

This study provides knowledge that may support healthcare professionals and educators to improve their understanding and implementation of PCC. To facilitate patient participation in clinical reasoning in the acute setting, it is important to pay attention to the persons' possibility to shift from surrendering, which is characteristic in the most acute phase in which the capacity and wish for active involvement is limited or non-existent, towards a will to being actively involved in the care. This shift is expected to be expressed gradually, and differently with different persons, thus implying that health professionals need to look for signs to invite the person to the clinical reasoning process. Such signs may include increased alertness, questions about the medical condition and treatment, small talk about previous experiences of being ill or rehabilitation, and thoughts about recovery and goals. After noticing these signs, the health professional should explain their thoughts and actions and invite the person to share their perspective, which will support shared learning and decisions. Person-centered goals are challenging to establish in the acute stroke setting, which encourages further discussion about the role and significance of goals in clinical reasoning processes. Furthermore, documenting the person's signs and preference for participation may facilitate a team approach and continuity.

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CRediT authorship contribution statement

ME, IKH, and SE made a substantial contribution to the concept and design of the study. ME and MC recruited participants for the interviews. ME collected the data by conducting the interviews. ME, IKH, and SE analyzed and interpreted the data. MC actively contributed to interpretation of the data. ME wrote the first draft of manuscript. All authors critically revised the manuscript.

Declaration of competing interest

The authors declare no potential conflicts of interest.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.pec.2023.107718.

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